Redlines from Mohan Gopalakrishna, PE, PTOE, Dated September 2020.

General Comment - Provide this TIA in report format if possible. Include Table of Contents, since there are so many Tables and Figures, to make it flow. Also confirm if this report will be sign-sealed by a Florida PE with Traffic Engineering specialty?

Kimley»Horn

August 18, 2020

Ms. Patricia L. McNeese, AICP
Principal Planner
City of Tarpon Springs
324 East Pine Street
Tarpon Springs, Florida 34688

Replace August 8, 2020 with August 7, 2020. The Meeting was on a Friday, not August 8th which was a Saturday.

Delete references to the preliminary meeting with Arpita Guha and replace with Methodology Meeting and follow up discussion held on July 16, 2020 and August 7, 2020, with Patricia McNeese, Mo Gopalakrishna and Linda Hess (American Consulting Professionals).

RE: ***Anclote Harbor***
Traffic Impact Analysis (TIA)
East of US 19 and North of E Live Oak Street
Pinellas County, Florida
Traffic Impact Analysis

Dear Ms. McNeese,

This Traffic Impact Analysis (TIA) for the residential development of Anclote Harbor was conducted following the pre-application meeting with the Florida Department of Transportation (FDOT) on May 9, 2019 and methodology meeting with Arpita Guha on May 9, 2019. Methodology comments were received and discussed on August 8, 2020. The updated methodology and comments are attached to this report. A description of the proposed land use and the results of the TIA are provided below.

The analysis is provided based upon the requirements in the Tarpon Springs Code of Ordinances Section 122.11 for Mobility Management. According to the Forward Pinellas *2019 Annual Level of Service Report*, US 19 from Klosterman Road to Tarpon Avenue and Tarpon Ave from US 19 to Alt US 19 are considered deficient corridors and operate at Level of Service (LOS) F.

This project meets the criteria for a deficient road corridor and a Tier 2 project based upon Section 122.11.04 for Deficient Road Corridors, Transportation Management Plan Strategies Applied. The requirements include a traffic study and transportation management plan identifying improvements necessary to mitigate the impacts of the project. The cost of transportation management strategies implemented for tier 2 projects may be applied as credit toward the project's multimodal impact fee assessment or payment of the fee could be included as part of a transportation management plan.

Narrative

The proposed residential development site is located along US 19 in Pinellas County, Florida, north of the Pinellas Trail. This development is proposed to include up to 404 mid-rise multi-family dwelling units.

Access to the property will be provided at one access connection along US 19 and a pre-application meeting was held with the Florida Department of Transportation (FDOT) on May 9, 2019. The pre-application comments are attached. Based upon comments received at the pre-application meeting, the project access is to consist of a proposed offset left-turn median opening along US 19. **Figure 1** illustrates the location of the project site.

The study area was based upon the *2019 Annual Level of Service Report* for Forward Pinellas and consists of the adjacent roadway segments of US 19 from Beckett Way to Klosterman Road. The study area intersections included were discussed during the methodology phase. The study area roadway segments were determined to be the roadway segments, defined in the *2019 Annual Level of Service Report*, that were significantly impacted by the project (greater than 1% of the service volume for directional peak hour traffic).

The study intersections were determined to be the following signalized intersections:

- US 19 & Klosterman Road
- US 19 & Tarpon Avenue
- US 19 & Spruce Street
- US 19 & Live Oak Street
- US 19 & Beckett Way
- Live Oak Street & Alt US 19
- Tarpon Ave & Alt US 19

According to the *Annual Level of Service Report* for Forward Pinellas, the roadway segment of US 19 from Klosterman Road to Tarpon Avenue currently operates at Level of Service F based upon a generalized roadway analysis.

Under Trip Generation, only PM peak hour is discussed. Elsewhere in the report AM Peak Hour analysis has be done. Revise narrative.

Trip Generation

The trip generation potential of the proposed residential development was estimated for the p.m. peak-hour using the equation from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition, for land use code (LUC) 221: Multi-Family Housing Mid-Rise. The estimated net, new trips expected to be generated by the proposed development are 178 p.m. peak-hour trips (108 entering, 70 exiting), as shown in **Table 1**. The p.m. peak-hour trips were determined to be higher than the a.m. peak-hour trips. Therefore, the p.m. peak-hour period was used in the analysis. No pass-by or internal capture trips were assumed. Based upon the trip generation, this project meets the criteria for a Tier 2 project (between 51 and 300 new peak hour trips). Therefore, transportation management strategies are included in this report.

Table 1: Project Trip Generation

TRIP GENERATION CHARACTERISTICS				TRIP GENERATION EQUATION	TRIP GENERATION PERIOD	DIRECTIONAL DISTRIBUTION		NET NEW EXTERNAL TRIPS		
Land Use	**LUC**	**Scale**	**Units**	**ITE**	**Peak Period**	**In**	**Out**	**In**	**Out**	**Total**
Multi-Family Housing (Mid-Rise)	221	404	DU	T = 0.36(X)	AM	26%	74%	37	108	**145**
Multi-Family Housing (Mid-Rise)	221	404	DU	T = 0.44(X)	PM	61%	39%	108	70	**178**

"Table 1: Project Trip Generation", is not the same as what was provided in the Approved Methodology. Include the Daily Trips and AM Peak Hour Trips, that was provided in the Methodology.

Since 2019 traffic volumes are higher, why not use 2019 volumes for all locations instead of increasing the 2020 volumes that are impacted by COVID-19 lower traffic volumes? If 2019 volumes are used, apply the 2% annual growth factor for 3 years between 2019 and 2022.

Existing Traffic Conditions

Existing traffic conditions were evaluated within the study network. The procedures used in this analysis are discussed below.

Vehicle turning movement volume counts were conducted at the intersections of US 19 & Klosterman Road, US 19 & Tarpon Avenue,, US 19 & Spruce Street, US 19 & Live Oak Street, andUS 19 & Beckett Way during the p.m. peak period (4:00 p.m. to 6:00 p.m.) on June 20, 2019 to quantify existing p.m. peak-hour conditions within the study area. The raw counts are attached for reference.

Additional data was collected on August 2020 for the study area intersections of Live Oak Street & Alt US 19 and Tarpon Avenue & Alt US 19. The traffic data was reviewed based upon the volumes provided in the Forward Pinellas 2019 Level of Service Report. The p.m. peak-hour traffic counts were collected again at the intersection of US 19 & Klosterman Road and determined to be within 5% of the 2019 traffic volumes at the same intersection for the p.m. peak-hour. The traffic volumes for the p.m. peak-hour were also compared to the peak hour volumes in the Pinellas County Level of Service Report for E Live Oak Street and Tarpon Avenue. Therefore, no modification was made to the August 2020 peak-hour traffic volumes.

The a.m. peak-hour traffic counts were collected again at the intersection of US 19 & Klosterman Road and determined to be 8% less than the 2019 traffic volumes at the same intersection for the a.m. peak-hour. The traffic volumes for the a.m. peak-hour were also compared to the peak hour volumes in the Pinellas County Level of Service Report for E Live Oak Street and Tarpon Avenue. Therefore, the a.m. peak-hour volumes were increased by 8% to account for fluctuations in normal traffic patterns due to COVID at the two study area intersections of Live Oak Street & Alt US 19 and Tarpon Avenue & Alt US 19 (the only study area intersections collected in 2020).

PSCF

All of the vehicle counts at the study intersections were adjusted to reflect peak-season conditions. This modification was performed using the Florida Department of Transportation (FDOT) peak-season conversion factor (SF), which corresponds to the data collection date for Pinellas County. The peak-season factors are attached.

Replace references to peak-season factor (SF) with Peak Season Conversion Factor (PSCF).

Project Trip Distribution and Assignment

The study area roadway segments were determined to be the adjacent roadway segments of US 19 from Beckett Way to Klosterman Road, Tarpon Avenue from US 19 to Alt US 19, and Live Oak Street from US 19 to Alt US 19. New traffic expected to be generated by the proposed residential project was distributed to the roadway network based on the existing turning movement volume counts at the study intersections and the Florida Standard Urban Model Structure (FSUTMS) for District 7 (version 9.1). The model distribution is attached. Approximately 35% of the vehicles entering and exiting the site are anticipated to utilize US 19 to the north while 65% of the vehicles entering and exiting the site are anticipated to utilize US 19 to the south. The project traffic distribution calculation is attached for reference. **Figure 2** illustrates the trip distribution in terms of percentage of trips.

The distribution percentages are not adding up to 65% from Live Oak intersection to the south. See redlines on Figure 2.

An example of the project access, off-set left-turn median opening, is included below and was provided by the FDOT to illustrate the offset left-turn lane median opening at the project access connection. The

Include a north arrow to the exhibit - "Offset Left-Turn Median Opening Example". Include a larger drawing to show the lengths of all proposed turn lanes (NBR right at site driveway, NBU turn lane lengths, SBU turn lane length, median opening width, provide any transition distances from site driveway, along US 19 north and south leading to the U turn lanes, etc.) in the drawing.

driveway allows for only right-in/right-out access. Vehicles entering from the southbound approach make a u-turn at the median opening and then a right-in at the driveway. Vehicles leaving the site would make a westbound right-turn and then a u-turn to travel south at the median opening. The median locations and turn lane lengths will be coordinated and reviewed by FDOT.

Offset Left-Turn Median Opening Example

Future Traffic Conditions

Future traffic volumes consist of two components: project traffic and background (non-project) traffic estimates. Future background traffic is defined as expected non-project traffic on the roadway network in the future year at buildout of the proposed project. For the purposes of this analysis, it was determined that 2022 would be the buildout year of the development and, thus, 2022 conditions were evaluated as the "future" year scenario. The future background volumes were developed by growing existing traffic 1.3% annually based upon historical Annual Average Daily Traffic (AADT) volumes along US 19. The growth rate calculations are attached. As discussed during the methodology phase, to account for projects in Tarpon Springs, a 2% background growth rate was used to provide a conservative estimate.

Roadway Capacity Analysis

US 19 is a six-lane divided roadway from Tarpon Avenue to Beckett Way and an eight-lane divided roadway from Klosterman Road to Tarpon Avenue.

As indicated in **Table 2**, the existing and future total traffic is anticipated to exceed the capacity for the US 19 level of service (LOS) D volume during the future p.m. peak-hour based upon the generalized roadway analysis.

To provide a more detailed analysis, a more specific modeling was performed using the Synchro detailed arterial report. Based upon the signal delay and travel time along the corridor, the analysis indicates the study roadway segments are anticipated to operate at LOS D or better during the p.m. peak-hour period for the study area.

Under the Roadway Capacity Analysis, indicate clearly the existing year 2020 and Future Year (opening year) 2022 both in the narrative and in Table 2.

In Tables 2 and 3, confirm if the 2% annual growth rate was added to the background peak hour volumes for 2 years from 2020 through 2022, the opening year? Provide a spreadsheet with your resubmittal.

Based on comments made on Figure 2 (Project Traffic Distribution Percentages). Confirm if Project Traffic Assignment in Table 2 will change and update the table.

Per Approved Methodology, all the Roadway Segments listed in Tables 2 and 3, are indicated as significantly impacted roadways with project traffic representing 1% of greater of Max service volume of LOS D. Add a column with the percentage.

Peak Season Conversion Factor (PSCF)

Table 2 –Roadway Analysis (P.M. Peak-Hour)

Roadway	From	To	Direction	Road Laneage	Adopted LOS D Service Volumes[1]	Existing Peak-Hour Volume[2]	Seasonal Factor	Existing Peak Season Directional Volume	Existing Volume Exceeds LOS D Capacity?	Background Peak-Hour Volumes	Project Traffic Assignment	Peak-Hour Project Volumes	Total P.M. Peak-Hour Traffic Volume	Exceeds LOS D Capacity?
US 19	Klosterman Road	Tarpon Avenue	NB	8D	4,040	3,902	1.01	3,942	No	4,183	33%	36	4,219	Yes[3]
			SB	8D	4,040	2,341	1.01	2,364	No	2,509	33%	36	2,545	No
	Tarpon Avenue	Live Oak Street	NB	6D	3,020	3,367	1.01	3,401	Yes	3,609	45%	49	3,658	Yes[3]
			SB	6D	3,020	2,055	1.01	2,159	No	2,203	45%	49	2,252	No
	Live Oak Street	Project Access	NB	6D	3,020	3,335	1.01	3,335	Yes	3,575	100%	108	3,683	Yes[3]
			SB	6D	3,020	2,002	1.01	2,159	No	2,145	100%	108	2,252	No
	Project Access	Beckett Way	NB	6D	3,020	3,335	1.01	3,369	Yes	3,575	65%	70	3,645	Yes[3]
			SB	6D	3,020	2,002	1.01	2,022	No	2,145	65%	70	2,215	No
E Live Oak St	US 19	Alt US 19	EB	2D	572	335	1.09	338	No	261	6%	6	267	No
			WB			129		130	No	191	6%	6	197	No
E Tarpon Ave	US 19	Alt US 19	EB	2D	792	636	1.09	651	No	686	14%	15	701	No
			WB			508		521	No	548	14%	15	563	No

Notes:
1. Based on Forward Pinellas LOS Report and FDOT QLOS Tables
2. Based on turning movement counts collected
3. Based upon Synchro detailed arterial analysis this roadway segment is anticipated to operate at LOS D

In Table 2, LOS D Service Volumes are exceeded along US 19, with the PM peak hour traffic volumes. Confirm with FDOT if they accept LOS D optimization result in lieu of any needed capacity improvements. Also confirm with FDOT if there are any planned roadway widening improvements. If not developer would need to make improvements to improve operations and safety

Based on comments made on Figure 2 (Project Traffic Distribution Percentages). Confirm if Project Traffic Assignment in Table 3 will change and update the table.

ated in **Table 3**, the existing and future total
evel of service (LOS) D volume during the future a.m. peak-hour based upon the generalized
analysis.

To provide a more detailed analysis, a more specific modeling was performed using the Synchro detailed arterial report. Based upon the signal delay and travel time along the corridor, the analysis indicates the study roadway segments are anticipated to operate at LOS D or better during the a.m. peak-hour period for the study area.

Confirm if the 2% annual growth rate was added to the background peak hour volumes for 2 years from 2020 through 2022, the opening year? Provide a spreadsheet with your resubmittal.

Peak Season Conversion Factor (PSCF)

Table 3 –Roadway Analysis (A.M. Peak-Hour)

Roadway	From	To	Direction	Road Laneage	Adopted LOS D Service Volumes[1]	Existing Peak-Hour Volume[2]	Seasonal Factor	Existing Peak Season Directional Volume	Existing Volume Exceeds LOS D Capacity?	Background Peak-Hour Volumes	Project Traffic Assignment	Peak-Hour Project Volumes	Total P.M. Peak-Hour Traffic Volume	Exceeds LOS D Capacity?
US 19	Klosterman Road	Tarpon Avenue	NB	8D	4,040	1,749	1.01	1,767	No	1,875	33%	36	1,911	No
			SB	8D	4,040	3,554	1.01	3,590	No	3,809	33%	36	3,845	No
	Tarpon Avenue	Live Oak Street	NB	6D	3,020	1,338	1.01	1,352	No	1,435	45%	49	1,484	No
			SB	6D	3,020	3,002	1.01	3,032	Yes	3,218	45%	49	3,267	Yes[3]
	Live Oak Street	Project Access	NB	6D	3,020	1,199	1.01	1,211	No	1,285	100%	108	1,393	No
			SB	6D	3,020	3,158	1.01	3,190	Yes	3,386	100%	108	3,494	Yes[3]
	Project Access	Beckett Way	NB	6D	3,020	1,199	1.01	1,211	No	1285	65%	70	1,355	No
			SB	6D	3,020	3,158	1.01	3,190	Yes	3,385	65%	70	3,455	Yes[3]
E Live Oak St	US 19	Alt US 19	EB	2D	572	128	1.09	134	No	140	6%	6	146	No
			WB			121		127	No	134	6%	6	140	No
E Tarpon Ave	US 19	Alt US 19	EB	2D	792	385	1.09	423	No	423	14%	15	438	No
			WB			434		474	No	474	14%	15	489	No

Notes:
1. Based on Forward Pinellas LOS Report and FDOT QLOS Tables
2. Based on turning movement counts collected
3. Based upon Synchro detailed arterial analysis this roadway segment is anticipated to operate at LOS D

In Table 2, LOS D Service Volumes are exceeded along US 19, with the PM peak hour traffic volumes. Confirm with FDOT if they accept LOS D optimization result in lieu of any capacity improvements. Also confirm with FDOT if there are any planned roadway widening improvements. If not developer would need to make improvements to improve operations and safety

Include any access approval letters from FDOT for site driveway and median openings as part of the Appendices in this report.

Please address the approved methodology requirement, "The two median openings (immediately north and south of the site) will be analyzed for the anticipated queue and turn lane length required. The analysis will include the number of anticipated trips heading north or south which utilize the median openings." Include the 95th percentile Queuing obtained from software (for peak hour analysis) so there are no rear end crashes for any potential spillbacks into the adjacent through lane. Include the required storage (L) based on posted speed along US 19, per FDOT Standard Index 711-001 (11 of 13). Include in the **Conclusions** section in this report as to what operational and safety improvements are being recommended, since WB right turning cars out of the site driveway have to cross three NB lanes of traffic to access the U turn median opening north of the site and may not have sufficient transition distance.

Project Access Analysis

Per discussion with the FDOT, the project access location will consist of an offset left-turn median opening along US 19. The project driveway is a right-in/right-out driveway and proposed left-turn median openings north and south of the project driveway to allow vehicles to make a southbound or northbound u-turn. The location and turn lane lengths of the median openings are subject to FDOT approval.

Figure 3 illustrates the p.m. peak-hour project volumes. **Figure 4** illustrates the existing p.m. peak-hour peak season volumes.

Intersection Analysis

Synchro (v10) software was used to determine existing and future total p.m. peak-hour operational conditions for the study area intersections. **Figure 5** illustrates the future background volumes and **Figure 6** illustrates the future total volumes (including project volumes).

The following movements are anticipated to operate with v/c ratios greater than 1.0 during the p.m. peak-hour periods in background conditions as indicated in **Table 4**.

- US 19 & Spruce Street
  - Northbound through
- US 19 & Tarpon Avenue
  - Eastbound left-turn
  - Westbound left-turn
  - Northbound through

In addition to V/C ratios, add LOS for each of movements and overall intersection LOS and corresponding delay in vehicles/second. Mention if LOS D thresholds can be met with any countermeasures to improve the operation of the movements/overall intersection. When would the improvements be needed and who will address operational improvements? Revise narrative under Intersection Analysis, and corresponding Table 4.

General Comment - Include a LOS chart with LOS A thru F with corresponding delays so City staff and laymen can understand the operations. Also include the thresholds for V/C (volume/capacity) ratio (such as what is acceptable and what is failure), so it is easily understandable to City council and anyone reviewing this report.

In Table 4, show the analysis years for - 1) Existing Conditions, 2) Background Conditions, 3) Total Conditions. Include a footnote at the bottom of the table as to what data each one includes. E.g. Total Conditions = Existing Conditions + background Conditions. Explain what background conditions include. E.g. Existing 2019 traffic+Annual growth factor.

Table 4 – Intersection Analysis (P.M. Peak-Hour)

Existing Conditions v/c Ratio 2019 or 2020?												
{Background Conditions v/c Ratio} 2022?												
[Total Conditions v/c Ratio] 2022?												
Intersection	**Peak Hour**	**Eastbound**			**Westbound**			**Northbound**			**Southbound**		
		EBL	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
US 19 & Beckett Way	PM	0.69	0.24		0.51			0.90	0.80	0.00	0.49	0.50	0.03
		{0.70}	{0.30}		{0.56}			{0.90}	{0.86}	{0.00}	{0.50}	{0.54}	{0.04}
		[0.70]	[0.35]		[0.63]			[0.90]	[0.86]	[0.00]	[0.50]	[0.55]	[0.04]
US 19 & E Live Oak Street	PM	--	--	0.08	--	--	0.08	--	--	--	0.26	--	--
		--	--	{0.10}	--	--	{0.10}	--	--	--	{0.35}	--	--
		--	--	[0.10]	--	--	[0.10]	--	--	--	[0.37]	--	--
US 19 & Spruce Street	PM	0.74	0.00	0.12	0.57	0.00	0.01	0.39	0.93	0.02	0.61	0.66	0.03
		{0.74}	{0.00}	{0.16}	{0.59}	{0.00}	{0.02}	{0.45}	**{1.00}**	{0.02}	{0.63}	{0.70}	{0.03}
		[0.74]	[0.00]	[0.16]	[0.59]	[0.00]	[0.02]	[0.45]	**[1.00]**	[0.02]	[0.63]	[0.70]	[0.03]
US 19 & E Tarpon Avenue	PM	**1.00**	0.88	0.00	**1.33**	0.83	0.00	0.84	**1.10**	0.00	0.70	0.61	0.00
		{1.06}	{0.89}	{0.00}	**{1.41}**	{0.84}	{0.00}	{0.85}	**{1.17}**	{0.00}	{0.78}	{0.65}	{0.00}
		[1.11]	[0.89]	[0.00]	**[1.41]**	[0.84]	[0.00]	[0.85]	**[1.18]**	[0.00]	[0.80]	[0.66]	[0.00]
US 19 & E Klosterman Road	PM	0.94	0.00	0.10	--	0.77	--	0.82	0.74	--	0.77	0.58	
		{0.97}	{0.00}	{0.12}	--	{0.78}	--	{0.83}	{0.80}	--	{0.77}	{0.63}	
		[0.97]	[0.00]	[0.12]	--	[0.78]	--	[0.83]	[0.81]	--	[0.77]	[0.64]	
E Live Oak Street/ Dodecanese Blvd & Alt US 19	PM	0.66	0.39		0.12	0.15	0.87	0.12	0.61		0.27	0.52	
		{0.67}	{0.40}		{0.13}	{0.15}	{0.87}	{0.13}	{0.64}		{0.30}	{0.55}	
		[0.64]	[0.38]		[0.13]	[0.15]	[0.83]	[0.13]	[0.64]		[0.31]	[0.56]	
E Tarpon Ave & Alt US 19	PM	0.74			0.48	0.76		0.02	0.79		0.47	0.32	
		{0.75}			{0.49}	{0.77}		{0.02}	{0.83}		{0.55}	{0.34}	
		[0.75]			[0.49]	[0.77]		[0.02]	[0.84]		[0.57]	[0.34]	

In Table 4, confirm the analysis years for - 1) Existing Conditions, 2) Background Conditions, 3) Total Conditions. Include a footnote at the bottom of the table as to what data each one includes. E.g. Total Conditions = Existing Conditions + background Conditions. Explain what background conditions include. E.g. Existing 2019 traffic+Annual growth factor.

The following movements are anticipated to operate with v/c ratios greater than 1.0 during the p.m. peak-hour periods in background conditions as indicated in **Table 5**.

- US 19 & Beckett Way
  - Southbound left-turn
- US 19 & Spruce Street
  - Southbound through
- US 19 & Tarpon Avenue
  - Westbound left-turn
- US 19 & Klosterman Road
  - Northbound left-turn

The narrative references PM peak hour analysis and refers to Table 5 (which says AM Peak hour). Please confirm, if it is AM or PM analysis? In addition to V/C ratios, add LOS for each of movements and overall intersection LOS. Mention if LOS D thresholds can be met with any countermeasures to improve the operation of the movements/overall intersection. When would the improvements be needed and who will address operational improvements? Revise narrative under Intersection Analysis, and corresponding Table 5

Is it AM or PM? Does not match.

Table 5 – Intersection Analysis (A.M. Peak-Hour)

Existing Conditions v/c Ratio 2019 or 2020?													
{Background Conditions v/c Ratio} 2022?													
[Total Conditions v/c Ratio] 2022?													
Intersection	**Peak Hour**	**Eastbound**			**Westbound**			**Northbound**			**Southbound**		
		EBL	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
US 19 & Beckett Way	AM	0.29	0.84		0.06			0.84	0.27	0.01	**1.24**	0.78	0.03
		{0.28}	{0.85}		{0.06}			{0.84}	{0.29}	{0.01}	**{1.31}**	{0.84}	{0.04}
		[0.26]	[0.86]		[0.09]			[0.85]	[0.29]	[0.00]	**[1.31]**	[0.84]	[0.04]
US 19 & E Live Oak Street	AM	--	--	0.12	--	--	0.01	--	--	--	0.01	--	--
		--	--	{0.15}	--	--	{0.01}	--	--	--	{0.01}	--	--
		--	--	[0.16]	--	--	[0.01]	--	--	--	[0.01]	--	--
US 19 & Spruce Street	AM	0.53	0.00	0.10	0.44		0.03	0.23	0.38	0.02	0.11	**1.08**	0.02
		{0.54}	{0.00}	{0.14}	{0.46}		{0.04}	{0.25}	{0.41}	{0.02}	{0.12}	**{1.14}**	{0.02}
		[0.55]	[0.00]	[0.13]	[0.46]		[0.04]	[0.25]	[0.41]	[0.02]	[0.13]	**[1.17]**	[0.03]
US 19 & E Tarpon Avenue	AM	0.77	0.49	0.90	**1.63**	0.62	0.60	0.80	0.43	0.58	0.89	0.92	0.11
		{0.78}	{0.49}	{0.91}	**{1.72}**	{0.65}	{0.00}	{0.81}	{0.46}	{0.63}	{0.90}	{0.99}	{0.12}
		[0.79]	[0.49]	[0.91]	**[1.73]**	[0.65]	[0.00]	[0.81]	[0.47]	[0.63]	[0.92]	[1.00]	[0.14]
US 19 & E Klosterman Road	AM	0.84	0.00	0.49	--	0.78	--	0.97	0.31	--	0.62	0.84	0.90
		{0.84}	{0.00}	{0.54}	--	{0.78}	--	**{1.03}**	{0.33}	--	{0.63}	{0.90}	{0.96}
		[0.84]	[0.00]	[0.53]	--	[0.78]	--	**[1.03]**	[0.33]	--	[0.63]	[0.90]	[0.97]
E Live Oak Street/ Dodecanese Blvd & Alt US 19	AM	0.16	0.12		0.07	0.08	0.81	0.03	0.28		0.19	0.59	
		{0.17}	{0.12}		{0.06}	{0.08}	{0.81}	{0.03}	{0.29}		{0.20}	{0.62}	
		[0.17]	[0.12]		[0.07]	[0.08]	[0.81]	[0.03]	[0.29]		[0.20]	[0.62]	
E Tarpon Ave & Alt US 19	AM	0.64			0.50	0.39		0.01	0.44		0.18	0.46	
		{0.65}			{0.52}	{0.39}		{0.01}	{0.46}		{0.20}	{0.49}	
		[0.65]			[0.52]	[0.40]		[0.01]	[0.46]		[0.20]	[0.49]	

An intersection analysis was also provided for the project driveway for the westbound right-turn. The right-in/right-out driveway is anticipated to operate at LOS F during the p.m. peak-hour and LOS B during the a.m. peak-hour. The LOS F during the p.m. peak-hour is due to the delay for the westbound right-turn movement for vehicles exiting the site during the p.m. peak-hour.

An analysis based on FDOT's *Access Management Guidebook (2019)* was performed for northbound right-turn volumes at the driveway access connection along US 19 to determine if a right-turn lane may be warranted for the proposed development. A right-turn lane may be warranted for a roadway with a

Include a Chart for Site Driveway Analysis for build out year 2022, with vehicular delay in seconds. With the intersection driveway failing during PM peak for WB right turn (outbound), what safety countermeasures are proposed to improve operations and enhance safety?

Confirm if the 405' NB right turn lane would satisfy 95th percentile Queuing?

speed limit over 45 miles per hour if the number of right-turns per hour is between 35 to 55 vehicles. The p.m. peak-hour project traffic right-turn volume is 108 vehicles. Therefore, a northbound right-turn lane of 405 feet (based upon a design speed of 55 miles per hour) is warranted at this location and the turn radii for the project site shall be designed accordingly with respect to FDOT turn lane specifications.

Include On-Site Parking Analysis and Site Plan for City's review.

Multi-modal Analysis

Sidewalks and bicycle lanes currently exist along both sides of US 19. The Fred Marquis Pinellas trail is south of the site and will be connected to the site. The sidewalk connection will be provided from the site to the existing sidewalk along US 19. A map illustrating the existing multi-modal including transit stops and routes is attached.

A circulation exhibit will be provided with the site plan showing the proposed sidewalk connections on site. Pedestrian facilities will be provided on site as well as additional gathering spaces including a pocket park, playground, proposed kayak launch, and pet park.

Can the Multi-Modal Map be further refined to show clearly what is existing and what is being proposed? Include dimensions in feet. Revise Legend and map accordingly.

Transportation Management Strategies

As required by the City of Tarpon Springs, transportation management strategies are included for this project. To provide access to the site, offset left-turn lanes will be constructed along US 19. This improvement will allow vehicles traveling on US 19 to make a southbound or northbound u-turn movement and will improve existing conditions as it provides an opportunity for vehicles to make a u-turn in both directions prior to the existing northbound and southbound left-turn lanes at the intersections of US 19 & E Live Oak Street and US 19 & Beckett Way. This will reduce the northbound and southbound u-turns at the adjacent signalized intersections and existing median openings and improve their intersection operations for these movements.

Additionally, coordination with the FDOT for access management and review will be required. The project is requesting only one access connection on US 19 to reduce impacts to the overall network. It is proposed to construct a northbound right-turn lane at the project entrance to reduce impacts to the existing network and improve safety.

Sidewalks currently exist along US 19. It is recommended to connect the sidewalk on site adjacent to the project along US 19. The Fred Marquis Pinellas trail is south of the site and the connection to the site will improve the pedestrian network. The site will provide bicycle racks and internal sidewalk in order to provide multi-modal options for residents. The project will also provide recreational amenities on site including a pocket park, playground, proposed kayak launch, and pet park.

Conclusion

The proposed residential development is located in Pinellas County, Florida, east of US 19. The residential development is proposed to include up to 404 multi-family dwelling units. A northbound right-turn lane of 405 feet at the project access is warranted with the addition of the residential development. Transportation management strategies, including the construction of the offset turn lanes and pedestrian and bicycle amenities on site, are recommended.

Please review this analysis and let us know if you have any questions.

Very truly yours,

KIMLEY-HORN AND ASSOCIATES, INC.

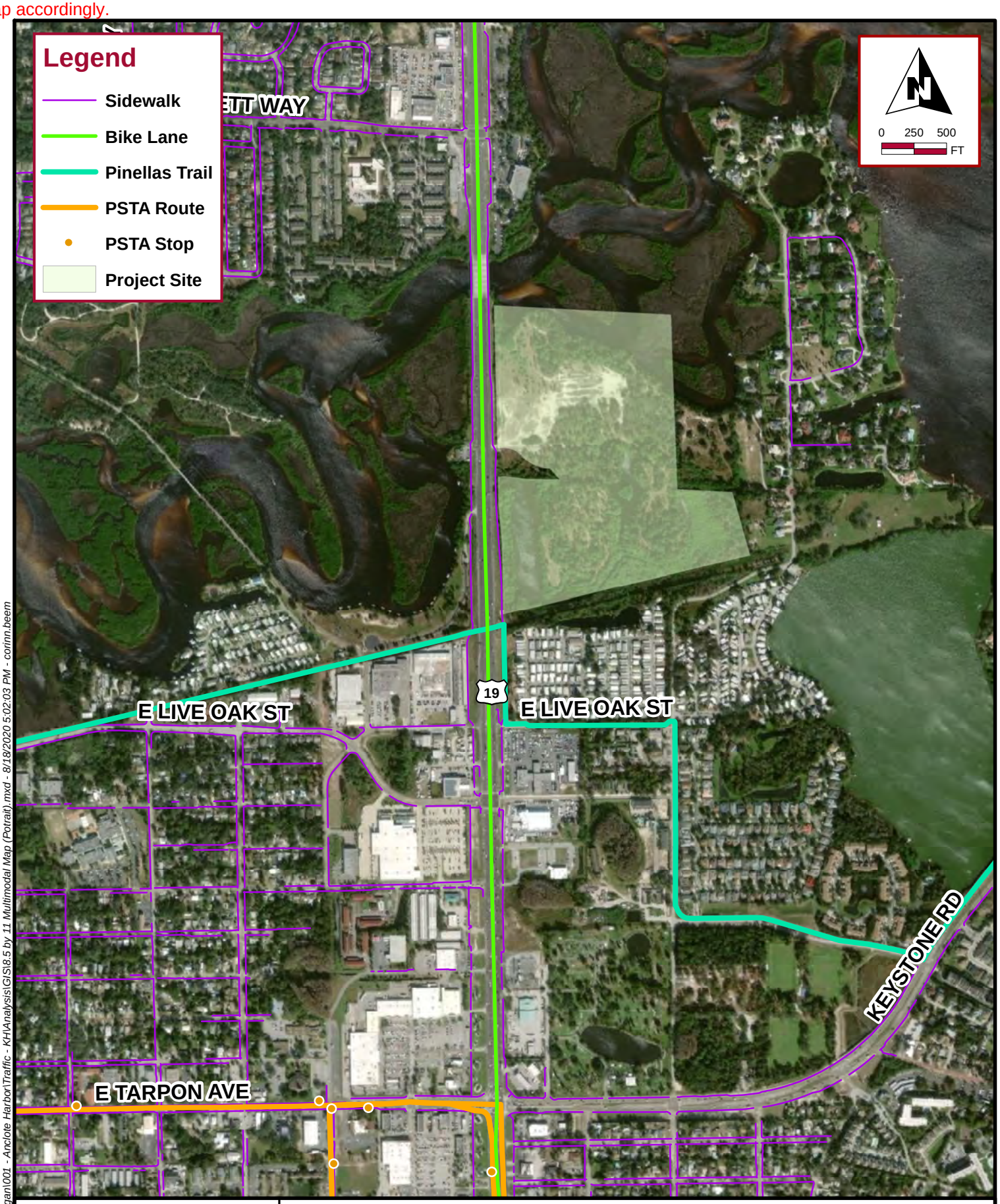
Christopher Hatton, P.E.
Senior Vice-President

Kelly Fearon, P.E.
Transportation Analyst

Attachments:

Methodology
FDOT Peak Season Conversion Factors
Vehicle Turning Movement Volume Counts
Signal Timing
Figure 2 - Project Traffic Distribution
Figure 3 - P.M. Peak-Hour Project Traffic
Figure 4 – P.M. Peak-Hour Existing Traffic
Figure 5 – P.M. Peak-Hour Background Traffic
Figure 6 – P.M. Peak-Hour Total Traffic
Figure 7 – A.M. Peak-Hour Project Traffic
Figure 8 – A.M. Peak-Hour Existing Traffic
Figure 9 – A.M. Peak-Hour Background Traffic
Figure 10 – A.M. Peak-Hour Total Traffic
Volume Development Worksheet
Synchro Output

Can the Multi-Modal Map be further refined to show clearly what is existing and what is being proposed? Revise Legend and map accordingly.



K:\TAM_Civil\145062 - Morgan\001 - Anclote Harbor\Traffic - KHAnalysis\GIS\8.5 by 11 Multimodal Map (Potrait).mxd - 8/19/2020 5:02:03 PM - corinn.beem

Kimley»Horn

655 North Franklin St, Suite 150, Tampa, FL 33602
Phone: (813) 620 1460
www.kimley-horn.com

Multimodal Map

MORGAN - TARPON SPRINGS
PINELLAS COUNTY, FLORIDA

Project No: 145062001	Scale: As Noted	August 2020	Figure 1

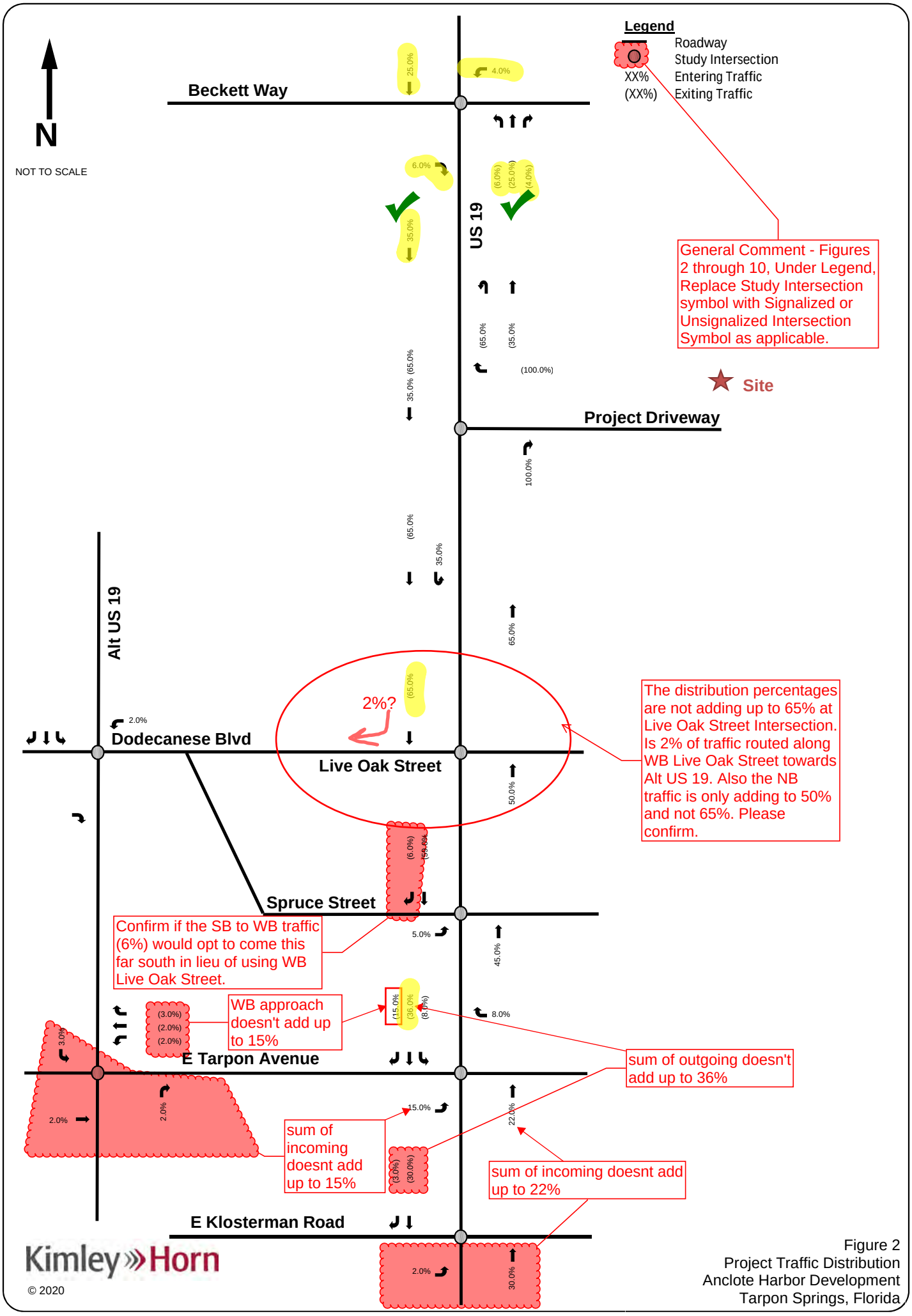


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Figure 2
Project Traffic Distribution
Anclote Harbor Development
Tarpon Springs, Florida

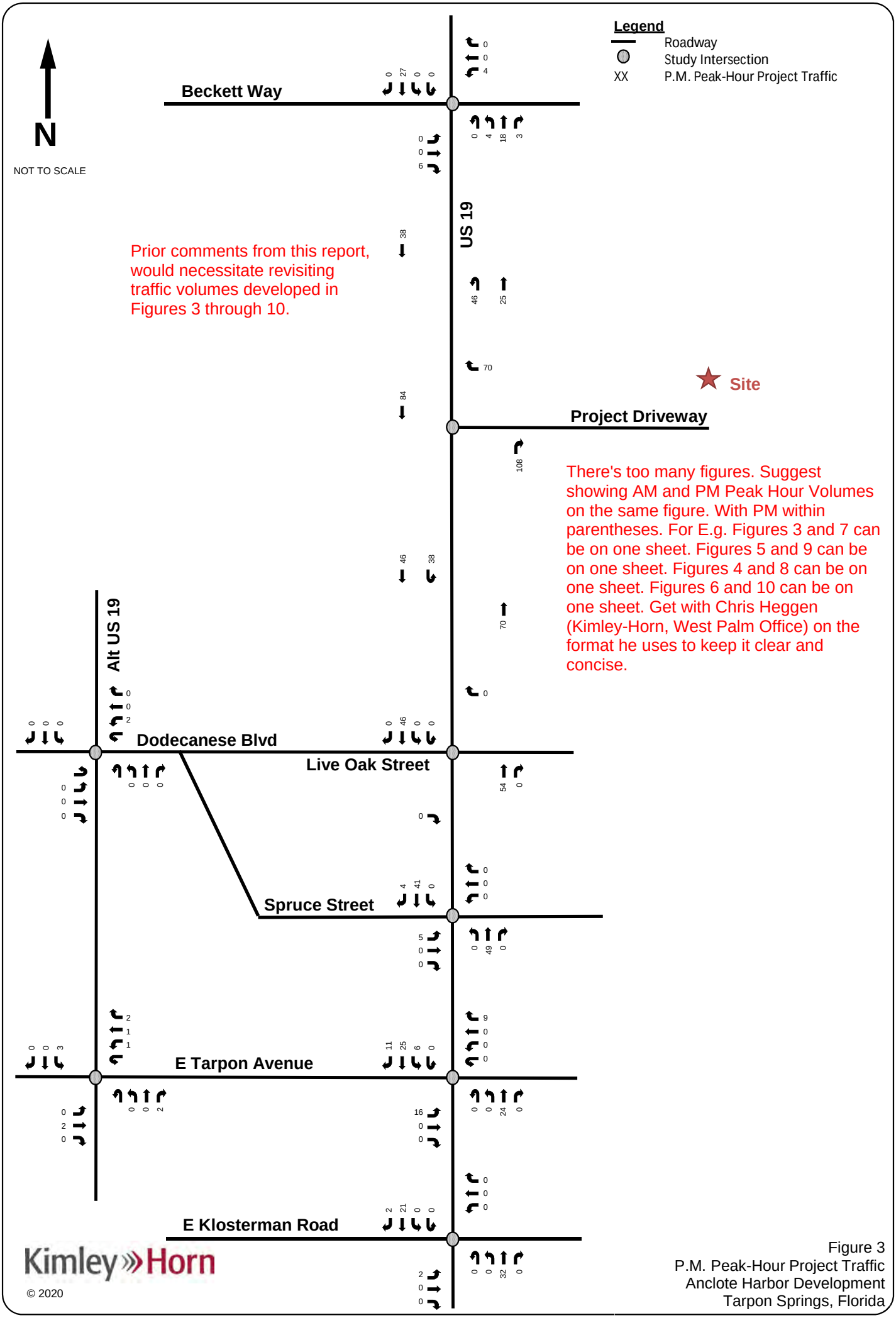

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Figure 3
P.M. Peak-Hour Project Traffic
Anclote Harbor Development
Tarpon Springs, Florida

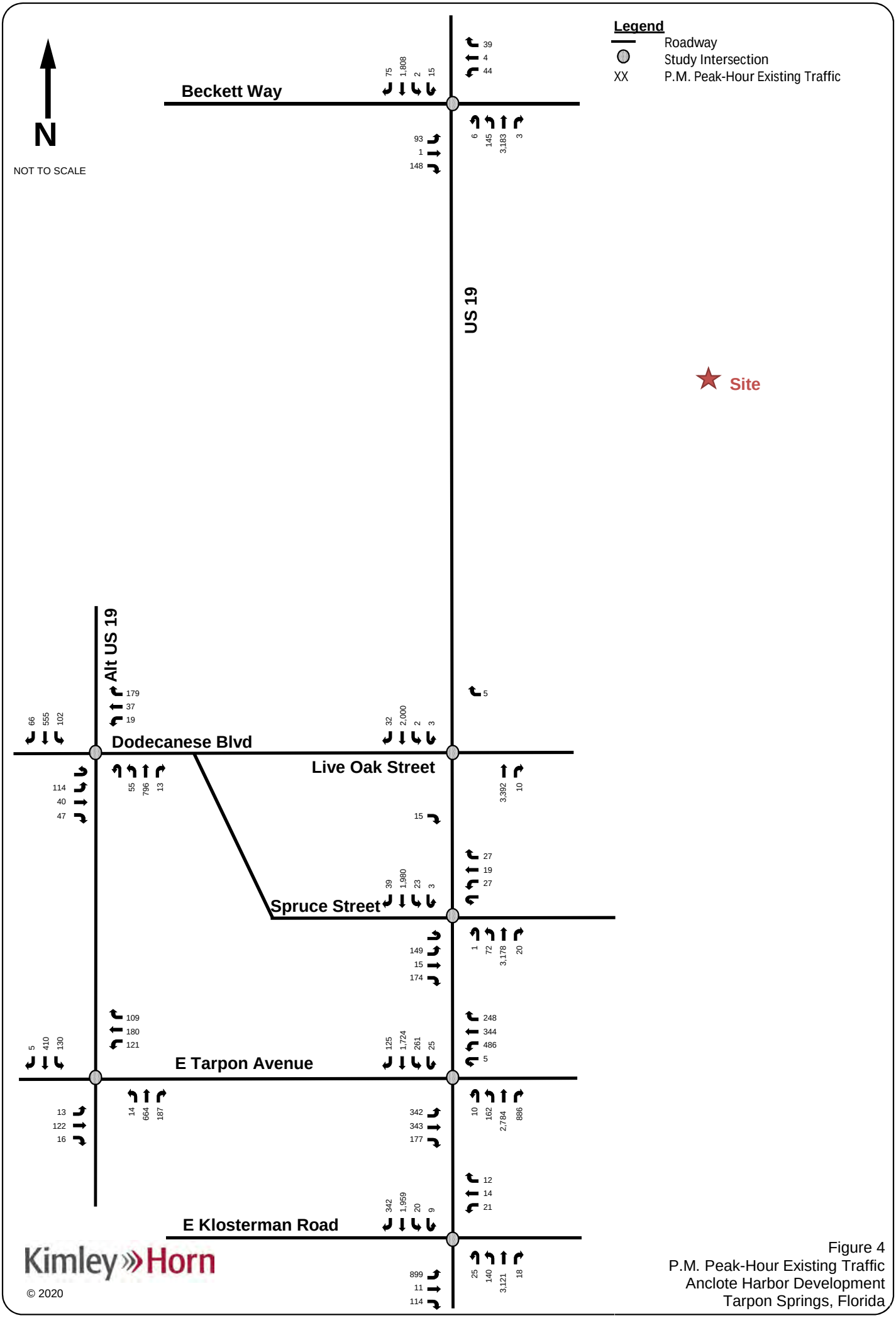

Figure 4
P.M. Peak-Hour Existing Traffic
Anclote Harbor Development
Tarpon Springs, Florida

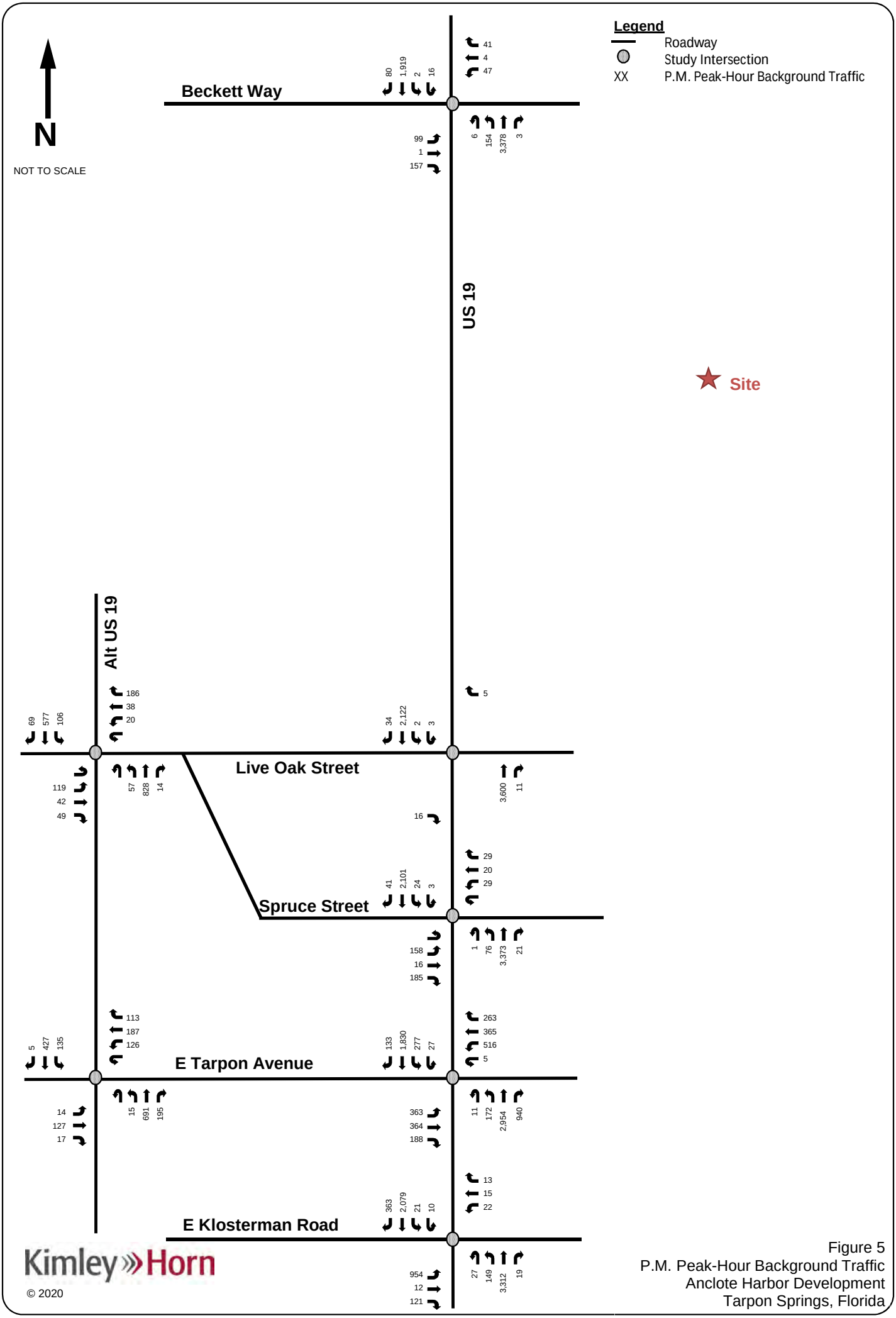

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Figure 5
P.M. Peak-Hour Background Traffic
Anclote Harbor Development
Tarpon Springs, Florida

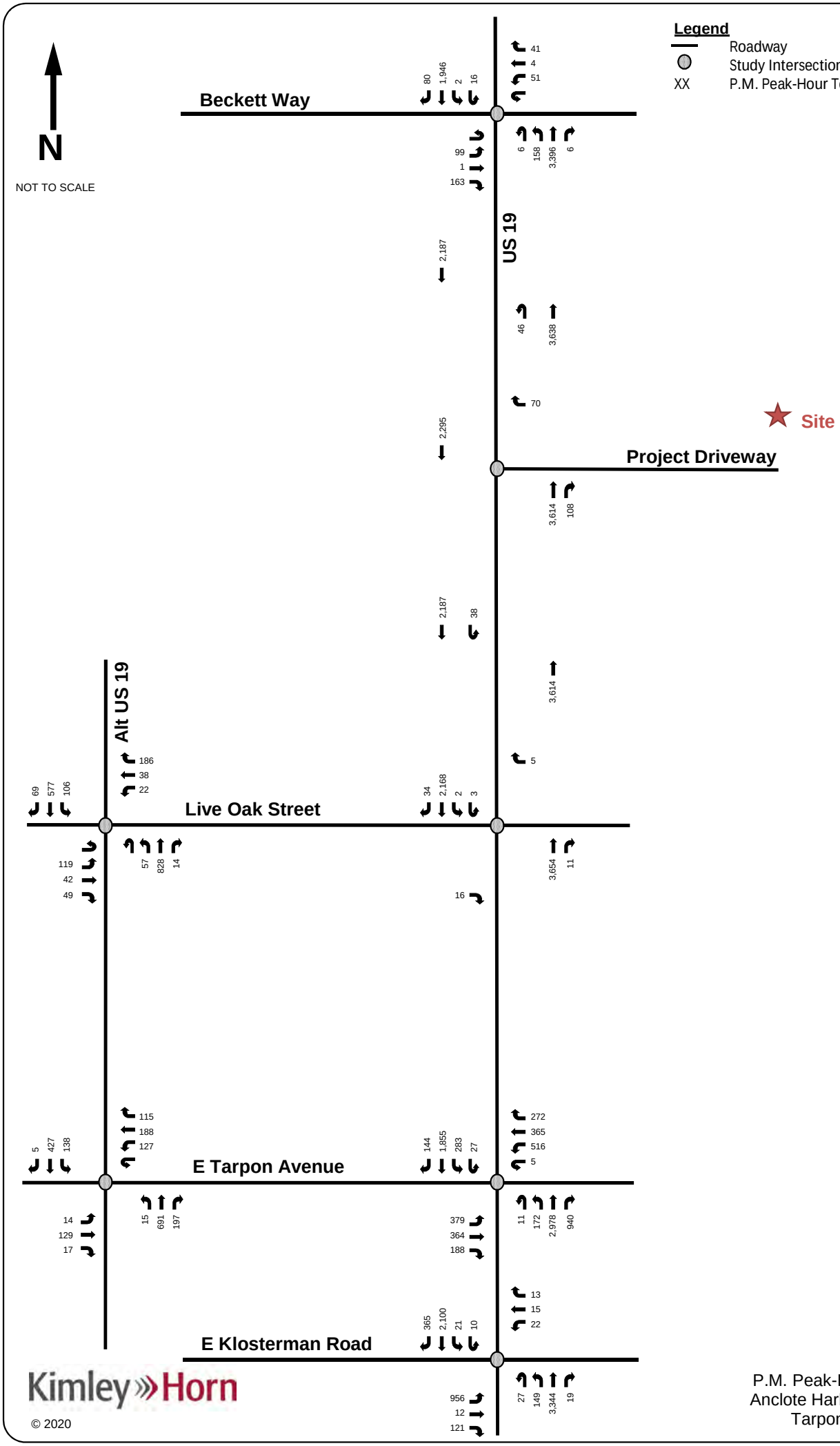

Figure 6
P.M. Peak-Hour Total Traffic
Anclote Harbor Development
Tarpon Springs, Florida

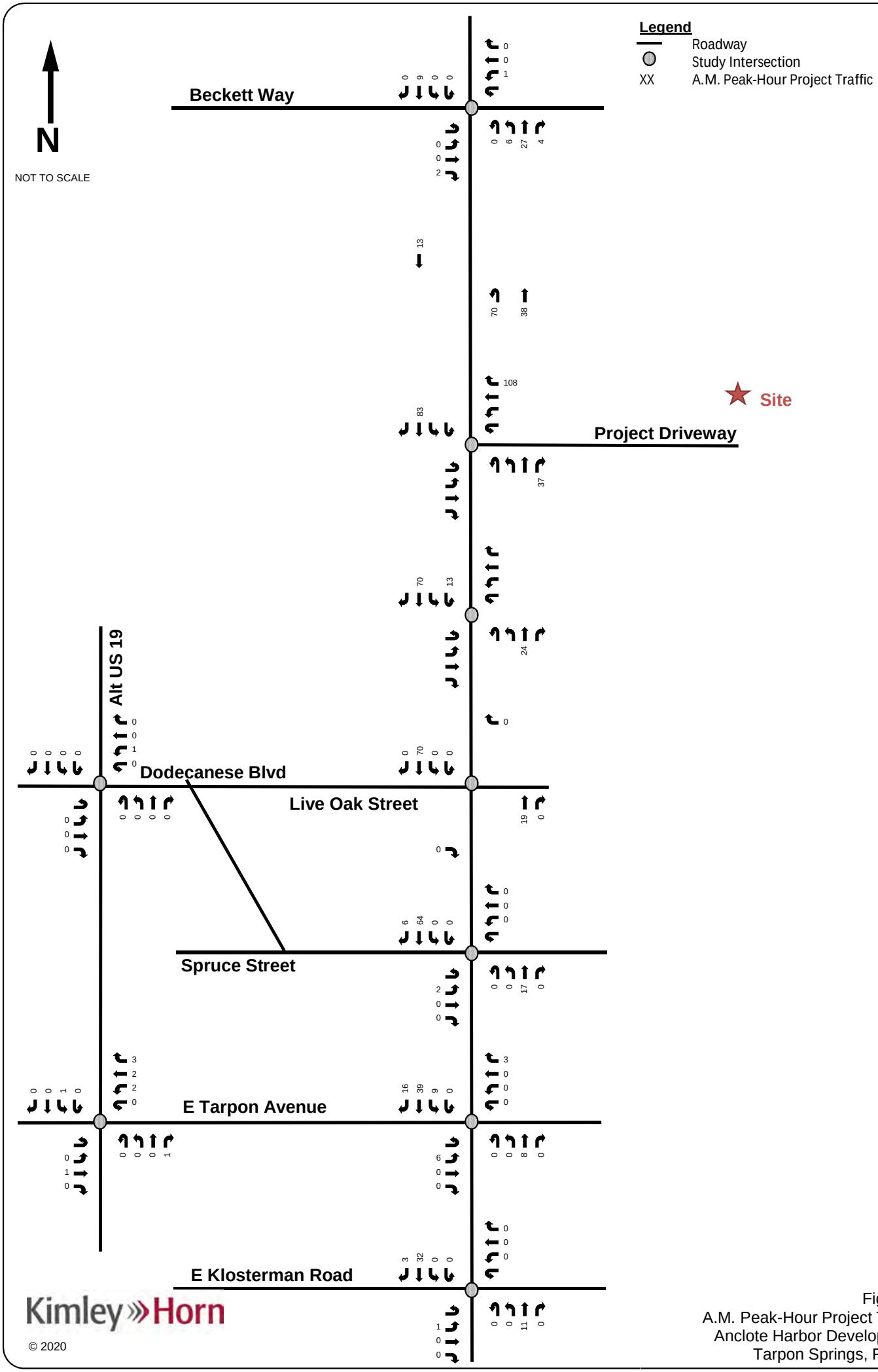

Figure 7
A.M. Peak-Hour Project Traffic
Anclote Harbor Development
Tarpon Springs, Florida

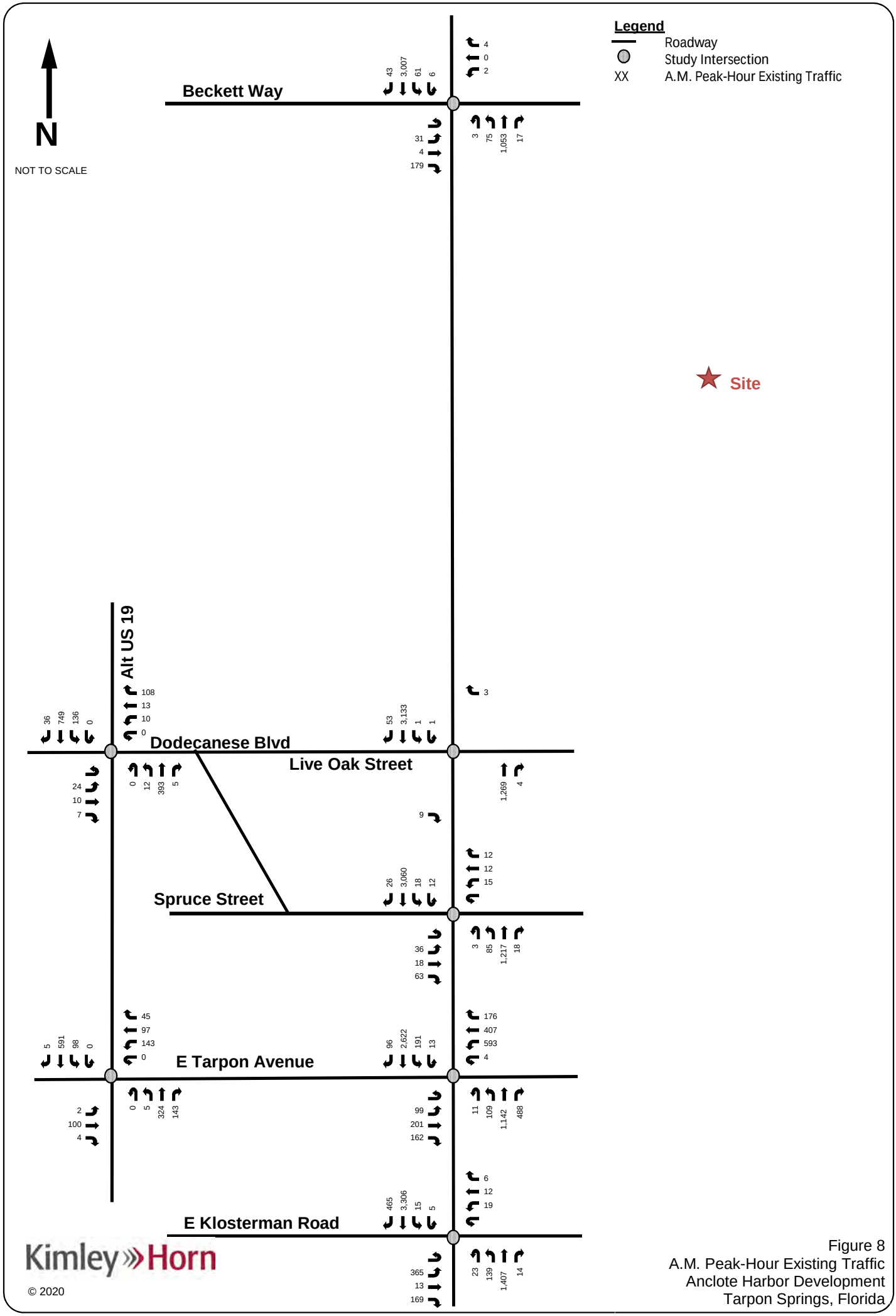

Figure 8
A.M. Peak-Hour Existing Traffic
Anclote Harbor Development
Tarpon Springs, Florida

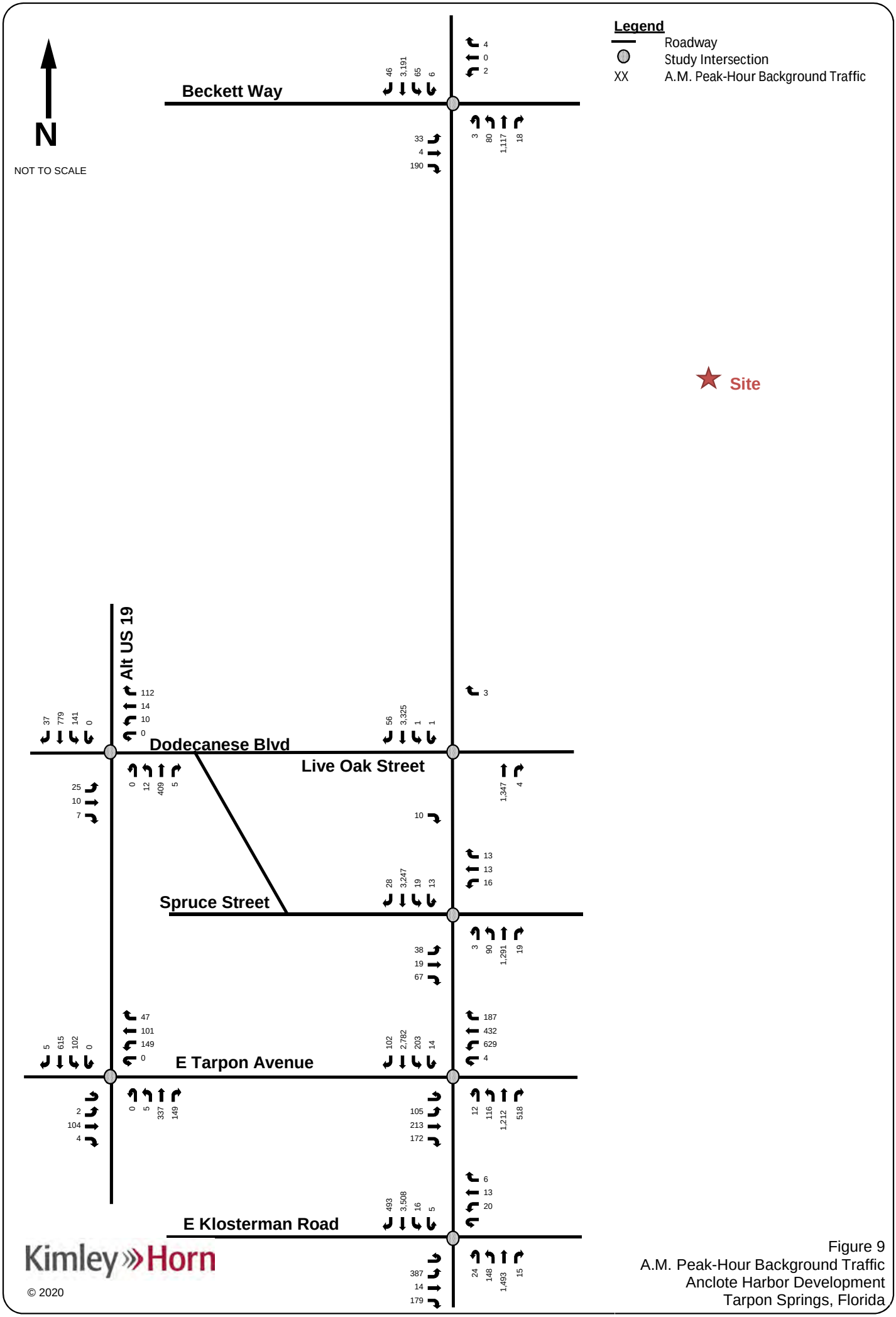

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Figure 9
A.M. Peak-Hour Background Traffic
Anclote Harbor Development
Tarpon Springs, Florida

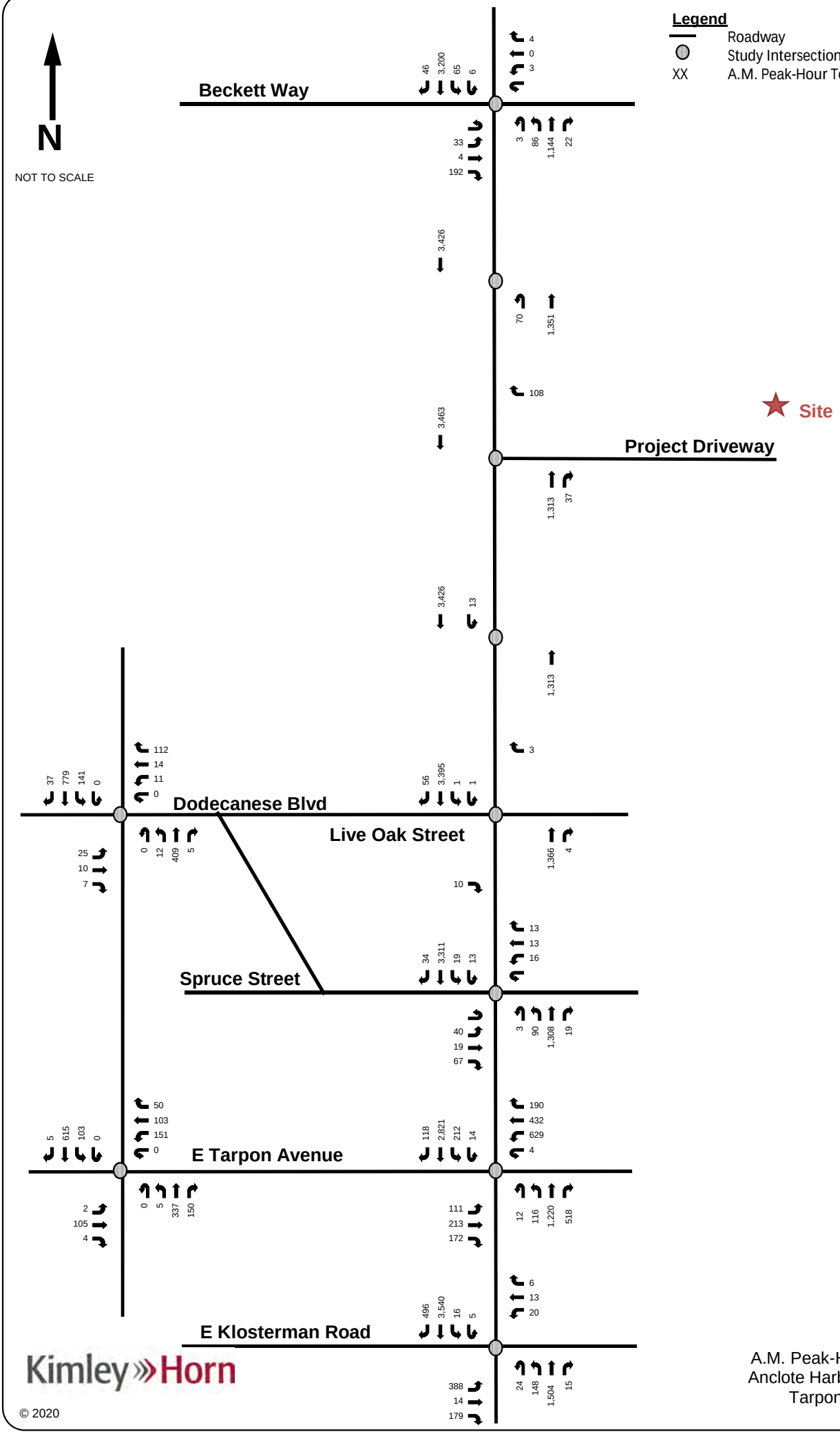


Figure 10
A.M. Peak-Hour Total Traffic
Anclote Harbor Development
Tarpon Springs, Florida

Kimley»Horn

August 17, 2020

Suite 150
655 North Franklin Street
Tampa, Florida
33602

Patricia L. McNeese, AICP
Principal Planner
City of Tarpon Springs
324 East Pine Street
Tarpon Springs, Florida 34688

Re: Anclote Harbor
Traffic Impact Analysis Methodology
42501 US Highway 19
Pinellas County, Florida
Parcel: 06-27-16-89388-000-0420

Dear Ms. McNeese:

The purpose of this letter is to document the methodology that will be conducted for the Traffic Impact Analysis for a proposed residential development, Anclote Harbor. The project site is located in the northeast corner of US 19 & Fred Marquis Pinellas Trail in Pinellas County, Florida. The concept site plan is attached. The following methodology is provided below for your review and comments.

The site will be analyzed for traffic impacts for up to 404 multi-family dwelling units (mid-rise). Access to the property will be provided at one access connection along US 19. A pre-application meeting was held with the Florida Department of Transportation (FDOT) on May 9, 2019 to discuss the proposed access along US 19. Based upon comments received at the pre-application meeting, overall access is to be provided along US 19 as a proposed offset left-turn median opening. The project driveway will only allow right-in/right-out movements as shown below in Figure 1 which was provided by the FDOT at the pre-application meeting.

Figure 1 – Proposed Offset Left-Turn Median Opening

To appropriately address transportation operational issues related to this proposed residential development, Kimley-Horn will conduct an analysis that follows the study

TEL: 813 620 1460

methodology detailed below. The general site location map is attached.

Project Trip Generation: The anticipated project trip generation will be based upon the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition for land use code 221 (Multi-family Housing Mid-Rise). The trip generation table is summarized and attached. Based upon the trip generation, the proposed development is anticipated to generate 145 net, new a.m. peak-hour trips (37 entering/108 exiting) and 178 net, new p.m. peak-hour trips (108 entering/70 exiting).

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS TRIPS			INTERNAL CAPTURE		PASS-BY CAPTURE		NET, NEW EXTERNAL TRIPS		
						Percent											
Land Use	Period	ITE Edition	ITE Code	Scale	ITE Units	In	Out	In	Out	Total	%	Trips	%	Trips	In	Out	Total
Multi-family Housing Mid-Rise	**Daily**	10	221	404	DU	50%	50%	1100	1100	2200	0%	0	0%	0	1,100	1,100	2,200
Multi-family Housing Mid-Rise	**AM**	10	221	404	DU	26%	74%	37	108	145	0%	0	0%	0	37	108	145
Multi-family Housing Mid-Rise	**PM**	10	221	404	DU	61%	39%	108	70	178	0%	0	0%	0	108	70	178

Notes:
1. Daily Trip Generation Fitted Curve: T = 5.45(X) - 1.75
2. AM Trip Generation Average Rate: T = 0.36(X)
3. AM Trip Generation based upon average rate as $R^2 < 0.75$
4. PM Trip Generation Average Rate: T = 0.44(X)
5. PM Trip Generation based upon average rate as $R^2 < 0.75$

Analysis Year Scenarios: The transportation intersection and roadway analysis for the study area segments will be conducted for the buildout (year is assumed as build out year 2022) during the p.m. peak-hours. Synchro version 10 will be used for the intersection analyses and Synchro for the roadway analyses (detailed arterial).

Project Trip Distribution: The project traffic will be assigned to the road network using the FDOT District Seven Florida Standard Urban Transportation Model Structure (FSUTMS) planning model, specifically the Existing plus Committed (E+C) network. The select zone distribution output is attached and has been updated based upon the latest available version of the model.

Scheduled Improvements: The Work Programs for Pinellas County, Forward Pinellas, and Florida Department of Transportation (FDOT) District 7 and developer committed improvements were reviewed for improvements which are currently planned and funded for construction within the buildout time frame in the immediate vicinity of the project site.

No improvements were identified during this time period. Therefore, existing lane geometry and traffic controls will be used in the analysis of existing conditions for all impacted intersections and roadways.

Background Traffic Volumes: A growth rate of 1.3% was calculated based upon historic FDOT AADT volumes in the area. The growth rate calculations are attached. As discussed with the City, to provide a conservative growth, 2% exponential growth rate will be included.

Study Area: As defined in the *2019 Annual Level of Service Report* for Forward Pinellas, the study area roadway segments will be those that are defined as significantly impacted roadways, with the project traffic representing 1.0% or greater of the maximum service volume of peak-hour Level of Service (LOS) D evaluated for up to two miles from the project site boundaries. The study roadway segments were evaluated within two miles of the site until no longer deemed to be significantly impacted.

The intersections were based upon the end segments defined in the Pinellas County *Annual Level of Service Report* for Forward Pinellas.

Roadway segments include those impacted by project traffic that is greater than 1.0% of the LOS D Minimum Adopted Standards service volume. US 19 from Klosterman Road to Tarpon Avenue and US 19 from Tarpon Avenue to Beckett Way are considered deficient segments; therefore, these segments will be included in the analysis. The study area table is attached.

The following study roadway segments will be included in the analysis:

- US 19 from Klosterman Road to Tarpon Avenue
- US 19 from Tarpon Avenue to Live Oak Street
- US 19 from Live Oak Street to Beckett Way
- Live Oak Street from US 19 to Alt US 19
- Tarpon Avenue from US 19 to Alt US 19

The following study intersections will be included in the analysis:

- US 19 & Klosterman Road
- US 19 & Tarpon Avenue
- US 19 & Beckett Way
- US 19 & Live Oak Street
- Live Oak Street & Alt US 19
- Tarpon Avenue & Alt US 19

As these segments of US 19 are considered deficient in the Comprehensive Plan, transportation management plan strategies will be included in the analysis.

The proposed project access connection along US 19 will also be analyzed and the level of service per movement will be documented.

Due to the potential impacts of COVID for the traffic data, the data collected during 2020 will be compared to historical data sources along the study roadway segments including the *2019 Annual Level of Service Report* for Forward Pinellas. The count data at the intersections that are collected during 2020 will be increased, if appropriate, to reflect traffic volumes in the *2019 Annual Level of Service Report* for Forward Pinellas.

Access Management Analysis: As shown in the concept development plan, access to the site is proposed via one right-in/right-out driveway along US 19. Directional median openings are proposed to be provided north and south of the development

driveway. The location of the medians will be coordinated with the Florida Department of Transportation.

The two median openings (immediately north and south of the site) will be analyzed for the anticipated queue and turn lane length required. The analysis will include the number of anticipated trips heading north or south which utilize the median openings.

A Level of Service (LOS) analysis will be included for the unsignalized project driveway.

Multi-Modal Review: A review will be conducted to document the existing multi-modal conditions. The review will include recommendations for future potential multi-modal options within the area.

We will follow-up with you to determine if you have any questions or comments regarding this transportation methodology. We look forward to working with you.

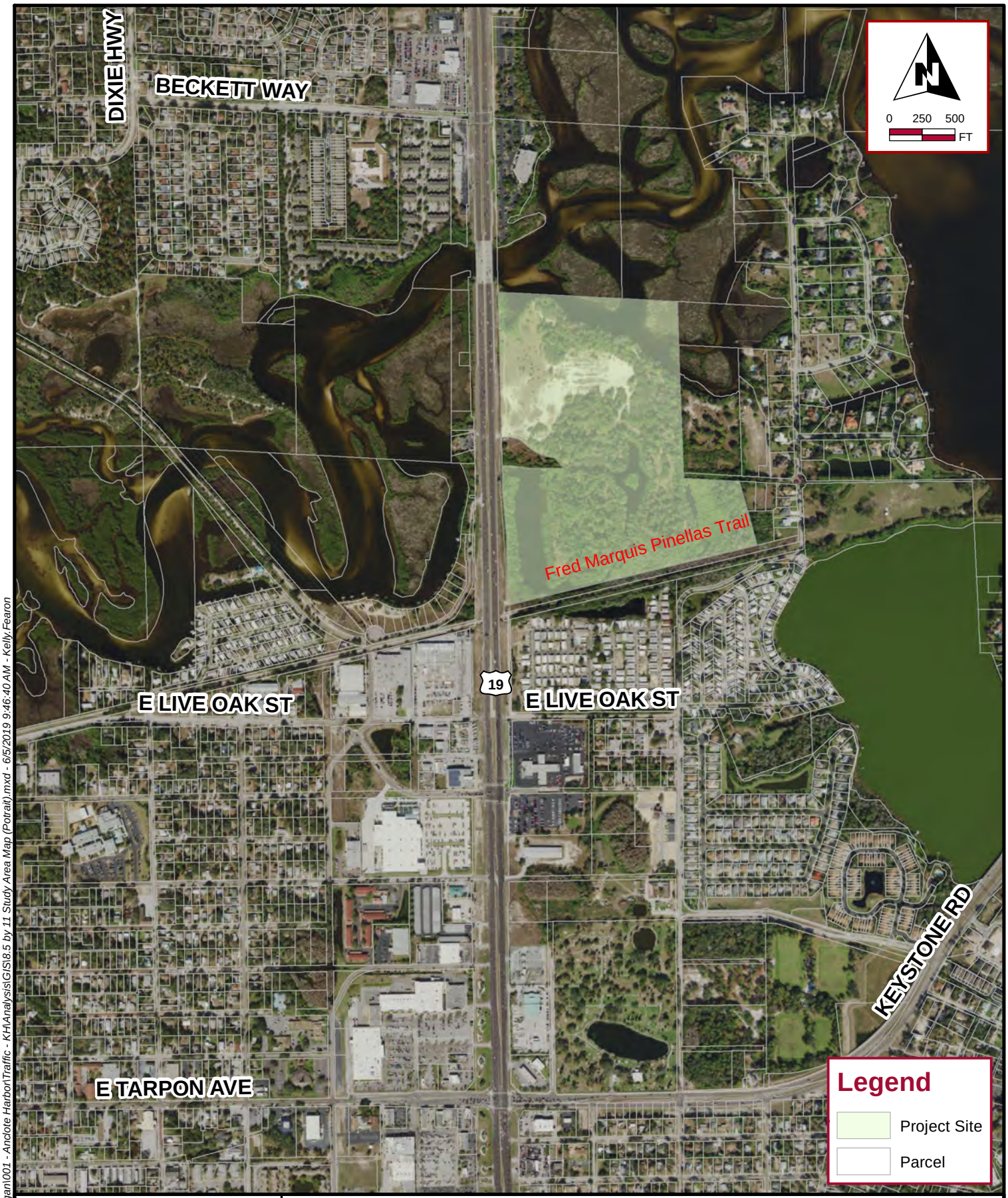
Very truly yours,

KIMLEY-HORN AND ASSOCIATES, INC.

Christopher Hatton, P.E.
Senior-Vice President

Kelly Fearon, P.E.
Transportation Engineer

Attachments: Study Area Table
FSUTMS Select Zone Analysis
Growth Calculations
FDOT Pre-Application Notes



K:\TAM_Civil\145062 - Morgan\001 - Andote Harbor\Traffic - KHAnalysis\GIS\8.5 by 11 Study Area Map (Potrait).mxd - 6/5/2019 9:46:40 AM - Kelly.Fearon

Kimley»Horn

655 North Franklin St, Suite 150, Tampa, FL 33602
Phone: (813) 620 1460
www.kimley-horn.com

Project Location Map

MORGAN - TARPON SPRINGS
PINELLAS COUNTY, FLORIDA

Project No: 145062001	Scale: As Noted	June 2019	Figure 1

Kimley»Horn

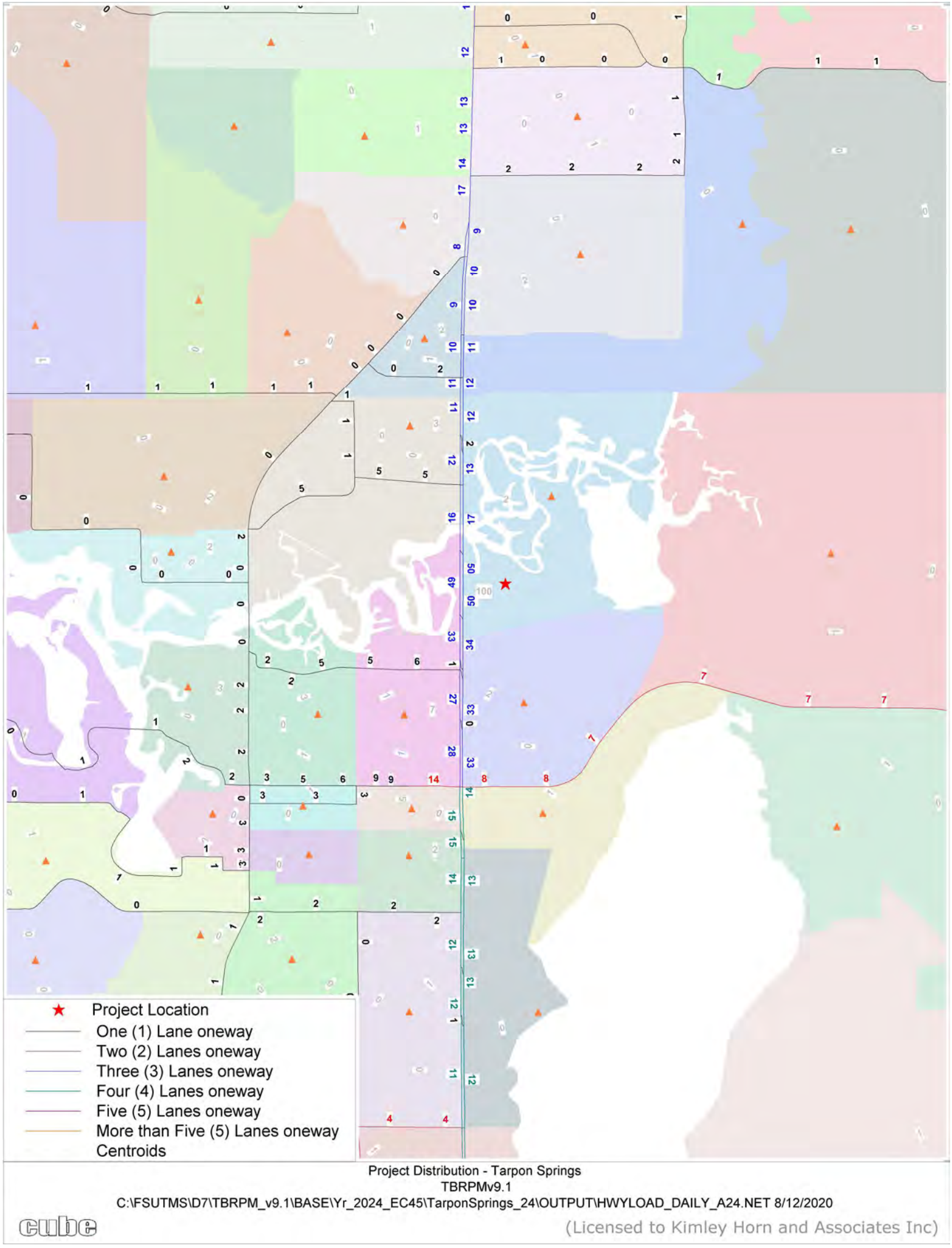
Study Area Table (AM Peak-Hour)

Roadway	From	To	Service Volumes		AM Peak-Hour Directional Traffic		Study Network	
			Lane	LOS D Peak Hour Directional Volume	Project Traffic (%)	Project Traffic (Inbound)	Project Traffic % of Service Volume	Significant Segment?
US 19	Alderman Rd	Klosterman Rd	6D	2,940	25%	27	0.92%	No
	Klosterman Rd	Tarpon Ave	6D	2,940	30%	32	1.09%	Yes
	Tarpon Ave	Live Oak St	6D	2,940	67%	72	2.45%	Yes
	Live Oak St	Project Access	6D	2,940	100%	108	3.67%	Yes
	Project Access	Beckett Way	6D	2,940	33%	36	1.22%	Yes
	Beckett Way	Pasco County Line	6D	2,940	25%	27	0.92%	No
Live Oak Street	Alt US 19	US 19	2D	572	6%	6	1.05%	Yes
Keystone Road	East Lake Road	US 19	2D	1764	8%	9	0.51%	No
Tarpon Avenue	Alt US 19	US 19	2D	792	14%	15	1.89%	Yes
Beckett Way	US 19	Old Dixie Highway	2U	559	5%	5	0.89%	No
Dixie Highway	Alt US 19	Beckett Way	2U	1,440	5%	5	0.35%	No
	Beckett Way	Pasco County Line	2U	1,440	0%	0	0.00%	No
Alt US 19	Meres Blvd	Tarpon Ave	2D	830	3%	3	0.36%	No
Alt US 19	Tarpon Ave	Anclote Ave	2U	880	2%	2	0.23%	No

Study Area Table (PM Peak-Hour)

Roadway	From	To	Service Volumes		PM Peak-Hour Directional Traffic		Study Network	
			Lane	LOS D Peak Hour Directional Volume	Project Traffic (%)	Project Traffic (Outbound)	Project Traffic % of Service Volume	Significant Segment?
US 19	Alderman Road	Klosterman Rd	6D	2,940	25%	27	0.92%	No
	Klosterman Rd	Tarpon Ave	6D	2,940	30%	32	1.09%	Yes
	Tarpon Ave	Live Oak	6D	2,940	67%	72	2.45%	Yes
	Live Oak	Project Access	6D	2,940	100%	108	3.67%	Yes
	Project Access	Beckett Way	6D	2,940	33%	36	1.22%	Yes
	Beckett Way	Pasco County Line	6D	2,940	25%	27	0.92%	No
Live Oak Street	Alt US 19	US 19	2D	572	6%	6	1.05%	Yes
Keystone Road	East Lake Road	US 19	2D	1764	8%	9	0.51%	No
Tarpon Avenue	Alt US 19	US 19	2D	792	14%	15	1.89%	Yes
Beckett Way	US 19	Old Dixie Highway	2U	559	5%	5	0.89%	No
Dixie Highway	Alt US 19	Beckett Way	2U	1,440	5%	5	0.35%	No
	Beckett Way	Pasco County Line	2U	1,440	0%	0	0.00%	No
Alt US 19	Meres Blvd	Tarpon Ave	2D	830	3%	3	0.36%	No
Alt US 19	Tarpon Ave	Anclote Ave	2U	880	2%	2	0.23%	No

Project Distribution (% of trips)



Project: Anclote Harbor
Location: Pinellas County
Notes: Annual Level of Service Report

Volume Source #1: US 19 from Tarpon Ave to Beckett Way
Volume Source #2:
Volume Source #3:
Volume Source #4:
Volume Source #5:

Line	Month	Year	Volume Source #1	Volume Source #2	Volume Source #3	Volume Source #4	Volume Source #5	Average Volume
1		2014	59000					59000
2		2015	59000					59000
3		2016	60000					60000
4		2017	61000					61000
5		2018	62000					62000
6								
7								
8								
9								
10								

INPUT DATA

Line	Month	Year	Aggregate Traffic Volume
1		2014	59000
2		2015	59000
3		2016	60000
4		2017	61000
5		2018	62000
6			
7			
8			
9			
10			

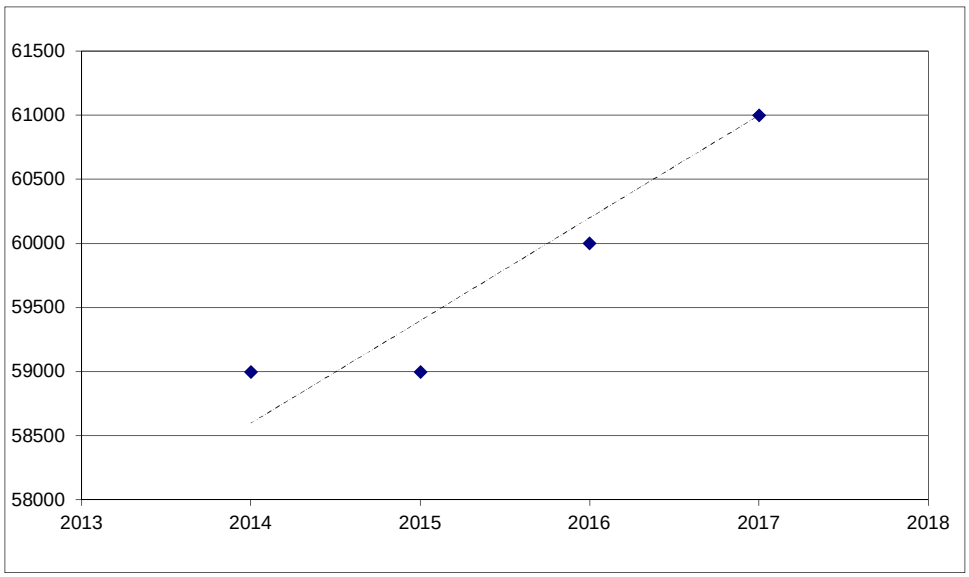
OUTPUT DATA

Line	Month	Year	Best Fit Volume Trend
1		2014	58600
2		2015	59400
3		2016	60200
4		2017	61000
5		2018	61800
6			
7			
8			
9			
10			

Slope: 800
Intercept: -1552600
R^2: 0.941176471
Standard Error: 365.1483717

Exponential
Growth Rate: 1.34%
Future = Existing (1+Growth)^N

Linear
Growth Rate: 1.37%
Future = Existing (1+Growth*N)



Florida Department of Transportation

RON DESANTIS
GOVERNOR

5211 Ulmerton Road
Clearwater, FL 33760

KEVIN J. THIBAULT, P.E.
SECRETARY

May 9, 2018

This pre-application finding may be used as a basis for permit approval until 11/09/2019 , given field conditions have not substantially changed.
THIS DOCUMENT IS NOT A PERMIT APPROVAL

Shane Hanney
Kimley Horn
655 N. Franklin Street Suite 150
Tampa, FL 33602

Re: **PRE-APPLICATION REVIEW FOR ACCESS PERMIT**

Access Class: 3
Applicant: Kimley Horn
Approx. M.P.: 32.258
Connection Category: C
County: Pinellas

Posted Speed: 55
Permit #: TBD
Project: TBD
Section: 15150 000
State Road: 55

Dear Mr. Hanney:

A Pre-application Review meeting for the above project was conducted on May 9, 2019. The purpose of the Pre-application Review is to establish the permit category, number, type, general location and associated features of access connections to the State Highway. The Department's Access Management Group offers the following based the information provided:

☐ We disapprove the concept as presented with the following considerations.

☒ We approve the concept as presented with the following conditions/considerations.

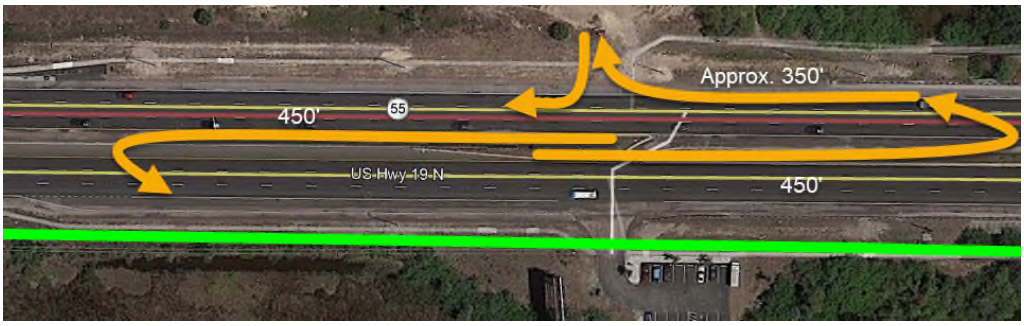
☐ We approve the concept as submitted and we invite you to submit a permit application package to the Pinellas Maintenance Office with engineering drawings that reflect the concept approved here.

☐ We are prepared to continue the review of the concept with the District Variance Committee.

☐ We are prepared to review a concept when presented with the following:

Conditions/Comments:

1. If you wish to pursue the proposed access connection project, the permit would be Category-C. The fee will be $1000. Please submit an Access Connection permit via FDOT's new One Stop Permitting website (https://osp.fdot.gov).
2. A Drainage permit or Exception will be required for your project. Please submit a Drainage Exception or Permit via FDOT's new One Stop Permitting website (https://osp.fdot.gov). If you need to discuss technical issues with your Drainage permit or exception, you may contact Antonius Lebrun at District Office (813-975-6000).
3. Given the speed and the traffic generated for the site a right turn lane is warranted.
4. The Department will not allow for an open median cut, but will agree to an offset left turn median opening. The illustration below depicts what the Department means by an offset left turn median opening.



5. The Daily trips for 400+ apartment according to ITE is 2,700 making the site a Category C. Category C requires a full traffic Study including a pedestrian and bike traffic.
6. A separate construction agreement will be required for the work in the roadway. The construction agreement will require a full plan, Certificate of Liability, Cost estimate, and a Surety bond OR a Letter of Credit.
7. A modification to the existing NB left to convert to a conventional median
8. 50-foot radiuses for the driveway with shoulder extended to the right-of-way line.
9. The turn lanes will be a minimum of 11-foot.
10. The installation of the right turn lane into the site will require a relocation of the existing light poles in the right-of-way. Please show on the plans the existing location and the relocation of the light poles.

All permit application packages shall be submitted to:

Florida Department of Transportation
5211 Ulmerton Road
Clearwater, FL 33760
Attn: Brian A. Bennett, P.E. Pinellas Operations Program Engineer

Favorable review of the proposed generally means that you may develop plans complying with the review comments and submit them, within six months, to the Department for permit processing. When permit requests are submitted subsequent to a Pre-application Review, Department staff reviews the design plans for compliance with standard and constructability. The applicant's Engineer of Record is responsible for the technical accuracy of the plans. In keeping with the intent of the Rule, the Department will attempt to abide with the review comments to the extent that necessary judgment is available to the Permits Engineer. Unfavorable review generally means that a permit application based on the design proposal would likely be denied.

Kimley»Horn

August 17, 2020

Patricia L. McNeese, AICP
Principal Planner
City of Tarpon Springs
324 East Pine Street
Tarpon Springs, Florida 34688

Re: Anclote Harbor
Traffic Impact Analysis Methodology
42501 US Highway 19
Pinellas County, Florida
Parcel: 06-27-16-89388-000-0420

Dear Ms. McNeese:

Kimley-Horn and Associates, Inc (Kimley-Horn) is providing you with the following responses to comments dated July 17, 2020 for the Traffic Impact Analysis Methodology Review. Enclosed within this application, please find:

- Updated traffic impact analysis methodology

Comment 1: In the subject and methodology document verbiage replace references to "Transportation Methodology" with "Traffic Impact Analysis Methodology"

Response 1: Acknowledged. The traffic impact analysis methodology has been updated.

Comment 2: Include address of property with Parcel Number if available.

Response 2: Acknowledged. The traffic impact analysis methodology has been updated.

Comment 3: Confirm the exact location of the proposed site. Per the location map, it is in the NE Corner of US 19 and Fred Marquis Trail.

Response 3: Acknowledged. The traffic impact analysis methodology has been updated.

Comment 4: How were the roadway segments and intersections selected for analysis? Was it linear along US 19 or was a 2 mile radius of influence used? Relevant intersections and roadway segments within 2 miles radius of influence, were not included. Study intersections that were selected in the methodology extend 2 miles to the south but north intersections only extend 0.5 miles. Please clarify.

Response 4: The study area roadway segments were defined as segments impacted by project traffic that is greater than 1.0% of the LOS D Minimum Adopted Standards service volume. A review was

performed of the roadway segments within two miles of the project to determine which roadway segments are impacted by project traffic that is greater than 1.0% of the LOS D Minimum Adopted Standards service volume.

The study area has been updated based upon the latest available FSUTMS (version 9.1) model.

Comment 5: Confirm there is only one sole unsignalized driveway to the site. Per the Concept Development Plan there is only a right in-right out access provided. Include directional arrows on the plans to indicate traffic movements from and to the site. Also confirm if there would be another access point for emergency vehicles to enter the property, should the sole access driveway be blocked by a potential crash.

Response 5: Due to the site location and existing roadway network, only one access connection is proposed (right-in/right-out driveway). The access connection will include two ingress lanes and one egress lanes to provide additional access to the site should the sole access driveway be blocked by a potential crash.

Comment 6: Include methodology for access management along US 19. The Concept Development Plan shows directional medians being provided north and south of the development driveway. Spacing for directional median openings should meet FDOT criteria for access management classification. Per FDOT Access management criteria, directional median opening should be 660'. Per the Concept Development Plan, only 350' has been provided which doesn't provide for much transition distance for maneuvers from the development's right in right out driveway, before they cross three lanes to make a U turn and then proceed to go SB. Can U turn median opening be moved further north to provide for sufficient transitional distance from a safety perspective. Also analyze the U turn opening for stacking in the U turn storage lane. Also analyze the U turn median opening proposed south of the development's entrance north of Live Oak, for motorists coming from the north. Include number of trips heading north or south.

Response 6: As indicated in the updated Traffic Impact Analysis Methodology, the proposed access along US 19 is based upon comments received at an FDOT pre-application meeting on May 9, 2019. The traffic impact analysis methodology has been updated with a figure to illustrate the allowed movements at the access connection. The location of the medians will be coordinated and subject to approval by the Florida Department of Transportation (FDOT).

Comment 7: Include in methodology for driveway analysis and if un-signalized driveway would meet acceptable LOS.

Response 7: Acknowledged. The traffic impact analysis methodology has been updated. A driveway analysis will be provided.

Comment 8: Include in methodology multi-modal considerations and improvements.

Response 8: Acknowledged. The traffic impact analysis methodology has been updated. Multi-modal considerations will be included in the analysis.

Comment 9: Confirm if the Multi-Family Housing will be Low-Rise or Mid-Rise? The TIA Report dated April 10, 2020 shows "Mid-Rise" with Net New External Trips different from what is shown here.

Response 9: The concept plan has been updated and the site is proposed to include mid-rise multi-family housing. The traffic impact analysis methodology has been updated.

Comment 10: Confirm which software will be used for the roadway segment LOS analysis.

Response 10: A roadway analysis will be provided using the detailed arterial analysis with Synchro, version 10.

Comment 11: Confirm which FSUTMS model was used and what the base and future model years are. Specify what the committed developments within the study area.

Response 11: The FSUTMS Model (version 9.1) was used for District 7. The model base year for this version is 2015, the existing + committed network year is 2024, and the future year is 2045.

As discussed with the City, a 2% growth rate will be included in the analysis to provide a conservative estimate of any committed developments within the study area.

Comment 12: How will existing year model traffic volumes be validated? Methodology does not specify data collection.

Response 12: The FSUTMS model existing traffic volumes will not be independently validated as the model is created and maintained by the District.

The existing traffic volumes along US 19 were collected on June 20, 2019 and will be utilized in the existing traffic conditions analysis. The traffic volumes were collected at the study area intersections identified in the methodology.

The additional study area intersections (Live Oak Street & Alt US 19 and Tarpon Ave & Alt US 19) were collected in 2020 and will be reviewed based upon Forward Pinellas 2019 Annual Level of Service data and adjusted, if appropriate.

Comment 13: Annual Growth Factor computation was shown. Would the exponential or linear growth factor be used? However, it is not clear what the opening year will be? Is it Year 2022? Would opening year traffic volumes be forecasted from current year traffic volumes? Also include

information on data collection efforts, on roadway segment and intersection peak hour collection efforts. Where is data being collected? Also include information on the committed developments traffic that would be included?

Response 13: The growth factor will be exponential growth. As stated in the methodology the opening year is 2022. Opening year (background) traffic volumes will be forecasted from the current traffic volume data (collected on June 20, 2019).

Turning movement count data was collected at the identified study intersections from the methodology on June 20, 2019 and will be utilized for the roadway and intersection analysis.
As discussed with the City, a 2% growth rate will be included in the analysis to provide a conservative estimate of any committed developments within the study area.

Comment 14: Update Trip Generation Chart per ITE Trip Generation to include:

a. AM Peak hour trips
    1. AM Peak Hour Trips per ITE
    2. Fitted Curve Equation:
    3. Ln(T) = 0.95 Ln(X) - 0.51
    4. Directional Distribution:
    5. 23% entering, 77% exiting
    6. Calculated Trip Ends:
    7. Fitted Curve: 181 (Total), 41 (Entry), 140 (Exit)

b. Daily Weekday trips.
    1. Daily Trips per ITE
    2. Fitted Curve Equation:
    3. T = 7.56(X) - 40.86
    4. Directional Distribution:
    5. 50% entering, 50% exiting
    6. Calculated Trip Ends:
    7. Fitted Curve: 3044 (Total), 1522 (Entry), 1522 (Exit)

Response 14: The trip generation was updated for land use code 221 (Mid-Rise Multifamily housing) for the a.m. peak-hour and daily weekday.

Comment 15: For the PM peak hour trip generation shown, include the Fitted Curve Equation:
    a. Ln(T) = 0.89 Ln(X) - 0.02

Response 15: The trip generation was updated for land use code 221 (Mid-Rise Multifamily housing) for the p.m. peak-hour.

Comment 16: Under Study Area, the 2017 Annual Level of Service Report for Forward Pinellas, is being used. Use Forward Pinellas's latest LOS report which is dated 2019. Here is the link to the report: https://forwardpinellas.org/wp-content/uploads/2016/06/Level-Of-Service-Final-Report.pdf

Response 16: Acknowledged.

Comment 17: Parking considerations have not been included. Is all parking on-site? Include parking per code.

Response 17: Acknowledged. Parking will be provided on site and noted on the site plan.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Kelly Fearon

Kelly Fearon, P.E.
Transportation Engineer

Project: Anclote Harbor
Location: Pinellas County
Notes: Annual Level of Service Report

Volume Source #1: US 19 from Tarpon Ave to Beckett Way
Volume Source #2:
Volume Source #3:
Volume Source #4:
Volume Source #5:

Line	Month	Year	Volume Source #1	Volume Source #2	Volume Source #3	Volume Source #4	Volume Source #5	Average Volume
1		2014	59000					59000
2		2015	59000					59000
3		2016	60000					60000
4		2017	61000					61000
5		2018	62000					62000
6								
7								
8								
9								
10								

INPUT DATA

Line	Month	Year	Aggregate Traffic Volume
1		2014	59000
2		2015	59000
3		2016	60000
4		2017	61000
5		2018	62000
6			
7			
8			
9			
10			

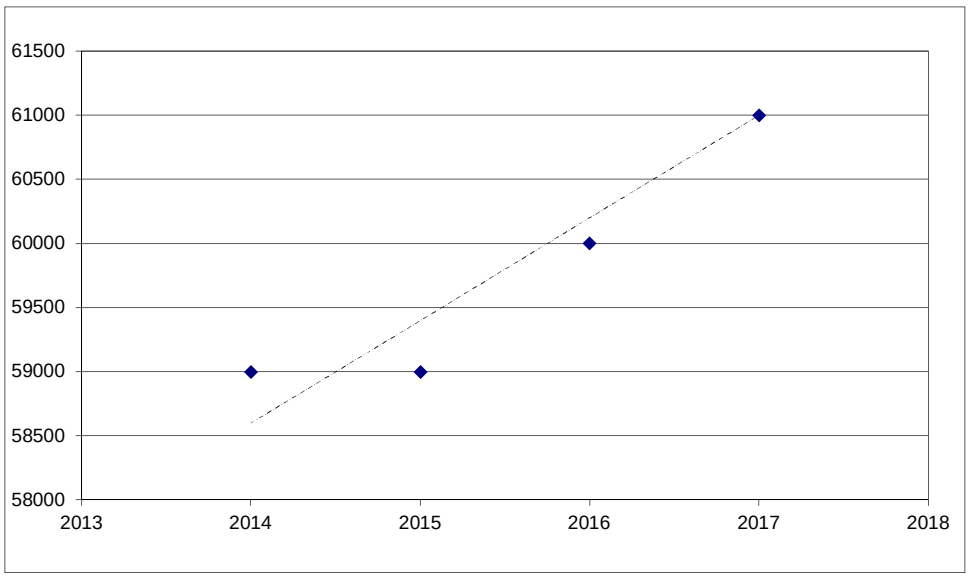
OUTPUT DATA

Line	Month	Year	Best Fit Volume Trend
1		2014	58600
2		2015	59400
3		2016	60200
4		2017	61000
5		2018	61800
6			
7			
8			
9			
10			

Slope: 800
Intercept: -1552600
R^2: 0.941176471
Standard Error: 365.1483717

Exponential
Growth Rate: 1.34%
Future = Existing (1+Growth)^N

Linear
Growth Rate: 1.37%
Future = Existing (1+Growth*N)



2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 1500 PINELLAS COUNTYWIDE

MOCF: 0.93

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

* PEAK SEASON

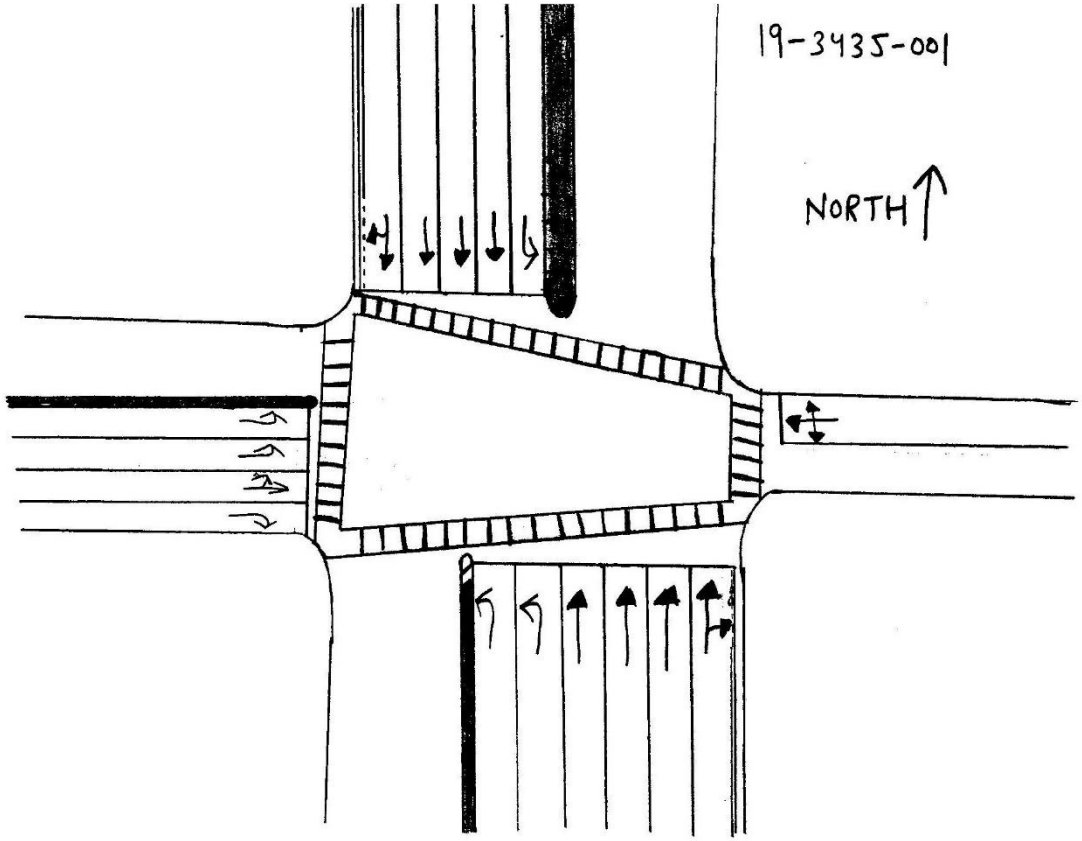
National Data & Surveying Services

N/S Street: **US 19**

Speed: **55 MPH**

E/W Street: **Klosterman Rd**

Speed: **40 MPH**



Site Code: **19-3435-001**

Date: **06/20/2019**

Weather: **Sunny**

City: **Tarpon Springs**

County: **Pinellas**

Count Times: **07:00 - 09:00**

16:00 - 18:00

Control: **Signalized**

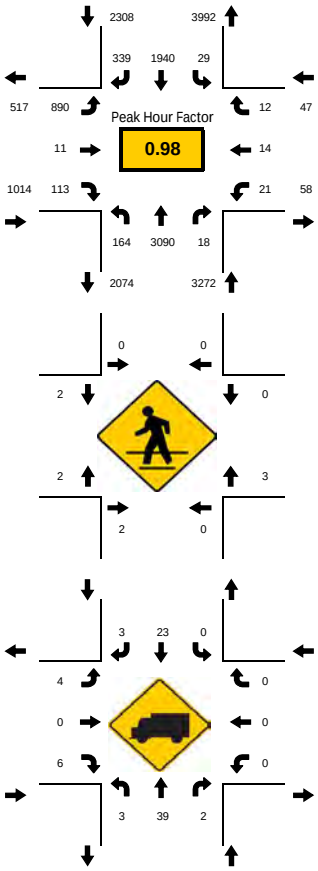
SIGNAL TIMING

PHASES	**1**	**2**	**3**
NL/NT	00:38	00:34	00:13
NT/ST	02:26	02:27	02:50
NL/SL	-	-	00:18
EL/ET	00:39	00:24	00:38
WL/WT	00:19	00:16	00:19

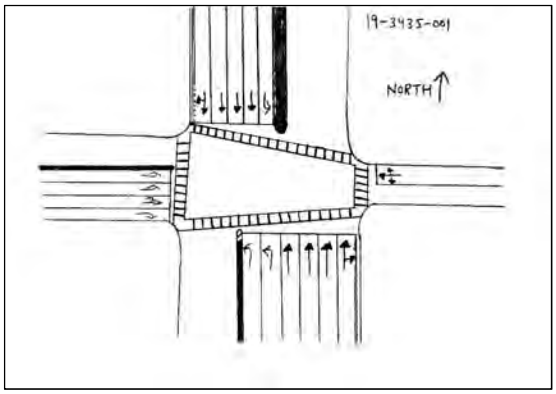
LOCATION: US 19 & Klosterman Rd
CITY/STATE: Tarpon Springs, FL

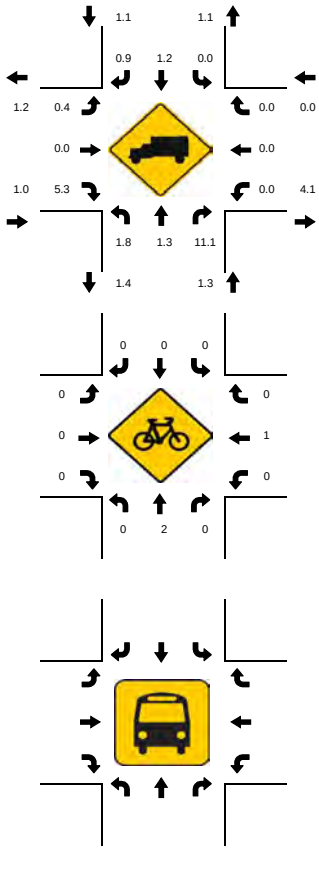
PROJECT ID: 19-03435-001
DATE: 06/20/2019

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



National Data & Surveying Services





15-Min Count Period Beginning At	US 19 Northbound					US 19 Southbound					Klosterman Rd Eastbound					Klosterman Rd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	40	700	4	5	1	7	469	87	1	4	194	1	33	0	24	3	2	6	0	3	1552	6137
04:15 PM	40	687	4	3	0	4	494	75	4	9	196	3	31	0	28	6	5	3	0	2	1555	6257
04:30 PM	55	669	7	1	1	4	440	77	1	3	215	4	29	0	18	1	2	2	0	0	1507	6389
04:45 PM	43	682	4	2	0	2	510	70	3	12	176	3	19	0	11	4	1	4	0	2	1523	6558
05:00 PM	22	748	3	2	0	1	524	81	3	11	235	3	27	0	22	11	7	5	0	2	1672	6641
05:15 PM	38	751	6	7	0	3	516	83	3	7	242	2	22	0	19	5	4	5	0	1	1687	4969
05:30 PM	47	819	2	3	0	9	433	87	1	17	230	3	36	0	23	3	3	0	0	0	1676	3282
05:45 PM	32	772	7	13	1	7	467	88	2	10	183	3	28	0	21	2	0	2	0	1	1606	1606

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	188	3276	28	52	4	36	2096	352	12	68	968	12	144	0	92	44	28	20	0	8	**7256**
Heavy Trucks	8	60	4			0	28	4			8	0	12			0	0	0			**124**
Pedestrians		8					0					8					8				**24**
Bicycles	0	8	0			0	0	0			0	0	0			0	4	0			**12**
Railroad																					
Stopped Buses																					

National Data & Surveying Services

N/S Street: **US 19**

Speed: **55 MPH**

E/W Street: **Tarpon Ave**

Speed: **45 MPH**

Site Code: **19-3435-002**

Date: **06/20/2019**

Weather: **Sunny**

City: **Tarpon Springs**

County: **Pinellas**

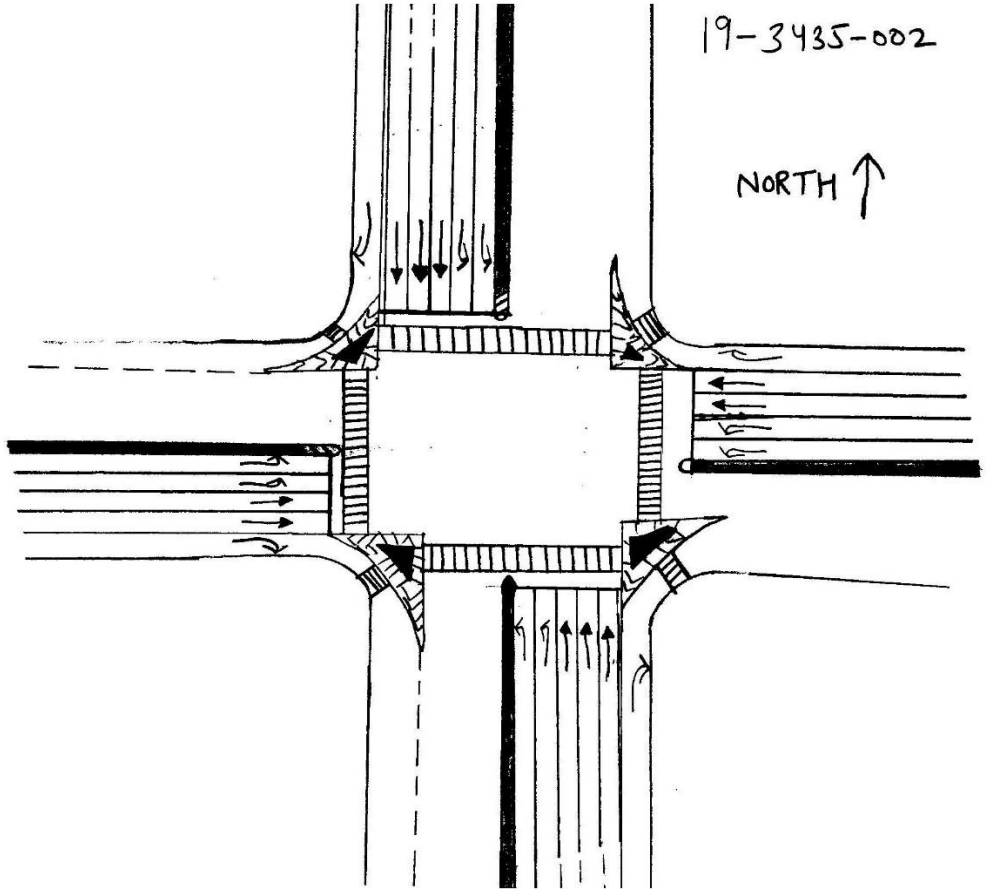
Count Times: **07:00 - 09:00**

16:00 - 18:00

Control: **Signalized**

SIGNAL TIMING

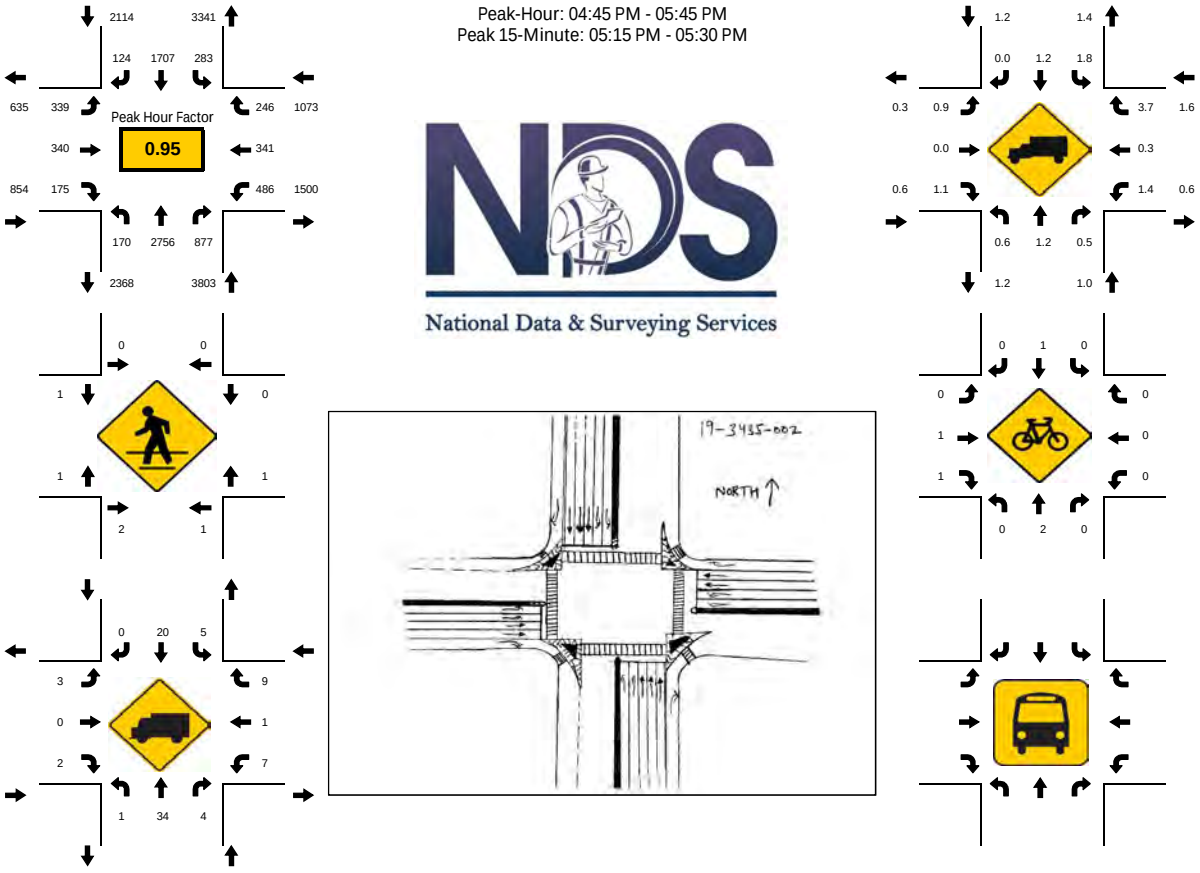
PHASES	**1**	**2**	**3**
NL/NT	00:26	00:26	00:30
NT/ST	01:53	01:51	01:45
SL/ST	00:25	00:26	00:28
EL/ET	00:33	00:33	00:32
WL/WT	00:45	00:44	00:44



LOCATION: US 19 & Tarpon Ave
CITY/STATE: Tarpon Springs, FL

PROJECT ID: 19-03435-002
DATE: 06/20/2019

Peak-Hour: 04:45 PM - 05:45 PM
Peak 15-Minute: 05:15 PM - 05:30 PM



National Data & Surveying Services

15-Min Count Period Beginning At	US 19 Northbound					US 19 Southbound					Tarpon Ave Eastbound					Tarpon Ave Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	22	634	159	1	0	76	382	22	6	0	92	95	33	0	0	107	84	75	0	0	1788	7587
04:15 PM	42	712	210	8	0	74	437	23	7	0	71	55	52	1	0	133	70	60	2	0	1957	7728
04:30 PM	43	705	201	1	0	57	422	30	5	0	81	77	47	1	0	134	103	83	3	0	1993	7840
04:45 PM	40	614	203	4	0	68	400	32	7	0	97	83	47	0	0	119	76	57	2	0	1849	7844
05:00 PM	32	671	211	2	0	67	421	36	8	0	91	93	39	0	0	116	86	56	0	0	1929	7834
05:15 PM	52	767	249	3	0	76	462	27	6	0	66	59	44	0	0	121	73	63	1	0	2069	5905
05:30 PM	36	704	214	1	0	47	424	29	4	0	85	105	45	0	0	125	106	70	2	0	1997	3836
05:45 PM	48	682	215	1	0	45	313	24	7	0	69	69	38	0	0	145	100	83	0	0	1839	1839

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	208	3068	996	16	0	304	1848	144	32	0	388	420	188	0	0	500	424	280	8	0	**8824**
Heavy Trucks	4	40	8			12	24	0			8	0	4			12		4	16		**132**
Pedestrians		8						0				4					4				**16**
Bicycles	0	8	0			0	4	0			0	4	4			0		0	0		**20**
Railroad																					
Stopped Buses																					

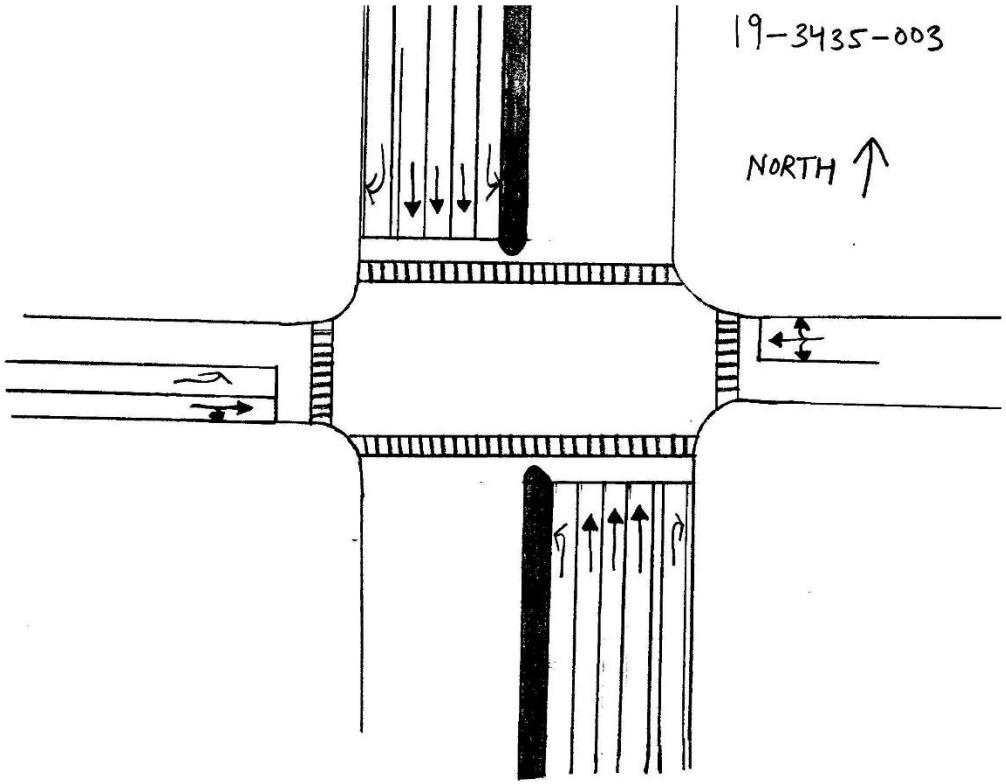
National Data & Surveying Services

N/S Street: **US 19**

Speed: **55 MPH**

E/W Street: **Beckett Way**

Speed: **35 MPH**



Site Code: **19-3435-003**

Date: **06/20/2019**

Weather: **Sunny**

City: **Tarpon Springs**

County: **Pinellas**

Count Times: **07:00 - 09:00**

16:00 - 18:00

Control: **Signalized**

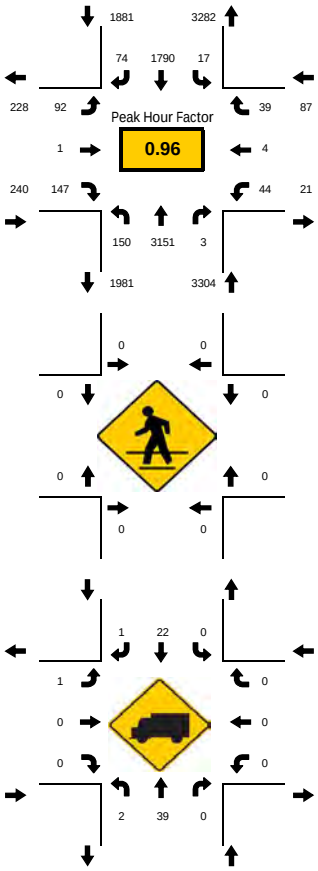
SIGNAL TIMING

PHASES	**1**	**2**	**3**
NL/SL	00:17	00:16	00:15
NL/NT	00:18	00:15	00:28
NT/ST	02:54	02:58	02:40
ET/WT	00:33	00:37	00:31

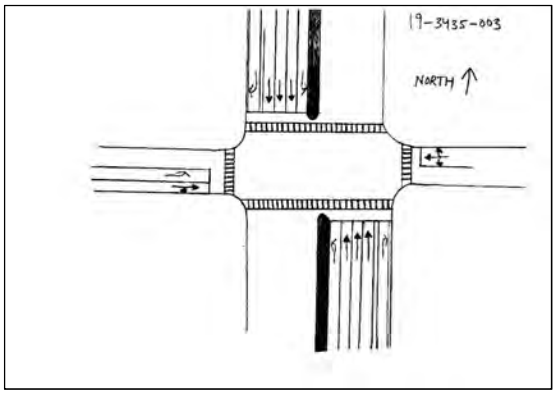
LOCATION: US 19 & Beckett Way
CITY/STATE: Tarpon Springs, FL

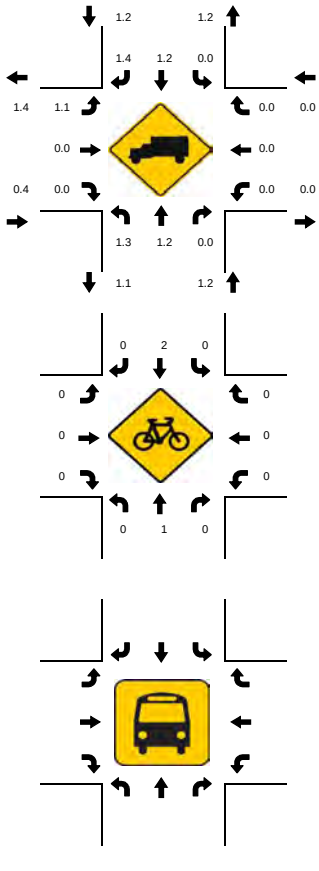
PROJECT ID: 19-03435-003
DATE: 06/20/2019

Peak-Hour: 04:30 PM - 05:30 PM
Peak 15-Minute: 05:15 PM - 05:30 PM



National Data & Surveying Services





15-Min Count Period Beginning At	US 19 Northbound					US 19 Southbound					Beckett Way Eastbound					Beckett Way Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	30	753	2	3	0	2	398	20	1	6	15	0	35	0	26	10	1	8	0	7	1278	5292
04:15 PM	23	788	2	2	0	0	427	14	5	4	21	0	34	0	29	11	0	11	0	10	1338	5421
04:30 PM	41	774	0	1	0	0	449	13	5	3	18	1	30	0	18	12	1	14	0	9	1359	5512
04:45 PM	30	727	0	1	0	2	457	19	2	6	21	0	41	0	37	9	1	7	0	5	1317	5494
05:00 PM	39	800	3	3	1	0	433	23	6	6	28	0	41	0	36	16	2	13	0	11	1407	5446
05:15 PM	34	850	0	1	0	0	451	19	2	4	25	0	35	0	29	7	0	5	0	4	1429	4039
05:30 PM	44	792	0	0	0	0	432	14	1	4	16	0	28	0	24	12	0	2	0	2	1341	2610
05:45 PM	38	784	0	1	0	0	376	14	1	7	12	1	32	0	25	8	0	2	0	1	1269	1269

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	164	3400	12	12	4	8	1828	92	24	24	112	4	164	0	148	64	8	56	0	44	**5948**
Heavy Trucks	4	60	0			0	28	4			4	0	0			0	0	0			**100**
Pedestrians		0					0					0					0				**0**
Bicycles	0	4	0			0	4	0			0	0	0			0	0	0			**8**
Railroad Stopped Buses																					

National Data & Surveying Services

N/S Street: **US 19**	Speed: **55 MPH**

Site Code: **19-3435-004**

Date: **06/20/2019**

Weather: **Sunny**

City: **Tarpon Springs**

County: **Pinellas**

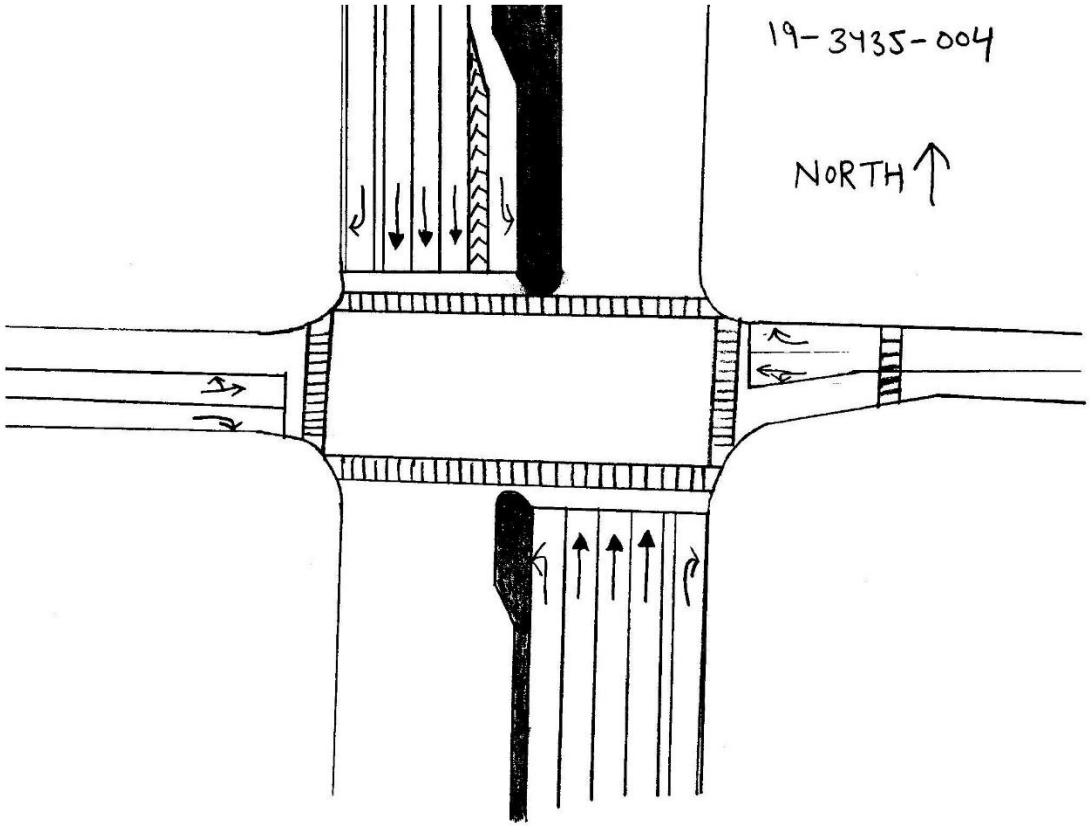
Count Times: **07:00 - 09:00**

16:00 - 18:00

Control: **Signalized**

SIGNAL TIMING

PHASES	**1**	**2**	**3**
SL/ST	00:13	00:15	00:14
NT/ST	02:31	02:20	02:37
NL/NT	00:30	00:31	00:29
ET/WT	00:56	00:40	00:48



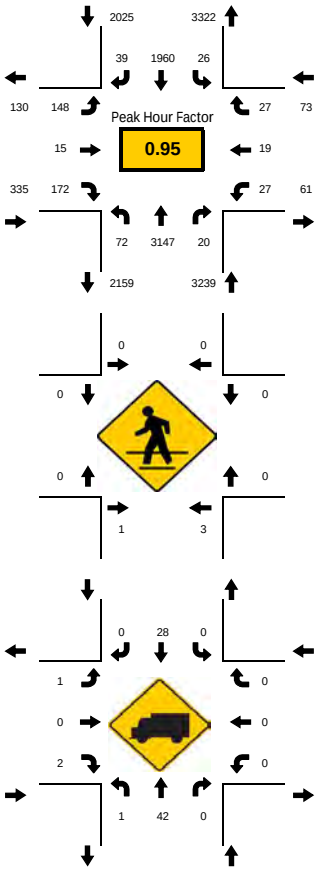
E/W Street: **Spruce St**

Speed: **30 MPH**

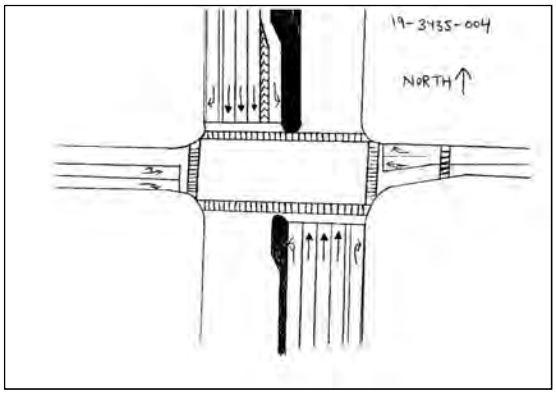
LOCATION: US 19 & Spruce St
CITY/STATE: Tarpon Springs, FL

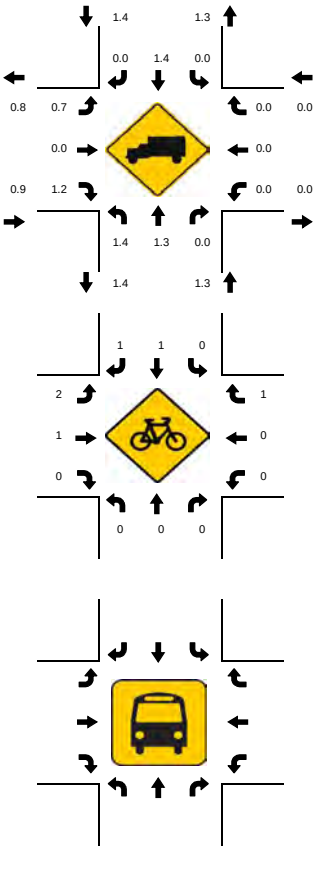
PROJECT ID: 19-03435-004
DATE: 06/20/2019

Peak-Hour: 04:30 PM - 05:30 PM
Peak 15-Minute: 05:15 PM - 05:30 PM



National Data & Surveying Services





15-Min Count Period Beginning At	US 19 Northbound					US 19 Southbound					Spruce St Eastbound					Spruce St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	21	727	5	1	1	7	380	13	4	1	39	4	47	0	42	10	5	8	0	8	1271	5441
04:15 PM	23	792	10	2	1	1	442	9	2	2	28	2	43	0	38	7	6	5	0	3	1372	5555
04:30 PM	18	784	4	0	0	7	500	13	1	5	36	5	38	0	27	6	5	8	0	8	1425	5672
04:45 PM	15	722	5	1	1	7	510	10	1	4	41	5	45	0	37	3	6	2	0	2	1373	5590
05:00 PM	21	770	6	0	2	7	444	9	0	3	49	4	47	0	39	14	6	8	0	8	1385	5545
05:15 PM	17	871	5	0	0	2	506	7	1	3	22	1	42	0	39	4	2	9	0	7	1489	4160
05:30 PM	14	782	2	0	0	4	439	10	1	2	31	2	37	0	29	5	7	9	0	5	1343	2671
05:45 PM	14	777	11	2	1	7	436	8	2	3	27	0	29	0	26	6	4	5	0	4	1328	1328

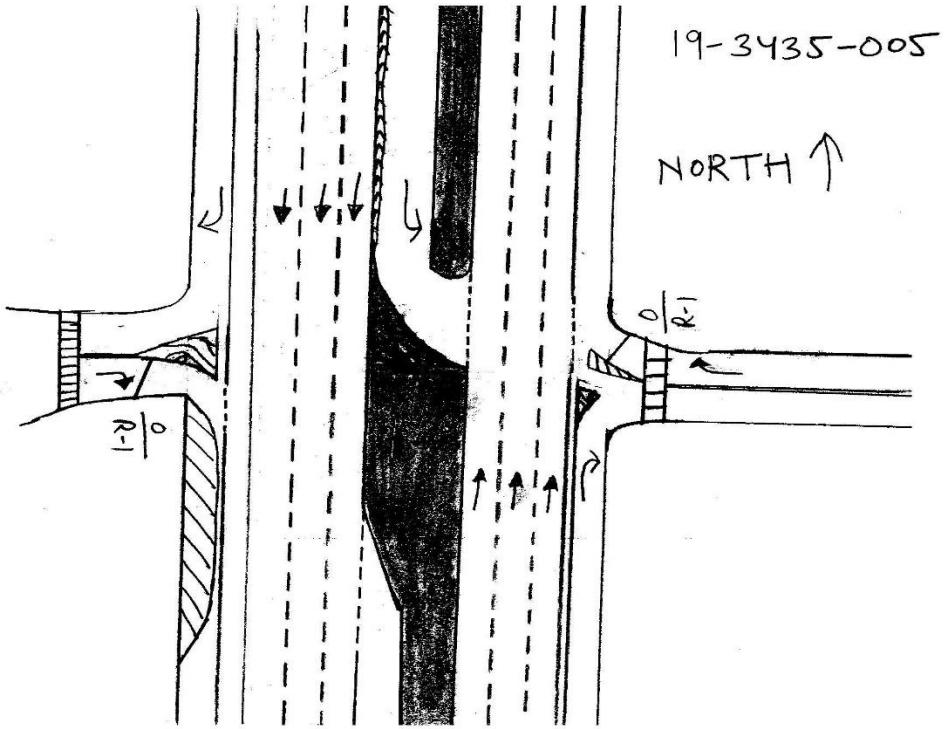
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	84	3484	24	4	8	28	2040	52	4	20	196	20	188	0	156	56	24	36	0	32	**6240**
Heavy Trucks	4	60	0			0	40	0			4	0	4			0		0	0		**112**
Pedestrians		12						0				0					0				**12**
Bicycles	0	0	0			0	4	4			8	4	0			0		0	4		**24**
Railroad																					
Stopped Buses																					

National Data & Surveying Services

Site Code:	**19-3435-005**
Date:	**06/20/2019**
Weather:	**Sunny**
City:	**Tarpon Springs**
County:	**Pinellas**
Count Times:	**07:00 - 09:00**
	16:00 - 18:00
Control:	**2-Way Stop (EB/WB)**

N/S Street: **US 19**

Speed: **55 MPH**



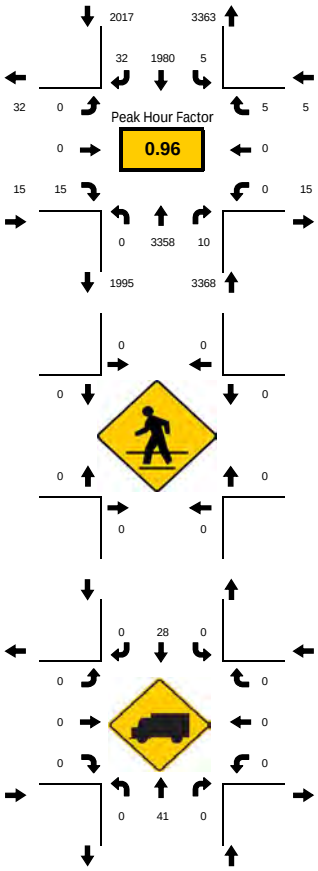
E/W Street: **Live Oak St**

Speed: **30 MPH**

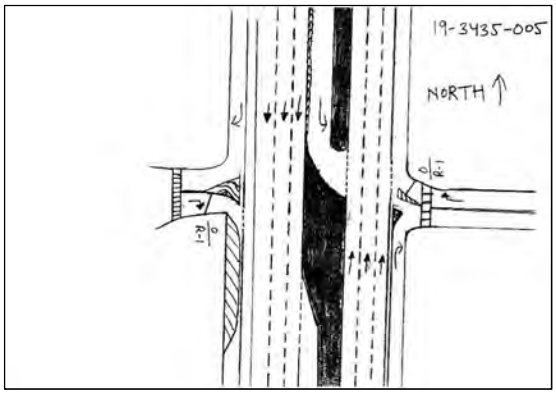
LOCATION: US 19 & Live Oak St
CITY/STATE: Tarpon Springs, FL

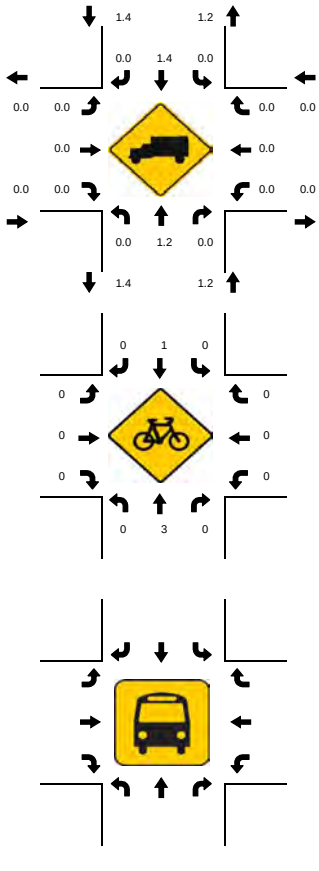
PROJECT ID: 19-03435-005
DATE: 06/20/2019

Peak-Hour: 04:30 PM - 05:30 PM
Peak 15-Minute: 05:15 PM - 05:30 PM



National Data & Surveying Services





15-Min Count Period Beginning At	US 19 Northbound					US 19 Southbound					Live Oak St Eastbound					Live Oak St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	0	802	0	0	0	0	412	2	2	0	0	0	6	0	0	0	0	3	0	0	1227	5116
04:15 PM	0	849	2	0	0	1	422	10	1	0	0	0	5	0	0	0	0	0	0	0	1290	5286
04:30 PM	0	786	3	0	0	1	499	15	0	0	0	0	8	0	0	0	0	3	0	0	1315	5405
04:45 PM	0	763	1	0	0	0	510	7	1	0	0	0	1	0	0	0	0	1	0	0	1284	5380
05:00 PM	0	883	2	0	0	1	504	2	1	0	0	0	4	0	0	0	0	0	0	0	1397	5387
05:15 PM	0	926	4	0	0	0	467	8	1	0	0	0	2	0	0	0	0	1	0	0	1409	3990
05:30 PM	0	813	4	0	0	1	464	5	0	0	0	0	3	0	0	0	0	0	0	0	1290	2581
05:45 PM	0	838	2	0	0	5	436	6	1	0	0	0	3	0	0	0	0	0	0	0	1291	1291

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	
All Vehicles	0	3704	16	0	0	4	2040	60	4	0	0	0	32	0	0	0	0	12	0	0	**5872**
Heavy Trucks	0	52	0			0	44	0			0	0	0			0		0	0		**96**
Pedestrians		0					0					0					0				**0**
Bicycles	0	12	0			0	4	0			0	0	0			0		0	0		**16**
Railroad																					
Stopped Buses																					

Prepared by National Data & Surveying Services

US 19 & E Klosterman Rd

Peak Hour Turning Movement Count

ID: 20-120166-001
City: Tarpon Springs

Day: Thursday
Date: 08/13/2020

	PEAK HOURS	COUNT PERIODS
AM	07:15 AM - 08:15 AM	07:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

US 19 — SOUTHBOUND

	Right	Through	Left	U-Turn	Exit (northbound departure)
AM	337	3206	7	5	1593
NOON	0	0	0	0	0
PM	332	1828	10	8	3830
Bikes	0	0	0	0	

E Klosterman Rd — EASTBOUND

	AM	NOON	PM	Bikes
Exit (westbound departure)	458	0	535	
U-Turn	0	0	1	0
Left	302	0	721	0
Through	4	0	22	0
Right	150	0	130	0

E Klosterman Rd — WESTBOUND

	Bikes	PM	NOON	AM
Right	0	26	0	2
Through	0	7	0	3
Left	0	17	0	16
U-Turn	0	0	0	0
Exit (eastbound departure)		48	0	18

US 19 — NORTHBOUND

	Exit (southbound departure)	U-Turn	Left	Through	Right
Bikes		0	0	0	0
PM	1991	16	195	3075	16
NOON	0	0	0	0	0
AM	3388	16	118	1284	7

CONTROL: Signalized

	AM	NOON	PM
TEV	5457	0	6404
PHF	0.95		0.94

Cars (AM)

Approach	Left	Through	Right
Southbound	7	3148	330
Eastbound	293	4	147
Westbound	16	2	2
Northbound	107	1220	9

HT (AM)

Approach	Left	Through	Right
Southbound	0	58	7
Eastbound	9	0	3
Westbound	0	1	0
Northbound	11	64	1

Cars (NOON)

Approach	Left	Through	Right
Southbound	N/A	N/A	N/A
Eastbound	N/A	N/A	N/A
Westbound	N/A	N/A	N/A
Northbound	N/A	N/A	N/A

HT (NOON)

Approach	Left	Through	Right
Southbound	N/A	N/A	N/A
Eastbound	N/A	N/A	N/A
Westbound	N/A	N/A	N/A
Northbound	N/A	N/A	N/A

Cars (PM)

Approach	Left	Through	Right
Southbound	10	1800	328
Eastbound	711	22	114
Westbound	17	7	26
Northbound	195	304	16

HT (PM)

Approach	Left	Through	Right
Southbound	0	28	4
Eastbound	10	0	16
Westbound	0	0	0
Northbound	0	34	0

Pedestrians (Crosswalks)

Crosswalk	Direction	AM	NOON	PM
North	Eastbound	2	0	0
North	Westbound	3	0	0
West	Southbound	0	0	0
West	Northbound	0	0	0
East	Southbound	0	0	0
East	Northbound	0	0	0
South	Eastbound	0	0	0
South	Westbound	0	0	0
Diagonal (NW, SW, NE, SE corners)		0	0	0

Prepared by National Data & Surveying Services

ALT US 19 & Live Oak St / Dodecanese Blvd

Peak Hour Turning Movement Count

ID: 20-120166-002
City: Tarpon Springs

Day: Thursday
Date: 08/13/2020

	PEAK HOURS	COUNT PERIODS
AM	07:15 AM - 08:15 AM	07:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

ALT US 19 – SOUTHBOUND

	Right	Thru	Left	U-Turn	Departing
AM	31	636	116	0	446
NOON	0	0	0	0	0
PM	63	529	97	0	1037
	0	0	0	0	

Live Oak St / Dodecanese Blvd – EASTBOUND

	AM	NOON	PM	
Departing	52	0	150	
U-Turn	0	0	0	0
Left	20	0	109	0
Thru	8	0	38	0
Right	6	0	45	0

Live Oak St / Dodecanese Blvd – WESTBOUND

		PM	NOON	AM
Left	0	170	0	92
Thru	0	35	0	11
Right	0	18	0	8
U-Turn	0	0	0	0
Departing		147	0	129

ALT US 19 – NORTHBOUND

	Departing	U-Turn	Left	Thru	Right
		0	0	0	0
PM	592	0	52	758	12
NOON	0	0	0	0	0
AM	650	0	10	334	5

CONTROL

Signalized

	AM	NOON	PM
TEV	1277	0	1926
PHF	0.97		0.92

Cars (AM)

Approach	Left	Thru	Right
SB	109	617	29
EB	19	7	6
WB	84	10	8
NB	9	330	4

HT (AM)

Approach	Left	Thru	Right
SB	7	19	2
EB	1	1	0
WB	8	1	0
NB	1	4	1

Cars (NOON)

Approach	Left	Thru	Right
SB	N/A	N/A	N/A
EB	N/A	N/A	N/A
WB	N/A	N/A	N/A
NB	N/A	N/A	N/A

HT (NOON)

Approach	Left	Thru	Right
SB	N/A	N/A	N/A
EB	N/A	N/A	N/A
WB	N/A	N/A	N/A
NB	N/A	N/A	N/A

Cars (PM)

Approach	Left	Thru	Right
SB	93	525	63
EB	106	38	44
WB	170	35	18
NB	51	749	12

HT (PM)

Approach	Left	Thru	Right
SB	4	4	0
EB	3	0	1
WB	0	0	0
NB	1	9	0

Pedestrians (Crosswalks)

Crosswalk	Direction	AM	NOON	PM
North	Eastward	1	0	0
North	Westward	1	0	0
South	Eastward	3	0	0
South	Westward	0	0	0
West	Southward	3	0	0
West	Northward	1	0	0
East	Southward	0	0	0
East	Northward	0	0	0
NW diagonal		0	0	0
NE diagonal		0	0	0
SW diagonal		0	0	0
SE diagonal		0	0	0

Prepared by National Data & Surveying Services

ALT US 19 & E Tarpon Ave / W Tarpon Ave

Peak Hour Turning Movement Count

ID: 20-120166-003
City: Tarpon Springs

Day: Thursday
Date: 08/13/2020

PEAK HOURS
07:30 AM - 08:30 AM
NONE
04:45 PM - 05:45 PM

COUNT PERIODS
07:00 AM - 09:00 AM
NONE
04:00 PM - 06:00 PM

ALT US 19 — SOUTHBOUND

AM	5	502	83	0	315	AM
NOON	0	0	0	0	0	NOON
PM	5	390	124	0	748	PM

EASTBOUND — E Tarpon Ave / W Tarpon Ave

AM	NOON	PM	
92	0	189	⇦
0	0	0	↶ 0
2	0	12	↱ 0
85	0	116	→ 0
4	0	15	↴ 0
AM	NOON	PM	

WESTBOUND — E Tarpon Ave / W Tarpon Ave

PM	NOON	AM	
104	0	38	0 ↰
171	0	82	0 ←
115	0	121	0 ↙
0	0	0	0 ↶
418	0	289	⇨
PM	NOON	AM	

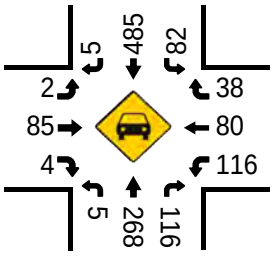
CONTROL: Signalized

TEV	1323 AM	0 NOON	1875 PM
PHF	0.95		0.98

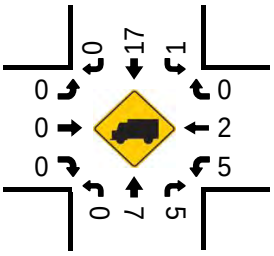
NORTHBOUND — ALT US 19

PM	520	0	13	632	178	PM
NOON	0	0	0	0	0	NOON
AM	627	0	5	275	121	AM

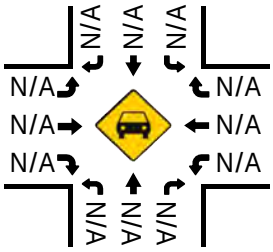
Cars (AM)



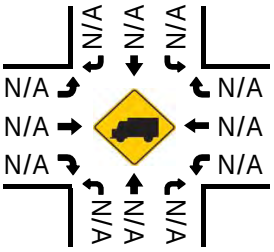
HT (AM)



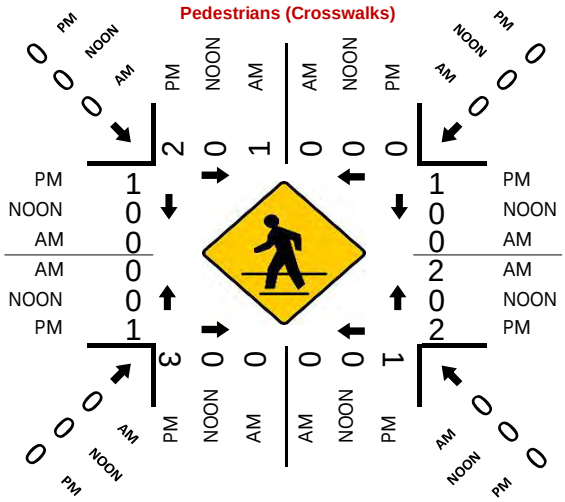
Cars (NOON)



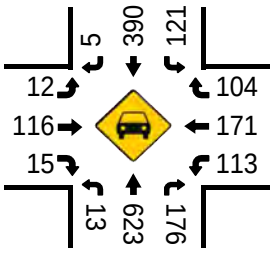
HT (NOON)



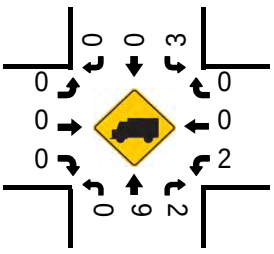
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Intersection 44

Report Date: **08/17/2020**
Run Time: 02:27 PM

Main Street: ALT 19
Side Street: TARPON AVE
Jurisdiction: STATE/TARPON SPRINGS
Section #: 2 MTCS
Comm. Addrs: IP: 10.198.100.78 Gateway: 10.198.100.254 Subnet: 255.255.255.0
Pre-empt: Y

Phase #	Street Name	Direction		Left Turn Type
1				
2	ALT 19	SB		
3				
4	TARPON AVE.	WB		
5	ALT 19	SB	LT	Protected/Permitted
6	ALT 19	NB		
7	TARPON AVE.	WB	LT	Protected/Permitted
8	TARPON AVE.	EB		

Timing Plan 1 (MM,2,1)

PHASE	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Min. Green		20		5	5	20	5	5
Walk		7		7		7		7
Ped Clr		7		10		11		13
Veh Ext		3.5		3	2	3.5	2	3
Yellow Clr		3.4		4.0	3.4	3.4	4.0	4.0
Red Clr		2.7		2.9	2.5	2.7	2.0	2.9
Max 1		70		35	15	55	15	20
Max 2								
Max 3								
Walk 2								
Ped Clr 2								
Lock Det								
Veh Recall								
Ped Recall								
Max Recall		X				X		
CNA 1		X				X		
Phase In Use		X		X		X		X
Flash		Y		R		Y		R
Delay Det.								

Last Timing Change Date: 03/21/2018	**Database Modified: 06/28/2020**
Technician Initials:	**Control Room Pers. Initials:**

COORD PATTERNS (CYCLE / OFFSET) (MM,3,2)

Cycle	Sec.
1	130
2	110
3	140
4	100
5	150
6	130

Offset	Sec. / %
1	59
2	106
3	66
4	7
5	60
6	45

COORD PATTERNS

	Ph 1 Sec / %	**Ph 2** Sec / %	**Ph 3** Sec / %	**Ph 4** Sec / %	**Ph 5** Sec / %	**Ph 6** Sec / %	**Ph 7** Sec / %	**Ph 8** Sec / %
PATTERN 1		79		51	21	58	20	31
PATTERN 2		70		40	15	55	15	25
PATTERN 3		95		45	13	82	18	27
PATTERN 4		60		40	15	45	15	25
PATTERN 5		103		47	15	88	18	29
PATTERN 6		82		48	16	66	18	30

DAY PLANS (MM,5,3)

	Event	**Action Plan #**	**Time**	**Action**	**On/Off**
DAY PLAN1					
	1	1	**0600**		
	2	3	**1130**		
	3	5	**1600**		
	4	3	**1800**		
	5	2	**1900**		
	6	100	**2300**	FREE	ON
DAY PLAN2					
	1	2	**0730**		
	2	3	**0930**		
	3	2	**1900**		
	4	100	**2100**	FREE	ON
DAY PLAN3					
	1	2	**0830**		
	2	3	**1030**		
	3	2	**1900**		
	4	100	**2100**	FREE	ON

WEEK PLAN

	S	M	T	W	T	F	S
1	3	1	1	1	1	1	2

Notes:

PLAN 1= AM PEAK 130
PLAN 2= OFF PEAK 110
PLAN 3= PM PEAK 140
PLAN 4= PM OFF PEAK 100
PLAN 5= 150 PM RUSH
PLAN 6= WEEKENDS 130 (UNUSED)

Intersection **10**

Report Date: **07/01/2019**
Run Time: 08:23 AM

Main Street: US 19
Side Street: BECKETT WAY
Jurisdiction: STATE/COUNTY
Section #: 7 MIST
Comm. Addrs: IP: 10.197.175.6 Gateway: 10.197.175.254 Subnet: 255.255.255.0
Pre-empt: Y

Phase #	Street Name	Direction		Left Turn Type
1	US 19 FYA	NB	LT	Protected/Permitted
2	US 19	SB		
3				
4	ST LUKES	WB		
5	US 19 FYA	SB	LT	Protected/Permitted
6	US 19	NB		
7				
8	BECKETT WAY	EB		

Timing Plan 1 (MM,2,1)

PHASE	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Min. Green	7	20		7	7	20		7
Walk		7		7		7		7
Ped Clr		15		36		15		39
Veh Ext	4	4		3	4	4		3
Yellow Clr	5.5	5.5		4.1	5.5	5.5		4.1
Red Clr	2.0	2.0		4.6	2.0	2.0		4.6
Max 1	30	60		20	30	60		20
Max 2								
Max 3								
Walk 2								
Ped Clr 2								
Lock Det								
Veh Recall		X				X		
Ped Recall								
Max Recall								
CNA 1								
Phase In Use	X	X		X	X	X		X
Flash	R	Y		R	R	Y		R
Delay Det.								10

Last Timing Change Date: **03/08/2018**	**Database Modified:** **06/24/2019**
Technician Initials:	**Control Room Pers. Initials:**

COORD PATTERNS (CYCLE / OFFSET) (MM,3,2)

Cycle	Sec.
1	240
2	226
3	240
4	160
7	200
8	200

Offset	Sec. / %
1	40
2	40
3	180
4	66
7	0
8	33

COORD PATTERNS

	Ph 1 Sec / %	Ph 2 Sec / %	Ph 3 Sec / %	Ph 4 Sec / %	Ph 5 Sec / %	Ph 6 Sec / %	Ph 7 Sec / %	Ph 8 Sec / %
PATTERN 1	24	161	0	55	24	161	0	55
PATTERN 2	30	141	0	55	23	148	0	55
PATTERN 3	58	127	0	55	15	170	0	55
PATTERN 4	35	69	0	56	35	69	0	56
PATTERN 5								
PATTERN 6								
PATTERN 7	34	109	0	57	20	123	0	57
PATTERN 8	34	109	0	57	20	123	0	57

DAY PLANS (MM,5,3)

	Event	Action Plan #	Time	Action	On/Off
DAY PLAN1					
	1	1	**0530**		
	2	2	**0900**		
	3	3	**1400**		
	4	4	**2030**		
	5	100	**2200**	FREE	100
DAY PLAN2					
	1	4	**0600**		
	2	10	**0800**		
	3	8	**1300**		
	4	9	**1900**		
	5	4	**2000**		
	6	100	**2200**	FREE	100
DAY PLAN3					
	1	4	**0600**		
	2	7	**0800**		
	3	10	**1000**		
	4	8	**1300**		
	5	9	**1900**		
	6	4	**2000**		
	7	100	**2200**	FREE	ON

WEEK PLAN

	S	M	T	W	T	F	S
1	3	1	1	1	1	1	2

Notes:

- THE NBLT & SBLT FYA'S ARE TURNED "OFF" (RUNS PROTECTED ONLY) FROM:
0530 - 2030 MONDAY - FRIDAY
0800 - 2000 SATURDAY
1000 - 2000 SUNDAY

ALSO RUNS PED PROTECT WHEN FYA'S ARE OPERATIONAL.

*** SEE PROGRAM SHEETS! ***

PLAN 1= 240 AM PEAK
PLAN 2= 225 MIDDAY
PLAN 3= 240 PM PEAK
PLAN 4= 160 LATE EVENING

PLAN 7= 200 WEEKEND AM
PLAN 8= 200 WEEKEND PM

ALL PLANS RUN THE STANDARD SEQUENCE

Intersection **28**

Report Date: **07/01/2019**
Run Time: 08:27 AM

Main Street: US 19
Side Street: SPRUCE ST
Jurisdiction: STATE/COUNTY
Section #:
Comm. Addrs: IP: 10.197.175.69 Gateway: 10.197.175.254 Subnet: 255.255.255.0
Pre-empt:

Phase #	Street Name	Direction		Left Turn Type
1	US 19 N.	NB	LT	Restricted
2	US 19 N.	SB		
3				
4	SPRUCE St.	WB		
5	US 19 N.	SB	LT	Restricted
6	US 19 N.	NB		
7				
8	SPRUCE St.	EB		

Timing Plan 1 (MM,2,1)

PHASE	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Min. Green	7	30		10	7	30		10
Walk		7		7		7		7
Ped Clr		28		39		28		39
Veh Ext	3	3		3	3	3		3
Yellow Clr	5.6	5.6		3.7	5.6	5.6		3.7
Red Clr	2.0	2.0		5.0	2.0	2.0		5.0
Max 1	15	80		45	15	80		45
Max 2								
Max 3								
Walk 2								
Ped Clr 2								
Lock Det								
Veh Recall		X				X		
Ped Recall								
Max Recall								
CNA 1		X				X		
Phase In Use	X	X		X	X	X		X
Flash	R	Y		R	R	Y		R
Delay Det.								

Last Timing Change Date: **05/14/2015**	**Database Modified:** **02/13/2019**
Technician Initials:	**Control Room Pers. Initials:**

COORD PATTERNS (CYCLE / OFFSET) (MM,3,2)

Cycle	Sec.
1	240
2	226
3	240
4	160
7	200
8	200

Offset	Sec. / %
1	80
2	30
3	115
4	0
7	150
8	165

COORD PATTERNS

	Ph 1 Sec / %	Ph 2 Sec / %	Ph 3 Sec / %	Ph 4 Sec / %	Ph 5 Sec / %	Ph 6 Sec / %	Ph 7 Sec / %	Ph 8 Sec / %
PATTERN 1	34	151	0	55	14	171	0	55
PATTERN 2	36	135	0	55	15	156	0	55
PATTERN 3	30	155	0	55	15	170	0	55
PATTERN 4	35	69	0	56	30	74	0	56
PATTERN 5								
PATTERN 6								
PATTERN 7	36	105	0	59	16	125	0	59
PATTERN 8	36	105	0	59	16	125	0	59

DAY PLANS (MM,5,3)

	Event	Action Plan #	Time	Action	On/Off
DAY PLAN1					
	1	1	**0530**		
	2	2	**0900**		
	3	3	**1400**		
	4	4	**2030**		
	5	100	**2200**	FREE	ON
DAY PLAN2					
	1	4	**0600**		
	2	7	**0800**		
	3	8	**1300**		
	4	4	**1900**		
	5	100	**2200**	FREE	ON

Notes: LEAD/LAGS BY TOD--SPECIAL PROGRAMMING

PLAN 1= 240 AM PEAK--- N AND S LT'S LAG (SEQUENCE 13)
PLAN 2= 225 MIDDAY--- N LAG/ S LEADS (SEQUENCE 9)
PLAN 3= 240 PM PEAK--- N LAG/S LEADS (SEQUENCE 9)
PLAN 4= 160 LATE NITE---LEAD/LEAD (SEQUENCE 1)

PLAN 7= 200 WEEKEND AM --- LEAD/LEAD (SEQUENCE 1)
PLAN 8= 200 WEEKEND PM --- LEAD/LEAD (SEQUENCE 1)

Intersection **48**

Report Date: **07/01/2019**
Run Time: 08:28 AM

Main Street: US 19
Side Street: TARPON AVE
Jurisdiction: STATE/COUNTY
Section #: 7 MIST-OPAC
Comm. Addrs: IP: 10.197.175.11 Gateway: 10.197.175.254 Subnet: 255.255.255.0
Pre-empt: Y

Phase #	Street Name	Direction		Left Turn Type
1	US 19	NB	LT	Restricted
2	US 19	SB		
3	TARPON AVE	EB	LT	Restricted
4	TARPON AVE	WB		
5	US 19	SB	LT	Restricted
6	US 19	NB		
7	TARPON AVE	WB	LT	Restricted
8	TARPON AVE	EB		

Timing Plan 1 (MM,2,1)

PHASE	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Min. Green	7	20	7	10	7	20	7	10
Walk		7		7		7		7
Ped Clr		28		33		28		33
Veh Ext	3	4	3	3	3	4	3	3
Yellow Clr	5.2	5.2	4.9	4.9	5.2	5.2	4.9	4.9
Red Clr	2.4	2.4	3.3	3.3	2.4	2.4	3.3	3.3
Max 1	25	60	25	30	25	60	25	30
Max 2	30	160	25	30	30	160	35	25
Max 3	20	160	25	44	40	160	40	20
Walk 2								
Ped Clr 2								
Lock Det								
Veh Recall		X				X		
Ped Recall								
Max Recall								
CNA 1		X				X		
Phase In Use	X	X	X	X	X	X	X	X
Flash	R	Y	R	R	R	Y	R	R
Delay Det.								

Last Timing Change Date: **01/25/2018**	**Database Modified:** **04/18/2019**
Technician Initials:	**Control Room Pers. Initials:**

COORD PATTERNS (CYCLE / OFFSET) (MM,3,2)

Cycle	Sec.
1	240
2	226
3	240
4	160
7	200
8	200

Offset	Sec. / %
1	64
2	27
3	100
4	4
7	115
8	131

COORD PATTERNS

	Ph 1 Sec / %	Ph 2 Sec / %	Ph 3 Sec / %	Ph 4 Sec / %	Ph 5 Sec / %	Ph 6 Sec / %	Ph 7 Sec / %	Ph 8 Sec / %
PATTERN 1	20	134	33	53	32	122	37	49
PATTERN 2	23	110	37	56	35	98	43	50
PATTERN 3	36	122	33	49	26	132	35	47
PATTERN 4	30	46	25	59	30	46	33	51
PATTERN 5								
PATTERN 6								
PATTERN 7	23	85	37	55	31	77	42	50
PATTERN 8	20	91	37	52	26	85	31	58

DAY PLANS (MM,5,3)

	Event	Action Plan #	Time	Action	On/Off
DAY PLAN1					
	1	1	**0530**		
	2	2	**0900**		
	3	3	**1400**		
	4	4	**2030**		
	5	100	**2200**	FREE	ON
DAY PLAN2					
	1	4	**0600**		
	2	7	**0800**		
	3	8	**1300**		
	4	4	**1900**		
	5	100	**2200**	FREE	ON

Notes:

PLAN 1= 240 AM PEAK---SEQUENCE 2 = 1-5, 2-6, 3-8, 4-7 - MAX 3
PLAN 2= 225 MIDDAY---SEQUENCE 14 = 2-6, 1-5, 3-8, 4-7 - MAX 3
PLAN 3= 240 PM PEAK--- SEQUENCE 6 = 1-6, 2-5, 3-8, 4-7 - MAX 2
PLAN 4= 160 LATE NIGHT---SEQUENCE 1 = 1-5, 2-6, 3-7, 4-8 - MAX 2
PLAN 7= 200 WEEKEND AM---SEQUENCE 5 = 1-6, 2-5, 3-7, 4-8 - MAX 2
PLAN 8= 200 WEEKEND PM---SEQUENCE 14 = 2-6, 1-5, 3-8, 4-7 - MAX 2

Intersection **84**

Report Date: **07/01/2019**
Run Time: 08:26 AM

Main Street: US 19
Side Street: KLOSTERMAN RD
Jurisdiction: STATE/COUNTY
Section #: 7 MIST-OPAC
Comm. Addrs: IP: 10.197.175.21 Gateway: 10.197.175.254 Subnet: 255.255.255.0
Pre-empt: Y

Phase #	Street Name	Direction		Left Turn Type
1	US 19	NB	LT	Restricted
2	US 19	SB		
3	KLOSTERMAN TIMING PHASE	EB	LT LEAD	
4	KLOSTERMAN RD	WB	LT LAG	Restricted
5	US 19	SB	LT	Restricted
6	US 19	NB		
7	KLOSTERMAN TIMING PHASE	WB	LT LAG	
8	KLOSTERMAN RD	EB	LT LEAD	Restricted

Timing Plan 1 (MM,2,1)

PHASE	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Min. Green	6	20	7	7	6	20	7	7
Walk		7		7		7		7
Ped Clr		32		43		32		45
Veh Ext	4	5	3	3	2.5	5	3	3
Yellow Clr	5.6	5.6	4.5	3.7	5.6	5.6	3.7	4.5
Red Clr	2.0	2.0	2.9	3.9	2.0	2.0	3.9	2.9
Max 1	33	60	35	35	15	60	35	35
Max 2	35	150	65	30	35	150	30	65
Max 3								
Walk 2								
Ped Clr 2								
Lock Det								
Veh Recall		X				X		
Ped Recall								
Max Recall								
CNA 1								
Phase In Use	X	X	X	X	X	X	X	X
Flash	R	Y		R	R	Y		R
Delay Det.								

Last Timing Change Date: **04/28/2016**	**Database Modified:** **08/16/2018**
Technician Initials:	**Control Room Pers. Initials:**

COORD PATTERNS (CYCLE / OFFSET) (MM,3,2)

Cycle	Sec.
1	240
2	226
3	240
4	160
7	200
8	200

Offset	Sec. / %
1	135
2	146
3	35
4	107
7	53
8	62

COORD PATTERNS

	Ph 1 Sec / %	Ph 2 Sec / %	Ph 3 Sec / %	Ph 4 Sec / %	Ph 5 Sec / %	Ph 6 Sec / %	Ph 7 Sec / %	Ph 8 Sec / %
PATTERN 1	20	102	60	58	20	102	58	60
PATTERN 2	30	77	60	59	20	87	59	60
PATTERN 3	35	100	55	50	25	110	50	55
PATTERN 4	30	77	30	23	30	77	23	30
PATTERN 5								
PATTERN 6	25	56	60	59	15	66	59	60
PATTERN 8	25	56	60	59	15	66	59	60

DAY PLANS (MM,5,3)

	Event	Action Plan #	Time	Action	On/Off
DAY PLAN1					
	1	1	**0530**		
	2	2	**0900**		
	3	3	**1400**		
	4	4	**2030**		
	5	100	**2200**	FREE	ON
DAY PLAN2					
	1	4	**0600**		
	2	7	**0800**		
	3	8	**1300**		
	4	4	**1900**		
	5	100	**2200**	FREE	ON

Notes: SIDE STREET IS SPLIT LEAD/LAG. PHASE 3 AND 8 LEAD----PHASE 4 AND 7 LAG
PHASES 3 AND 7 ARE FOR TIMING ONLY, NO FIELD WIRING
LEAD/LAG PROGRAMMED THROUGH PHASE SEQUENCE MENU

DETECTOR 36 PHASE 4 CALLS 7
DETECTOR 40 PHASE 8 CALLS 3

*** SEE NEXT PAGE! ***

ALL PLANS RUN MAX 2 DURING COORD/SET TO "FIXED"
SEQUENCE 2= 1, 5----2, 6----3, 8----4, 7
SEQUENCE 10= 2, 5----1, 6-----3, 8-----4, 7

PLAN 1= 240 AM PEAK (SEQ 2)
PLAN 2= 225 WEEKDAY OFF PEAK (SEQ 2)
PLAN 3= 240 PM PEAK (SEQ 10)
PLAN 4= WEEKENDS AND LATE NIGHT OFF PEAK (SEQ 1)

PLAN 7= 200 WEEKEND AM (SEQ 2)
PLAN 8= 200 WEEKEND PM (SEQ 2)

TURN LANE CALCULATIONS

Calculations based upon the Red Time Formula

Intersection:	US 19 & NBR Turn Lane
Scenario:	Total
Date of Analysis:	4/10/2020
Analyst:	Kimley-Horn & Associates, Inc.

GENERAL INFORMATION	
Time of Day:	PM Peak Hour
Approach:	Southbound
Traffic Control:	Unsignalized Intersection
Geometric Conditions:	Rural Conditions
Turn Lane Type:	Right-Turn Lane
Number of Lanes:	1
Design Speed:	55 Miles per Hour

UNSIGNALIZED INPUT PARAMETERS	
Turning Traffic Volume:	108 vph
Peak Cycle Factor:	30

UNSIGNALIZED TURN LANE CALCULATIONS	
Turning Traffic Volume (DHV):	vph
Cycle Length (C):	sec
Vehicle Length (V):	feet
g/C:	
Percent Heavy Vehicles (%HV):	percent
Peak Factor (F):	
Number of Lanes (N):	
Peak Storage Length (L):	feet
Minimum Storage Length:	feet
Required Design Storage per Lane:	feet
Total Deceleration Distance:	feet
Total Turn Lane Length (incl. Taper):	feet

TURN LANE CALCULATION RESULTS	
Design Storage Length:	0 feet
Total Deceleration Distance:	350 feet
Total Turn Lane Length (incl. Taper):	350 feet

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION:	US 19 & Beckett Way
COUNT DATE:	June 20, 2019
TIME PERIOD:	7:00 a.m. - 8:00 a.m.
PEAK HOUR FACTOR:	0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		31	4	177		2	0	4	3	74	1,043	17	6	60	2,977	43
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS		31	4	179		2	0	4	3	75	1,053	17	6	61	3,007	43

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH		2	0	11		0	0	0	0	5	64	1	0	4	184	3
NON-PROJECT TRAFFIC		33	4	190		2	0	4	3	80	1,117	18	6	65	3,191	46

"PROJECT TRAFFIC"																	
LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New				2		1				6	27	4			9	
TOTAL PROJECT TRAFFIC			0	0	2		1	0	0	0	6	27	4	0	0	9	0
TOTAL TRAFFIC			33	4	192		3	0	4	3	86	1,144	22	6	65	3,200	46

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION:	US 19 & E Live Oak Street
COUNT DATE:	June 20, 2019
TIME PERIOD:	7:15 a.m. - 8:15 a.m.
PEAK HOUR FACTOR:	0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements				9				3			1,256	4	1	1	3,102	52
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS				9				3			1,269	4	1	1	3,133	53

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH				1				0			78	0	0	0	192	3
NON-PROJECT TRAFFIC				10				3			1,347	4	1	1	3,325	56

"PROJECT TRAFFIC"																	
LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New											19				70	
TOTAL PROJECT TRAFFIC					0				0			19	0	0	0	70	0
TOTAL TRAFFIC					10				3			1,366	4	1	1	3,395	56

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION:	US 19 & Spruce Street
COUNT DATE:	June 20, 2019
TIME PERIOD:	7:15 a.m. - 8:15 a.m.
PEAK HOUR FACTOR:	0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		36	18	62		15	12	12	3	84	1,205	18	12	18	3,030	26
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS		36	18	63		15	12	12	3	85	1,217	18	12	18	3,060	26

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH		2	1	4		1	1	1	0	5	74	1	1	1	187	2
NON-PROJECT TRAFFIC		38	19	67		16	13	13	3	90	1,291	19	13	19	3,247	28

"PROJECT TRAFFIC"																	
LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New		2									17				64	6
TOTAL PROJECT TRAFFIC			2	0	0		0	0	0	0	0	17	0	0	0	64	6
TOTAL TRAFFIC			40	19	67		16	13	13	3	90	1,308	19	13	19	3,311	34

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION: US 19 & E Tarpon Ave
COUNT DATE: June 20, 2019
TIME PERIOD: 7:45 a.m. - 8:45 a.m.
PEAK HOUR FACTOR: 0.95

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		98	199	160	4	587	403	174	11	108	1,131	483	13	189	2,596	95
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS		99	201	162	4	593	407	176	11	109	1,142	488	13	191	2,622	96

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH		6	12	10	0	36	25	11	1	7	70	30	1	12	160	6
NON-PROJECT TRAFFIC		105	213	172	4	629	432	187	12	116	1,212	518	14	203	2,782	102

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New		6						3			8			9	39	16
TOTAL PROJECT TRAFFIC			6	0	0	0	0	0	3	0	0	8	0	0	9	39	16
TOTAL TRAFFIC			111	213	172	4	629	432	190	12	116	1,220	518	14	212	2,821	118

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION: US 19 & E Klosterman Road
COUNT DATE: June 20, 2019
TIME PERIOD: 7:15 a.m. - 8:15 a.m.
PEAK HOUR FACTOR: 0.95

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		361	13	167		19	12	6	23	138	1,393	14	5	15	3,273	460
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS		365	13	169		19	12	6	23	139	1,407	14	5	15	3,306	465

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH		22	1	10		1	1	0	1	9	86	1	0	1	202	28
NON-PROJECT TRAFFIC		387	14	179		20	13	6	24	148	1,493	15	5	16	3,508	493

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New		1									11				32	3
TOTAL PROJECT TRAFFIC			1	0	0		0	0	0	0	0	11	0	0	0	32	3
TOTAL TRAFFIC			388	14	179		20	13	6	24	148	1,504	15	5	16	3,540	496

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION: Project Driveway
COUNT DATE: June 20, 2019
TIME PERIOD:
PEAK HOUR FACTOR:

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements																
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS																

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH																
NON-PROJECT TRAFFIC																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New								108				37			83	
TOTAL PROJECT TRAFFIC									108				37			83	
TOTAL TRAFFIC									108				37			83	

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION: Offset Median Opening (North)
COUNT DATE: June 20, 2019
TIME PERIOD:
PEAK HOUR FACTOR:

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements																
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS																

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH																
NON-PROJECT TRAFFIC																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New									70		38				13	
TOTAL PROJECT TRAFFIC										70		38				13	
TOTAL TRAFFIC										70		38				13	

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION: Offset Median Opening (South)
COUNT DATE: June 20, 2019
TIME PERIOD:
PEAK HOUR FACTOR:

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements																
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS																

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH																
NON-PROJECT TRAFFIC																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New											24		13		70	
TOTAL PROJECT TRAFFIC												24		13		70	
TOTAL TRAFFIC												24		13		70	

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION: Live Oak St & Alt US 19 (Adjusted by 8%)
COUNT DATE: August 13, 2020
TIME PERIOD: 4:30 p.m. - 5:30 p.m.
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		22	9	6	0	9	12	99	0	11	361	5	0	125	687	33
Peak Season Correction Factor	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090
EXISTING CONDITIONS		24	10	7	0	10	13	108	0	12	393	5	0	136	749	36

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH		1	0	0	0	0	1	4	0	0	16	0	0	5	30	1
NON-PROJECT TRAFFIC		25	10	7	0	10	14	112	0	12	409	5	0	141	779	37

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New						1										
TOTAL PROJECT TRAFFIC			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
TOTAL TRAFFIC			25	10	7	0	11	14	112	0	12	409	5	0	141	779	37

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION:	Tarpon Ave & Alt US 19 (Adjusted by 8%)
COUNT DATE:	August 13, 2020
TIME PERIOD:	4:45 p.m. - 5:45 p.m.
PEAK HOUR FACTOR:	0.95

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		2	92	4	0	131	89	41	0	5	297	131	0	90	542	5
Peak Season Correction Factor	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090
EXISTING CONDITIONS		2	100	4	0	143	97	45	0	5	324	143	0	98	591	5

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH		0	4	0	0	6	4	2	0	0	13	6	0	4	24	0
NON-PROJECT TRAFFIC		2	104	4	0	149	101	47	0	5	337	149	0	102	615	5

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New			1			2	2	3				1		1		
TOTAL PROJECT TRAFFIC			0	1	0	0	2	2	3	0	0	0	1	0	1	0	0
TOTAL TRAFFIC			2	105	4	0	151	103	50	0	5	337	150	0	103	615	5

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION: US 19 & Beckett Way
COUNT DATE: June 20, 2019
TIME PERIOD: 4:30 p.m. - 5:30 p.m.
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		92	1	147		44	4	39	6	144	3,151	3	15	2	1,790	74
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS		93	1	148		44	4	39	6	145	3,183	3	15	2	1,808	75

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH		6	0	9		3	0	2	0	9	195	0	1	0	111	5
NON-PROJECT TRAFFIC		99	1	157		47	4	41	6	154	3,378	3	16	2	1,919	80

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New				6		4				4	18	3			27	
TOTAL PROJECT TRAFFIC			0	0	6		4	0	0	0	4	18	3	0	0	27	0
TOTAL TRAFFIC			99	1	163		51	4	41	6	158	3,396	6	16	2	1,946	80

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION:	US 19 & E Live Oak Street
COUNT DATE:	June 20, 2019
TIME PERIOD:	4:30 p.m. - 5:30 p.m.
PEAK HOUR FACTOR:	0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements				15				5			3,358	10	3	2	1,980	32
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS				15				5			3,392	10	3	2	2,000	32

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH				1				0			208	1	0	0	122	2
NON-PROJECT TRAFFIC				16				5			3,600	11	3	2	2,122	34

"PROJECT TRAFFIC"																	
LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New											54				46	
TOTAL PROJECT TRAFFIC					0				0			54	0	0	0	46	0
TOTAL TRAFFIC					16				5			3,654	11	3	2	2,168	34

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION: US 19 & Spruce Street
COUNT DATE: June 20, 2019
TIME PERIOD: 4:30 p.m. - 5:30 p.m.
PEAK HOUR FACTOR: 0.95

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		148	15	172		27	19	27	1	71	3,147	20	3	23	1,960	39
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS		149	15	174		27	19	27	1	72	3,178	20	3	23	1,980	39

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH		9	1	11		2	1	2	0	4	195	1	0	1	121	2
NON-PROJECT TRAFFIC		158	16	185		29	20	29	1	76	3,373	21	3	24	2,101	41

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New		5									49				41	4
TOTAL PROJECT TRAFFIC			5	0	0		0	0	0	0	0	49	0	0	0	41	4
TOTAL TRAFFIC			163	16	185		29	20	29	1	76	3,422	21	3	24	2,142	45

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION:	US 19 & E Tarpon Ave
COUNT DATE:	June 20, 2019
TIME PERIOD:	4:45 p.m. - 5:45 p.m.
PEAK HOUR FACTOR:	0.95

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		339	340	175	5	481	341	246	10	160	2,756	877	25	258	1,707	124
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS		342	343	177	5	486	344	248	10	162	2,784	886	25	261	1,724	125

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH		21	21	11	0	30	21	15	1	10	170	54	2	16	106	8
NON-PROJECT TRAFFIC		363	364	188	5	516	365	263	11	172	2,954	940	27	277	1,830	133

"PROJECT TRAFFIC"																	
LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New		16						9			24			6	25	11
TOTAL PROJECT TRAFFIC			16	0	0	0	0	0	9	0	0	24	0	0	6	25	11
TOTAL TRAFFIC			379	364	188	5	516	365	272	11	172	2,978	940	27	283	1,855	144

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION: US 19 & E Klosterman Road
COUNT DATE: June 20, 2019
TIME PERIOD: 5:00 p.m. - 6:00 p.m.
PEAK HOUR FACTOR: 0.98

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		890	11	113		21	14	12	25	139	3,090	18	9	20	1,940	339
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS		899	11	114		21	14	12	25	140	3,121	18	9	20	1,959	342

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH		55	1	7		1	1	1	2	9	191	1	1	1	120	21
NON-PROJECT TRAFFIC		954	12	121		22	15	13	27	149	3,312	19	10	21	2,079	363

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New		2									32				21	2
TOTAL PROJECT TRAFFIC			2	0	0		0	0	0	0	0	32	0	0	0	21	2
TOTAL TRAFFIC			956	12	121		22	15	13	27	149	3,344	19	10	21	2,100	365

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION:	US 19 & Project Driveway
COUNT DATE:	June 20, 2019
TIME PERIOD:	5:00 p.m. - 6:00 p.m.
PEAK HOUR FACTOR:	0.98

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements																
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS																

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH																
NON-PROJECT TRAFFIC																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New								70				108			84	
TOTAL PROJECT TRAFFIC									70				108			84	
TOTAL TRAFFIC									70				108			84	

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION:	Offset Median Opening (North)
COUNT DATE:	June 20, 2019
TIME PERIOD:	5:00 p.m. - 6:00 p.m.
PEAK HOUR FACTOR:	0.98

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements																
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS																
"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH																
NON-PROJECT TRAFFIC																

"PROJECT TRAFFIC"																	
LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New									46		25				38	
TOTAL PROJECT TRAFFIC										46		25				38	
TOTAL TRAFFIC										46		25				38	

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION:	Offset Median Opening (South)
COUNT DATE:	June 20, 2019
TIME PERIOD:	5:00 p.m. - 6:00 p.m.
PEAK HOUR FACTOR:	0.98

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements																
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
EXISTING CONDITIONS																

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH																
NON-PROJECT TRAFFIC																

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New											70		38		46	
TOTAL PROJECT TRAFFIC												70		38		46	
TOTAL TRAFFIC												70		38		46	

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION: Live Oak St & Alt US 19
COUNT DATE: August 13, 2020
TIME PERIOD: 4:30 p.m. - 5:30 p.m.
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		109	38	45		18	35	170		52	758	12		97	529	63
Peak Season Correction Factor	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050
EXISTING CONDITIONS		114	40	47		19	37	179		55	796	13		102	555	66

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH		5	2	2		1	1	7		2	32	1		4	22	3
NON-PROJECT TRAFFIC		119	42	49		20	38	186		57	828	14		106	577	69

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New						2										
TOTAL PROJECT TRAFFIC			0	0	0		2	0	0		0	0	0		0	0	0
TOTAL TRAFFIC			119	42	49		22	38	186		57	828	14		106	577	69

TRAFFIC VOLUMES
AT STUDY INTERSECTION

INTERSECTION: Tarpon Ave & Alt US 19
COUNT DATE: August 13, 2020
TIME PERIOD: 4:45 p.m. - 5:45 p.m.
PEAK HOUR FACTOR: 0.98

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		12	116	15		115	171	104		13	632	178		124	390	5
Peak Season Correction Factor	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050
EXISTING CONDITIONS		13	122	16		121	180	109		14	664	187		130	410	5

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
BACKGROUND TRAFFIC GROWTH		1	5	1		5	7	4		1	27	8		5	17	0
NON-PROJECT TRAFFIC		14	127	17		126	187	113		15	691	195		135	427	5

"PROJECT TRAFFIC"

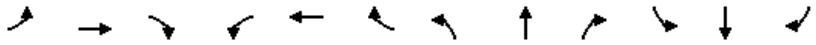
LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Trips	Net New			2			1	1	2				2		3		
TOTAL PROJECT TRAFFIC			0	2	0		1	1	2		0	0	2		3	0	0
TOTAL TRAFFIC			14	129	17		127	188	115		15	691	197		138	427	5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	4	179	2	0	4	78	1053	17	67	3007	43
Future Volume (vph)	31	4	179	2	0	4	78	1053	17	67	3007	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	650		635	300		755
Storage Lanes	1		0	0		0	1		1	1		1
Taper Length (ft)	50			25			125			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		688			312			4591			2676	
Travel Time (s)		13.4			6.1			56.9			33.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	3%	0%	1%	0%	0%	25%	5%	3%	0%	0%	1%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	190	0	0	6	0	81	1097	18	70	3132	45
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	8	8		4	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	54.7	54.7		51.7	51.7		14.5	29.5	29.5	14.5	29.5	29.5
Total Split (s)	55.0	55.0		55.0	55.0		58.0	170.0	170.0	15.0	127.0	127.0
Total Split (%)	22.9%	22.9%		22.9%	22.9%		24.2%	70.8%	70.8%	6.3%	52.9%	52.9%
Yellow Time (s)	4.1	4.1		4.1	4.1		5.5	5.5	5.5	5.5	5.5	5.5
All-Red Time (s)	4.6	4.6		4.6	4.6		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.7	8.7			8.7		7.5	7.5	7.5	7.5	7.5	7.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.48	0.75			0.06		0.64	0.28	0.01	0.45	0.78	0.04
Control Delay	133.3	30.7			1.2		125.2	4.7	0.2	114.5	17.8	0.1
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	133.3	30.7			1.2		125.2	4.7	0.2	114.5	17.8	0.1
Queue Length 50th (ft)	51	6			0		116	125	0	109	946	0
Queue Length 95th (ft)	96	105			0		189	113	0	175	1217	0
Internal Link Dist (ft)		608			232			4511			2596	
Turn Bay Length (ft)	85						650		635	300		755
Base Capacity (vph)	268	459			138		361	3864	1253	155	4004	1197
Starvation Cap Reductn	0	0			0		0	0	0	0	0	0
Spillback Cap Reductn	0	0			0		0	0	0	0	0	0
Storage Cap Reductn	0	0			0		0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.41			0.04		0.22	0.28	0.01	0.45	0.78	0.04

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 180 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 4: US 19 & Beckett Way



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	4	179	2	0	4	78	1053	17	67	3007	43
Future Volume (veh/h)	31	4	179	2	0	4	78	1053	17	67	3007	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1885	1900	1900	1530	1826	1856	1900	1900	1885	1796
Adj Flow Rate, veh/h	32	4	82	2	0	1	81	1097	13	70	3132	39
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	0	1	0	0	25	5	3	0	0	1	7
Cap, veh/h	111	5	98	35	5	8	97	4087	1299	57	4027	1191
Arrive On Green	0.06	0.06	0.06	0.06	0.00	0.06	0.06	0.81	0.81	0.03	0.78	0.78
Sat Flow, veh/h	1405	75	1546	159	79	119	1739	5066	1610	1810	5147	1522
Grp Volume(v), veh/h	32	0	86	3	0	0	81	1097	13	70	3132	39
Grp Sat Flow(s),veh/h/ln	1405	0	1622	357	0	0	1739	1689	1610	1810	1716	1522
Q Serve(g_s), s	0.0	0.0	12.6	0.0	0.0	0.0	11.1	12.8	0.4	7.5	81.1	1.4
Cycle Q Clear(g_c), s	5.8	0.0	12.6	12.6	0.0	0.0	11.1	12.8	0.4	7.5	81.1	1.4
Prop In Lane	1.00		0.95	0.67		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	0	102	48	0	0	97	4087	1299	57	4027	1191
V/C Ratio(X)	0.29	0.00	0.84	0.06	0.00	0.00	0.84	0.27	0.01	1.24	0.78	0.03
Avail Cap(c_a), veh/h	294	0	313	231	0	0	366	4087	1299	57	4027	1191
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	108.1	0.0	111.2	105.8	0.0	0.0	112.3	5.7	4.5	116.3	14.5	5.8
Incr Delay (d2), s/veh	1.4	0.0	16.3	0.6	0.0	0.0	22.6	0.2	0.0	197.0	1.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	5.9	0.2	0.0	0.0	5.6	4.2	0.1	6.6	28.5	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	109.5	0.0	127.5	106.3	0.0	0.0	134.9	5.9	4.5	313.3	16.0	5.9
LnGrp LOS	F	A	F	F	A	A	F	A	A	F	B	A
Approach Vol, veh/h		118			3			1191			3241	
Approach Delay, s/veh		122.6			106.3			14.6			22.3	
Approach LOS		F			F			B			C	

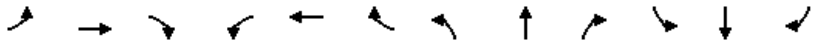
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.8	195.3		23.8	15.0	201.2		23.8				
Change Period (Y+Rc), s	7.5	7.5		8.7	7.5	7.5		8.7				
Max Green Setting (Gmax), s	50.5	119.5		46.3	7.5	162.5		46.3				
Max Q Clear Time (g_c+I1), s	13.1	83.1		14.6	9.5	14.8		14.6				
Green Ext Time (p_c), s	0.3	34.9		0.0	0.0	13.7		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		23.0
HCM 6th LOS		C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	18	63	15	12	12	88	1217	18	30	3060	26
Future Volume (vph)	36	18	63	15	12	12	88	1217	18	30	3060	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		160	0		50	300		500	275		175
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	70			25			125			115		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		635			737			2346			564	
Travel Time (s)		9.6			11.2			29.1			7.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	6%	0%	4%	0%	0%	0%	7%	4%	0%	3%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	68	0	29	13	95	1309	19	32	3290	28
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4			6			2
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	7.0	30.0	30.0	6.4	30.0	30.0
Minimum Split (s)	26.7	26.7	26.7	26.7	26.7	26.7	14.6	37.6	37.6	14.6	37.6	37.6
Total Split (s)	55.0	55.0	55.0	55.0	55.0	55.0	34.0	171.0	171.0	14.0	151.0	151.0
Total Split (%)	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	14.2%	71.3%	71.3%	5.8%	62.9%	62.9%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		8.7	8.7		8.7	8.7	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag							Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio		0.64	0.37		0.30	0.07	0.58	0.32	0.01	0.70	0.88	0.02
Control Delay		138.6	11.3		113.4	0.8	98.6	2.4	0.1	184.8	34.9	0.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		138.6	11.3		113.4	0.8	98.6	2.4	0.1	184.8	34.9	0.0
Queue Length 50th (ft)		92	0		45	0	157	117	0	51	1987	0
Queue Length 95th (ft)		152	28		87	0	234	75	1	m72	1965	m0
Internal Link Dist (ft)		555			657			2266			484	
Turn Bay Length (ft)			160			50	300		500	275		175
Base Capacity (vph)		274	372		291	384	185	4097	1337	46	3753	1216
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.21	0.18		0.10	0.03	0.51	0.32	0.01	0.70	0.88	0.02

Intersection Summary	
Area Type:	Other
Cycle Length: 240	
Actuated Cycle Length: 240	
Offset: 80 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 6: US 19 & Spruce St



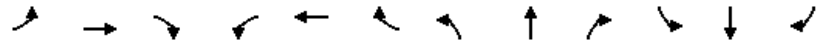
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	18	63	15	12	12	88	1217	18	30	3060	26
Future Volume (veh/h)	36	18	63	15	12	12	88	1217	18	30	3060	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1841	1900	1900	1900	1796	1841	1900	1856	1870	1900
Adj Flow Rate, veh/h	39	19	10	16	13	3	95	1309	18	32	3290	16
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	0	4	0	0	0	7	4	0	3	2	0
Cap, veh/h	78	30	96	40	26	99	413	3421	1096	279	3051	962
Arrive On Green	0.06	0.06	0.06	0.06	0.06	0.06	0.48	1.00	1.00	0.16	0.60	0.60
Sat Flow, veh/h	863	493	1560	266	425	1610	1711	5025	1610	1767	5106	1610
Grp Volume(v), veh/h	58	0	10	29	0	3	95	1309	18	32	3290	16
Grp Sat Flow(s),veh/h/ln	1356	0	1560	692	0	1610	1711	1675	1610	1767	1702	1610
Q Serve(g_s), s	0.0	0.0	1.5	2.4	0.0	0.4	7.8	0.0	0.0	3.7	143.4	1.0
Cycle Q Clear(g_c), s	10.3	0.0	1.5	12.7	0.0	0.4	7.8	0.0	0.0	3.7	143.4	1.0
Prop In Lane	0.67		1.00	0.55		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	0	96	66	0	99	413	3421	1096	279	3051	962
V/C Ratio(X)	0.53	0.00	0.10	0.44	0.00	0.03	0.23	0.38	0.02	0.11	1.08	0.02
Avail Cap(c_a), veh/h	312	0	301	275	0	311	413	3421	1096	279	3051	962
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	0.90	0.90	0.90	1.00	1.00	1.00
Uniform Delay (d), s/veh	110.4	0.0	106.4	112.0	0.0	105.9	49.1	0.0	0.0	86.6	48.3	19.6
Incr Delay (d2), s/veh	4.0	0.0	0.5	4.6	0.0	0.1	0.3	0.3	0.0	0.2	42.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	0.6	1.9	0.0	0.2	3.2	0.1	0.0	1.7	69.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	114.5	0.0	106.9	116.6	0.0	106.0	49.3	0.3	0.0	86.8	90.4	19.7
LnGrp LOS	F	A	F	F	A	F	D	A	A	F	F	B
Approach Vol, veh/h		68			32			1422			3338	
Approach Delay, s/veh		113.3			115.6			3.6			90.0	
Approach LOS		F			F			A			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	65.6	151.0		23.4	45.6	171.0		23.4				
Change Period (Y+Rc), s	7.6	7.6		* 8.7	7.6	7.6		* 8.7				
Max Green Setting (Gmax), s	26.4	143.4		* 46	6.4	163.4		* 46				
Max Q Clear Time (g_c+I1), s	9.8	145.4		14.7	5.7	2.0		12.3				
Green Ext Time (p_c), s	0.2	0.0		0.1	0.0	11.3		0.3				

Intersection Summary		
HCM 6th Ctrl Delay		65.2
HCM 6th LOS		E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	9	0	0	3	0	1269	4	2	3133	53
Future Volume (vph)	0	0	9	0	0	3	0	1269	4	2	3133	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		500	420		420
Storage Lanes	0		1	0		1	0		1	1		1
Taper Length (ft)	25			25			25			115		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		410			292			564			4591	
Travel Time (s)		9.3			6.6			12.8			104.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	9	0	0	3	0	1308	4	2	3230	55
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	9	0	0	3	0	1269	4	2	3133	53
Future Vol, veh/h	0	0	9	0	0	3	0	1269	4	2	3133	53
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	-	-	0	-	-	0	-	-	500	420	-	420
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	2	2
Mvmt Flow	0	0	9	0	0	3	0	1308	4	2	3230	55

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1615	-	-	654	-	0	0	1312	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.1	-	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.9	-	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	81	0	0	355	0	-	-	281	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	81	-	-	355	-	-	-	281	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	55.1	15.2	0	0
HCM LOS	F	C		

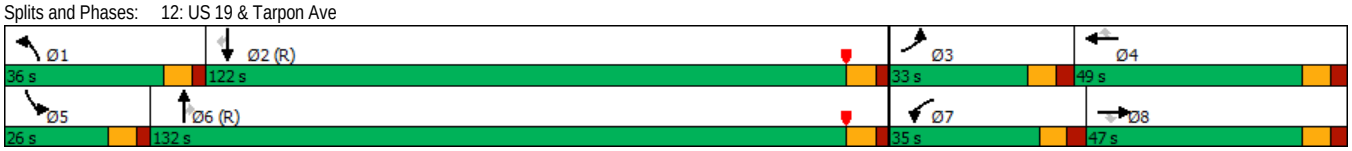
Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	81	355	281	-	-
HCM Lane V/C Ratio	-	-	0.115	0.009	0.007	-	-
HCM Control Delay (s)	-	-	55.1	15.2	17.9	-	-
HCM Lane LOS	-	-	F	C	C	-	-
HCM 95th %tile Q(veh)	-	-	0.4	0	0	-	-

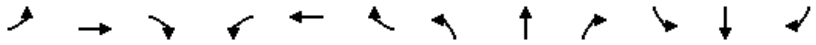
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	201	162	597	407	176	120	1142	488	204	2622	96
Future Volume (vph)	99	201	162	597	407	176	120	1142	488	204	2622	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	500		270	320		200	300		200
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			80			230			300		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		686			1067			6497			2346	
Travel Time (s)		10.4			16.2			80.5			29.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	1%	4%	2%	2%	2%	5%	5%	3%	5%	2%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	212	171	628	428	185	126	1202	514	215	2760	101
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8			4			6			2
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	15.2	26.2	26.2	15.2	26.2	26.2	14.6	27.6	27.6	14.6	27.6	27.6
Total Split (s)	33.0	47.0	47.0	35.0	49.0	49.0	36.0	132.0	132.0	26.0	122.0	122.0
Total Split (%)	13.8%	19.6%	19.6%	14.6%	20.4%	20.4%	15.0%	55.0%	55.0%	10.8%	50.8%	50.8%
Yellow Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	5.2	5.2	5.2	5.2	5.2	5.2
All-Red Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	2.4	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2	8.2	8.2	8.2	8.2	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.58	0.64	0.63	1.64	0.80	0.48	0.63	0.42	0.49	0.74	0.90	0.10
Control Delay	123.6	113.4	31.4	353.3	110.1	16.0	117.1	44.0	28.0	143.0	16.6	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	123.6	113.4	31.4	353.3	110.1	16.0	117.1	44.0	28.0	143.0	16.6	0.6
Queue Length 50th (ft)	85	175	44	~737	354	14	104	463	288	169	964	2
Queue Length 95th (ft)	124	220	136	#874	411	102	146	613	544	m192	#1483	m5
Internal Link Dist (ft)		606			987			6417			2266	
Turn Bay Length (ft)	375			500		270	320		200	300		200
Base Capacity (vph)	351	577	370	383	606	416	394	2849	1042	298	3072	998
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.37	0.46	1.64	0.71	0.44	0.32	0.42	0.49	0.72	0.90	0.10

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 100 (42%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: US 19 & Tarpon Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	201	162	597	407	176	120	1142	488	204	2622	96
Future Volume (veh/h)	99	201	162	597	407	176	120	1142	488	204	2622	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1885	1841	1870	1870	1870	1826	1826	1856	1826	1870	1856
Adj Flow Rate, veh/h	104	212	171	628	428	185	126	1202	514	215	2760	101
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	1	4	2	2	2	5	5	3	5	2	3
Cap, veh/h	135	436	190	386	690	308	157	2809	886	241	3004	925
Arrive On Green	0.04	0.12	0.12	0.11	0.19	0.19	0.05	0.56	0.56	0.14	1.00	1.00
Sat Flow, veh/h	3428	3582	1560	3456	3554	1585	3374	4985	1572	3374	5106	1572
Grp Volume(v), veh/h	104	212	171	628	428	185	126	1202	514	215	2760	101
Grp Sat Flow(s),veh/h/ln	1714	1791	1560	1728	1777	1585	1687	1662	1572	1687	1702	1572
Q Serve(g_s), s	7.2	13.3	25.9	26.8	26.5	25.6	8.9	33.3	50.9	15.0	0.0	0.0
Cycle Q Clear(g_c), s	7.2	13.3	25.9	26.8	26.5	25.6	8.9	33.3	50.9	15.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	135	436	190	386	690	308	157	2809	886	241	3004	925
V/C Ratio(X)	0.77	0.49	0.90	1.63	0.62	0.60	0.80	0.43	0.58	0.89	0.92	0.11
Avail Cap(c_a), veh/h	354	579	252	386	690	308	399	2809	886	259	3004	925
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.38	0.38	0.38
Uniform Delay (d), s/veh	114.2	98.4	103.9	106.6	88.6	88.2	113.3	30.1	34.0	102.0	0.0	0.0
Incr Delay (d2), s/veh	9.0	0.8	26.5	294.0	1.7	3.2	9.1	0.5	2.8	13.6	2.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	6.2	12.0	27.8	12.4	10.8	4.1	13.4	20.2	6.6	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	123.2	99.2	130.5	400.6	90.3	91.5	122.4	30.6	36.7	115.6	2.4	0.1
LnGrp LOS	F	F	F	F	F	F	F	C	D	F	A	A
Approach Vol, veh/h		487			1241			1842			3076	
Approach Delay, s/veh		115.3			247.5			38.6			10.3	
Approach LOS		F			F			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	148.8	17.6	54.8	24.7	142.8	35.0	37.4
Change Period (Y+Rc), s	7.6	7.6	* 8.2	* 8.2	7.6	7.6	* 8.2	* 8.2
Max Green Setting (Gmax), s	28.4	114.4	* 25	* 41	18.4	124.4	* 27	* 39
Max Q Clear Time (g_c+I1), s	10.9	2.0	9.2	28.5	17.0	52.9	28.8	27.9
Green Ext Time (p_c), s	0.3	88.2	0.2	2.5	0.1	23.3	0.0	1.3

Intersection Summary		
HCM 6th Ctrl Delay		70.1
HCM 6th LOS		E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	365	13	169	19	12	6	162	1407	14	20	3306	465
Future Volume (vph)	365	13	169	19	12	6	162	1407	14	20	3306	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		350	0		0	500		0	300		0
Storage Lanes	1		1	0		0	2		0	1		0
Taper Length (ft)	100			25			100			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		626			411			1496			1992	
Travel Time (s)		10.7			7.0			18.5			24.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	0%	1%	0%	8%	0%	4%	3%	0%	0%	2%	2%
Shared Lane Traffic (%)	31%											
Lane Group Flow (vph)	265	133	178	0	39	0	171	1496	0	21	3969	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	25.4	25.4	25.4	25.6	25.6		13.6	27.6		13.6	27.6	
Total Split (s)	60.0	60.0	60.0	58.0	58.0		20.0	102.0		20.0	102.0	
Total Split (%)	25.0%	25.0%	25.0%	24.2%	24.2%		8.3%	42.5%		8.3%	42.5%	
Yellow Time (s)	4.5	4.5	4.5	3.7	3.7		5.6	5.6		5.6	5.6	
All-Red Time (s)	2.9	2.9	2.9	3.9	3.9		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.4	7.4	7.4		7.6		7.6	7.6		7.6	7.6	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
v/c Ratio	0.75	0.74	0.53		0.49		0.60	0.33		0.36	0.97	
Control Delay	116.0	126.7	15.5		122.9		114.6	15.2		120.9	68.1	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay	116.0	126.7	15.5		122.9		114.6	15.2		120.9	68.1	
Queue Length 50th (ft)	229	229	0		57		137	270		33	1812	
Queue Length 95th (ft)	280	316	87		108		185	356		m40	m#1831	
Internal Link Dist (ft)		546			331			1416			1912	
Turn Bay Length (ft)	175		350				500			300		
Base Capacity (vph)	698	353	489		373		287	4494		93	4071	
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	0.38	0.38	0.36		0.10		0.60	0.33		0.23	0.97	

Intersection Summary

Area Type: Other

Cycle Length: 240

Actuated Cycle Length: 240

Offset: 135 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

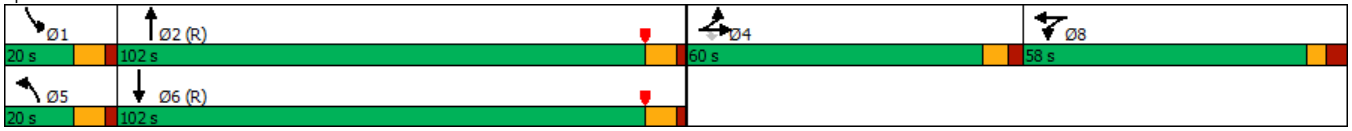
Natural Cycle: 145

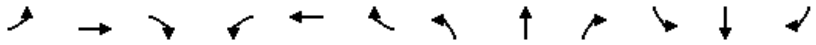
Control Type: Actuated-Coordinated

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

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

Splits and Phases: 15: US 19 & Klosterman Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	365	13	169	19	12	6	162	1407	14	20	3306	465
Future Volume (veh/h)	365	13	169	19	12	6	162	1407	14	20	3306	465
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1885	1900	1781	1900	1841	1856	1900	1900	1870	1870
Adj Flow Rate, veh/h	394	0	70	20	13	6	171	1481	11	21	3480	464
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	0	1	0	8	0	4	3	0	0	2	2
Cap, veh/h	470	0	142	26	17	8	176	4854	36	34	4107	516
Arrive On Green	0.09	0.00	0.09	0.03	0.03	0.03	0.05	0.74	0.74	0.02	0.70	0.70
Sat Flow, veh/h	5302	0	1598	867	564	260	3401	6585	49	1810	5832	732
Grp Volume(v), veh/h	394	0	70	39	0	0	171	1077	415	21	2842	1102
Grp Sat Flow(s),veh/h/ln	1767	0	1598	1691	0	0	1700	1596	1847	1810	1609	1739
Q Serve(g_s), s	17.6	0.0	10.0	5.5	0.0	0.0	12.0	18.3	18.3	2.8	101.7	122.8
Cycle Q Clear(g_c), s	17.6	0.0	10.0	5.5	0.0	0.0	12.0	18.3	18.3	2.8	101.7	122.8
Prop In Lane	1.00		1.00	0.51		0.15	1.00		0.03	1.00		0.42
Lane Grp Cap(c), veh/h	470	0	142	50	0	0	176	3529	1361	34	3399	1224
V/C Ratio(X)	0.84	0.00	0.49	0.78	0.00	0.00	0.97	0.31	0.31	0.62	0.84	0.90
Avail Cap(c_a), veh/h	1162	0	350	355	0	0	176	3529	1361	93	3399	1224
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	107.7	0.0	104.2	115.7	0.0	0.0	113.6	10.7	10.7	116.9	25.5	28.6
Incr Delay (d2), s/veh	4.1	0.0	2.7	22.4	0.0	0.0	60.0	0.2	0.6	12.7	2.6	10.7
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	8.3	0.0	4.3	2.8	0.0	0.0	6.8	6.3	7.5	1.4	37.0	50.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	111.7	0.0	106.9	138.1	0.0	0.0	173.6	10.9	11.3	129.5	28.1	39.3
LnGrp LOS	F	A	F	F	A	A	F	B	B	F	C	D
Approach Vol, veh/h		464			39			1663			3965	
Approach Delay, s/veh		111.0			138.1			27.7			31.8	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.1	184.5		28.7	20.0	176.6		14.7				
Change Period (Y+Rc), s	7.6	7.6		7.4	7.6	7.6		7.6				
Max Green Setting (Gmax), s	12.4	94.4		52.6	12.4	94.4		50.4				
Max Q Clear Time (g_c+I1), s	4.8	20.3		19.6	14.0	124.8		7.5				
Green Ext Time (p_c), s	0.0	30.5		1.7	0.0	0.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay	37.4	
HCM 6th LOS	D	

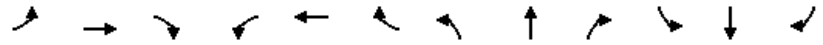
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	100	4	143	97	45	5	324	143	98	591	5
Future Volume (vph)	2	100	4	143	97	45	5	324	143	98	591	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	125		0	120		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			125			125			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		313			430			527			338	
Travel Time (s)		7.1			9.8			12.0			7.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	0%	1%	1%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	108	0	146	145	0	5	477	0	100	608	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		20.0	20.0		5.0	20.0	
Minimum Split (s)	24.9	24.9		11.0	24.9		26.1	26.1		10.9	26.1	
Total Split (s)	31.0	31.0		20.0	51.0		58.0	58.0		21.0	79.0	
Total Split (%)	23.8%	23.8%		15.4%	39.2%		44.6%	44.6%		16.2%	60.8%	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.4	3.4		3.4	3.4	
All-Red Time (s)	2.9	2.9		2.0	2.9		2.7	2.7		2.5	2.7	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.9		6.0	6.9		6.1	6.1		5.9	6.1	
Lead/Lag	Lag	Lag		Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	
v/c Ratio		0.59		0.53	0.32		0.01	0.47		0.20	0.49	
Control Delay		67.9		45.9	35.8		16.0	19.7		9.9	13.6	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		67.9		45.9	35.8		16.0	19.7		9.9	13.6	
Queue Length 50th (ft)		88		100	86		2	227		29	246	
Queue Length 95th (ft)		145		154	140		9	361		57	374	
Internal Link Dist (ft)		233			350			447			258	
Turn Bay Length (ft)				115			125			120		
Base Capacity (vph)		348		288	626		438	1008		572	1249	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.31		0.51	0.23		0.01	0.47		0.17	0.49	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 59 (45%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 19: Alt US 19 & Tarpon Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	100	4	143	97	45	5	324	143	98	591	5
Future Volume (veh/h)	2	100	4	143	97	45	5	324	143	98	591	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1900	1900	1900	1885	1885	1870	1900	1900
Adj Flow Rate, veh/h	2	102	4	146	99	46	5	331	146	100	603	5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	2	0	0	0	1	1	2	0	0
Cap, veh/h	29	134	5	290	257	119	505	754	332	549	1299	11
Arrive On Green	0.07	0.07	0.07	0.09	0.21	0.21	0.61	0.61	0.61	0.04	0.69	0.69
Sat Flow, veh/h	12	1799	70	1781	1227	570	826	1240	547	1781	1882	16
Grp Volume(v), veh/h	108	0	0	146	0	145	5	0	477	100	0	608
Grp Sat Flow(s),veh/h/ln	1881	0	0	1781	0	1797	826	0	1787	1781	0	1897
Q Serve(g_s), s	1.1	0.0	0.0	9.5	0.0	9.0	0.4	0.0	18.6	2.6	0.0	19.0
Cycle Q Clear(g_c), s	7.3	0.0	0.0	9.5	0.0	9.0	8.6	0.0	18.6	2.6	0.0	19.0
Prop In Lane	0.02		0.04	1.00		0.32	1.00		0.31	1.00		0.01
Lane Grp Cap(c), veh/h	169	0	0	290	0	376	505	0	1086	549	0	1310
V/C Ratio(X)	0.64	0.00	0.00	0.50	0.00	0.39	0.01	0.00	0.44	0.18	0.00	0.46
Avail Cap(c_a), veh/h	376	0	0	324	0	610	505	0	1086	689	0	1310
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.0	0.0	0.0	47.8	0.0	44.2	13.6	0.0	13.6	9.8	0.0	9.2
Incr Delay (d2), s/veh	4.0	0.0	0.0	0.5	0.0	0.6	0.0	0.0	1.3	0.1	0.0	1.2
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	3.7	0.0	0.0	4.3	0.0	4.1	0.1	0.0	7.7	1.0	0.0	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.0	0.0	0.0	48.3	0.0	44.8	13.6	0.0	14.9	9.8	0.0	10.3
LnGrp LOS	E	A	A	D	A	D	B	A	B	A	A	B
Approach Vol, veh/h		108			291			482			708	
Approach Delay, s/veh		63.0			46.6			14.9			10.3	
Approach LOS		E			D			B			B	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		95.9		34.1	10.8	85.1	17.5	16.6				
Change Period (Y+Rc), s		* 6.1		6.9	5.9	* 6.1	6.0	6.9				
Max Green Setting (Gmax), s		* 73		44.1	15.1	* 52	14.0	24.1				
Max Q Clear Time (g_c+I1), s		21.0		11.0	4.6	20.6	11.5	9.3				
Green Ext Time (p_c), s		6.0		0.9	0.1	4.2	0.0	0.4				

Intersection Summary		
HCM 6th Ctrl Delay		21.9
HCM 6th LOS		C

Notes

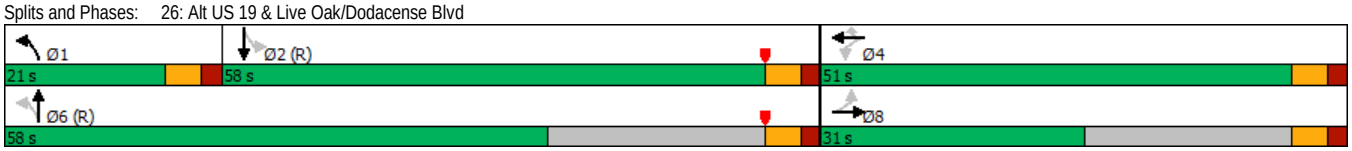
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

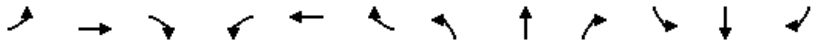
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	10	7	10	13	108	12	393	5	136	749	36
Future Volume (vph)	24	10	7	10	13	108	12	393	5	136	749	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	400		0	100		0	230		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	125			150			225			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			497			1327			1658	
Travel Time (s)		9.5			11.3			30.2			37.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	0%	2%	0%	0%	0%	2%	1%	0%	4%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	19	0	11	14	117	13	432	0	148	853	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		8			4		1	6			2	
Permitted Phases	8			4		4	6			2		
Detector Phase	8	8		4	4	4	1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	20.0		20.0	20.0	
Minimum Split (s)	23.5	23.5		23.5	23.5	23.5	10.5	25.5		25.5	25.5	
Total Split (s)	31.0	31.0		51.0	51.0	51.0	21.0	58.0		58.0	58.0	
Total Split (%)	23.8%	23.8%		39.2%	39.2%	39.2%	16.2%	44.6%		44.6%	44.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5		5.5	5.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		C-Max	C-Max	
v/c Ratio	0.30	0.16		0.12	0.12	0.55	0.03	0.27		0.19	0.56	
Control Delay	66.2	42.4		59.1	58.2	20.2	1.8	2.4		4.2	6.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	66.2	42.4		59.1	58.2	20.2	1.8	2.4		4.2	6.7	
Queue Length 50th (ft)	21	9		9	11	0	1	50		16	140	
Queue Length 95th (ft)	51	34		29	33	60	5	90		59	415	
Internal Link Dist (ft)		338			417			1247			1578	
Turn Bay Length (ft)	250			400			100			230		
Base Capacity (vph)	483	622		495	665	641	576	1601		764	1529	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.05	0.03		0.02	0.02	0.18	0.02	0.27		0.19	0.56	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 22 (17%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 26: Alt US 19 & Live Oak/Dodacense Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	10	7	10	13	108	12	393	5	136	749	36
Future Volume (veh/h)	24	10	7	10	13	108	12	393	5	136	749	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1870	1900	1900	1900	1870	1885	1900	1841	1885	1900
Adj Flow Rate, veh/h	26	11	8	11	14	117	13	427	5	148	814	39
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, %	3	0	2	0	0	0	2	1	0	4	1	0
Cap, veh/h	160	92	67	169	171	145	452	1534	18	779	1371	66
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.01	0.83	0.83	0.77	0.77	0.77
Sat Flow, veh/h	1249	1023	744	1416	1900	1610	1781	1859	22	941	1784	85
Grp Volume(v), veh/h	26	0	19	11	14	117	13	0	432	148	0	853
Grp Sat Flow(s),veh/h/ln	1249	0	1766	1416	1900	1610	1781	0	1881	941	0	1870
Q Serve(g_s), s	2.5	0.0	1.3	0.9	0.9	9.3	0.2	0.0	6.8	5.6	0.0	25.3
Cycle Q Clear(g_c), s	3.4	0.0	1.3	2.2	0.9	9.3	0.2	0.0	6.8	5.6	0.0	25.3
Prop In Lane	1.00		0.42	1.00		1.00	1.00		0.01	1.00		0.05
Lane Grp Cap(c), veh/h	160	0	159	169	171	145	452	0	1552	779	0	1437
V/C Ratio(X)	0.16	0.00	0.12	0.07	0.08	0.81	0.03	0.00	0.28	0.19	0.00	0.59
Avail Cap(c_a), veh/h	292	0	346	537	665	564	639	0	1552	779	0	1437
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.8	0.0	54.4	55.4	54.2	58.0	5.6	0.0	2.6	4.1	0.0	6.4
Incr Delay (d2), s/veh	0.5	0.0	0.3	0.2	0.2	9.9	0.0	0.0	0.4	0.5	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.6	0.3	0.4	4.2	0.1	0.0	2.1	1.1	0.0	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.2	0.0	54.7	55.6	54.4	68.0	5.6	0.0	3.0	4.7	0.0	8.2
LnGrp LOS	E	A	D	E	D	E	A	A	A	A	A	A
Approach Vol, veh/h		45			142			445			1001	
Approach Delay, s/veh		55.6			65.7			3.1			7.7	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	7.4	105.4		17.2		112.8		17.2				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s	15.5	52.5		45.5		52.5		25.5				
Max Q Clear Time (g_c+I1), s	2.2	27.3		11.3		8.8		5.4				
Green Ext Time (p_c), s	0.0	8.2		0.5		3.0		0.1				

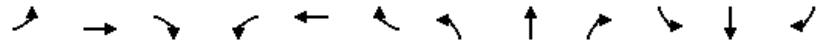
Intersection Summary			
HCM 6th Ctrl Delay		12.8	
HCM 6th LOS		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	4	190	2	0	4	83	1117	18	71	3191	46
Future Volume (vph)	33	4	190	2	0	4	83	1117	18	71	3191	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	650		635	300		755
Storage Lanes	1		0	0		0	1		1	1		1
Taper Length (ft)	50			25			125			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		688			312			4591			2676	
Travel Time (s)		13.4			6.1			56.9			33.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	3%	0%	1%	0%	0%	25%	5%	3%	0%	0%	1%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	202	0	0	6	0	86	1164	19	74	3324	48
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	8	8		4	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	54.7	54.7		51.7	51.7		14.5	29.5	29.5	14.5	29.5	29.5
Total Split (s)	55.0	55.0		55.0	55.0		58.0	170.0	170.0	15.0	127.0	127.0
Total Split (%)	22.9%	22.9%		22.9%	22.9%		24.2%	70.8%	70.8%	6.3%	52.9%	52.9%
Yellow Time (s)	4.1	4.1		4.1	4.1		5.5	5.5	5.5	5.5	5.5	5.5
All-Red Time (s)	4.6	4.6		4.6	4.6		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.7	8.7			8.7		7.5	7.5	7.5	7.5	7.5	7.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.50	0.76			0.06		0.66	0.30	0.02	0.45	0.83	0.04
Control Delay	133.9	30.2			1.2		125.6	4.7	0.2	113.1	21.0	0.1
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	133.9	30.2			1.2		125.6	4.7	0.2	113.1	21.0	0.1
Queue Length 50th (ft)	54	6			0		126	122	0	114	1134	0
Queue Length 95th (ft)	101	109			0		206	121	0	183	1453	0
Internal Link Dist (ft)		608			232			4511			2596	
Turn Bay Length (ft)	85						650		635	300		755
Base Capacity (vph)	268	469			136		361	3830	1242	165	3983	1191
Starvation Cap Reductn	0	0			0		0	0	0	0	0	0
Spillback Cap Reductn	0	0			0		0	0	0	0	0	0
Storage Cap Reductn	0	0			0		0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.43			0.04		0.24	0.30	0.02	0.45	0.83	0.04

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 180 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 4: US 19 & Beckett Way



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	4	190	2	0	4	83	1117	18	71	3191	46
Future Volume (veh/h)	33	4	190	2	0	4	83	1117	18	71	3191	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1885	1900	1900	1530	1826	1856	1900	1900	1885	1796
Adj Flow Rate, veh/h	34	4	94	2	0	1	86	1164	14	74	3324	42
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	0	1	0	0	25	5	3	0	0	1	7
Cap, veh/h	120	5	110	35	5	8	102	4048	1287	57	3972	1175
Arrive On Green	0.07	0.07	0.07	0.07	0.00	0.07	0.06	0.80	0.80	0.03	0.77	0.77
Sat Flow, veh/h	1405	66	1554	145	70	108	1739	5066	1610	1810	5147	1522
Grp Volume(v), veh/h	34	0	98	3	0	0	86	1164	14	74	3324	42
Grp Sat Flow(s),veh/h/ln	1405	0	1620	323	0	0	1739	1689	1610	1810	1716	1522
Q Serve(g_s), s	0.0	0.0	14.4	0.0	0.0	0.0	11.8	14.4	0.4	7.5	99.9	1.6
Cycle Q Clear(g_c), s	6.2	0.0	14.4	14.4	0.0	0.0	11.8	14.4	0.4	7.5	99.9	1.6
Prop In Lane	1.00		0.96	0.67		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	120	0	115	48	0	0	102	4048	1287	57	3972	1175
V/C Ratio(X)	0.28	0.00	0.85	0.06	0.00	0.00	0.84	0.29	0.01	1.31	0.84	0.04
Avail Cap(c_a), veh/h	292	0	313	219	0	0	366	4048	1287	57	3972	1175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	106.5	0.0	110.3	104.2	0.0	0.0	111.9	6.3	4.9	116.3	17.6	6.4
Incr Delay (d2), s/veh	1.3	0.0	16.0	0.5	0.0	0.0	22.3	0.2	0.0	223.0	2.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	6.6	0.2	0.0	0.0	5.9	4.8	0.1	7.0	35.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	107.8	0.0	126.3	104.7	0.0	0.0	134.2	6.5	4.9	339.2	19.9	6.5
LnGrp LOS	F	A	F	F	A	A	F	A	A	F	B	A
Approach Vol, veh/h		132			3			1264			3440	
Approach Delay, s/veh		121.5			104.7			15.1			26.6	
Approach LOS		F			F			B			C	

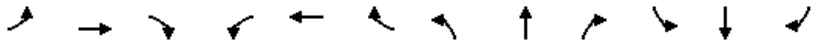
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.6	192.7		25.7	15.0	199.3		25.7				
Change Period (Y+Rc), s	7.5	7.5		8.7	7.5	7.5		8.7				
Max Green Setting (Gmax), s	50.5	119.5		46.3	7.5	162.5		46.3				
Max Q Clear Time (g_c+I1), s	13.8	101.9		16.4	9.5	16.4		16.4				
Green Ext Time (p_c), s	0.4	17.4		0.0	0.0	15.2		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		26.2
HCM 6th LOS		C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	19	67	16	13	13	93	1291	19	32	3247	28
Future Volume (vph)	38	19	67	16	13	13	93	1291	19	32	3247	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		160	0		50	300		500	275		175
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	70			25			125			115		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		635			737			2346			564	
Travel Time (s)		9.6			11.2			29.1			7.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	6%	0%	4%	0%	0%	0%	7%	4%	0%	3%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	61	72	0	31	14	100	1388	20	34	3491	30
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4			6			2
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	7.0	30.0	30.0	6.4	30.0	30.0
Minimum Split (s)	26.7	26.7	26.7	26.7	26.7	26.7	14.6	37.6	37.6	14.0	37.6	37.6
Total Split (s)	55.0	55.0	55.0	55.0	55.0	55.0	34.0	171.0	171.0	14.0	151.0	151.0
Total Split (%)	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	14.2%	71.3%	71.3%	5.8%	62.9%	62.9%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		8.7	8.7		8.7	8.7	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag							Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio		0.65	0.39		0.31	0.07	0.54	0.34	0.02	0.74	0.95	0.03
Control Delay		138.7	12.7		113.3	0.8	92.4	2.6	0.1	185.7	41.3	0.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		138.7	12.7		113.3	0.8	92.4	2.6	0.1	185.7	41.3	0.0
Queue Length 50th (ft)		97	0		48	0	165	106	0	54	2118	0
Queue Length 95th (ft)		158	34		90	0	244	79	m1	m71	2114	m0
Internal Link Dist (ft)		555			657			2266			484	
Turn Bay Length (ft)			160			50	300		500	275		175
Base Capacity (vph)		274	372		291	384	185	4028	1315	46	3683	1196
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.22	0.19		0.11	0.04	0.54	0.34	0.02	0.74	0.95	0.03

Intersection Summary	
Area Type:	Other
Cycle Length: 240	
Actuated Cycle Length: 240	
Offset: 80 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 6: US 19 & Spruce St



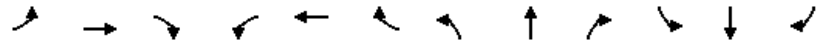
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	19	67	16	13	13	93	1291	19	32	3247	28
Future Volume (veh/h)	38	19	67	16	13	13	93	1291	19	32	3247	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1841	1900	1900	1900	1796	1841	1900	1856	1870	1900
Adj Flow Rate, veh/h	41	20	14	17	14	4	100	1388	19	34	3491	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	0	4	0	0	0	7	4	0	3	2	0
Cap, veh/h	81	32	102	41	27	105	406	3421	1096	272	3051	962
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.47	1.00	1.00	0.15	0.60	0.60
Sat Flow, veh/h	853	484	1560	264	416	1610	1711	5025	1610	1767	5106	1610
Grp Volume(v), veh/h	61	0	14	31	0	4	100	1388	19	34	3491	18
Grp Sat Flow(s),veh/h/ln	1338	0	1560	681	0	1610	1711	1675	1610	1767	1702	1610
Q Serve(g_s), s	0.0	0.0	2.0	2.7	0.0	0.6	8.3	0.0	0.0	4.0	143.4	1.1
Cycle Q Clear(g_c), s	10.9	0.0	2.0	13.6	0.0	0.6	8.3	0.0	0.0	4.0	143.4	1.1
Prop In Lane	0.67		1.00	0.55		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	113	0	102	68	0	105	406	3421	1096	272	3051	962
V/C Ratio(X)	0.54	0.00	0.14	0.46	0.00	0.04	0.25	0.41	0.02	0.12	1.14	0.02
Avail Cap(c_a), veh/h	310	0	301	270	0	311	406	3421	1096	272	3051	962
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	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	109.8	0.0	105.7	111.8	0.0	105.1	50.2	0.0	0.0	87.6	48.3	19.7
Incr Delay (d2), s/veh	4.0	0.0	0.6	4.7	0.0	0.1	0.3	0.3	0.0	0.2	69.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	0.8	2.0	0.0	0.2	3.4	0.1	0.0	1.8	77.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	113.8	0.0	106.3	116.5	0.0	105.2	50.5	0.3	0.0	87.8	117.6	19.7
LnGrp LOS	F	A	F	F	A	F	D	A	A	F	F	B
Approach Vol, veh/h		75			35			1507			3543	
Approach Delay, s/veh		112.4			115.2			3.6			116.8	
Approach LOS		F			F			A			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	64.6	151.0		24.4	44.6	171.0		24.4				
Change Period (Y+Rc), s	7.6	7.6		* 8.7	7.6	7.6		* 8.7				
Max Green Setting (Gmax), s	26.4	143.4		* 46	6.4	163.4		* 46				
Max Q Clear Time (g_c+I1), s	10.3	145.4		15.6	6.0	2.0		12.9				
Green Ext Time (p_c), s	0.2	0.0		0.1	0.0	12.5		0.3				

Intersection Summary		
HCM 6th Ctrl Delay		83.7
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	10	0	0	3	0	1347	4	2	3325	56
Future Volume (vph)	0	0	10	0	0	3	0	1347	4	2	3325	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		500	420		420
Storage Lanes	0		1	0		1	0		1	1		1
Taper Length (ft)	25			25			25			115		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		410			292			564			4591	
Travel Time (s)		9.3			6.6			12.8			104.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	10	0	0	3	0	1389	4	2	3428	58
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	10	0	0	3	0	1347	4	2	3325	56
Future Vol, veh/h	0	0	10	0	0	3	0	1347	4	2	3325	56
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	-	-	0	-	-	0	-	-	500	420	-	420
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	2	2
Mvmt Flow	0	0	10	0	0	3	0	1389	4	2	3428	58

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1714	-	-	695	-	0	0	1393	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.1	-	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.9	-	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	69	0	0	334	0	-	-	256	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	69	-	-	334	-	-	-	256	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	66.1	15.9	0	0
HCM LOS	F	C		

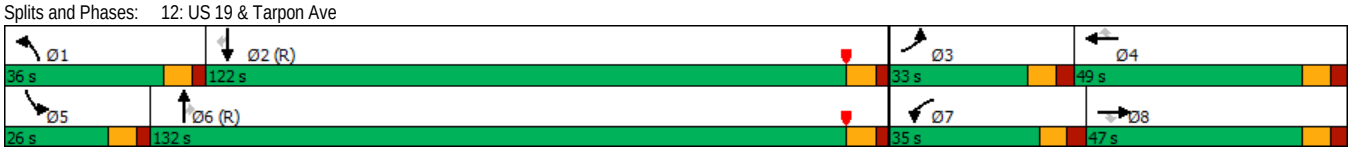
Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	69	334	256	-	-
HCM Lane V/C Ratio	-	-	0.149	0.009	0.008	-	-
HCM Control Delay (s)	-	-	66.1	15.9	19.2	-	-
HCM Lane LOS	-	-	F	C	C	-	-
HCM 95th %tile Q(veh)	-	-	0.5	0	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	213	172	632	432	187	128	1212	518	217	2782	102
Future Volume (vph)	105	213	172	632	432	187	128	1212	518	217	2782	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	500		270	320		200	300		200
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			80			230			300		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		686			1067			6497			2346	
Travel Time (s)		10.4			16.2			80.5			29.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	1%	4%	2%	2%	2%	5%	5%	3%	5%	2%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	111	224	181	665	455	197	135	1276	545	228	2928	107
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8			4			6			2
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	15.2	26.2	26.2	15.2	26.2	26.2	14.6	27.6	27.6	14.6	27.6	27.6
Total Split (s)	33.0	47.0	47.0	35.0	49.0	49.0	36.0	132.0	132.0	26.0	122.0	122.0
Total Split (%)	13.8%	19.6%	19.6%	14.6%	20.4%	20.4%	15.0%	55.0%	55.0%	10.8%	50.8%	50.8%
Yellow Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	5.2	5.2	5.2	5.2	5.2	5.2
All-Red Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	2.4	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2	8.2	8.2	8.2	8.2	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.59	0.63	0.64	1.74	0.82	0.50	0.65	0.46	0.53	0.76	0.97	0.11
Control Delay	123.5	110.8	34.7	392.1	110.6	18.5	116.5	47.2	31.3	140.2	21.0	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	123.5	110.8	34.7	392.1	110.6	18.5	116.5	47.2	31.3	140.2	21.0	0.7
Queue Length 50th (ft)	90	184	59	~800	376	29	111	536	363	179	1132	3
Queue Length 95th (ft)	130	227	154	#936	433	119	156	656	596	m192	#1902	m6
Internal Link Dist (ft)		606			987			6417			2266	
Turn Bay Length (ft)	375			500		270	320		200	300		200
Base Capacity (vph)	351	577	370	383	612	419	394	2797	1029	303	3020	984
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.39	0.49	1.74	0.74	0.47	0.34	0.46	0.53	0.75	0.97	0.11

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 100 (42%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: US 19 & Tarpon Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	213	172	632	432	187	128	1212	518	217	2782	102
Future Volume (veh/h)	105	213	172	632	432	187	128	1212	518	217	2782	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1885	1841	1870	1870	1870	1826	1826	1856	1826	1870	1856
Adj Flow Rate, veh/h	111	224	181	665	455	197	135	1276	545	228	2928	107
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	1	4	2	2	2	5	5	3	5	2	3
Cap, veh/h	142	459	200	386	705	314	166	2760	871	253	2958	911
Arrive On Green	0.04	0.13	0.13	0.11	0.20	0.20	0.05	0.55	0.55	0.15	1.00	1.00
Sat Flow, veh/h	3428	3582	1560	3456	3554	1585	3374	4985	1572	3374	5106	1572
Grp Volume(v), veh/h	111	224	181	665	455	197	135	1276	545	228	2928	107
Grp Sat Flow(s),veh/h/ln	1714	1791	1560	1728	1777	1585	1687	1662	1572	1687	1702	1572
Q Serve(g_s), s	7.7	14.0	27.5	26.8	28.3	27.3	9.5	36.9	56.8	15.9	0.0	0.0
Cycle Q Clear(g_c), s	7.7	14.0	27.5	26.8	28.3	27.3	9.5	36.9	56.8	15.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	142	459	200	386	705	314	166	2760	871	253	2958	911
V/C Ratio(X)	0.78	0.49	0.91	1.72	0.65	0.63	0.81	0.46	0.63	0.90	0.99	0.12
Avail Cap(c_a), veh/h	354	579	252	386	705	314	399	2760	871	259	2958	911
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.24	0.24	0.24
Uniform Delay (d), s/veh	114.0	97.3	103.2	106.6	88.4	88.1	113.0	32.1	36.6	101.2	0.0	0.0
Incr Delay (d2), s/veh	9.0	0.8	28.8	336.2	2.0	3.9	9.1	0.6	3.4	10.4	6.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	6.6	12.8	30.1	13.2	11.6	4.4	14.9	22.7	6.8	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	123.0	98.1	132.0	442.8	90.5	92.0	122.1	32.7	40.0	111.5	6.1	0.1
LnGrp LOS	F	F	F	F	F	F	F	C	D	F	A	A
Approach Vol, veh/h		516			1317			1956			3263	
Approach Delay, s/veh		115.3			268.6			40.9			13.3	
Approach LOS		F			F			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.4	146.6	18.1	55.8	25.6	140.5	35.0	38.9
Change Period (Y+Rc), s	7.6	7.6	* 8.2	* 8.2	7.6	7.6	* 8.2	* 8.2
Max Green Setting (Gmax), s	28.4	114.4	* 25	* 41	18.4	124.4	* 27	* 39
Max Q Clear Time (g_c+I1), s	11.5	2.0	9.7	30.3	17.9	58.8	28.8	29.5
Green Ext Time (p_c), s	0.3	94.8	0.2	2.5	0.0	25.4	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	76.1
HCM 6th LOS	E

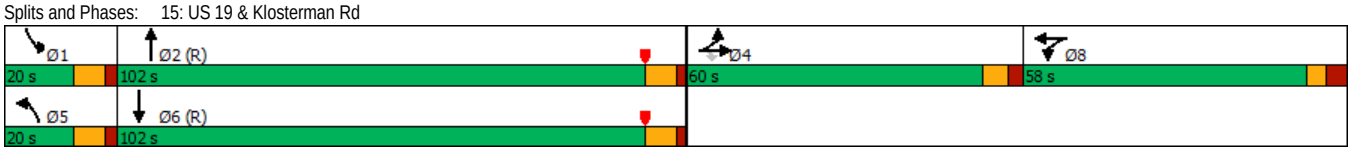
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	387	14	179	20	13	6	172	1493	15	21	3508	493
Future Volume (vph)	387	14	179	20	13	6	172	1493	15	21	3508	493
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		350	0		0	500		0	300		0
Storage Lanes	1		1	0		0	2		0	1		0
Taper Length (ft)	100			25			100			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		626			411			1496			1992	
Travel Time (s)		10.7			7.0			18.5			24.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	0%	1%	0%	8%	0%	4%	3%	0%	0%	2%	2%
Shared Lane Traffic (%)	31%											
Lane Group Flow (vph)	281	141	188	0	41	0	181	1588	0	22	4212	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	25.4	25.4	25.4	25.6	25.6		13.6	27.6		13.6	27.6	
Total Split (s)	60.0	60.0	60.0	58.0	58.0		20.0	102.0		20.0	102.0	
Total Split (%)	25.0%	25.0%	25.0%	24.2%	24.2%		8.3%	42.5%		8.3%	42.5%	
Yellow Time (s)	4.5	4.5	4.5	3.7	3.7		5.6	5.6		5.6	5.6	
All-Red Time (s)	2.9	2.9	2.9	3.9	3.9		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.4	7.4	7.4		7.6		7.6	7.6		7.6	7.6	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
v/c Ratio	0.76	0.75	0.53		0.51		0.58	0.36		0.37	1.06	
Control Delay	115.6	126.1	15.0		123.7		112.5	16.2		121.7	89.5	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay	115.6	126.1	15.0		123.7		112.5	16.2		121.7	89.5	
Queue Length 50th (ft)	242	243	0		60		145	299		34	~2125	
Queue Length 95th (ft)	294	334	88		113		194	393		m39	m#2054	
Internal Link Dist (ft)		546			331			1416			1912	
Turn Bay Length (ft)	175		350				500			300		
Base Capacity (vph)	698	353	497		373		310	4453		93	3990	
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	0.40	0.40	0.38		0.11		0.58	0.36		0.24	1.06	

Intersection Summary	
Area Type:	Other
Cycle Length: 240	
Actuated Cycle Length: 240	
Offset: 135 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 15: US 19 & Klosterman Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	387	14	179	20	13	6	172	1493	15	21	3508	493
Future Volume (veh/h)	387	14	179	20	13	6	172	1493	15	21	3508	493
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1885	1900	1781	1900	1841	1856	1900	1900	1870	1870
Adj Flow Rate, veh/h	418	0	80	21	14	6	181	1572	12	22	3693	494
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	0	1	0	8	0	4	3	0	0	2	2
Cap, veh/h	496	0	149	27	18	8	176	4809	37	35	4069	512
Arrive On Green	0.09	0.00	0.09	0.03	0.03	0.03	0.05	0.73	0.73	0.02	0.70	0.70
Sat Flow, veh/h	5302	0	1598	867	578	248	3401	6584	50	1810	5830	734
Grp Volume(v), veh/h	418	0	80	41	0	0	181	1143	441	22	3017	1170
Grp Sat Flow(s),veh/h/ln	1767	0	1598	1693	0	0	1700	1596	1846	1810	1609	1738
Q Serve(g_s), s	18.6	0.0	11.5	5.8	0.0	0.0	12.4	20.3	20.3	2.9	121.0	149.1
Cycle Q Clear(g_c), s	18.6	0.0	11.5	5.8	0.0	0.0	12.4	20.3	20.3	2.9	121.0	149.1
Prop In Lane	1.00		1.00	0.51		0.15	1.00		0.03	1.00		0.42
Lane Grp Cap(c), veh/h	496	0	149	52	0	0	176	3497	1349	35	3368	1213
V/C Ratio(X)	0.84	0.00	0.54	0.78	0.00	0.00	1.03	0.33	0.33	0.63	0.90	0.96
Avail Cap(c_a), veh/h	1162	0	350	356	0	0	176	3497	1349	93	3368	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	107.0	0.0	103.8	115.5	0.0	0.0	113.8	11.5	11.5	116.8	29.2	33.5
Incr Delay (d2), s/veh	4.0	0.0	3.0	21.7	0.0	0.0	76.0	0.2	0.6	13.2	4.2	18.5
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	8.8	0.0	4.9	2.9	0.0	0.0	7.3	7.1	8.4	1.5	44.6	63.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	111.0	0.0	106.7	137.2	0.0	0.0	189.8	11.7	12.1	130.0	33.4	52.0
LnGrp LOS	F	A	F	F	A	A	F	B	B	F	C	D
Approach Vol, veh/h		498			41			1765			4209	
Approach Delay, s/veh		110.3			137.2			30.1			39.1	
Approach LOS		F			F			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.2	182.9		29.9	20.0	175.1		15.0				
Change Period (Y+Rc), s	7.6	7.6		7.4	7.6	7.6		7.6				
Max Green Setting (Gmax), s	12.4	94.4		52.6	12.4	94.4		50.4				
Max Q Clear Time (g_c+I1), s	4.9	22.3		20.6	14.4	151.1		7.8				
Green Ext Time (p_c), s	0.0	33.4		1.8	0.0	0.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay	42.7	
HCM 6th LOS	D	

Notes

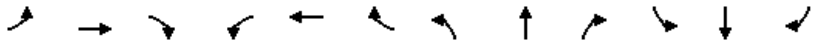
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	104	4	149	101	47	5	337	149	102	615	5
Future Volume (vph)	2	104	4	149	101	47	5	337	149	102	615	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	125		0	120		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			125			125			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		313			430			527			338	
Travel Time (s)		7.1			9.8			12.0			7.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	0%	1%	1%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	112	0	152	151	0	5	496	0	104	633	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		20.0	20.0		5.0	20.0	
Minimum Split (s)	24.9	24.9		11.0	24.9		26.1	26.1		10.9	26.1	
Total Split (s)	31.0	31.0		20.0	51.0		58.0	58.0		21.0	79.0	
Total Split (%)	23.8%	23.8%		15.4%	39.2%		44.6%	44.6%		16.2%	60.8%	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.4	3.4		3.4	3.4	
All-Red Time (s)	2.9	2.9		2.0	2.9		2.7	2.7		2.5	2.7	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.9		6.0	6.9		6.1	6.1		5.9	6.1	
Lead/Lag	Lag	Lag		Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	
v/c Ratio		0.60		0.55	0.33		0.01	0.50		0.21	0.51	
Control Delay		67.9		46.3	35.6		16.2	20.5		10.2	14.2	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		67.9		46.3	35.6		16.2	20.5		10.2	14.2	
Queue Length 50th (ft)		91		104	89		2	242		31	263	
Queue Length 95th (ft)		150		159	144		10	385		59	399	
Internal Link Dist (ft)		233			350			447			258	
Turn Bay Length (ft)				115			125			120		
Base Capacity (vph)		348		288	626		415	1000		554	1243	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.32		0.53	0.24		0.01	0.50		0.19	0.51	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 59 (45%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 19: Alt US 19 & Tarpon Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	104	4	149	101	47	5	337	149	102	615	5
Future Volume (veh/h)	2	104	4	149	101	47	5	337	149	102	615	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1900	1900	1900	1885	1885	1870	1900	1900
Adj Flow Rate, veh/h	2	106	4	152	103	48	5	344	152	104	628	5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	2	0	0	0	1	1	2	0	0
Cap, veh/h	29	139	5	295	263	123	481	747	330	528	1290	10
Arrive On Green	0.08	0.08	0.08	0.09	0.21	0.21	0.60	0.60	0.60	0.04	0.69	0.69
Sat Flow, veh/h	12	1803	67	1781	1226	571	807	1239	548	1781	1882	15
Grp Volume(v), veh/h	112	0	0	152	0	151	5	0	496	104	0	633
Grp Sat Flow(s),veh/h/ln	1882	0	0	1781	0	1797	807	0	1787	1781	0	1897
Q Serve(g_s), s	1.1	0.0	0.0	9.9	0.0	9.4	0.4	0.0	19.9	2.8	0.0	20.5
Cycle Q Clear(g_c), s	7.6	0.0	0.0	9.9	0.0	9.4	10.1	0.0	19.9	2.8	0.0	20.5
Prop In Lane	0.02		0.04	1.00		0.32	1.00		0.31	1.00		0.01
Lane Grp Cap(c), veh/h	173	0	0	295	0	385	481	0	1077	528	0	1301
V/C Ratio(X)	0.65	0.00	0.00	0.52	0.00	0.39	0.01	0.00	0.46	0.20	0.00	0.49
Avail Cap(c_a), veh/h	376	0	0	324	0	610	481	0	1077	668	0	1301
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.9	0.0	0.0	47.4	0.0	43.8	14.6	0.0	14.2	10.3	0.0	9.6
Incr Delay (d2), s/veh	4.0	0.0	0.0	0.5	0.0	0.6	0.0	0.0	1.4	0.1	0.0	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	3.8	0.0	0.0	4.5	0.0	4.3	0.1	0.0	8.3	1.1	0.0	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.9	0.0	0.0	47.9	0.0	44.4	14.6	0.0	15.6	10.3	0.0	11.0
LnGrp LOS	E	A	A	D	A	D	B	A	B	B	A	B
Approach Vol, veh/h		112			303			501			737	
Approach Delay, s/veh		62.9			46.2			15.6			10.9	
Approach LOS		E			D			B			B	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		95.2		34.8	10.8	84.4	17.9	16.9				
Change Period (Y+Rc), s		* 6.1		6.9	5.9	* 6.1	6.0	6.9				
Max Green Setting (Gmax), s		* 73		44.1	15.1	* 52	14.0	24.1				
Max Q Clear Time (g_c+I1), s		22.5		11.4	4.8	21.9	11.9	9.6				
Green Ext Time (p_c), s		6.3		0.9	0.1	4.4	0.0	0.4				

Intersection Summary		
HCM 6th Ctrl Delay		22.3
HCM 6th LOS		C

Notes

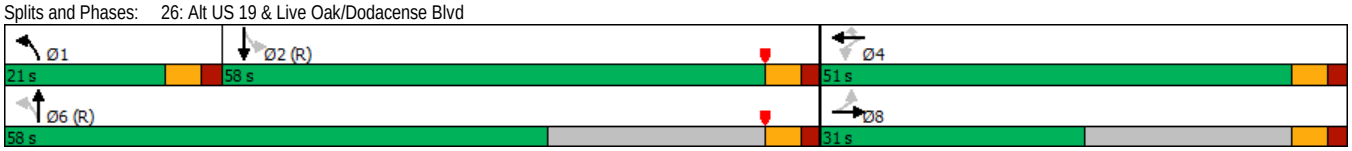
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

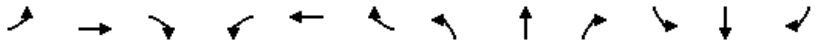
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	10	7	10	14	112	12	409	5	141	779	37
Future Volume (vph)	25	10	7	10	14	112	12	409	5	141	779	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	400		0	100		0	230		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	125			150			225			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			497			1327			1658	
Travel Time (s)		9.5			11.3			30.2			37.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	0%	2%	0%	0%	0%	2%	1%	0%	4%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	19	0	11	15	122	13	450	0	153	887	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		8			4		1	6			2	
Permitted Phases	8			4		4	6			2		
Detector Phase	8	8		4	4	4	1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	20.0		20.0	20.0	
Minimum Split (s)	23.5	23.5		23.5	23.5	23.5	10.5	25.5		25.5	25.5	
Total Split (s)	31.0	31.0		51.0	51.0	51.0	21.0	58.0		58.0	58.0	
Total Split (%)	23.8%	23.8%		39.2%	39.2%	39.2%	16.2%	44.6%		44.6%	44.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5		5.5	5.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		C-Max	C-Max	
v/c Ratio	0.31	0.16		0.12	0.12	0.56	0.03	0.28		0.20	0.58	
Control Delay	66.4	42.3		58.9	58.3	20.2	1.9	2.5		4.3	7.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	66.4	42.3		58.9	58.3	20.2	1.9	2.5		4.3	7.1	
Queue Length 50th (ft)	22	9		9	12	0	1	53		16	152	
Queue Length 95th (ft)	53	34		29	35	60	5	96		62	452	
Internal Link Dist (ft)		338			417			1247			1578	
Turn Bay Length (ft)	250			400			100			230		
Base Capacity (vph)	483	622		495	665	644	557	1600		751	1528	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.06	0.03		0.02	0.02	0.19	0.02	0.28		0.20	0.58	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 26: Alt US 19 & Live Oak/Dodacense Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	10	7	10	14	112	12	409	5	141	779	37
Future Volume (veh/h)	25	10	7	10	14	112	12	409	5	141	779	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1870	1900	1900	1900	1870	1885	1900	1841	1885	1900
Adj Flow Rate, veh/h	27	11	8	11	15	122	13	445	5	153	847	40
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, %	3	0	2	0	0	0	2	1	0	4	1	0
Cap, veh/h	163	96	69	174	178	150	428	1529	17	764	1366	65
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.01	0.82	0.82	0.77	0.77	0.77
Sat Flow, veh/h	1242	1023	744	1416	1900	1610	1781	1861	21	926	1786	84
Grp Volume(v), veh/h	27	0	19	11	15	122	13	0	450	153	0	887
Grp Sat Flow(s),veh/h/ln	1242	0	1766	1416	1900	1610	1781	0	1881	926	0	1870
Q Serve(g_s), s	2.6	0.0	1.3	0.9	0.9	9.7	0.2	0.0	7.3	6.0	0.0	27.5
Cycle Q Clear(g_c), s	3.6	0.0	1.3	2.2	0.9	9.7	0.2	0.0	7.3	6.0	0.0	27.5
Prop In Lane	1.00		0.42	1.00		1.00	1.00		0.01	1.00		0.05
Lane Grp Cap(c), veh/h	163	0	165	174	178	150	428	0	1546	764	0	1431
V/C Ratio(X)	0.17	0.00	0.12	0.06	0.08	0.81	0.03	0.00	0.29	0.20	0.00	0.62
Avail Cap(c_a), veh/h	290	0	346	537	665	564	614	0	1546	764	0	1431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.5	0.0	54.0	55.0	53.8	57.8	6.2	0.0	2.7	4.3	0.0	6.8
Incr Delay (d2), s/veh	0.5	0.0	0.3	0.2	0.2	9.9	0.0	0.0	0.5	0.6	0.0	2.0
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	0.9	0.0	0.6	0.3	0.5	4.4	0.1	0.0	2.3	1.2	0.0	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.0	0.0	54.3	55.2	54.0	67.7	6.2	0.0	3.2	4.9	0.0	8.8
LnGrp LOS	E	A	D	E	D	E	A	A	A	A	A	A
Approach Vol, veh/h		46			148			463			1040	
Approach Delay, s/veh		55.3			65.4			3.3			8.3	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	7.4	105.0		17.6		112.4		17.6				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s	15.5	52.5		45.5		52.5		25.5				
Max Q Clear Time (g_c+I1), s	2.2	29.5		11.7		9.3		5.6				
Green Ext Time (p_c), s	0.0	8.4		0.5		3.2		0.1				

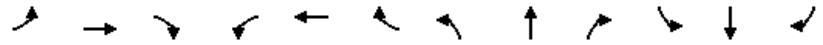
Intersection Summary			
HCM 6th Ctrl Delay			13.2
HCM 6th LOS			B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	4	192	3	0	4	89	1144	22	71	3200	46
Future Volume (vph)	33	4	192	3	0	4	89	1144	22	71	3200	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	650		635	300		755
Storage Lanes	1		0	0		0	1		1	1		1
Taper Length (ft)	50			25			125			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		688			312			3180			2676	
Travel Time (s)		13.4			6.1			39.4			33.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	3%	0%	1%	0%	0%	25%	5%	3%	0%	0%	1%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	204	0	0	7	0	93	1192	23	74	3333	48
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	8	8		4	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	54.7	54.7		51.7	51.7		14.5	29.5	29.5	14.5	29.5	29.5
Total Split (s)	55.0	55.0		55.0	55.0		58.0	170.0	170.0	15.0	127.0	127.0
Total Split (%)	22.9%	22.9%		22.9%	22.9%		24.2%	70.8%	70.8%	6.3%	52.9%	52.9%
Yellow Time (s)	4.1	4.1		4.1	4.1		5.5	5.5	5.5	5.5	5.5	5.5
All-Red Time (s)	4.6	4.6		4.6	4.6		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.7	8.7			8.7		7.5	7.5	7.5	7.5	7.5	7.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.50	0.76			0.07		0.67	0.31	0.02	0.45	0.84	0.04
Control Delay	134.1	30.1			1.3		125.7	5.3	0.3	113.1	21.9	0.1
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	134.1	30.1			1.3		125.7	5.3	0.3	113.1	21.9	0.1
Queue Length 50th (ft)	54	6			0		136	134	1	114	1167	0
Queue Length 95th (ft)	101	109			0		217	138	1	183	1494	0
Internal Link Dist (ft)		608			232			3100			2596	
Turn Bay Length (ft)	85						650		635	300		755
Base Capacity (vph)	267	471			143		361	3830	1242	165	3962	1185
Starvation Cap Reductn	0	0			0		0	0	0	0	0	0
Spillback Cap Reductn	0	0			0		0	0	0	0	0	0
Storage Cap Reductn	0	0			0		0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.43			0.05		0.26	0.31	0.02	0.45	0.84	0.04

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 180 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 4: US 19 & Beckett Way



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	4	192	3	0	4	89	1144	22	71	3200	46
Future Volume (veh/h)	33	4	192	3	0	4	89	1144	22	71	3200	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1885	1900	1900	1530	1826	1856	1900	1900	1885	1796
Adj Flow Rate, veh/h	34	4	96	3	0	1	93	1192	18	74	3333	42
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	0	1	0	0	25	5	3	0	0	1	7
Cap, veh/h	131	5	112	38	4	5	109	4042	1285	57	3944	1167
Arrive On Green	0.07	0.07	0.07	0.07	0.00	0.07	0.06	0.80	0.80	0.03	0.77	0.77
Sat Flow, veh/h	1405	65	1555	158	53	70	1739	5066	1610	1810	5147	1522
Grp Volume(v), veh/h	34	0	100	4	0	0	93	1192	18	74	3333	42
Grp Sat Flow(s),veh/h/ln	1405	0	1620	281	0	0	1739	1689	1610	1810	1716	1522
Q Serve(g_s), s	0.0	0.0	14.7	0.0	0.0	0.0	12.7	14.9	0.5	7.5	103.0	1.6
Cycle Q Clear(g_c), s	5.6	0.0	14.7	14.7	0.0	0.0	12.7	14.9	0.5	7.5	103.0	1.6
Prop In Lane	1.00		0.96	0.75		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	131	0	117	47	0	0	109	4042	1285	57	3944	1167
V/C Ratio(X)	0.26	0.00	0.86	0.09	0.00	0.00	0.85	0.29	0.01	1.31	0.84	0.04
Avail Cap(c_a), veh/h	301	0	313	213	0	0	366	4042	1285	57	3944	1167
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	105.9	0.0	110.1	104.0	0.0	0.0	111.4	6.4	5.0	116.3	18.6	6.7
Incr Delay (d2), s/veh	1.0	0.0	15.9	0.8	0.0	0.0	22.0	0.2	0.0	223.0	2.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	6.8	0.2	0.0	0.0	6.4	5.0	0.2	7.0	37.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	106.9	0.0	126.1	104.7	0.0	0.0	133.4	6.6	5.0	339.2	21.0	6.8
LnGrp LOS	F	A	F	F	A	A	F	A	A	F	C	A
Approach Vol, veh/h		134			4			1303			3449	
Approach Delay, s/veh		121.2			104.7			15.6			27.6	
Approach LOS		F			F			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.6	191.4		26.0	15.0	199.0		26.0				
Change Period (Y+Rc), s	7.5	7.5		8.7	7.5	7.5		8.7				
Max Green Setting (Gmax), s	50.5	119.5		46.3	7.5	162.5		46.3				
Max Q Clear Time (g_c+I1), s	14.7	105.0		16.7	9.5	16.9		16.7				
Green Ext Time (p_c), s	0.4	14.3		0.0	0.0	15.8		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	27.1
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	19	67	16	13	13	93	1308	19	32	3311	34
Future Volume (vph)	40	19	67	16	13	13	93	1308	19	32	3311	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		160	0		50	300		500	275		175
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	70			25			125			115		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		635			737			2346			564	
Travel Time (s)		9.6			11.2			29.1			7.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	6%	0%	4%	0%	0%	0%	7%	4%	0%	3%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	72	0	31	14	100	1406	20	34	3560	37
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4			6			2
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	7.0	30.0	30.0	6.4	30.0	30.0
Minimum Split (s)	26.7	26.7	26.7	26.7	26.7	26.7	14.6	37.6	37.6	14.0	37.6	37.6
Total Split (s)	55.0	55.0	55.0	55.0	55.0	55.0	34.0	171.0	171.0	14.0	151.0	151.0
Total Split (%)	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	14.2%	71.3%	71.3%	5.8%	62.9%	62.9%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		8.7	8.7		8.7	8.7	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag							Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio		0.66	0.38		0.31	0.07	0.54	0.35	0.02	0.74	0.97	0.03
Control Delay		139.3	12.5		112.6	0.8	92.0	2.7	0.1	175.9	61.8	0.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		139.3	12.5		112.6	0.8	92.0	2.7	0.1	175.9	61.8	0.0
Queue Length 50th (ft)		100	0		48	0	165	109	0	54	2063	0
Queue Length 95th (ft)		163	34		90	0	246	83	m0	m71	#2166	m0
Internal Link Dist (ft)		555			657			2266			484	
Turn Bay Length (ft)			160			50	300		500	275		175
Base Capacity (vph)		273	372		291	384	185	4022	1314	46	3677	1194
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.23	0.19		0.11	0.04	0.54	0.35	0.02	0.74	0.97	0.03

Intersection Summary

Area Type: Other

Cycle Length: 240

Actuated Cycle Length: 240

Offset: 80 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

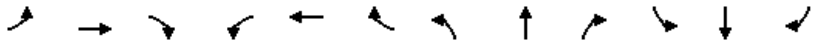
Natural Cycle: 150

Control Type: Actuated-Coordinated

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

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

Splits and Phases: 6: US 19 & Spruce St



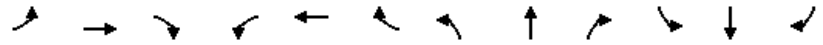
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	19	67	16	13	13	93	1308	19	32	3311	34
Future Volume (veh/h)	40	19	67	16	13	13	93	1308	19	32	3311	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1841	1900	1900	1900	1796	1841	1900	1856	1870	1900
Adj Flow Rate, veh/h	43	20	14	17	14	4	100	1406	19	34	3560	25
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	0	4	0	0	0	7	4	0	3	2	0
Cap, veh/h	84	31	106	41	27	109	402	3421	1096	268	3051	962
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.47	1.00	1.00	0.15	0.60	0.60
Sat Flow, veh/h	863	458	1560	256	403	1610	1711	5025	1610	1767	5106	1610
Grp Volume(v), veh/h	63	0	14	31	0	4	100	1406	19	34	3560	25
Grp Sat Flow(s),veh/h/ln	1321	0	1560	659	0	1610	1711	1675	1610	1767	1702	1610
Q Serve(g_s), s	0.0	0.0	2.0	2.7	0.0	0.6	8.4	0.0	0.0	4.0	143.4	1.5
Cycle Q Clear(g_c), s	11.5	0.0	2.0	14.1	0.0	0.6	8.4	0.0	0.0	4.0	143.4	1.5
Prop In Lane	0.68		1.00	0.55		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	0	106	68	0	109	402	3421	1096	268	3051	962
V/C Ratio(X)	0.55	0.00	0.13	0.46	0.00	0.04	0.25	0.41	0.02	0.13	1.17	0.03
Avail Cap(c_a), veh/h	308	0	301	266	0	311	402	3421	1096	268	3051	962
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	0.87	0.87	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	109.5	0.0	105.3	111.6	0.0	104.6	50.8	0.0	0.0	88.0	48.3	19.7
Incr Delay (d2), s/veh	4.1	0.0	0.6	4.7	0.0	0.1	0.3	0.3	0.0	0.2	79.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	0.8	2.0	0.0	0.2	3.4	0.1	0.0	1.8	80.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	113.6	0.0	105.8	116.3	0.0	104.7	51.1	0.3	0.0	88.2	127.3	19.8
LnGrp LOS	F	A	F	F	A	F	D	A	A	F	F	B
Approach Vol, veh/h		77			35			1525			3619	
Approach Delay, s/veh		112.2			115.0			3.6			126.2	
Approach LOS		F			F			A			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	64.1	151.0		24.9	44.1	171.0		24.9
Change Period (Y+Rc), s	7.6	7.6		* 8.7	7.6	7.6		* 8.7
Max Green Setting (Gmax), s	26.4	143.4		* 46	6.4	163.4		* 46
Max Q Clear Time (g_c+I1), s	10.4	145.4		16.1	6.0	2.0		13.5
Green Ext Time (p_c), s	0.2	0.0		0.1	0.0	12.7		0.3

Intersection Summary		
HCM 6th Ctrl Delay		90.4
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	10	0	0	3	0	1366	4	2	3395	56
Future Volume (vph)	0	0	10	0	0	3	0	1366	4	2	3395	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		500	420		420
Storage Lanes	0		1	0		1	0		1	1		1
Taper Length (ft)	25			25			25			115		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		410			292			564			1411	
Travel Time (s)		9.3			6.6			12.8			32.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	10	0	0	3	0	1408	4	2	3500	58
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	10	0	0	3	0	1366	4	2	3395	56
Future Vol, veh/h	0	0	10	0	0	3	0	1366	4	2	3395	56
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	-	-	0	-	-	0	-	-	500	420	-	420
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	2	2
Mvmt Flow	0	0	10	0	0	3	0	1408	4	2	3500	58

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1750	-	-	704	-	0	0	1412	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.1	-	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.9	-	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	65	0	0	329	0	-	-	251	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	65	-	-	329	-	-	-	251	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	70.6	16	0	0
HCM LOS	F	C		

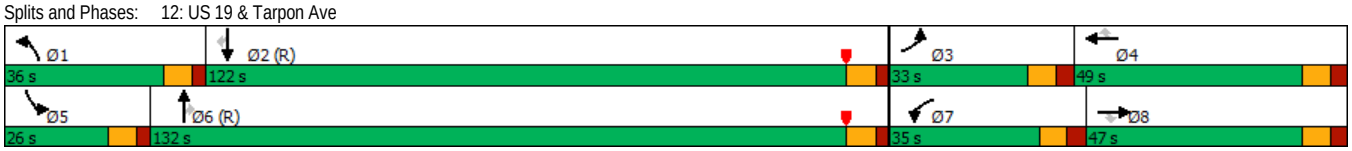
Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	65	329	251	-	-
HCM Lane V/C Ratio	-	-	0.159	0.009	0.008	-	-
HCM Control Delay (s)	-	-	70.6	16	19.5	-	-
HCM Lane LOS	-	-	F	C	C	-	-
HCM 95th %tile Q(veh)	-	-	0.5	0	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	213	172	633	432	190	128	1220	518	226	2821	118
Future Volume (vph)	111	213	172	633	432	190	128	1220	518	226	2821	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	500		270	320		200	300		200
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			80			230			300		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		686			1067			6497			2346	
Travel Time (s)		10.4			16.2			80.5			29.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	1%	4%	2%	2%	2%	5%	5%	3%	5%	2%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	117	224	181	666	455	200	135	1284	545	238	2969	124
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8			4			6			2
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	15.2	26.2	26.2	15.2	26.2	26.2	14.6	27.6	27.6	14.6	27.6	27.6
Total Split (s)	33.0	47.0	47.0	35.0	49.0	49.0	36.0	132.0	132.0	26.0	122.0	122.0
Total Split (%)	13.8%	19.6%	19.6%	14.6%	20.4%	20.4%	15.0%	55.0%	55.0%	10.8%	50.8%	50.8%
Yellow Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	5.2	5.2	5.2	5.2	5.2	5.2
All-Red Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	2.4	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2	8.2	8.2	8.2	8.2	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.61	0.62	0.64	1.74	0.82	0.50	0.65	0.46	0.53	0.76	0.99	0.13
Control Delay	123.6	110.0	34.3	393.1	110.7	18.7	116.5	48.1	31.9	137.1	28.3	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	123.6	110.0	34.3	393.1	110.7	18.7	116.5	48.1	31.9	137.1	28.3	0.9
Queue Length 50th (ft)	95	183	58	~801	376	31	111	548	370	187	1517	5
Queue Length 95th (ft)	136	226	153	#938	433	122	156	660	596	m197	#1956	m10
Internal Link Dist (ft)		606			987			6417			2266	
Turn Bay Length (ft)	375			500		270	320		200	300		200
Base Capacity (vph)	351	577	370	383	612	421	394	2772	1022	313	3012	981
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.39	0.49	1.74	0.74	0.48	0.34	0.46	0.53	0.76	0.99	0.13

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 100 (42%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: US 19 & Tarpon Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	213	172	633	432	190	128	1220	518	226	2821	118
Future Volume (veh/h)	111	213	172	633	432	190	128	1220	518	226	2821	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1885	1841	1870	1870	1870	1826	1826	1856	1826	1870	1856
Adj Flow Rate, veh/h	117	224	181	666	455	200	135	1284	545	238	2969	124
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	1	4	2	2	2	5	5	3	5	2	3
Cap, veh/h	148	459	200	386	698	312	166	2751	868	259	2958	911
Arrive On Green	0.04	0.13	0.13	0.11	0.20	0.20	0.05	0.55	0.55	0.15	1.00	1.00
Sat Flow, veh/h	3428	3582	1560	3456	3554	1585	3374	4985	1572	3374	5106	1572
Grp Volume(v), veh/h	117	224	181	666	455	200	135	1284	545	238	2969	124
Grp Sat Flow(s),veh/h/ln	1714	1791	1560	1728	1777	1585	1687	1662	1572	1687	1702	1572
Q Serve(g_s), s	8.1	14.0	27.5	26.8	28.3	27.8	9.5	37.3	57.0	16.7	139.0	0.0
Cycle Q Clear(g_c), s	8.1	14.0	27.5	26.8	28.3	27.8	9.5	37.3	57.0	16.7	139.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	148	459	200	386	698	312	166	2751	868	259	2958	911
V/C Ratio(X)	0.79	0.49	0.91	1.73	0.65	0.64	0.81	0.47	0.63	0.92	1.00	0.14
Avail Cap(c_a), veh/h	354	579	252	386	698	312	399	2751	868	259	2958	911
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.19	0.19	0.19
Uniform Delay (d), s/veh	113.7	97.3	103.2	106.6	88.8	88.7	113.0	32.5	36.9	100.9	0.0	0.0
Incr Delay (d2), s/veh	9.0	0.8	28.8	337.4	2.2	4.4	9.1	0.6	3.4	10.4	8.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	6.6	12.8	30.2	13.3	11.8	4.4	15.1	22.8	7.1	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	122.8	98.1	132.0	444.0	91.0	93.1	122.1	33.0	40.3	111.2	8.1	0.1
LnGrp LOS	F	F	F	F	F	F	F	C	D	F	F	A
Approach Vol, veh/h		522			1321			1964			3331	
Approach Delay, s/veh		115.4			269.3			41.2			15.2	
Approach LOS		F			F			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.4	146.6	18.6	55.4	26.0	140.1	35.0	38.9
Change Period (Y+Rc), s	7.6	7.6	* 8.2	* 8.2	7.6	7.6	* 8.2	* 8.2
Max Green Setting (Gmax), s	28.4	114.4	* 25	* 41	18.4	124.4	* 27	* 39
Max Q Clear Time (g_c+I1), s	11.5	141.0	10.1	30.3	18.7	59.0	28.8	29.5
Green Ext Time (p_c), s	0.3	0.0	0.3	2.5	0.0	25.6	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	76.7
HCM 6th LOS	E

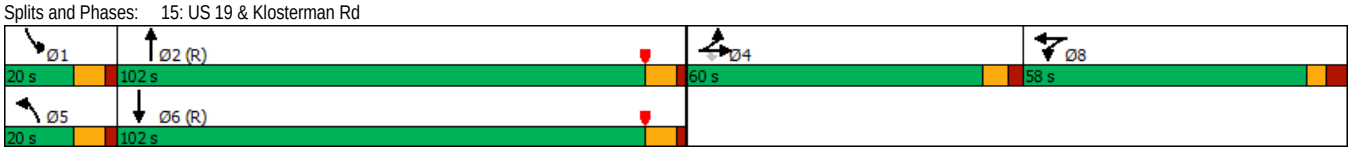
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	388	14	179	20	13	6	172	1504	15	21	3540	496
Future Volume (vph)	388	14	179	20	13	6	172	1504	15	21	3540	496
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		350	0		0	500		0	300		0
Storage Lanes	1		1	0		0	2		0	1		0
Taper Length (ft)	100			25			100			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		626			411			1496			1992	
Travel Time (s)		10.7			7.0			18.5			24.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	0%	1%	0%	8%	0%	4%	3%	0%	0%	2%	2%
Shared Lane Traffic (%)	31%											
Lane Group Flow (vph)	282	141	188	0	41	0	181	1599	0	22	4248	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	25.4	25.4	25.4	25.6	25.6		13.6	27.6		13.6	27.6	
Total Split (s)	60.0	60.0	60.0	58.0	58.0		20.0	102.0		20.0	102.0	
Total Split (%)	25.0%	25.0%	25.0%	24.2%	24.2%		8.3%	42.5%		8.3%	42.5%	
Yellow Time (s)	4.5	4.5	4.5	3.7	3.7		5.6	5.6		5.6	5.6	
All-Red Time (s)	2.9	2.9	2.9	3.9	3.9		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.4	7.4	7.4		7.6		7.6	7.6		7.6	7.6	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
v/c Ratio	0.76	0.75	0.53		0.51		0.58	0.36		0.37	1.07	
Control Delay	115.6	126.0	15.0		123.7		112.5	16.3		121.1	92.9	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay	115.6	126.0	15.0		123.7		112.5	16.3		121.1	92.9	
Queue Length 50th (ft)	243	242	0		60		145	303		34	~2161	
Queue Length 95th (ft)	295	334	88		113		194	397		m39	m#2086	
Internal Link Dist (ft)		546			331			1416			1912	
Turn Bay Length (ft)	175		350				500			300		
Base Capacity (vph)	698	353	497		373		310	4452		93	3988	
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	0.40	0.40	0.38		0.11		0.58	0.36		0.24	1.07	

Intersection Summary	
Area Type:	Other
Cycle Length: 240	
Actuated Cycle Length: 240	
Offset: 135 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 15: US 19 & Klosterman Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	388	14	179	20	13	6	172	1504	15	21	3540	496
Future Volume (veh/h)	388	14	179	20	13	6	172	1504	15	21	3540	496
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1885	1900	1781	1900	1841	1856	1900	1900	1870	1870
Adj Flow Rate, veh/h	419	0	80	21	14	6	181	1583	12	22	3726	497
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	0	1	0	8	0	4	3	0	0	2	2
Cap, veh/h	497	0	150	27	18	8	176	4808	36	35	4069	511
Arrive On Green	0.09	0.00	0.09	0.03	0.03	0.03	0.05	0.73	0.73	0.02	0.70	0.70
Sat Flow, veh/h	5302	0	1598	867	578	248	3401	6584	50	1810	5832	732
Grp Volume(v), veh/h	419	0	80	41	0	0	181	1151	444	22	3043	1180
Grp Sat Flow(s),veh/h/ln	1767	0	1598	1693	0	0	1700	1596	1847	1810	1609	1739
Q Serve(g_s), s	18.7	0.0	11.5	5.8	0.0	0.0	12.4	20.5	20.5	2.9	123.9	153.1
Cycle Q Clear(g_c), s	18.7	0.0	11.5	5.8	0.0	0.0	12.4	20.5	20.5	2.9	123.9	153.1
Prop In Lane	1.00		1.00	0.51		0.15	1.00		0.03	1.00		0.42
Lane Grp Cap(c), veh/h	497	0	150	52	0	0	176	3496	1348	35	3367	1213
V/C Ratio(X)	0.84	0.00	0.53	0.78	0.00	0.00	1.03	0.33	0.33	0.63	0.90	0.97
Avail Cap(c_a), veh/h	1162	0	350	356	0	0	176	3496	1348	93	3367	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	107.0	0.0	103.7	115.5	0.0	0.0	113.8	11.5	11.5	116.8	29.7	34.1
Incr Delay (d2), s/veh	4.0	0.0	2.9	21.7	0.0	0.0	76.0	0.3	0.7	13.2	4.5	20.0
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	8.8	0.0	4.9	2.9	0.0	0.0	7.3	7.1	8.4	1.5	45.8	66.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	111.0	0.0	106.7	137.2	0.0	0.0	189.8	11.8	12.2	130.0	34.2	54.1
LnGrp LOS	F	A	F	F	A	A	F	B	B	F	C	D
Approach Vol, veh/h		499			41			1776			4245	
Approach Delay, s/veh		110.3			137.2			30.0			40.3	
Approach LOS		F			F			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.2	182.8		29.9	20.0	175.1		15.0				
Change Period (Y+Rc), s	7.6	7.6		7.4	7.6	7.6		7.6				
Max Green Setting (Gmax), s	12.4	94.4		52.6	12.4	94.4		50.4				
Max Q Clear Time (g_c+I1), s	4.9	22.5		20.7	14.4	155.1		7.8				
Green Ext Time (p_c), s	0.0	33.7		1.8	0.0	0.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay	43.4	
HCM 6th LOS	D	

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	105	4	151	103	50	5	337	150	103	615	5
Future Volume (vph)	2	105	4	151	103	50	5	337	150	103	615	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	125		0	120		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			125			125			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		313			430			527			338	
Travel Time (s)		7.1			9.8			12.0			7.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	0%	1%	1%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	113	0	154	156	0	5	497	0	105	633	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		20.0	20.0		5.0	20.0	
Minimum Split (s)	24.9	24.9		11.0	24.9		26.1	26.1		10.9	26.1	
Total Split (s)	31.0	31.0		20.0	51.0		58.0	58.0		21.0	79.0	
Total Split (%)	23.8%	23.8%		15.4%	39.2%		44.6%	44.6%		16.2%	60.8%	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.4	3.4		3.4	3.4	
All-Red Time (s)	2.9	2.9		2.0	2.9		2.7	2.7		2.5	2.7	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.9		6.0	6.9		6.1	6.1		5.9	6.1	
Lead/Lag	Lag	Lag		Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	
v/c Ratio		0.60		0.55	0.34		0.01	0.50		0.22	0.51	
Control Delay		67.8		46.5	35.9		16.4	20.6		10.2	14.2	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		67.8		46.5	35.9		16.4	20.6		10.2	14.2	
Queue Length 50th (ft)		92		105	93		2	242		31	264	
Queue Length 95th (ft)		150		160	149		10	387		60	401	
Internal Link Dist (ft)		233			350			447			258	
Turn Bay Length (ft)				115			125			120		
Base Capacity (vph)		348		288	626		413	999		552	1241	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.32		0.53	0.25		0.01	0.50		0.19	0.51	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 59 (45%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 19: Alt US 19 & Tarpon Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	105	4	151	103	50	5	337	150	103	615	5
Future Volume (veh/h)	2	105	4	151	103	50	5	337	150	103	615	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1900	1900	1900	1885	1885	1870	1900	1900
Adj Flow Rate, veh/h	2	107	4	154	105	51	5	344	153	105	628	5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	2	0	0	0	1	1	2	0	0
Cap, veh/h	29	140	5	296	261	127	480	743	330	525	1288	10
Arrive On Green	0.08	0.08	0.08	0.09	0.22	0.22	0.60	0.60	0.60	0.04	0.68	0.68
Sat Flow, veh/h	12	1804	67	1781	1208	587	807	1236	550	1781	1882	15
Grp Volume(v), veh/h	113	0	0	154	0	156	5	0	497	105	0	633
Grp Sat Flow(s),veh/h/ln	1882	0	0	1781	0	1794	807	0	1786	1781	0	1897
Q Serve(g_s), s	1.1	0.0	0.0	10.0	0.0	9.7	0.4	0.0	20.0	2.8	0.0	20.6
Cycle Q Clear(g_c), s	7.6	0.0	0.0	10.0	0.0	9.7	10.2	0.0	20.0	2.8	0.0	20.6
Prop In Lane	0.02		0.04	1.00		0.33	1.00		0.31	1.00		0.01
Lane Grp Cap(c), veh/h	174	0	0	296	0	388	480	0	1074	525	0	1298
V/C Ratio(X)	0.65	0.00	0.00	0.52	0.00	0.40	0.01	0.00	0.46	0.20	0.00	0.49
Avail Cap(c_a), veh/h	376	0	0	324	0	609	480	0	1074	665	0	1298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.9	0.0	0.0	47.2	0.0	43.8	14.7	0.0	14.3	10.4	0.0	9.7
Incr Delay (d2), s/veh	4.0	0.0	0.0	0.5	0.0	0.7	0.0	0.0	1.4	0.1	0.0	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	3.9	0.0	0.0	4.5	0.0	4.4	0.1	0.0	8.4	1.1	0.0	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.9	0.0	0.0	47.8	0.0	44.4	14.7	0.0	15.8	10.4	0.0	11.1
LnGrp LOS	E	A	A	D	A	D	B	A	B	B	A	B
Approach Vol, veh/h		113			310			502			738	
Approach Delay, s/veh		62.9			46.1			15.8			11.0	
Approach LOS		E			D			B			B	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		95.0		35.0	10.8	84.2	18.0	17.0				
Change Period (Y+Rc), s		* 6.1		6.9	5.9	* 6.1	6.0	6.9				
Max Green Setting (Gmax), s		* 73		44.1	15.1	* 52	14.0	24.1				
Max Q Clear Time (g_c+I1), s		22.6		11.7	4.8	22.0	12.0	9.6				
Green Ext Time (p_c), s		6.3		0.9	0.1	4.4	0.0	0.4				

Intersection Summary		
HCM 6th Ctrl Delay		22.5
HCM 6th LOS		C

Notes

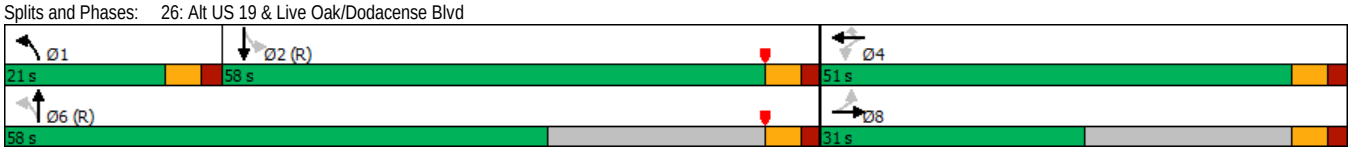
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

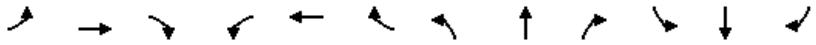
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	10	7	11	14	112	12	409	5	141	779	37
Future Volume (vph)	25	10	7	11	14	112	12	409	5	141	779	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	400		0	100		0	230		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	125			150			225			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			497			1327			1658	
Travel Time (s)		9.5			11.3			30.2			37.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	0%	2%	0%	0%	0%	2%	1%	0%	4%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	19	0	12	15	122	13	450	0	153	887	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		8			4		1	6			2	
Permitted Phases	8			4		4	6			2		
Detector Phase	8	8		4	4	4	1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	20.0		20.0	20.0	
Minimum Split (s)	23.5	23.5		23.5	23.5	23.5	10.5	25.5		25.5	25.5	
Total Split (s)	31.0	31.0		51.0	51.0	51.0	21.0	58.0		58.0	58.0	
Total Split (%)	23.8%	23.8%		39.2%	39.2%	39.2%	16.2%	44.6%		44.6%	44.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5		5.5	5.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		C-Max	C-Max	
v/c Ratio	0.31	0.16		0.13	0.12	0.56	0.03	0.28		0.20	0.58	
Control Delay	66.4	42.3		59.3	58.3	20.2	1.9	2.5		4.3	7.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	66.4	42.3		59.3	58.3	20.2	1.9	2.5		4.3	7.1	
Queue Length 50th (ft)	22	9		10	12	0	1	53		16	152	
Queue Length 95th (ft)	53	34		30	35	60	5	96		62	452	
Internal Link Dist (ft)		338			417			1247			1578	
Turn Bay Length (ft)	250			400			100			230		
Base Capacity (vph)	483	622		495	665	644	557	1600		751	1528	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.06	0.03		0.02	0.02	0.19	0.02	0.28		0.20	0.58	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 26: Alt US 19 & Live Oak/Dodacense Blvd

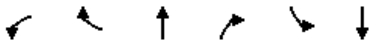




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	10	7	11	14	112	12	409	5	141	779	37
Future Volume (veh/h)	25	10	7	11	14	112	12	409	5	141	779	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1870	1900	1900	1900	1870	1885	1900	1841	1885	1900
Adj Flow Rate, veh/h	27	11	8	12	15	122	13	445	5	153	847	40
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, %	3	0	2	0	0	0	2	1	0	4	1	0
Cap, veh/h	163	96	70	174	178	151	428	1529	17	764	1366	65
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.01	0.82	0.82	0.77	0.77	0.77
Sat Flow, veh/h	1242	1023	744	1416	1900	1610	1781	1861	21	926	1786	84
Grp Volume(v), veh/h	27	0	19	12	15	122	13	0	450	153	0	887
Grp Sat Flow(s),veh/h/ln	1242	0	1766	1416	1900	1610	1781	0	1881	926	0	1870
Q Serve(g_s), s	2.6	0.0	1.3	1.0	0.9	9.7	0.2	0.0	7.3	6.0	0.0	27.5
Cycle Q Clear(g_c), s	3.6	0.0	1.3	2.3	0.9	9.7	0.2	0.0	7.3	6.0	0.0	27.5
Prop In Lane	1.00		0.42	1.00		1.00	1.00		0.01	1.00		0.05
Lane Grp Cap(c), veh/h	163	0	165	174	178	151	428	0	1546	764	0	1431
V/C Ratio(X)	0.17	0.00	0.12	0.07	0.08	0.81	0.03	0.00	0.29	0.20	0.00	0.62
Avail Cap(c_a), veh/h	290	0	346	537	665	564	614	0	1546	764	0	1431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.5	0.0	54.0	55.1	53.8	57.8	6.2	0.0	2.7	4.3	0.0	6.8
Incr Delay (d2), s/veh	0.5	0.0	0.3	0.2	0.2	9.9	0.0	0.0	0.5	0.6	0.0	2.0
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	0.9	0.0	0.6	0.4	0.5	4.4	0.1	0.0	2.3	1.2	0.0	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.0	0.0	54.3	55.2	54.0	67.7	6.2	0.0	3.2	4.9	0.0	8.8
LnGrp LOS	E	A	D	E	D	E	A	A	A	A	A	A
Approach Vol, veh/h		46			149			463			1040	
Approach Delay, s/veh		55.3			65.3			3.3			8.3	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	7.4	105.0		17.7		112.3		17.7				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s	15.5	52.5		45.5		52.5		25.5				
Max Q Clear Time (g_c+I1), s	2.2	29.5		11.7		9.3		5.6				
Green Ext Time (p_c), s	0.0	8.4		0.5		3.2		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		13.2	
HCM 6th LOS		B	



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	108	1313	37	0	3463
Future Volume (vph)	0	108	1313	37	0	3463
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		300	0	
Storage Lanes	0	1		1	0	
Taper Length (ft)	25				25	
Link Speed (mph)	30		55			55
Link Distance (ft)	1221		1411			3180
Travel Time (s)	27.8		17.5			39.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	117	1427	40	0	3764
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	108	1313	37	0	3463
Future Vol, veh/h	0	108	1313	37	0	3463
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	-	300	-	-
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	117	1427	40	0	3764

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	714	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	*616	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		1	-	-		-
Mov Cap-1 Maneuver	-	*616	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	616	-
HCM Lane V/C Ratio	-	-	0.191	-
HCM Control Delay (s)	-	-	12.2	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.7	-

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

Arterial Level of Service: NB US 19

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Klosterman Rd	I	55	26.1	16.3	42.4	0.28	24.1	D
Tarpon Ave	I	46	125.8	48.1	173.9	1.61	33.3	C
Spruce St	I	55	34.7	2.7	37.4	0.44	42.8	A
Beckett Way	I	50	69.7	5.3	75.0	0.98	46.9	A
Total	I		256.3	72.4	328.7	3.31	36.3	B

Arterial Level of Service: SB US 19

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Beckett Way	II	55	37.0	21.9	58.9	0.51	31.0	B
Spruce St	II	45	78.5	61.8	140.3	0.98	25.1	C
Tarpon Ave	II	55	34.7	28.3	63.0	0.44	25.4	C
Klosterman Rd	II	34	172.4	92.9	265.3	1.61	21.8	D
Total	II		322.6	204.9	527.5	3.54	24.1	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	1	148	44	4	39	151	3183	3	17	1808	75
Future Volume (vph)	93	1	148	44	4	39	151	3183	3	17	1808	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	650		635	300		755
Storage Lanes	1		0	0		0	1		1	1		1
Taper Length (ft)	50			25			125			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		688			312			4591			2676	
Travel Time (s)		13.4			6.1			56.9			33.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	0%	2%	0%	0%	0%	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	97	155	0	0	91	0	157	3316	3	18	1883	78
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	8	8		4	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	54.7	54.7		51.7	51.7		14.5	29.5	29.5	14.5	29.5	29.5
Total Split (s)	55.0	55.0		55.0	55.0		58.0	170.0	170.0	15.0	127.0	127.0
Total Split (%)	22.9%	22.9%		22.9%	22.9%		24.2%	70.8%	70.8%	6.3%	52.9%	52.9%
Yellow Time (s)	4.1	4.1		4.1	4.1		5.5	5.5	5.5	5.5	5.5	5.5
All-Red Time (s)	4.6	4.6		4.6	4.6		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.7	8.7			8.7		7.5	7.5	7.5	7.5	7.5	7.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.82	0.53			1.12		0.77	0.82	0.00	0.27	0.53	0.07
Control Delay	150.6	17.5			211.9		118.1	9.1	0.0	121.3	20.3	1.5
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	150.6	17.5			211.9		118.1	9.1	0.0	121.3	20.3	1.5
Queue Length 50th (ft)	154	1			~142		257	353	0	28	520	0
Queue Length 95th (ft)	228	84			#251		m292	439	m0	65	687	17
Internal Link Dist (ft)		608			232			4511			2596	
Turn Bay Length (ft)	85						650		635	300		755
Base Capacity (vph)	230	430			145		376	4056	1288	68	3534	1129
Starvation Cap Reductn	0	0			0		0	0	0	0	0	0
Spillback Cap Reductn	0	0			0		0	0	0	0	0	0
Storage Cap Reductn	0	0			0		0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.36			0.63		0.42	0.82	0.00	0.26	0.53	0.07

Intersection Summary

Area Type: Other

Cycle Length: 240

Actuated Cycle Length: 240

Offset: 180 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

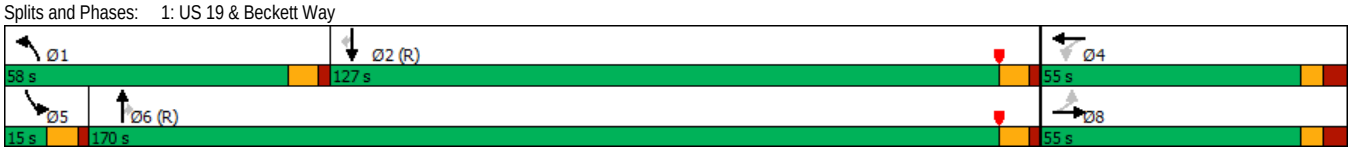
Control Type: Actuated-Coordinated

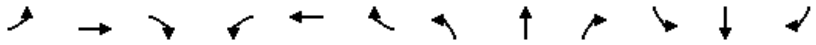
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

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

Splits and Phases: 1: US 19 & Beckett Way

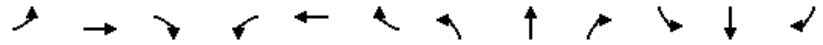




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1	148	44	4	39	151	3183	3	17	1808	75
Future Volume (veh/h)	93	1	148	44	4	39	151	3183	3	17	1808	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1870	1900	1900	1900	1885	1885	1900	1900	1885	1885
Adj Flow Rate, veh/h	97	1	29	46	4	11	157	3316	2	18	1883	36
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	0	2	0	0	0	1	1	0	0	1	1
Cap, veh/h	140	4	121	92	10	17	175	4136	1294	37	3738	1160
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.80	0.80	0.02	0.73	0.73
Sat Flow, veh/h	1410	54	1564	853	127	216	1795	5147	1610	1810	5147	1598
Grp Volume(v), veh/h	97	0	30	61	0	0	157	3316	2	18	1883	36
Grp Sat Flow(s),veh/h/ln	1410	0	1618	1196	0	0	1795	1716	1610	1810	1716	1598
Q Serve(g_s), s	3.0	0.0	4.2	9.0	0.0	0.0	20.8	85.4	0.1	2.4	37.9	1.5
Cycle Q Clear(g_c), s	16.2	0.0	4.2	13.2	0.0	0.0	20.8	85.4	0.1	2.4	37.9	1.5
Prop In Lane	1.00		0.97	0.75		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	140	0	125	119	0	0	175	4136	1294	37	3738	1160
V/C Ratio(X)	0.69	0.00	0.24	0.51	0.00	0.00	0.90	0.80	0.00	0.49	0.50	0.03
Avail Cap(c_a), veh/h	303	0	312	288	0	0	378	4136	1294	57	3738	1160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	109.6	0.0	104.1	109.6	0.0	0.0	107.1	13.0	4.6	116.3	14.2	9.2
Incr Delay (d2), s/veh	6.0	0.0	1.0	3.4	0.0	0.0	19.3	1.7	0.0	13.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	1.8	3.9	0.0	0.0	10.6	29.0	0.0	1.3	14.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	115.6	0.0	105.1	113.0	0.0	0.0	126.4	14.7	4.6	129.8	14.7	9.2
LnGrp LOS	F	A	F	F	A	A	F	B	A	F	B	A
Approach Vol, veh/h		127			61			3475			1937	
Approach Delay, s/veh		113.1			113.0			19.8			15.6	
Approach LOS		F			F			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.9	181.8		27.3	12.4	200.4		27.3				
Change Period (Y+Rc), s	7.5	7.5		8.7	7.5	7.5		8.7				
Max Green Setting (Gmax), s	50.5	119.5		46.3	7.5	162.5		46.3				
Max Q Clear Time (g_c+I1), s	22.8	39.9		15.2	4.4	87.4		18.2				
Green Ext Time (p_c), s	0.7	36.5		0.3	0.0	71.3		0.4				

Intersection Summary			
HCM 6th Ctrl Delay			21.5
HCM 6th LOS			C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	15	0	0	5	0	3392	10	5	2000	32
Future Volume (vph)	0	0	15	0	0	5	0	3392	10	5	2000	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		500	420		420
Storage Lanes	0		1	0		1	0		1	1		1
Taper Length (ft)	25			25			25			115		
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		410			292			564			4591	
Travel Time (s)		9.3			6.6			7.0			56.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	16	0	0	5	0	3533	10	5	2083	33
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	15	0	0	5	0	3392	10	5	2000	32
Future Vol, veh/h	0	0	15	0	0	5	0	3392	10	5	2000	32
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	-	-	0	-	-	0	-	-	500	420	-	420
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	0	0	16	0	0	5	0	3533	10	5	2083	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1042	-	-	1767	-	0	0	3543	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.1	-	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.9	-	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	197	0	0	64	0	-	-	20	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	197	-	-	64	-	-	-	20	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

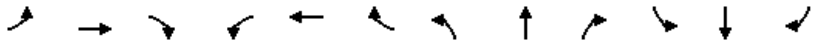
Approach	EB	WB	NB	SB
HCM Control Delay, s	24.8	66.2	0	0.6
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	197	64	20	-	-
HCM Lane V/C Ratio	-	-	0.079	0.081	0.26	-	-
HCM Control Delay (s)	-	-	24.8	66.2	239.5	-	-
HCM Lane LOS	-	-	C	F	F	-	-
HCM 95th %tile Q(veh)	-	-	0.3	0.3	0.8	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	149	15	174	27	19	27	73	3178	20	26	1980	39
Future Volume (vph)	149	15	174	27	19	27	73	3178	20	26	1980	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		160	0		50	300		500	275		175
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	70			25			125			115		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		635			737			2346			564	
Travel Time (s)		14.4			16.8			29.1			7.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	1%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	173	183	0	48	28	77	3345	21	27	2084	41
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4			6			2
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	7.0	30.0	30.0	7.0	30.0	30.0
Minimum Split (s)	54.7	54.7	54.7	54.7	54.7	54.7	14.6	42.6	42.6	14.6	42.6	42.6
Total Split (s)	55.0	55.0	55.0	55.0	55.0	55.0	30.0	170.0	170.0	15.0	155.0	155.0
Total Split (%)	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	12.5%	70.8%	70.8%	6.3%	64.6%	64.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		8.7	8.7		8.7	8.7	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag							Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio		0.86	0.51		0.34	0.09	0.46	0.89	0.02	0.44	0.62	0.04
Control Delay		134.8	25.5		95.6	0.6	81.9	10.7	0.0	116.7	36.3	9.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		134.8	25.5		95.6	0.6	81.9	10.7	0.0	116.7	36.3	9.2
Queue Length 50th (ft)		273	53		69	0	127	309	0	42	730	0
Queue Length 95th (ft)		364	142		119	0	m121	m299	m0	m86	1049	m36
Internal Link Dist (ft)		555			657			2266			484	
Turn Bay Length (ft)			160			50	300		500	275		175
Base Capacity (vph)		258	425		183	384	166	3740	1192	62	3375	1081
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.67	0.43		0.26	0.07	0.46	0.89	0.02	0.44	0.62	0.04

Intersection Summary	
Area Type:	Other
Cycle Length: 240	
Actuated Cycle Length: 240	
Offset: 115 (48%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 3: US 19 & Spruce St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	15	174	27	19	27	73	3178	20	26	1980	39
Future Volume (veh/h)	149	15	174	27	19	27	73	3178	20	26	1980	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1900	1900	1900	1885	1885	1900	1900	1885	1900
Adj Flow Rate, veh/h	157	16	34	28	20	2	77	3345	18	27	2084	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	1	0	0	0	1	1	0	0	1	0
Cap, veh/h	216	19	283	53	32	285	196	3597	1125	44	3161	989
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.15	0.93	0.93	0.02	0.61	0.61
Sat Flow, veh/h	1059	108	1598	163	180	1610	1795	5147	1610	1810	5147	1610
Grp Volume(v), veh/h	173	0	34	48	0	2	77	3345	18	27	2084	25
Grp Sat Flow(s),veh/h/ln	1167	0	1598	343	0	1610	1795	1716	1610	1810	1716	1610
Q Serve(g_s), s	0.0	0.0	4.3	5.6	0.0	0.2	9.3	81.0	0.2	3.5	63.0	1.5
Cycle Q Clear(g_c), s	34.9	0.0	4.3	40.5	0.0	0.2	9.3	81.0	0.2	3.5	63.0	1.5
Prop In Lane	0.91		1.00	0.58		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	235	0	283	85	0	285	196	3597	1125	44	3161	989
V/C Ratio(X)	0.74	0.00	0.12	0.57	0.00	0.01	0.39	0.93	0.02	0.61	0.66	0.03
Avail Cap(c_a), veh/h	258	0	308	109	0	311	196	3597	1125	56	3161	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	95.6	0.0	83.0	106.5	0.0	81.4	95.4	5.4	2.6	116.0	30.0	18.1
Incr Delay (d2), s/veh	9.5	0.0	0.2	5.9	0.0	0.0	0.1	0.6	0.0	13.0	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	1.8	3.2	0.0	0.1	4.3	5.1	0.1	1.8	25.7	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.1	0.0	83.2	112.3	0.0	81.4	95.5	6.0	2.6	129.0	31.1	18.2
LnGrp LOS	F	A	F	F	A	F	F	A	A	F	C	B
Approach Vol, veh/h		207			50			3440			2136	
Approach Delay, s/veh		101.5			111.1			8.0			32.2	
Approach LOS		F			F			A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.8	155.0		51.2	13.4	175.3		51.2				
Change Period (Y+Rc), s	7.6	7.6		* 8.7	7.6	7.6		* 8.7				
Max Green Setting (Gmax), s	22.4	147.4		* 46	7.4	162.4		* 46				
Max Q Clear Time (g_c+I1), s	11.3	65.0		42.5	5.5	83.0		36.9				
Green Ext Time (p_c), s	0.1	28.0		0.0	0.0	67.5		0.7				

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C

Notes

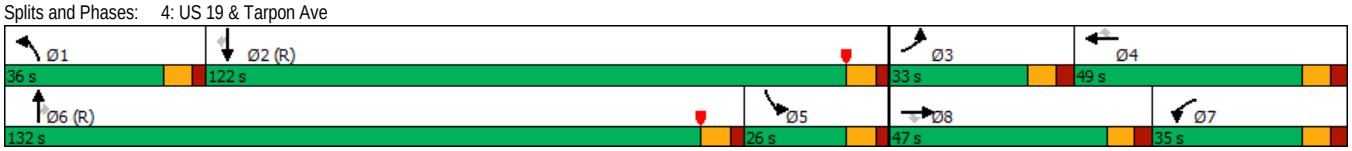
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	342	343	177	491	344	248	172	2784	886	286	1724	125
Future Volume (vph)	342	343	177	491	344	248	172	2784	886	286	1724	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	500		270	320		200	300		200
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			80			230			300		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		686			1067			6497			2346	
Travel Time (s)		10.4			16.2			80.5			29.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	1%	1%	1%	4%	1%	1%	1%	2%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	360	361	186	517	362	261	181	2931	933	301	1815	132
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8			4			6			2
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	15.2	26.2	26.2	15.2	26.2	26.2	14.6	27.6	27.6	14.6	27.6	27.6
Total Split (s)	33.0	47.0	47.0	35.0	49.0	49.0	36.0	132.0	132.0	26.0	122.0	122.0
Total Split (%)	13.8%	19.6%	19.6%	14.6%	20.4%	20.4%	15.0%	55.0%	55.0%	10.8%	50.8%	50.8%
Yellow Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	5.2	5.2	5.2	5.2	5.2	5.2
All-Red Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	2.4	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2	8.2	8.2	8.2	8.2	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	1.01	0.81	0.52	1.00	0.60	0.71	0.70	1.10	0.99	1.14	0.68	0.15
Control Delay	151.6	116.8	14.6	134.0	96.6	58.6	143.8	90.7	45.3	176.7	35.9	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	151.6	116.8	14.6	134.0	96.6	58.6	143.8	90.7	45.3	176.7	35.9	2.8
Queue Length 50th (ft)	~302	300	0	429	284	210	155	~1930	395	~281	876	16
Queue Length 95th (ft)	#428	356	88	#649	350	335	m185	m#1920	m#712	#410	1115	24
Internal Link Dist (ft)		606			987			6417			2266	
Turn Bay Length (ft)	375			500		270	320		200	300		200
Base Capacity (vph)	358	583	414	519	607	369	410	2662	945	263	2673	904
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.62	0.45	1.00	0.60	0.71	0.44	1.10	0.99	1.14	0.68	0.15

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 100 (42%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: US 19 & Tarpon Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	342	343	177	491	344	248	172	2784	886	286	1724	125
Future Volume (veh/h)	342	343	177	491	344	248	172	2784	886	286	1724	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1885	1885	1841	1885	1885	1885	1870	1885	1900
Adj Flow Rate, veh/h	360	361	0	517	362	0	181	2931	0	301	1815	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	1	1	1	4	1	1	1	2	1	0
Cap, veh/h	360	411		389	437		214	2668		430	2992	
Arrive On Green	0.10	0.11	0.00	0.11	0.12	0.00	0.06	0.52	0.00	0.17	0.77	0.00
Sat Flow, veh/h	3483	3610	1598	3483	3582	1560	3483	5147	1598	3456	5147	1610
Grp Volume(v), veh/h	360	361	0	517	362	0	181	2931	0	301	1815	0
Grp Sat Flow(s),veh/h/ln	1742	1805	1598	1742	1791	1560	1742	1716	1598	1728	1716	1610
Q Serve(g_s), s	24.8	23.6	0.0	26.8	23.7	0.0	12.3	124.4	0.0	19.7	36.2	0.0
Cycle Q Clear(g_c), s	24.8	23.6	0.0	26.8	23.7	0.0	12.3	124.4	0.0	19.7	36.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	360	411		389	437		214	2668		430	2992	
V/C Ratio(X)	1.00	0.88		1.33	0.83		0.84	1.10		0.70	0.61	
Avail Cap(c_a), veh/h	360	584		389	609		412	2668		430	2992	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.76	0.76	0.00
Uniform Delay (d), s/veh	107.6	104.7	0.0	106.6	102.9	0.0	111.5	57.8	0.0	95.9	15.5	0.0
Incr Delay (d2), s/veh	47.5	10.7	0.0	164.9	6.6	0.0	8.7	51.0	0.0	3.8	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	11.7	0.0	21.1	11.5	0.0	5.8	64.5	0.0	8.8	11.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	155.1	115.4	0.0	271.5	109.5	0.0	120.2	108.8	0.0	99.7	16.2	0.0
LnGrp LOS	F	F		F	F		F	F		F	B	
Approach Vol, veh/h		721	A		879	A		3112	A		2116	A
Approach Delay, s/veh		135.2			204.8			109.4			28.1	
Approach LOS		F			F			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.4	147.1	33.0	37.5	37.5	132.0	35.0	35.5
Change Period (Y+Rc), s	7.6	7.6	* 8.2	* 8.2	7.6	7.6	* 8.2	* 8.2
Max Green Setting (Gmax), s	28.4	114.4	* 25	* 41	18.4	124.4	* 27	* 39
Max Q Clear Time (g_c+I1), s	14.3	38.2	26.8	25.7	21.7	126.4	28.8	25.6
Green Ext Time (p_c), s	0.4	32.9	0.0	1.8	0.0	0.0	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	99.2
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

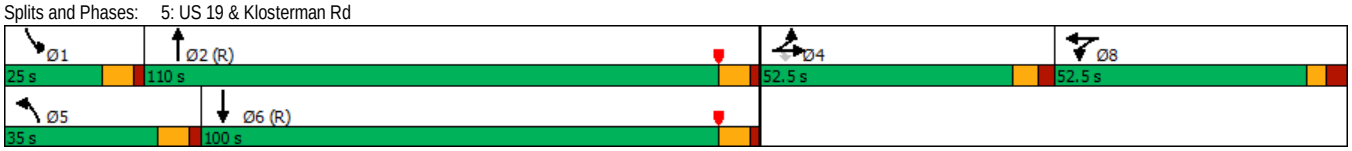
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

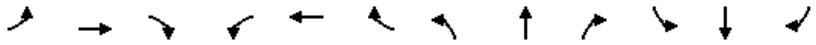
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	899	11	114	21	14	12	165	3121	18	29	1959	342
Future Volume (vph)	899	11	114	21	14	12	165	3121	18	29	1959	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		350	0		0	500		0	300		0
Storage Lanes	1		1	0		0	2		0	1		0
Taper Length (ft)	100			25			100			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		626			411			1496			1992	
Travel Time (s)		10.7			7.0			18.5			24.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	0%	5%	0%	0%	0%	2%	1%	11%	0%	1%	1%
Shared Lane Traffic (%)	33%											
Lane Group Flow (vph)	614	314	116	0	47	0	168	3203	0	30	2348	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	25.4	25.4	25.4	25.6	25.6		13.6	27.6		14.6	27.6	
Total Split (s)	52.5	52.5	52.5	52.5	52.5		35.0	110.0		25.0	100.0	
Total Split (%)	21.9%	21.9%	21.9%	21.9%	21.9%		14.6%	45.8%		10.4%	41.7%	
Yellow Time (s)	4.5	4.5	4.5	3.7	3.7		5.6	5.6		5.6	5.6	
All-Red Time (s)	2.9	2.9	2.9	3.9	3.9		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.4	7.4	7.4		7.6		7.6	7.6		7.6	7.6	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
v/c Ratio	1.00	1.02	0.30		0.53		0.65	0.81		0.44	0.65	
Control Delay	131.4	148.0	9.9		118.3		119.8	38.7		148.8	48.8	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay	131.4	148.0	9.9		118.3		119.8	38.7		148.8	48.8	
Queue Length 50th (ft)	~548	~578	0		65		136	1142		45	964	
Queue Length 95th (ft)	#701	#830	57		121		183	1250		m62	m1112	
Internal Link Dist (ft)		546			331			1416			1912	
Turn Bay Length (ft)	175		350				500			300		
Base Capacity (vph)	611	307	390		340		391	3967		130	3587	
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	1.00	1.02	0.30		0.14		0.43	0.81		0.23	0.65	

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 35 (15%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: US 19 & Klosterman Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	899	11	114	21	14	12	165	3121	18	29	1959	342
Future Volume (veh/h)	899	11	114	21	14	12	165	3121	18	29	1959	342
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1826	1900	1900	1900	1870	1885	1737	1900	1885	1885
Adj Flow Rate, veh/h	925	0	29	21	14	8	168	3185	17	30	1999	303
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	0	5	0	0	0	2	1	11	0	1	1
Cap, veh/h	981	0	282	27	18	10	204	4288	23	39	3448	521
Arrive On Green	0.18	0.00	0.18	0.03	0.03	0.03	0.06	0.64	0.64	0.02	0.60	0.60
Sat Flow, veh/h	5386	0	1547	877	585	334	3456	6707	36	1810	5727	866
Grp Volume(v), veh/h	925	0	29	43	0	0	168	2309	893	30	1697	605
Grp Sat Flow(s),veh/h/ln	1795	0	1547	1796	0	0	1728	1621	1879	1810	1621	1729
Q Serve(g_s), s	40.7	0.0	3.7	5.7	0.0	0.0	11.5	78.2	78.4	4.0	51.2	51.4
Cycle Q Clear(g_c), s	40.7	0.0	3.7	5.7	0.0	0.0	11.5	78.2	78.4	4.0	51.2	51.4
Prop In Lane	1.00		1.00	0.49		0.19	1.00		0.02	1.00		0.50
Lane Grp Cap(c), veh/h	981	0	282	56	0	0	204	3110	1201	39	2928	1041
V/C Ratio(X)	0.94	0.00	0.10	0.77	0.00	0.00	0.82	0.74	0.74	0.77	0.58	0.58
Avail Cap(c_a), veh/h	1012	0	291	336	0	0	395	3110	1201	131	2928	1041
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	96.9	0.0	81.8	115.4	0.0	0.0	111.7	29.7	29.7	116.8	29.2	29.2
Incr Delay (d2), s/veh	16.1	0.0	0.2	19.9	0.0	0.0	11.2	1.6	4.2	20.3	0.8	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	20.5	0.0	1.5	3.0	0.0	0.0	5.5	29.8	35.5	2.1	19.8	21.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	113.0	0.0	82.0	135.3	0.0	0.0	122.9	31.4	33.9	137.1	30.0	31.6
LnGrp LOS	F	A	F	F	A	A	F	C	C	F	C	C
Approach Vol, veh/h		954			43			3370			2332	
Approach Delay, s/veh		112.0			135.3			36.6			31.8	
Approach LOS		F			F			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.8	161.1		51.1	21.8	152.1		15.0				
Change Period (Y+Rc), s	7.6	7.6		7.4	7.6	7.6		7.6				
Max Green Setting (Gmax), s	17.4	102.4		45.1	27.4	92.4		44.9				
Max Q Clear Time (g_c+I1), s	6.0	80.4		42.7	13.5	53.4		7.7				
Green Ext Time (p_c), s	0.0	21.7		1.0	0.6	33.8		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		46.3
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	122	16	121	180	109	14	664	187	130	410	5
Future Volume (vph)	13	122	16	121	180	109	14	664	187	130	410	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	125		0	120		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			125			125			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		313			430			527			338	
Travel Time (s)		7.1			9.8			12.0			7.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	0%	1%	1%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	153	0	123	295	0	14	869	0	133	423	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		20.0	20.0		5.0	20.0	
Minimum Split (s)	24.9	24.9		11.0	24.9		26.1	26.1		10.9	26.1	
Total Split (s)	27.0	27.0		18.0	45.0		82.0	82.0		13.0	95.0	
Total Split (%)	19.3%	19.3%		12.9%	32.1%		58.6%	58.6%		9.3%	67.9%	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.4	3.4		3.4	3.4	
All-Red Time (s)	2.9	2.9		2.0	2.9		2.7	2.7		2.5	2.7	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.9		6.0	6.9		6.1	6.1		5.9	6.1	
Lead/Lag	Lag	Lag		Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	
v/c Ratio		0.73		0.53	0.67		0.03	0.83		0.57	0.33	
Control Delay		77.7		50.1	51.9		14.9	33.3		18.9	11.4	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		77.7		50.1	51.9		14.9	33.3		18.9	11.4	
Queue Length 50th (ft)		132		90	224		6	641		42	158	
Queue Length 95th (ft)		205		144	317		17	#912		73	234	
Internal Link Dist (ft)		233			350			447			258	
Turn Bay Length (ft)				115			125			120		
Base Capacity (vph)		256		243	503		560	1049		235	1268	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.60		0.51	0.59		0.03	0.83		0.57	0.33	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 66 (47%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

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

Splits and Phases: 10: Alt US 19 & Tarpon Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	122	16	121	180	109	14	664	187	130	410	5
Future Volume (veh/h)	13	122	16	121	180	109	14	664	187	130	410	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1900	1900	1900	1885	1885	1870	1900	1900
Adj Flow Rate, veh/h	13	124	16	123	184	111	14	678	191	133	418	5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	2	0	0	0	1	1	2	0	0
Cap, veh/h	36	153	19	259	241	145	640	859	242	281	1293	15
Arrive On Green	0.10	0.10	0.10	0.07	0.22	0.22	0.61	0.61	0.61	0.04	0.69	0.69
Sat Flow, veh/h	85	1530	189	1781	1110	670	979	1415	399	1781	1874	22
Grp Volume(v), veh/h	153	0	0	123	0	295	14	0	869	133	0	423
Grp Sat Flow(s),veh/h/ln	1804	0	0	1781	0	1779	979	0	1813	1781	0	1896
Q Serve(g_s), s	5.6	0.0	0.0	8.4	0.0	21.8	0.8	0.0	50.7	3.8	0.0	12.4
Cycle Q Clear(g_c), s	11.6	0.0	0.0	8.4	0.0	21.8	1.6	0.0	50.7	3.8	0.0	12.4
Prop In Lane	0.08		0.10	1.00		0.38	1.00		0.22	1.00		0.01
Lane Grp Cap(c), veh/h	208	0	0	259	0	386	640	0	1100	281	0	1309
V/C Ratio(X)	0.74	0.00	0.00	0.48	0.00	0.76	0.02	0.00	0.79	0.47	0.00	0.32
Avail Cap(c_a), veh/h	285	0	0	279	0	484	640	0	1100	298	0	1309
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.9	0.0	0.0	49.6	0.0	51.5	11.3	0.0	20.8	21.1	0.0	8.6
Incr Delay (d2), s/veh	6.3	0.0	0.0	0.5	0.0	5.6	0.1	0.0	5.8	0.5	0.0	0.7
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	5.7	0.0	0.0	3.8	0.0	10.3	0.2	0.0	22.5	2.0	0.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.1	0.0	0.0	50.1	0.0	57.1	11.3	0.0	26.6	21.6	0.0	9.3
LnGrp LOS	E	A	A	D	A	E	B	A	C	C	A	A
Approach Vol, veh/h		153			418			883			556	
Approach Delay, s/veh		68.1			55.0			26.3			12.2	
Approach LOS		E			D			C			B	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		102.8		37.2	11.7	91.1	16.4	20.9				
Change Period (Y+Rc), s		* 6.1		6.9	5.9	* 6.1	6.0	6.9				
Max Green Setting (Gmax), s		* 89		38.1	7.1	* 76	12.0	20.1				
Max Q Clear Time (g_c+I1), s		14.4		23.8	5.8	52.7	10.4	13.6				
Green Ext Time (p_c), s		3.7		1.5	0.0	8.9	0.0	0.4				

Intersection Summary		
HCM 6th Ctrl Delay		31.6
HCM 6th LOS		C

Notes

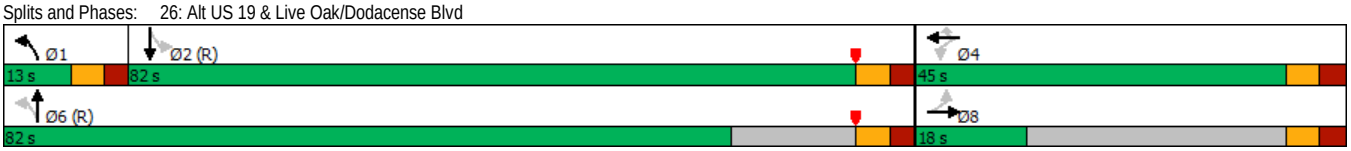
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

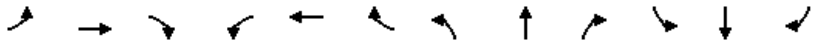
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	40	47	19	37	179	55	796	13	102	555	66
Future Volume (vph)	114	40	47	19	37	179	55	796	13	102	555	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	400		0	100		0	230		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	125			150			225			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			497			312			175	
Travel Time (s)		9.5			11.3			7.1			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	0%	2%	0%	0%	0%	2%	1%	0%	4%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	94	0	21	40	195	60	879	0	111	675	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		8			4		1	6			2	
Permitted Phases	8			4		4	6			2		
Detector Phase	8	8		4	4	4	1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	20.0		20.0	20.0	
Minimum Split (s)	11.4	11.4		24.4	24.4	24.4	10.9	26.2		26.2	26.2	
Total Split (s)	18.0	18.0		45.0	45.0	45.0	13.0	82.0		82.0	82.0	
Total Split (%)	12.9%	12.9%		32.1%	32.1%	32.1%	9.3%	58.6%		58.6%	58.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.4	3.5		3.5	3.5	
All-Red Time (s)	2.9	2.9		2.9	2.9	2.9	2.5	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.4	6.4		6.4	6.4	6.4	5.9	6.2		6.2	6.2	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		C-Max	C-Max	
v/c Ratio	0.72	0.37		0.13	0.16	0.53	0.12	0.60		0.29	0.51	
Control Delay	80.3	34.4		52.9	53.4	14.3	4.6	9.1		11.8	12.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	80.3	34.4		52.9	53.4	14.3	4.6	9.1		11.8	12.4	
Queue Length 50th (ft)	110	43		17	33	11	11	282		36	270	
Queue Length 95th (ft)	173	95		42	67	81	26	483		84	443	
Internal Link Dist (ft)		338			417			232			95	
Turn Bay Length (ft)	250			400			100			230		
Base Capacity (vph)	371	506		357	523	577	515	1468		385	1315	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.33	0.19		0.06	0.08	0.34	0.12	0.60		0.29	0.51	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 22 (16%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 26: Alt US 19 & Live Oak/Dodacense Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	40	47	19	37	179	55	796	13	102	555	66
Future Volume (veh/h)	114	40	47	19	37	179	55	796	13	102	555	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1870	1900	1900	1900	1870	1885	1900	1841	1885	1900
Adj Flow Rate, veh/h	124	43	51	21	40	195	60	865	14	111	603	72
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, %	3	0	2	0	0	0	2	1	0	4	1	0
Cap, veh/h	188	110	131	170	264	224	508	1426	23	405	1151	137
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.03	0.77	0.77	0.70	0.70	0.70
Sat Flow, veh/h	1136	792	939	1323	1900	1610	1781	1850	30	621	1652	197
Grp Volume(v), veh/h	124	0	94	21	40	195	60	0	879	111	0	675
Grp Sat Flow(s),veh/h/ln	1136	0	1731	1323	1900	1610	1781	0	1880	621	0	1850
Q Serve(g_s), s	15.1	0.0	6.9	2.1	2.6	16.6	1.3	0.0	28.2	13.1	0.0	24.4
Cycle Q Clear(g_c), s	17.7	0.0	6.9	9.0	2.6	16.6	1.3	0.0	28.2	30.9	0.0	24.4
Prop In Lane	1.00		0.54	1.00		1.00	1.00		0.02	1.00		0.11
Lane Grp Cap(c), veh/h	188	0	241	170	264	224	508	0	1449	405	0	1288
V/C Ratio(X)	0.66	0.00	0.39	0.12	0.15	0.87	0.12	0.00	0.61	0.27	0.00	0.52
Avail Cap(c_a), veh/h	188	0	241	351	524	444	541	0	1449	405	0	1288
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.8	0.0	54.9	59.0	53.0	59.0	7.5	0.0	6.9	15.8	0.0	10.1
Incr Delay (d2), s/veh	8.1	0.0	1.0	0.3	0.3	10.0	0.1	0.0	1.9	1.7	0.0	1.5
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	4.8	0.0	3.1	0.7	1.3	7.4	0.5	0.0	10.7	2.1	0.0	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.9	0.0	55.9	59.3	53.3	69.0	7.6	0.0	8.8	17.4	0.0	11.7
LnGrp LOS	E	A	E	E	D	E	A	A	A	B	A	B
Approach Vol, veh/h		218			256			939			786	
Approach Delay, s/veh		63.3			65.8			8.7			12.5	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.4	103.7		25.9		114.1		25.9				
Change Period (Y+Rc), s	5.9	* 6.2		6.4		* 6.2		6.4				
Max Green Setting (Gmax), s	7.1	* 76		38.6		* 76		11.6				
Max Q Clear Time (g_c+I1), s	3.3	32.9		18.6		30.2		19.7				
Green Ext Time (p_c), s	0.0	8.8		0.9		8.7		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		22.1	
HCM 6th LOS		C	

Notes

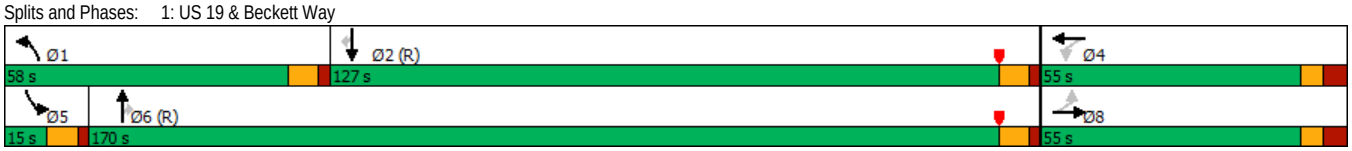
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

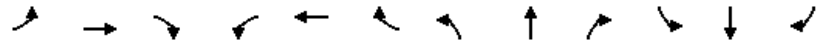
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	1	157	47	4	41	160	3378	3	18	1919	80
Future Volume (vph)	99	1	157	47	4	41	160	3378	3	18	1919	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	650		635	300		755
Storage Lanes	1		0	0		0	1		1	1		1
Taper Length (ft)	50			25			125			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		688			312			4591			2676	
Travel Time (s)		13.4			6.1			56.9			33.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	0%	2%	0%	0%	0%	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	165	0	0	96	0	167	3519	3	19	1999	83
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	8	8		4	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	54.7	54.7		51.7	51.7		14.5	29.5	29.5	14.5	29.5	29.5
Total Split (s)	55.0	55.0		55.0	55.0		58.0	170.0	170.0	15.0	127.0	127.0
Total Split (%)	22.9%	22.9%		22.9%	22.9%		24.2%	70.8%	70.8%	6.3%	52.9%	52.9%
Yellow Time (s)	4.1	4.1		4.1	4.1		5.5	5.5	5.5	5.5	5.5	5.5
All-Red Time (s)	4.6	4.6		4.6	4.6		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.7	8.7			8.7		7.5	7.5	7.5	7.5	7.5	7.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.82	0.53			1.17		0.78	0.88	0.00	0.28	0.58	0.07
Control Delay	147.1	16.6			220.8		115.8	11.5	0.0	121.7	22.9	2.1
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	147.1	16.6			220.8		115.8	11.5	0.0	121.7	22.9	2.1
Queue Length 50th (ft)	164	1			~159		274	456	0	30	594	0
Queue Length 95th (ft)	238	85			#263		m291	465	m0	66	793	21
Internal Link Dist (ft)		608			232			4511			2596	
Turn Bay Length (ft)	85						650		635	300		755
Base Capacity (vph)	229	438			138		376	4018	1276	69	3471	1111
Starvation Cap Reductn	0	0			0		0	0	0	0	0	0
Spillback Cap Reductn	0	0			0		0	0	0	0	0	0
Storage Cap Reductn	0	0			0		0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.38			0.70		0.44	0.88	0.00	0.28	0.58	0.07

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 180 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: US 19 & Beckett Way

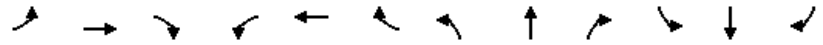




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	1	157	47	4	41	160	3378	3	18	1919	80
Future Volume (veh/h)	99	1	157	47	4	41	160	3378	3	18	1919	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1870	1900	1900	1900	1885	1885	1900	1900	1885	1885
Adj Flow Rate, veh/h	103	1	39	49	4	13	167	3519	2	19	1999	41
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	0	2	0	0	0	1	1	0	0	1	1
Cap, veh/h	146	3	131	90	10	18	185	4104	1284	38	3681	1143
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.80	0.80	0.02	0.72	0.72
Sat Flow, veh/h	1407	40	1576	775	115	218	1795	5147	1610	1810	5147	1598
Grp Volume(v), veh/h	103	0	40	66	0	0	167	3519	2	19	1999	41
Grp Sat Flow(s),veh/h/ln	1407	0	1616	1108	0	0	1795	1716	1610	1810	1716	1598
Q Serve(g_s), s	2.0	0.0	5.6	9.8	0.0	0.0	22.1	105.1	0.1	2.5	43.4	1.8
Cycle Q Clear(g_c), s	17.4	0.0	5.6	15.4	0.0	0.0	22.1	105.1	0.1	2.5	43.4	1.8
Prop In Lane	1.00		0.98	0.74		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	0	134	118	0	0	185	4104	1284	38	3681	1143
V/C Ratio(X)	0.70	0.00	0.30	0.56	0.00	0.00	0.90	0.86	0.00	0.50	0.54	0.04
Avail Cap(c_a), veh/h	301	0	312	278	0	0	378	4104	1284	57	3681	1143
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	108.9	0.0	103.5	109.9	0.0	0.0	106.4	15.6	4.9	116.2	15.9	10.0
Incr Delay (d2), s/veh	6.0	0.0	1.2	4.1	0.0	0.0	19.1	2.5	0.0	13.8	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	2.4	4.2	0.0	0.0	11.3	36.3	0.0	1.3	16.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	115.0	0.0	104.7	114.0	0.0	0.0	125.5	18.1	4.9	130.1	16.5	10.1
LnGrp LOS	F	A	F	F	A	A	F	B	A	F	B	B
Approach Vol, veh/h		143			66			3688			2059	
Approach Delay, s/veh		112.1			114.0			23.0			17.4	
Approach LOS		F			F			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.3	179.1		28.6	12.5	198.9		28.6				
Change Period (Y+Rc), s	7.5	7.5		8.7	7.5	7.5		8.7				
Max Green Setting (Gmax), s	50.5	119.5		46.3	7.5	162.5		46.3				
Max Q Clear Time (g_c+I1), s	24.1	45.4		17.4	4.5	107.1		19.4				
Green Ext Time (p_c), s	0.7	39.5		0.3	0.0	54.2		0.5				

Intersection Summary			
HCM 6th Ctrl Delay			24.2
HCM 6th LOS			C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	16	0	0	5	0	3600	11	5	2122	34
Future Volume (vph)	0	0	16	0	0	5	0	3600	11	5	2122	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		500	420		420
Storage Lanes	0		1	0		1	0		1	1		1
Taper Length (ft)	25			25			25			115		
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		410			292			564			4591	
Travel Time (s)		9.3			6.6			7.0			56.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	17	0	0	5	0	3750	11	5	2210	35
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	16	0	0	5	0	3600	11	5	2122	34
Future Vol, veh/h	0	0	16	0	0	5	0	3600	11	5	2122	34
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	-	-	0	-	-	0	-	-	500	420	-	420
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	0	0	17	0	0	5	0	3750	11	5	2210	35

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1105	-	-	1875	-	0	0	3761	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.1	-	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.9	-	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	179	0	0	53	0	-	-	15	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	179	-	-	53	-	-	-	15	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.2	80.2	0	0.8
HCM LOS	D	F		

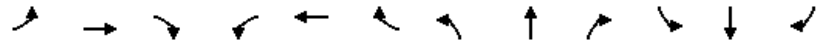
Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	179	53	15	-	-
HCM Lane V/C Ratio	-	-	0.093	0.098	0.347	-	-
HCM Control Delay (s)	-	-	27.2	80.2	$ 341.2	-	-
HCM Lane LOS	-	-	D	F	F	-	-
HCM 95th %tile Q(veh)	-	-	0.3	0.3	0.9	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	16	185	29	20	29	77	3373	21	27	2101	41
Future Volume (vph)	158	16	185	29	20	29	77	3373	21	27	2101	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		160	0		50	300		500	275		175
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	70			25			125			115		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		635			737			2346			564	
Travel Time (s)		14.4			16.8			29.1			7.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	1%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	183	195	0	52	31	81	3551	22	28	2212	43
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4			6			2
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	7.0	30.0	30.0	7.0	30.0	30.0
Minimum Split (s)	54.7	54.7	54.7	54.7	54.7	54.7	14.6	42.6	42.6	14.6	42.6	42.6
Total Split (s)	55.0	55.0	55.0	55.0	55.0	55.0	30.0	170.0	170.0	15.0	155.0	155.0
Total Split (%)	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	12.5%	70.8%	70.8%	6.3%	64.6%	64.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		8.7	8.7		8.7	8.7	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag							Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio		0.88	0.52		0.38	0.09	0.49	0.96	0.02	0.45	0.66	0.04
Control Delay		136.1	28.2		96.7	0.6	82.0	14.6	0.0	113.2	42.3	10.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		136.1	28.2		96.7	0.6	82.0	14.6	0.0	113.2	42.3	10.9
Queue Length 50th (ft)		289	67		75	0	133	334	0	44	851	3
Queue Length 95th (ft)		385	162		127	0	m119	m302	m0	m81	1183	m42
Internal Link Dist (ft)		555			657			2266			484	
Turn Bay Length (ft)			160			50	300		500	275		175
Base Capacity (vph)		257	427		171	384	166	3707	1182	63	3344	1072
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.71	0.46		0.30	0.08	0.49	0.96	0.02	0.44	0.66	0.04

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 115 (48%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: US 19 & Spruce St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	16	185	29	20	29	77	3373	21	27	2101	41
Future Volume (veh/h)	158	16	185	29	20	29	77	3373	21	27	2101	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1900	1900	1900	1885	1885	1900	1900	1885	1900
Adj Flow Rate, veh/h	166	17	46	31	21	5	81	3551	19	28	2212	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	1	0	0	0	1	1	0	0	1	0
Cap, veh/h	228	20	296	56	32	298	182	3555	1112	45	3161	989
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.10	0.69	0.69	0.02	0.61	0.61
Sat Flow, veh/h	1079	110	1598	173	175	1610	1795	5147	1610	1810	5147	1610
Grp Volume(v), veh/h	183	0	46	52	0	5	81	3551	19	28	2212	27
Grp Sat Flow(s),veh/h/ln	1189	0	1598	349	0	1610	1795	1716	1610	1810	1716	1610
Q Serve(g_s), s	0.0	0.0	5.8	6.4	0.0	0.6	10.2	165.2	0.9	3.7	69.8	1.6
Cycle Q Clear(g_c), s	36.0	0.0	5.8	42.4	0.0	0.6	10.2	165.2	0.9	3.7	69.8	1.6
Prop In Lane	0.91		1.00	0.60		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	0	296	88	0	298	182	3555	1112	45	3161	989
V/C Ratio(X)	0.74	0.00	0.16	0.59	0.00	0.02	0.45	1.00	0.02	0.63	0.70	0.03
Avail Cap(c_a), veh/h	260	0	308	101	0	311	182	3555	1112	56	3161	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	94.4	0.0	82.1	106.9	0.0	79.9	101.5	37.0	11.6	115.9	31.3	18.2
Incr Delay (d2), s/veh	10.0	0.0	0.2	6.8	0.0	0.0	0.2	4.3	0.0	13.8	1.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	0.0	2.5	3.4	0.0	0.3	4.8	64.9	0.3	1.9	28.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.3	0.0	82.3	113.7	0.0	80.0	101.7	41.3	11.6	129.7	32.6	18.2
LnGrp LOS	F	A	F	F	A	E	F	D	B	F	C	B
Approach Vol, veh/h		229			57			3651			2267	
Approach Delay, s/veh		99.9			110.7			42.5			33.7	
Approach LOS		F			F			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.9	155.0		53.1	13.5	173.4		53.1				
Change Period (Y+Rc), s	7.6	7.6		* 8.7	7.6	7.6		* 8.7				
Max Green Setting (Gmax), s	22.4	147.4		* 46	7.4	162.4		* 46				
Max Q Clear Time (g_c+I1), s	12.2	71.8		44.4	5.7	167.2		38.0				
Green Ext Time (p_c), s	0.1	31.2		0.0	0.0	0.0		0.7				

Intersection Summary			
HCM 6th Ctrl Delay			42.0
HCM 6th LOS			D

Notes

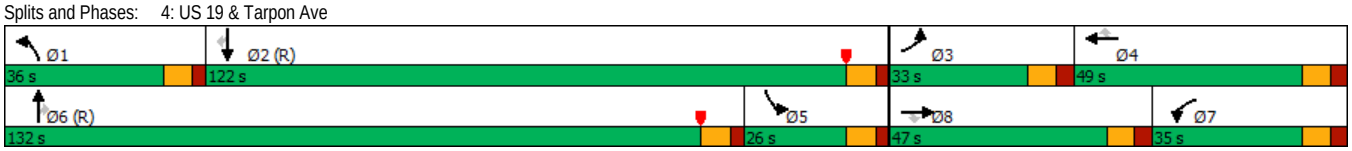
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	363	364	188	521	365	263	183	2954	940	304	1830	133
Future Volume (vph)	363	364	188	521	365	263	183	2954	940	304	1830	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	500		270	320		200	300		200
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			80			230			300		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		686			1067			6497			2346	
Travel Time (s)		10.4			16.2			80.5			29.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	1%	1%	1%	4%	1%	1%	1%	2%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	382	383	198	548	384	277	193	3109	989	320	1926	140
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8			4			6			2
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	15.2	26.2	26.2	15.2	26.2	26.2	14.6	27.6	27.6	14.6	27.6	27.6
Total Split (s)	33.0	47.0	47.0	35.0	49.0	49.0	36.0	132.0	132.0	26.0	122.0	122.0
Total Split (%)	13.8%	19.6%	19.6%	14.6%	20.4%	20.4%	15.0%	55.0%	55.0%	10.8%	50.8%	50.8%
Yellow Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	5.2	5.2	5.2	5.2	5.2	5.2
All-Red Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	2.4	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2	8.2	8.2	8.2	8.2	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	1.07	0.82	0.53	1.10	0.63	0.75	0.72	1.17	1.05	1.22	0.73	0.16
Control Delay	162.0	115.6	15.6	157.5	97.9	64.1	140.6	118.7	62.3	195.5	35.7	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	162.0	115.6	15.6	157.5	97.9	64.1	140.6	118.7	62.3	195.5	35.7	2.4
Queue Length 50th (ft)	~342	316	7	~511	303	239	165	~2126	~455	~313	977	16
Queue Length 95th (ft)	#468	374	98	#721	371	369	m184	m#2080	m#868	#444	1053	16
Internal Link Dist (ft)		606			987			6417			2266	
Turn Bay Length (ft)	375			500		270	320		200	300		200
Base Capacity (vph)	358	583	420	496	607	369	410	2662	945	263	2656	899
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.07	0.66	0.47	1.10	0.63	0.75	0.47	1.17	1.05	1.22	0.73	0.16

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 100 (42%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: US 19 & Tarpon Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	363	364	188	521	365	263	183	2954	940	304	1830	133
Future Volume (veh/h)	363	364	188	521	365	263	183	2954	940	304	1830	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1885	1885	1841	1885	1885	1885	1870	1885	1900
Adj Flow Rate, veh/h	382	383	0	548	384	0	193	3109	0	320	1926	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	1	1	1	4	1	1	1	2	1	0
Cap, veh/h	360	433		389	459		227	2668		409	2943	
Arrive On Green	0.10	0.12	0.00	0.11	0.13	0.00	0.07	0.52	0.00	0.16	0.76	0.00
Sat Flow, veh/h	3483	3610	1598	3483	3582	1560	3483	5147	1598	3456	5147	1610
Grp Volume(v), veh/h	382	383	0	548	384	0	193	3109	0	320	1926	0
Grp Sat Flow(s),veh/h/ln	1742	1805	1598	1742	1791	1560	1742	1716	1598	1728	1716	1610
Q Serve(g_s), s	24.8	25.1	0.0	26.8	25.1	0.0	13.2	124.4	0.0	21.4	42.8	0.0
Cycle Q Clear(g_c), s	24.8	25.1	0.0	26.8	25.1	0.0	13.2	124.4	0.0	21.4	42.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	360	433		389	459		227	2668		409	2943	
V/C Ratio(X)	1.06	0.89		1.41	0.84		0.85	1.17		0.78	0.65	
Avail Cap(c_a), veh/h	360	584		389	609		412	2668		409	2943	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.71	0.71	0.00
Uniform Delay (d), s/veh	107.6	104.0	0.0	106.6	102.2	0.0	111.0	57.8	0.0	98.1	17.4	0.0
Incr Delay (d2), s/veh	64.6	12.0	0.0	198.8	7.6	0.0	8.7	78.9	0.0	6.9	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.5	12.5	0.0	22.9	12.2	0.0	6.2	71.4	0.0	9.7	13.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	172.2	116.0	0.0	305.4	109.8	0.0	119.7	136.7	0.0	105.0	18.3	0.0
LnGrp LOS	F	F		F	F		F	F		F	B	
Approach Vol, veh/h		765	A		932	A		3302	A		2246	A
Approach Delay, s/veh		144.1			224.8			135.7			30.6	
Approach LOS		F			F			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.2	144.8	33.0	39.0	36.0	132.0	35.0	37.0
Change Period (Y+Rc), s	7.6	7.6	* 8.2	* 8.2	7.6	7.6	* 8.2	* 8.2
Max Green Setting (Gmax), s	28.4	114.4	* 25	* 41	18.4	124.4	* 27	* 39
Max Q Clear Time (g_c+I1), s	15.2	44.8	26.8	27.1	23.4	126.4	28.8	27.1
Green Ext Time (p_c), s	0.5	35.3	0.0	1.8	0.0	0.0	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	115.5
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

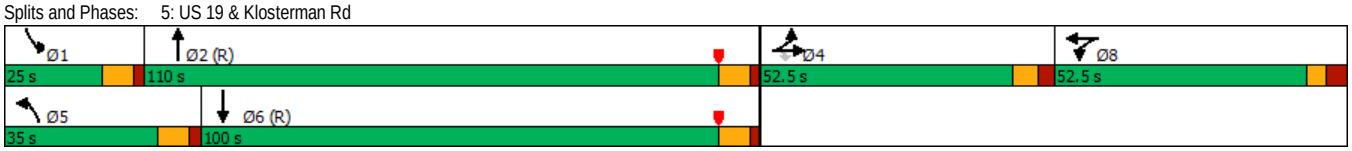
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	954	12	121	22	15	13	176	3312	19	31	2079	363
Future Volume (vph)	954	12	121	22	15	13	176	3312	19	31	2079	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		350	0		0	500		0	300		0
Storage Lanes	1		1	0		0	2		0	1		0
Taper Length (ft)	100			25			100			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		626			411			1496			1992	
Travel Time (s)		10.7			7.0			18.5			24.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	0%	5%	0%	0%	0%	2%	1%	11%	0%	1%	1%
Shared Lane Traffic (%)	33%											
Lane Group Flow (vph)	652	333	123	0	50	0	180	3399	0	32	2491	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	25.4	25.4	25.4	25.6	25.6		13.6	27.6		14.6	27.6	
Total Split (s)	52.5	52.5	52.5	52.5	52.5		35.0	110.0		25.0	100.0	
Total Split (%)	21.9%	21.9%	21.9%	21.9%	21.9%		14.6%	45.8%		10.4%	41.7%	
Yellow Time (s)	4.5	4.5	4.5	3.7	3.7		5.6	5.6		5.6	5.6	
All-Red Time (s)	2.9	2.9	2.9	3.9	3.9		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.4	7.4	7.4		7.6		7.6	7.6		7.6	7.6	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
v/c Ratio	1.07	1.08	0.32		0.56		0.67	0.86		0.46	0.70	
Control Delay	143.1	160.6	11.9		119.7		119.5	42.4		148.5	51.1	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay	143.1	160.6	11.9		119.7		119.5	42.4		148.5	51.1	
Queue Length 50th (ft)	~624	~646	0		70		146	1300		48	1096	
Queue Length 95th (ft)	#771	#902	68		127		193	1416		m64	m1158	
Internal Link Dist (ft)		546			331			1416			1912	
Turn Bay Length (ft)	175		350				500			300		
Base Capacity (vph)	611	307	390		340		391	3951		130	3554	
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	1.07	1.08	0.32		0.15		0.46	0.86		0.25	0.70	

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 35 (15%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: US 19 & Klosterman Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	954	12	121	22	15	13	176	3312	19	31	2079	363
Future Volume (veh/h)	954	12	121	22	15	13	176	3312	19	31	2079	363
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1826	1900	1900	1900	1870	1885	1737	1900	1885	1885
Adj Flow Rate, veh/h	982	0	36	22	15	9	180	3380	18	32	2121	324
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	0	5	0	0	0	2	1	11	0	1	1
Cap, veh/h	1012	0	291	28	19	12	216	4228	22	41	3380	514
Arrive On Green	0.19	0.00	0.19	0.03	0.03	0.03	0.06	0.63	0.63	0.02	0.59	0.59
Sat Flow, veh/h	5386	0	1547	858	585	351	3456	6707	36	1810	5722	870
Grp Volume(v), veh/h	982	0	36	46	0	0	180	2450	948	32	1801	644
Grp Sat Flow(s),veh/h/ln	1795	0	1547	1794	0	0	1728	1621	1879	1810	1621	1729
Q Serve(g_s), s	43.5	0.0	4.6	6.1	0.0	0.0	12.4	90.0	90.4	4.2	57.8	58.3
Cycle Q Clear(g_c), s	43.5	0.0	4.6	6.1	0.0	0.0	12.4	90.0	90.4	4.2	57.8	58.3
Prop In Lane	1.00		1.00	0.48		0.20	1.00		0.02	1.00		0.50
Lane Grp Cap(c), veh/h	1012	0	291	59	0	0	216	3066	1184	41	2873	1021
V/C Ratio(X)	0.97	0.00	0.12	0.78	0.00	0.00	0.83	0.80	0.80	0.77	0.63	0.63
Avail Cap(c_a), veh/h	1012	0	291	336	0	0	395	3066	1184	131	2873	1021
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	96.8	0.0	81.0	115.2	0.0	0.0	111.3	33.0	33.1	116.6	31.9	32.0
Incr Delay (d2), s/veh	21.3	0.0	0.2	19.3	0.0	0.0	11.1	2.3	5.7	19.7	1.0	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	22.3	0.0	1.9	3.2	0.0	0.0	5.9	34.6	41.4	2.2	22.5	24.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	118.1	0.0	81.2	134.4	0.0	0.0	122.4	35.3	38.8	136.3	33.0	35.0
LnGrp LOS	F	A	F	F	A	A	F	D	D	F	C	C
Approach Vol, veh/h		1018			46			3578			2477	
Approach Delay, s/veh		116.8			134.4			40.6			34.8	
Approach LOS		F			F			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.1	158.9		52.5	22.6	149.4		15.5				
Change Period (Y+Rc), s	7.6	7.6		7.4	7.6	7.6		7.6				
Max Green Setting (Gmax), s	17.4	102.4		45.1	27.4	92.4		44.9				
Max Q Clear Time (g_c+I1), s	6.2	92.4		45.5	14.4	60.3		8.1				
Green Ext Time (p_c), s	0.0	10.0		0.0	0.6	29.3		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		50.1
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	127	17	126	187	113	15	691	195	135	427	5
Future Volume (vph)	14	127	17	126	187	113	15	691	195	135	427	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	125		0	120		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			125			125			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		313			430			527			338	
Travel Time (s)		7.1			9.8			12.0			7.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	0%	1%	1%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	161	0	129	306	0	15	904	0	138	441	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		20.0	20.0		5.0	20.0	
Minimum Split (s)	24.9	24.9		11.0	24.9		26.1	26.1		10.9	26.1	
Total Split (s)	27.0	27.0		18.0	45.0		82.0	82.0		13.0	95.0	
Total Split (%)	19.3%	19.3%		12.9%	32.1%		58.6%	58.6%		9.3%	67.9%	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.4	3.4		3.4	3.4	
All-Red Time (s)	2.9	2.9		2.0	2.9		2.7	2.7		2.5	2.7	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.9		6.0	6.9		6.1	6.1		5.9	6.1	
Lead/Lag	Lag	Lag		Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	
v/c Ratio		0.75		0.55	0.68		0.03	0.87		0.68	0.35	
Control Delay		78.9		50.7	52.2		15.1	37.5		29.0	11.8	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		78.9		50.7	52.2		15.1	37.5		29.0	11.8	
Queue Length 50th (ft)		139		94	234		6	711		44	170	
Queue Length 95th (ft)		216		150	331		18	#1021		#97	245	
Internal Link Dist (ft)		233			350			447			258	
Turn Bay Length (ft)				115			125			120		
Base Capacity (vph)		255		242	503		544	1035		204	1260	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.63		0.53	0.61		0.03	0.87		0.68	0.35	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

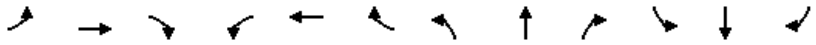
Offset: 66 (47%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

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

Splits and Phases: 10: Alt US 19 & Tarpon Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	127	17	126	187	113	15	691	195	135	427	5
Future Volume (veh/h)	14	127	17	126	187	113	15	691	195	135	427	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1900	1900	1900	1885	1885	1870	1900	1900
Adj Flow Rate, veh/h	14	130	17	129	191	115	15	705	199	138	436	5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	2	0	0	0	1	1	2	0	0
Cap, veh/h	37	159	20	264	249	150	617	845	239	250	1281	15
Arrive On Green	0.10	0.10	0.10	0.08	0.22	0.22	0.60	0.60	0.60	0.04	0.68	0.68
Sat Flow, veh/h	89	1521	190	1781	1111	669	963	1414	399	1781	1875	21
Grp Volume(v), veh/h	161	0	0	129	0	306	15	0	904	138	0	441
Grp Sat Flow(s),veh/h/ln	1800	0	0	1781	0	1780	963	0	1813	1781	0	1896
Q Serve(g_s), s	6.1	0.0	0.0	8.8	0.0	22.6	0.9	0.0	56.0	4.1	0.0	13.4
Cycle Q Clear(g_c), s	12.2	0.0	0.0	8.8	0.0	22.6	2.4	0.0	56.0	4.1	0.0	13.4
Prop In Lane	0.09		0.11	1.00		0.38	1.00		0.22	1.00		0.01
Lane Grp Cap(c), veh/h	216	0	0	264	0	399	617	0	1084	250	0	1295
V/C Ratio(X)	0.75	0.00	0.00	0.49	0.00	0.77	0.02	0.00	0.83	0.55	0.00	0.34
Avail Cap(c_a), veh/h	285	0	0	280	0	484	617	0	1084	264	0	1295
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.5	0.0	0.0	48.9	0.0	50.9	12.1	0.0	22.6	24.5	0.0	9.2
Incr Delay (d2), s/veh	7.3	0.0	0.0	0.5	0.0	6.0	0.1	0.0	7.6	1.1	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	0.0	4.0	0.0	10.8	0.2	0.0	25.3	2.4	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.9	0.0	0.0	49.4	0.0	56.9	12.2	0.0	30.1	25.6	0.0	9.9
LnGrp LOS	E	A	A	D	A	E	B	A	C	C	A	A
Approach Vol, veh/h		161			435			919			579	
Approach Delay, s/veh		68.9			54.7			29.8			13.6	
Approach LOS		E			D			C			B	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		101.7		38.3	11.9	89.8	16.7	21.5				
Change Period (Y+Rc), s		* 6.1		6.9	5.9	* 6.1	6.0	6.9				
Max Green Setting (Gmax), s		* 89		38.1	7.1	* 76	12.0	20.1				
Max Q Clear Time (g_c+I1), s		15.4		24.6	6.1	58.0	10.8	14.2				
Green Ext Time (p_c), s		3.9		1.5	0.0	8.2	0.0	0.4				

Intersection Summary		
HCM 6th Ctrl Delay		33.5
HCM 6th LOS		C

Notes

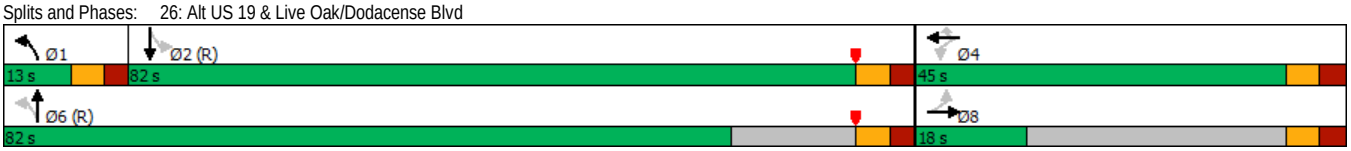
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

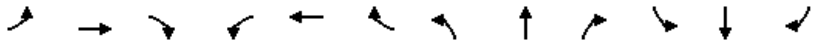
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	42	49	20	38	186	57	828	14	106	577	69
Future Volume (vph)	119	42	49	20	38	186	57	828	14	106	577	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	400		0	100		0	230		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	125			150			225			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			497			312			175	
Travel Time (s)		9.5			11.3			7.1			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	0%	2%	0%	0%	0%	2%	1%	0%	4%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	129	99	0	22	41	202	62	915	0	115	702	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		8			4		1	6			2	
Permitted Phases	8			4		4	6			2		
Detector Phase	8	8		4	4	4	1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	20.0		20.0	20.0	
Minimum Split (s)	11.4	11.4		24.4	24.4	24.4	10.9	26.2		26.2	26.2	
Total Split (s)	18.0	18.0		45.0	45.0	45.0	13.0	82.0		82.0	82.0	
Total Split (%)	12.9%	12.9%		32.1%	32.1%	32.1%	9.3%	58.6%		58.6%	58.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.4	3.5		3.5	3.5	
All-Red Time (s)	2.9	2.9		2.9	2.9	2.9	2.5	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.4	6.4		6.4	6.4	6.4	5.9	6.2		6.2	6.2	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		C-Max	C-Max	
v/c Ratio	0.73	0.38		0.13	0.16	0.56	0.13	0.63		0.32	0.54	
Control Delay	80.7	35.6		52.7	52.9	18.1	4.8	9.8		13.0	13.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	80.7	35.6		52.7	52.9	18.1	4.8	9.8		13.0	13.1	
Queue Length 50th (ft)	114	48		18	34	27	11	312		39	292	
Queue Length 95th (ft)	179	100		43	67	101	27	532		92	478	
Internal Link Dist (ft)		338			417			232			95	
Turn Bay Length (ft)	250			400			100			230		
Base Capacity (vph)	371	506		349	523	567	492	1462		358	1308	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.35	0.20		0.06	0.08	0.36	0.13	0.63		0.32	0.54	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 22 (16%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 26: Alt US 19 & Live Oak/Dodacense Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	42	49	20	38	186	57	828	14	106	577	69
Future Volume (veh/h)	119	42	49	20	38	186	57	828	14	106	577	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1870	1900	1900	1900	1870	1885	1900	1841	1885	1900
Adj Flow Rate, veh/h	129	46	53	22	41	202	62	900	15	115	627	75
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, %	3	0	2	0	0	0	2	1	0	4	1	0
Cap, veh/h	192	116	133	172	273	231	484	1417	24	379	1143	137
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.03	0.77	0.77	0.69	0.69	0.69
Sat Flow, veh/h	1128	805	928	1317	1900	1610	1781	1849	31	601	1652	198
Grp Volume(v), veh/h	129	0	99	22	41	202	62	0	915	115	0	702
Grp Sat Flow(s),veh/h/ln	1128	0	1733	1317	1900	1610	1781	0	1880	601	0	1850
Q Serve(g_s), s	15.8	0.0	7.3	2.2	2.6	17.2	1.3	0.0	31.0	15.1	0.0	26.4
Cycle Q Clear(g_c), s	18.5	0.0	7.3	9.4	2.6	17.2	1.3	0.0	31.0	35.6	0.0	26.4
Prop In Lane	1.00		0.54	1.00		1.00	1.00		0.02	1.00		0.11
Lane Grp Cap(c), veh/h	192	0	249	172	273	231	484	0	1441	379	0	1280
V/C Ratio(X)	0.67	0.00	0.40	0.13	0.15	0.87	0.13	0.00	0.64	0.30	0.00	0.55
Avail Cap(c_a), veh/h	192	0	249	346	524	444	517	0	1441	379	0	1280
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.6	0.0	54.5	58.7	52.5	58.7	8.1	0.0	7.4	17.9	0.0	10.7
Incr Delay (d2), s/veh	8.8	0.0	1.0	0.3	0.3	10.0	0.1	0.0	2.1	2.1	0.0	1.7
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	5.0	0.0	3.3	0.7	1.3	7.7	0.5	0.0	11.9	2.3	0.0	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.4	0.0	55.5	59.1	52.7	68.7	8.2	0.0	9.6	20.0	0.0	12.4
LnGrp LOS	E	A	E	E	D	E	A	A	A	B	A	B
Approach Vol, veh/h		228			265			977			817	
Approach Delay, s/veh		63.4			65.4			9.5			13.5	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.5	103.1		26.5		113.5		26.5				
Change Period (Y+Rc), s	5.9	* 6.2		6.4		* 6.2		6.4				
Max Green Setting (Gmax), s	7.1	* 76		38.6		* 76		11.6				
Max Q Clear Time (g_c+I1), s	3.3	37.6		19.2		33.0		20.5				
Green Ext Time (p_c), s	0.0	7.6		0.9		9.3		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		22.8	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	1	148	44	4	39	151	3183	3	17	1808	75
Future Volume (vph)	93	1	148	44	4	39	151	3183	3	17	1808	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	650		635	300		755
Storage Lanes	1		0	0		0	1		1	1		1
Taper Length (ft)	50			25			125			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		688			312			4591			2676	
Travel Time (s)		13.4			6.1			56.9			33.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	0%	2%	0%	0%	0%	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	97	155	0	0	91	0	157	3316	3	18	1883	78
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	8	8		4	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	54.7	54.7		51.7	51.7		14.5	29.5	29.5	14.5	29.5	29.5
Total Split (s)	55.0	55.0		55.0	55.0		58.0	170.0	170.0	15.0	127.0	127.0
Total Split (%)	22.9%	22.9%		22.9%	22.9%		24.2%	70.8%	70.8%	6.3%	52.9%	52.9%
Yellow Time (s)	4.1	4.1		4.1	4.1		5.5	5.5	5.5	5.5	5.5	5.5
All-Red Time (s)	4.6	4.6		4.6	4.6		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.7	8.7			8.7		7.5	7.5	7.5	7.5	7.5	7.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.82	0.53			1.12		0.77	0.82	0.00	0.27	0.53	0.07
Control Delay	150.6	17.5			211.9		118.1	9.1	0.0	121.3	20.3	1.5
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	150.6	17.5			211.9		118.1	9.1	0.0	121.3	20.3	1.5
Queue Length 50th (ft)	154	1			~142		257	353	0	28	520	0
Queue Length 95th (ft)	228	84			#251		m292	439	m0	65	687	17
Internal Link Dist (ft)		608			232			4511			2596	
Turn Bay Length (ft)	85						650		635	300		755
Base Capacity (vph)	230	430			145		376	4056	1288	68	3534	1129
Starvation Cap Reductn	0	0			0		0	0	0	0	0	0
Spillback Cap Reductn	0	0			0		0	0	0	0	0	0
Storage Cap Reductn	0	0			0		0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.36			0.63		0.42	0.82	0.00	0.26	0.53	0.07

Intersection Summary

Area Type: Other

Cycle Length: 240

Actuated Cycle Length: 240

Offset: 180 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

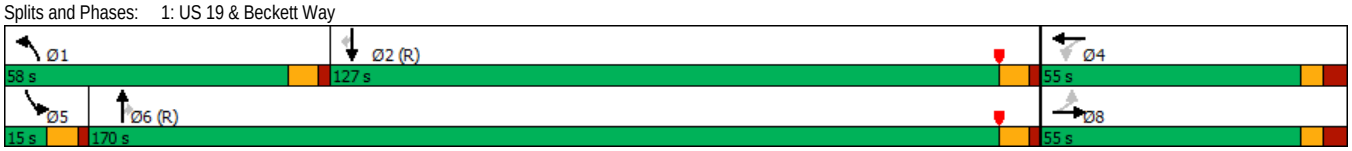
Control Type: Actuated-Coordinated

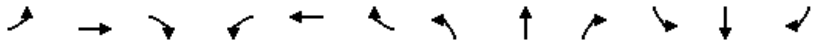
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

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

Splits and Phases: 1: US 19 & Beckett Way

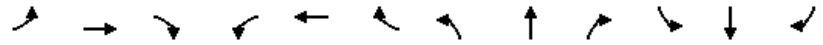




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1	148	44	4	39	151	3183	3	17	1808	75
Future Volume (veh/h)	93	1	148	44	4	39	151	3183	3	17	1808	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1870	1900	1900	1900	1885	1885	1900	1900	1885	1885
Adj Flow Rate, veh/h	97	1	29	46	4	11	157	3316	2	18	1883	36
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	0	2	0	0	0	1	1	0	0	1	1
Cap, veh/h	140	4	121	92	10	17	175	4136	1294	37	3738	1160
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.80	0.80	0.02	0.73	0.73
Sat Flow, veh/h	1410	54	1564	853	127	216	1795	5147	1610	1810	5147	1598
Grp Volume(v), veh/h	97	0	30	61	0	0	157	3316	2	18	1883	36
Grp Sat Flow(s),veh/h/ln	1410	0	1618	1196	0	0	1795	1716	1610	1810	1716	1598
Q Serve(g_s), s	3.0	0.0	4.2	9.0	0.0	0.0	20.8	85.4	0.1	2.4	37.9	1.5
Cycle Q Clear(g_c), s	16.2	0.0	4.2	13.2	0.0	0.0	20.8	85.4	0.1	2.4	37.9	1.5
Prop In Lane	1.00		0.97	0.75		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	140	0	125	119	0	0	175	4136	1294	37	3738	1160
V/C Ratio(X)	0.69	0.00	0.24	0.51	0.00	0.00	0.90	0.80	0.00	0.49	0.50	0.03
Avail Cap(c_a), veh/h	303	0	312	288	0	0	378	4136	1294	57	3738	1160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	109.6	0.0	104.1	109.6	0.0	0.0	107.1	13.0	4.6	116.3	14.2	9.2
Incr Delay (d2), s/veh	6.0	0.0	1.0	3.4	0.0	0.0	19.3	1.7	0.0	13.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	1.8	3.9	0.0	0.0	10.6	29.0	0.0	1.3	14.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	115.6	0.0	105.1	113.0	0.0	0.0	126.4	14.7	4.6	129.8	14.7	9.2
LnGrp LOS	F	A	F	F	A	A	F	B	A	F	B	A
Approach Vol, veh/h		127			61			3475			1937	
Approach Delay, s/veh		113.1			113.0			19.8			15.6	
Approach LOS		F			F			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.9	181.8		27.3	12.4	200.4		27.3				
Change Period (Y+Rc), s	7.5	7.5		8.7	7.5	7.5		8.7				
Max Green Setting (Gmax), s	50.5	119.5		46.3	7.5	162.5		46.3				
Max Q Clear Time (g_c+I1), s	22.8	39.9		15.2	4.4	87.4		18.2				
Green Ext Time (p_c), s	0.7	36.5		0.3	0.0	71.3		0.4				

Intersection Summary			
HCM 6th Ctrl Delay			21.5
HCM 6th LOS			C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	15	0	0	5	0	3392	10	5	2000	32
Future Volume (vph)	0	0	15	0	0	5	0	3392	10	5	2000	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		500	420		420
Storage Lanes	0		1	0		1	0		1	1		1
Taper Length (ft)	25			25			25			115		
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		410			292			564			4591	
Travel Time (s)		9.3			6.6			7.0			56.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	16	0	0	5	0	3533	10	5	2083	33
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	15	0	0	5	0	3392	10	5	2000	32
Future Vol, veh/h	0	0	15	0	0	5	0	3392	10	5	2000	32
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	-	-	0	-	-	0	-	-	500	420	-	420
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	0	0	16	0	0	5	0	3533	10	5	2083	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1042	-	-	1767	-	0	0	3543	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.1	-	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.9	-	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	197	0	0	64	0	-	-	20	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	197	-	-	64	-	-	-	20	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

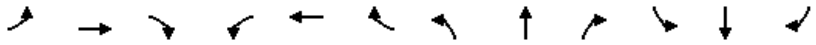
Approach	EB	WB	NB	SB
HCM Control Delay, s	24.8	66.2	0	0.6
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	197	64	20	-	-
HCM Lane V/C Ratio	-	-	0.079	0.081	0.26	-	-
HCM Control Delay (s)	-	-	24.8	66.2	239.5	-	-
HCM Lane LOS	-	-	C	F	F	-	-
HCM 95th %tile Q(veh)	-	-	0.3	0.3	0.8	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	149	15	174	27	19	27	73	3178	20	26	1980	39
Future Volume (vph)	149	15	174	27	19	27	73	3178	20	26	1980	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		160	0		50	300		500	275		175
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	70			25			125			115		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		635			737			2346			564	
Travel Time (s)		14.4			16.8			29.1			7.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	1%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	173	183	0	48	28	77	3345	21	27	2084	41
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4			6			2
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	7.0	30.0	30.0	7.0	30.0	30.0
Minimum Split (s)	54.7	54.7	54.7	54.7	54.7	54.7	14.6	42.6	42.6	14.6	42.6	42.6
Total Split (s)	55.0	55.0	55.0	55.0	55.0	55.0	30.0	170.0	170.0	15.0	155.0	155.0
Total Split (%)	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	12.5%	70.8%	70.8%	6.3%	64.6%	64.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		8.7	8.7		8.7	8.7	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag							Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio		0.86	0.51		0.34	0.09	0.46	0.89	0.02	0.44	0.62	0.04
Control Delay		134.8	25.5		95.6	0.6	81.9	10.7	0.0	116.7	36.3	9.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		134.8	25.5		95.6	0.6	81.9	10.7	0.0	116.7	36.3	9.2
Queue Length 50th (ft)		273	53		69	0	127	309	0	42	730	0
Queue Length 95th (ft)		364	142		119	0	m121	m299	m0	m86	1049	m36
Internal Link Dist (ft)		555			657			2266			484	
Turn Bay Length (ft)			160			50	300		500	275		175
Base Capacity (vph)		258	425		183	384	166	3740	1192	62	3375	1081
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.67	0.43		0.26	0.07	0.46	0.89	0.02	0.44	0.62	0.04

Intersection Summary	
Area Type:	Other
Cycle Length: 240	
Actuated Cycle Length: 240	
Offset: 115 (48%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 3: US 19 & Spruce St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	15	174	27	19	27	73	3178	20	26	1980	39
Future Volume (veh/h)	149	15	174	27	19	27	73	3178	20	26	1980	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1900	1900	1900	1885	1885	1900	1900	1885	1900
Adj Flow Rate, veh/h	157	16	34	28	20	2	77	3345	18	27	2084	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	1	0	0	0	1	1	0	0	1	0
Cap, veh/h	216	19	283	53	32	285	196	3597	1125	44	3161	989
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.15	0.93	0.93	0.02	0.61	0.61
Sat Flow, veh/h	1059	108	1598	163	180	1610	1795	5147	1610	1810	5147	1610
Grp Volume(v), veh/h	173	0	34	48	0	2	77	3345	18	27	2084	25
Grp Sat Flow(s),veh/h/ln	1167	0	1598	343	0	1610	1795	1716	1610	1810	1716	1610
Q Serve(g_s), s	0.0	0.0	4.3	5.6	0.0	0.2	9.3	81.0	0.2	3.5	63.0	1.5
Cycle Q Clear(g_c), s	34.9	0.0	4.3	40.5	0.0	0.2	9.3	81.0	0.2	3.5	63.0	1.5
Prop In Lane	0.91		1.00	0.58		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	235	0	283	85	0	285	196	3597	1125	44	3161	989
V/C Ratio(X)	0.74	0.00	0.12	0.57	0.00	0.01	0.39	0.93	0.02	0.61	0.66	0.03
Avail Cap(c_a), veh/h	258	0	308	109	0	311	196	3597	1125	56	3161	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	95.6	0.0	83.0	106.5	0.0	81.4	95.4	5.4	2.6	116.0	30.0	18.1
Incr Delay (d2), s/veh	9.5	0.0	0.2	5.9	0.0	0.0	0.1	0.6	0.0	13.0	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	1.8	3.2	0.0	0.1	4.3	5.1	0.1	1.8	25.7	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.1	0.0	83.2	112.3	0.0	81.4	95.5	6.0	2.6	129.0	31.1	18.2
LnGrp LOS	F	A	F	F	A	F	F	A	A	F	C	B
Approach Vol, veh/h		207			50			3440			2136	
Approach Delay, s/veh		101.5			111.1			8.0			32.2	
Approach LOS		F			F			A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.8	155.0		51.2	13.4	175.3		51.2				
Change Period (Y+Rc), s	7.6	7.6		* 8.7	7.6	7.6		* 8.7				
Max Green Setting (Gmax), s	22.4	147.4		* 46	7.4	162.4		* 46				
Max Q Clear Time (g_c+I1), s	11.3	65.0		42.5	5.5	83.0		36.9				
Green Ext Time (p_c), s	0.1	28.0		0.0	0.0	67.5		0.7				

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C

Notes

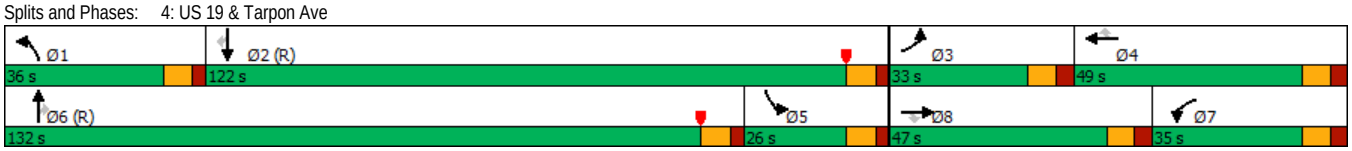
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	342	343	177	491	344	248	172	2784	886	286	1724	125
Future Volume (vph)	342	343	177	491	344	248	172	2784	886	286	1724	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	500		270	320		200	300		200
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			80			230			300		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		686			1067			6497			2346	
Travel Time (s)		10.4			16.2			80.5			29.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	1%	1%	1%	4%	1%	1%	1%	2%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	360	361	186	517	362	261	181	2931	933	301	1815	132
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8			4			6			2
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	15.2	26.2	26.2	15.2	26.2	26.2	14.6	27.6	27.6	14.6	27.6	27.6
Total Split (s)	33.0	47.0	47.0	35.0	49.0	49.0	36.0	132.0	132.0	26.0	122.0	122.0
Total Split (%)	13.8%	19.6%	19.6%	14.6%	20.4%	20.4%	15.0%	55.0%	55.0%	10.8%	50.8%	50.8%
Yellow Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	5.2	5.2	5.2	5.2	5.2	5.2
All-Red Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	2.4	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2	8.2	8.2	8.2	8.2	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	1.01	0.81	0.52	1.00	0.60	0.71	0.70	1.10	0.99	1.14	0.68	0.15
Control Delay	151.6	116.8	14.6	134.0	96.6	58.6	143.8	90.7	45.3	176.7	35.9	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	151.6	116.8	14.6	134.0	96.6	58.6	143.8	90.7	45.3	176.7	35.9	2.8
Queue Length 50th (ft)	~302	300	0	429	284	210	155	~1930	395	~281	876	16
Queue Length 95th (ft)	#428	356	88	#649	350	335	m185	m#1920	m#712	#410	1115	24
Internal Link Dist (ft)		606			987			6417			2266	
Turn Bay Length (ft)	375			500		270	320		200	300		200
Base Capacity (vph)	358	583	414	519	607	369	410	2662	945	263	2673	904
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.62	0.45	1.00	0.60	0.71	0.44	1.10	0.99	1.14	0.68	0.15

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 100 (42%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: US 19 & Tarpon Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	342	343	177	491	344	248	172	2784	886	286	1724	125
Future Volume (veh/h)	342	343	177	491	344	248	172	2784	886	286	1724	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1885	1885	1841	1885	1885	1885	1870	1885	1900
Adj Flow Rate, veh/h	360	361	0	517	362	0	181	2931	0	301	1815	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	1	1	1	4	1	1	1	2	1	0
Cap, veh/h	360	411		389	437		214	2668		430	2992	
Arrive On Green	0.10	0.11	0.00	0.11	0.12	0.00	0.06	0.52	0.00	0.17	0.77	0.00
Sat Flow, veh/h	3483	3610	1598	3483	3582	1560	3483	5147	1598	3456	5147	1610
Grp Volume(v), veh/h	360	361	0	517	362	0	181	2931	0	301	1815	0
Grp Sat Flow(s),veh/h/ln	1742	1805	1598	1742	1791	1560	1742	1716	1598	1728	1716	1610
Q Serve(g_s), s	24.8	23.6	0.0	26.8	23.7	0.0	12.3	124.4	0.0	19.7	36.2	0.0
Cycle Q Clear(g_c), s	24.8	23.6	0.0	26.8	23.7	0.0	12.3	124.4	0.0	19.7	36.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	360	411		389	437		214	2668		430	2992	
V/C Ratio(X)	1.00	0.88		1.33	0.83		0.84	1.10		0.70	0.61	
Avail Cap(c_a), veh/h	360	584		389	609		412	2668		430	2992	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.76	0.76	0.00
Uniform Delay (d), s/veh	107.6	104.7	0.0	106.6	102.9	0.0	111.5	57.8	0.0	95.9	15.5	0.0
Incr Delay (d2), s/veh	47.5	10.7	0.0	164.9	6.6	0.0	8.7	51.0	0.0	3.8	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	11.7	0.0	21.1	11.5	0.0	5.8	64.5	0.0	8.8	11.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	155.1	115.4	0.0	271.5	109.5	0.0	120.2	108.8	0.0	99.7	16.2	0.0
LnGrp LOS	F	F		F	F		F	F		F	B	
Approach Vol, veh/h		721	A		879	A		3112	A		2116	A
Approach Delay, s/veh		135.2			204.8			109.4			28.1	
Approach LOS		F			F			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.4	147.1	33.0	37.5	37.5	132.0	35.0	35.5
Change Period (Y+Rc), s	7.6	7.6	* 8.2	* 8.2	7.6	7.6	* 8.2	* 8.2
Max Green Setting (Gmax), s	28.4	114.4	* 25	* 41	18.4	124.4	* 27	* 39
Max Q Clear Time (g_c+I1), s	14.3	38.2	26.8	25.7	21.7	126.4	28.8	25.6
Green Ext Time (p_c), s	0.4	32.9	0.0	1.8	0.0	0.0	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	99.2
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

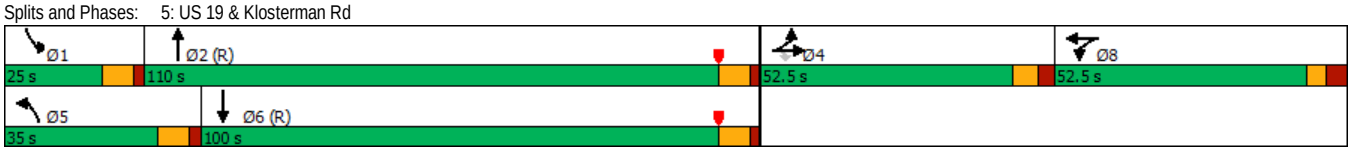
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

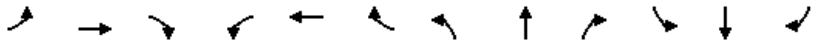
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	899	11	114	21	14	12	165	3121	18	29	1959	342
Future Volume (vph)	899	11	114	21	14	12	165	3121	18	29	1959	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		350	0		0	500		0	300		0
Storage Lanes	1		1	0		0	2		0	1		0
Taper Length (ft)	100			25			100			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		626			411			1496			1992	
Travel Time (s)		10.7			7.0			18.5			24.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	0%	5%	0%	0%	0%	2%	1%	11%	0%	1%	1%
Shared Lane Traffic (%)	33%											
Lane Group Flow (vph)	614	314	116	0	47	0	168	3203	0	30	2348	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	25.4	25.4	25.4	25.6	25.6		13.6	27.6		14.6	27.6	
Total Split (s)	52.5	52.5	52.5	52.5	52.5		35.0	110.0		25.0	100.0	
Total Split (%)	21.9%	21.9%	21.9%	21.9%	21.9%		14.6%	45.8%		10.4%	41.7%	
Yellow Time (s)	4.5	4.5	4.5	3.7	3.7		5.6	5.6		5.6	5.6	
All-Red Time (s)	2.9	2.9	2.9	3.9	3.9		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.4	7.4	7.4		7.6		7.6	7.6		7.6	7.6	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
v/c Ratio	1.00	1.02	0.30		0.53		0.65	0.81		0.44	0.65	
Control Delay	131.4	148.0	9.9		118.3		119.8	38.7		148.8	48.8	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay	131.4	148.0	9.9		118.3		119.8	38.7		148.8	48.8	
Queue Length 50th (ft)	~548	~578	0		65		136	1142		45	964	
Queue Length 95th (ft)	#701	#830	57		121		183	1250		m62	m1112	
Internal Link Dist (ft)		546			331			1416			1912	
Turn Bay Length (ft)	175		350				500			300		
Base Capacity (vph)	611	307	390		340		391	3967		130	3587	
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	1.00	1.02	0.30		0.14		0.43	0.81		0.23	0.65	

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 35 (15%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: US 19 & Klosterman Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	899	11	114	21	14	12	165	3121	18	29	1959	342
Future Volume (veh/h)	899	11	114	21	14	12	165	3121	18	29	1959	342
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1826	1900	1900	1900	1870	1885	1737	1900	1885	1885
Adj Flow Rate, veh/h	925	0	29	21	14	8	168	3185	17	30	1999	303
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	0	5	0	0	0	2	1	11	0	1	1
Cap, veh/h	981	0	282	27	18	10	204	4288	23	39	3448	521
Arrive On Green	0.18	0.00	0.18	0.03	0.03	0.03	0.06	0.64	0.64	0.02	0.60	0.60
Sat Flow, veh/h	5386	0	1547	877	585	334	3456	6707	36	1810	5727	866
Grp Volume(v), veh/h	925	0	29	43	0	0	168	2309	893	30	1697	605
Grp Sat Flow(s),veh/h/ln	1795	0	1547	1796	0	0	1728	1621	1879	1810	1621	1729
Q Serve(g_s), s	40.7	0.0	3.7	5.7	0.0	0.0	11.5	78.2	78.4	4.0	51.2	51.4
Cycle Q Clear(g_c), s	40.7	0.0	3.7	5.7	0.0	0.0	11.5	78.2	78.4	4.0	51.2	51.4
Prop In Lane	1.00		1.00	0.49		0.19	1.00		0.02	1.00		0.50
Lane Grp Cap(c), veh/h	981	0	282	56	0	0	204	3110	1201	39	2928	1041
V/C Ratio(X)	0.94	0.00	0.10	0.77	0.00	0.00	0.82	0.74	0.74	0.77	0.58	0.58
Avail Cap(c_a), veh/h	1012	0	291	336	0	0	395	3110	1201	131	2928	1041
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	96.9	0.0	81.8	115.4	0.0	0.0	111.7	29.7	29.7	116.8	29.2	29.2
Incr Delay (d2), s/veh	16.1	0.0	0.2	19.9	0.0	0.0	11.2	1.6	4.2	20.3	0.8	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	20.5	0.0	1.5	3.0	0.0	0.0	5.5	29.8	35.5	2.1	19.8	21.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	113.0	0.0	82.0	135.3	0.0	0.0	122.9	31.4	33.9	137.1	30.0	31.6
LnGrp LOS	F	A	F	F	A	A	F	C	C	F	C	C
Approach Vol, veh/h		954			43			3370			2332	
Approach Delay, s/veh		112.0			135.3			36.6			31.8	
Approach LOS		F			F			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.8	161.1		51.1	21.8	152.1		15.0				
Change Period (Y+Rc), s	7.6	7.6		7.4	7.6	7.6		7.6				
Max Green Setting (Gmax), s	17.4	102.4		45.1	27.4	92.4		44.9				
Max Q Clear Time (g_c+I1), s	6.0	80.4		42.7	13.5	53.4		7.7				
Green Ext Time (p_c), s	0.0	21.7		1.0	0.6	33.8		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		46.3
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	122	16	121	180	109	14	664	187	130	410	5
Future Volume (vph)	13	122	16	121	180	109	14	664	187	130	410	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	125		0	120		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			125			125			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		313			430			527			338	
Travel Time (s)		7.1			9.8			12.0			7.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	0%	1%	1%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	153	0	123	295	0	14	869	0	133	423	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		20.0	20.0		5.0	20.0	
Minimum Split (s)	24.9	24.9		11.0	24.9		26.1	26.1		10.9	26.1	
Total Split (s)	27.0	27.0		18.0	45.0		82.0	82.0		13.0	95.0	
Total Split (%)	19.3%	19.3%		12.9%	32.1%		58.6%	58.6%		9.3%	67.9%	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.4	3.4		3.4	3.4	
All-Red Time (s)	2.9	2.9		2.0	2.9		2.7	2.7		2.5	2.7	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.9		6.0	6.9		6.1	6.1		5.9	6.1	
Lead/Lag	Lag	Lag		Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	
v/c Ratio		0.73		0.53	0.67		0.03	0.83		0.57	0.33	
Control Delay		77.7		50.1	51.9		14.9	33.3		18.9	11.4	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		77.7		50.1	51.9		14.9	33.3		18.9	11.4	
Queue Length 50th (ft)		132		90	224		6	641		42	158	
Queue Length 95th (ft)		205		144	317		17	#912		73	234	
Internal Link Dist (ft)		233			350			447			258	
Turn Bay Length (ft)				115			125			120		
Base Capacity (vph)		256		243	503		560	1049		235	1268	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.60		0.51	0.59		0.03	0.83		0.57	0.33	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 66 (47%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

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

Splits and Phases: 10: Alt US 19 & Tarpon Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	122	16	121	180	109	14	664	187	130	410	5
Future Volume (veh/h)	13	122	16	121	180	109	14	664	187	130	410	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1900	1900	1900	1885	1885	1870	1900	1900
Adj Flow Rate, veh/h	13	124	16	123	184	111	14	678	191	133	418	5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	2	0	0	0	1	1	2	0	0
Cap, veh/h	36	153	19	259	241	145	640	859	242	281	1293	15
Arrive On Green	0.10	0.10	0.10	0.07	0.22	0.22	0.61	0.61	0.61	0.04	0.69	0.69
Sat Flow, veh/h	85	1530	189	1781	1110	670	979	1415	399	1781	1874	22
Grp Volume(v), veh/h	153	0	0	123	0	295	14	0	869	133	0	423
Grp Sat Flow(s),veh/h/ln	1804	0	0	1781	0	1779	979	0	1813	1781	0	1896
Q Serve(g_s), s	5.6	0.0	0.0	8.4	0.0	21.8	0.8	0.0	50.7	3.8	0.0	12.4
Cycle Q Clear(g_c), s	11.6	0.0	0.0	8.4	0.0	21.8	1.6	0.0	50.7	3.8	0.0	12.4
Prop In Lane	0.08		0.10	1.00		0.38	1.00		0.22	1.00		0.01
Lane Grp Cap(c), veh/h	208	0	0	259	0	386	640	0	1100	281	0	1309
V/C Ratio(X)	0.74	0.00	0.00	0.48	0.00	0.76	0.02	0.00	0.79	0.47	0.00	0.32
Avail Cap(c_a), veh/h	285	0	0	279	0	484	640	0	1100	298	0	1309
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.9	0.0	0.0	49.6	0.0	51.5	11.3	0.0	20.8	21.1	0.0	8.6
Incr Delay (d2), s/veh	6.3	0.0	0.0	0.5	0.0	5.6	0.1	0.0	5.8	0.5	0.0	0.7
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	5.7	0.0	0.0	3.8	0.0	10.3	0.2	0.0	22.5	2.0	0.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.1	0.0	0.0	50.1	0.0	57.1	11.3	0.0	26.6	21.6	0.0	9.3
LnGrp LOS	E	A	A	D	A	E	B	A	C	C	A	A
Approach Vol, veh/h		153			418			883			556	
Approach Delay, s/veh		68.1			55.0			26.3			12.2	
Approach LOS		E			D			C			B	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		102.8		37.2	11.7	91.1	16.4	20.9				
Change Period (Y+Rc), s		* 6.1		6.9	5.9	* 6.1	6.0	6.9				
Max Green Setting (Gmax), s		* 89		38.1	7.1	* 76	12.0	20.1				
Max Q Clear Time (g_c+I1), s		14.4		23.8	5.8	52.7	10.4	13.6				
Green Ext Time (p_c), s		3.7		1.5	0.0	8.9	0.0	0.4				

Intersection Summary		
HCM 6th Ctrl Delay		31.6
HCM 6th LOS		C

Notes

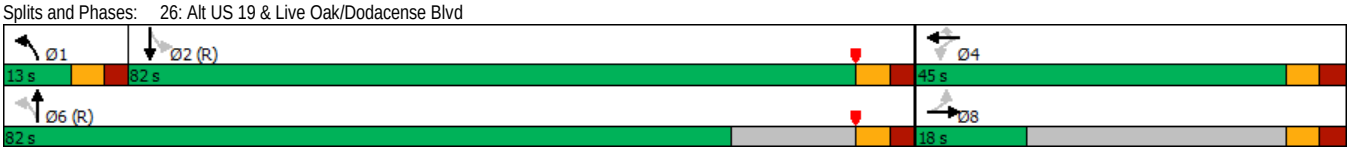
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

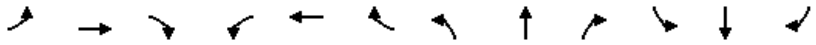
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	40	47	19	37	179	55	796	13	102	555	66
Future Volume (vph)	114	40	47	19	37	179	55	796	13	102	555	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	400		0	100		0	230		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	125			150			225			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			497			312			175	
Travel Time (s)		9.5			11.3			7.1			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	0%	2%	0%	0%	0%	2%	1%	0%	4%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	94	0	21	40	195	60	879	0	111	675	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		8			4		1	6			2	
Permitted Phases	8			4		4	6			2		
Detector Phase	8	8		4	4	4	1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	20.0		20.0	20.0	
Minimum Split (s)	11.4	11.4		24.4	24.4	24.4	10.9	26.2		26.2	26.2	
Total Split (s)	18.0	18.0		45.0	45.0	45.0	13.0	82.0		82.0	82.0	
Total Split (%)	12.9%	12.9%		32.1%	32.1%	32.1%	9.3%	58.6%		58.6%	58.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.4	3.5		3.5	3.5	
All-Red Time (s)	2.9	2.9		2.9	2.9	2.9	2.5	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.4	6.4		6.4	6.4	6.4	5.9	6.2		6.2	6.2	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		C-Max	C-Max	
v/c Ratio	0.72	0.37		0.13	0.16	0.53	0.12	0.60		0.29	0.51	
Control Delay	80.3	34.4		52.9	53.4	14.3	4.6	9.1		11.8	12.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	80.3	34.4		52.9	53.4	14.3	4.6	9.1		11.8	12.4	
Queue Length 50th (ft)	110	43		17	33	11	11	282		36	270	
Queue Length 95th (ft)	173	95		42	67	81	26	483		84	443	
Internal Link Dist (ft)		338			417			232			95	
Turn Bay Length (ft)	250			400			100			230		
Base Capacity (vph)	371	506		357	523	577	515	1468		385	1315	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.33	0.19		0.06	0.08	0.34	0.12	0.60		0.29	0.51	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 22 (16%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 26: Alt US 19 & Live Oak/Dodacense Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	40	47	19	37	179	55	796	13	102	555	66
Future Volume (veh/h)	114	40	47	19	37	179	55	796	13	102	555	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1870	1900	1900	1900	1870	1885	1900	1841	1885	1900
Adj Flow Rate, veh/h	124	43	51	21	40	195	60	865	14	111	603	72
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, %	3	0	2	0	0	0	2	1	0	4	1	0
Cap, veh/h	188	110	131	170	264	224	508	1426	23	405	1151	137
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.03	0.77	0.77	0.70	0.70	0.70
Sat Flow, veh/h	1136	792	939	1323	1900	1610	1781	1850	30	621	1652	197
Grp Volume(v), veh/h	124	0	94	21	40	195	60	0	879	111	0	675
Grp Sat Flow(s),veh/h/ln	1136	0	1731	1323	1900	1610	1781	0	1880	621	0	1850
Q Serve(g_s), s	15.1	0.0	6.9	2.1	2.6	16.6	1.3	0.0	28.2	13.1	0.0	24.4
Cycle Q Clear(g_c), s	17.7	0.0	6.9	9.0	2.6	16.6	1.3	0.0	28.2	30.9	0.0	24.4
Prop In Lane	1.00		0.54	1.00		1.00	1.00		0.02	1.00		0.11
Lane Grp Cap(c), veh/h	188	0	241	170	264	224	508	0	1449	405	0	1288
V/C Ratio(X)	0.66	0.00	0.39	0.12	0.15	0.87	0.12	0.00	0.61	0.27	0.00	0.52
Avail Cap(c_a), veh/h	188	0	241	351	524	444	541	0	1449	405	0	1288
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.8	0.0	54.9	59.0	53.0	59.0	7.5	0.0	6.9	15.8	0.0	10.1
Incr Delay (d2), s/veh	8.1	0.0	1.0	0.3	0.3	10.0	0.1	0.0	1.9	1.7	0.0	1.5
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	4.8	0.0	3.1	0.7	1.3	7.4	0.5	0.0	10.7	2.1	0.0	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.9	0.0	55.9	59.3	53.3	69.0	7.6	0.0	8.8	17.4	0.0	11.7
LnGrp LOS	E	A	E	E	D	E	A	A	A	B	A	B
Approach Vol, veh/h		218			256			939			786	
Approach Delay, s/veh		63.3			65.8			8.7			12.5	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.4	103.7		25.9		114.1		25.9				
Change Period (Y+Rc), s	5.9	* 6.2		6.4		* 6.2		6.4				
Max Green Setting (Gmax), s	7.1	* 76		38.6		* 76		11.6				
Max Q Clear Time (g_c+I1), s	3.3	32.9		18.6		30.2		19.7				
Green Ext Time (p_c), s	0.0	8.8		0.9		8.7		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		22.1	
HCM 6th LOS		C	

Notes

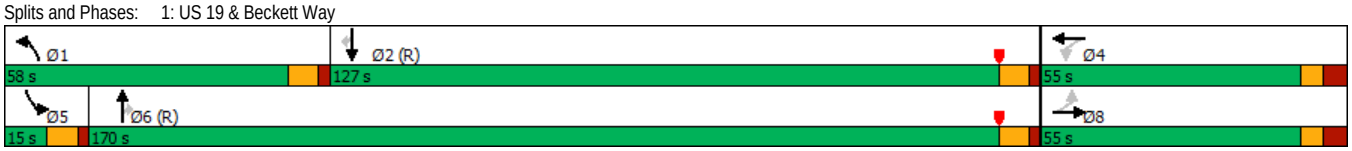
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

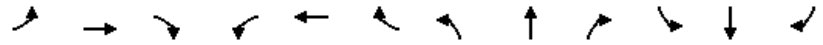
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	1	157	47	4	41	160	3378	3	18	1919	80
Future Volume (vph)	99	1	157	47	4	41	160	3378	3	18	1919	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	650		635	300		755
Storage Lanes	1		0	0		0	1		1	1		1
Taper Length (ft)	50			25			125			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		688			312			4591			2676	
Travel Time (s)		13.4			6.1			56.9			33.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	0%	2%	0%	0%	0%	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	165	0	0	96	0	167	3519	3	19	1999	83
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	8	8		4	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	54.7	54.7		51.7	51.7		14.5	29.5	29.5	14.5	29.5	29.5
Total Split (s)	55.0	55.0		55.0	55.0		58.0	170.0	170.0	15.0	127.0	127.0
Total Split (%)	22.9%	22.9%		22.9%	22.9%		24.2%	70.8%	70.8%	6.3%	52.9%	52.9%
Yellow Time (s)	4.1	4.1		4.1	4.1		5.5	5.5	5.5	5.5	5.5	5.5
All-Red Time (s)	4.6	4.6		4.6	4.6		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.7	8.7			8.7		7.5	7.5	7.5	7.5	7.5	7.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.82	0.53			1.17		0.78	0.88	0.00	0.28	0.58	0.07
Control Delay	147.1	16.6			220.8		115.8	11.5	0.0	121.7	22.9	2.1
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	147.1	16.6			220.8		115.8	11.5	0.0	121.7	22.9	2.1
Queue Length 50th (ft)	164	1			~159		274	456	0	30	594	0
Queue Length 95th (ft)	238	85			#263		m291	465	m0	66	793	21
Internal Link Dist (ft)		608			232			4511			2596	
Turn Bay Length (ft)	85						650		635	300		755
Base Capacity (vph)	229	438			138		376	4018	1276	69	3471	1111
Starvation Cap Reductn	0	0			0		0	0	0	0	0	0
Spillback Cap Reductn	0	0			0		0	0	0	0	0	0
Storage Cap Reductn	0	0			0		0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.38			0.70		0.44	0.88	0.00	0.28	0.58	0.07

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 180 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: US 19 & Beckett Way

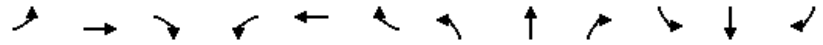




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	1	157	47	4	41	160	3378	3	18	1919	80
Future Volume (veh/h)	99	1	157	47	4	41	160	3378	3	18	1919	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1870	1900	1900	1900	1885	1885	1900	1900	1885	1885
Adj Flow Rate, veh/h	103	1	39	49	4	13	167	3519	2	19	1999	41
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	0	2	0	0	0	1	1	0	0	1	1
Cap, veh/h	146	3	131	90	10	18	185	4104	1284	38	3681	1143
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.80	0.80	0.02	0.72	0.72
Sat Flow, veh/h	1407	40	1576	775	115	218	1795	5147	1610	1810	5147	1598
Grp Volume(v), veh/h	103	0	40	66	0	0	167	3519	2	19	1999	41
Grp Sat Flow(s),veh/h/ln	1407	0	1616	1108	0	0	1795	1716	1610	1810	1716	1598
Q Serve(g_s), s	2.0	0.0	5.6	9.8	0.0	0.0	22.1	105.1	0.1	2.5	43.4	1.8
Cycle Q Clear(g_c), s	17.4	0.0	5.6	15.4	0.0	0.0	22.1	105.1	0.1	2.5	43.4	1.8
Prop In Lane	1.00		0.98	0.74		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	0	134	118	0	0	185	4104	1284	38	3681	1143
V/C Ratio(X)	0.70	0.00	0.30	0.56	0.00	0.00	0.90	0.86	0.00	0.50	0.54	0.04
Avail Cap(c_a), veh/h	301	0	312	278	0	0	378	4104	1284	57	3681	1143
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	108.9	0.0	103.5	109.9	0.0	0.0	106.4	15.6	4.9	116.2	15.9	10.0
Incr Delay (d2), s/veh	6.0	0.0	1.2	4.1	0.0	0.0	19.1	2.5	0.0	13.8	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	2.4	4.2	0.0	0.0	11.3	36.3	0.0	1.3	16.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	115.0	0.0	104.7	114.0	0.0	0.0	125.5	18.1	4.9	130.1	16.5	10.1
LnGrp LOS	F	A	F	F	A	A	F	B	A	F	B	B
Approach Vol, veh/h		143			66			3688			2059	
Approach Delay, s/veh		112.1			114.0			23.0			17.4	
Approach LOS		F			F			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.3	179.1		28.6	12.5	198.9		28.6				
Change Period (Y+Rc), s	7.5	7.5		8.7	7.5	7.5		8.7				
Max Green Setting (Gmax), s	50.5	119.5		46.3	7.5	162.5		46.3				
Max Q Clear Time (g_c+I1), s	24.1	45.4		17.4	4.5	107.1		19.4				
Green Ext Time (p_c), s	0.7	39.5		0.3	0.0	54.2		0.5				

Intersection Summary			
HCM 6th Ctrl Delay			24.2
HCM 6th LOS			C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	16	0	0	5	0	3600	11	5	2122	34
Future Volume (vph)	0	0	16	0	0	5	0	3600	11	5	2122	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		500	420		420
Storage Lanes	0		1	0		1	0		1	1		1
Taper Length (ft)	25			25			25			115		
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		410			292			564			4591	
Travel Time (s)		9.3			6.6			7.0			56.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	17	0	0	5	0	3750	11	5	2210	35
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	16	0	0	5	0	3600	11	5	2122	34
Future Vol, veh/h	0	0	16	0	0	5	0	3600	11	5	2122	34
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	-	-	0	-	-	0	-	-	500	420	-	420
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	0	0	17	0	0	5	0	3750	11	5	2210	35

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1105	-	-	1875	-	0	0	3761	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.1	-	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.9	-	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	179	0	0	53	0	-	-	15	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	179	-	-	53	-	-	-	15	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.2	80.2	0	0.8
HCM LOS	D	F		

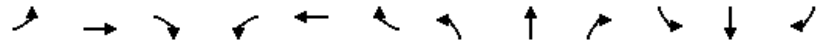
Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	179	53	15	-	-
HCM Lane V/C Ratio	-	-	0.093	0.098	0.347	-	-
HCM Control Delay (s)	-	-	27.2	80.2	$ 341.2	-	-
HCM Lane LOS	-	-	D	F	F	-	-
HCM 95th %tile Q(veh)	-	-	0.3	0.3	0.9	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	16	185	29	20	29	77	3373	21	27	2101	41
Future Volume (vph)	158	16	185	29	20	29	77	3373	21	27	2101	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		160	0		50	300		500	275		175
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	70			25			125			115		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		635			737			2346			564	
Travel Time (s)		14.4			16.8			29.1			7.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	1%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	183	195	0	52	31	81	3551	22	28	2212	43
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4			6			2
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	7.0	30.0	30.0	7.0	30.0	30.0
Minimum Split (s)	54.7	54.7	54.7	54.7	54.7	54.7	14.6	42.6	42.6	14.6	42.6	42.6
Total Split (s)	55.0	55.0	55.0	55.0	55.0	55.0	30.0	170.0	170.0	15.0	155.0	155.0
Total Split (%)	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	12.5%	70.8%	70.8%	6.3%	64.6%	64.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		8.7	8.7		8.7	8.7	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag							Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio		0.88	0.52		0.38	0.09	0.49	0.96	0.02	0.45	0.66	0.04
Control Delay		136.1	28.2		96.7	0.6	82.0	14.6	0.0	113.2	42.3	10.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		136.1	28.2		96.7	0.6	82.0	14.6	0.0	113.2	42.3	10.9
Queue Length 50th (ft)		289	67		75	0	133	334	0	44	851	3
Queue Length 95th (ft)		385	162		127	0	m119	m302	m0	m81	1183	m42
Internal Link Dist (ft)		555			657			2266			484	
Turn Bay Length (ft)			160			50	300		500	275		175
Base Capacity (vph)		257	427		171	384	166	3707	1182	63	3344	1072
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.71	0.46		0.30	0.08	0.49	0.96	0.02	0.44	0.66	0.04

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 115 (48%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: US 19 & Spruce St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	16	185	29	20	29	77	3373	21	27	2101	41
Future Volume (veh/h)	158	16	185	29	20	29	77	3373	21	27	2101	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1900	1900	1900	1885	1885	1900	1900	1885	1900
Adj Flow Rate, veh/h	166	17	46	31	21	5	81	3551	19	28	2212	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	1	0	0	0	1	1	0	0	1	0
Cap, veh/h	228	20	296	56	32	298	182	3555	1112	45	3161	989
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.10	0.69	0.69	0.02	0.61	0.61
Sat Flow, veh/h	1079	110	1598	173	175	1610	1795	5147	1610	1810	5147	1610
Grp Volume(v), veh/h	183	0	46	52	0	5	81	3551	19	28	2212	27
Grp Sat Flow(s),veh/h/ln	1189	0	1598	349	0	1610	1795	1716	1610	1810	1716	1610
Q Serve(g_s), s	0.0	0.0	5.8	6.4	0.0	0.6	10.2	165.2	0.9	3.7	69.8	1.6
Cycle Q Clear(g_c), s	36.0	0.0	5.8	42.4	0.0	0.6	10.2	165.2	0.9	3.7	69.8	1.6
Prop In Lane	0.91		1.00	0.60		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	0	296	88	0	298	182	3555	1112	45	3161	989
V/C Ratio(X)	0.74	0.00	0.16	0.59	0.00	0.02	0.45	1.00	0.02	0.63	0.70	0.03
Avail Cap(c_a), veh/h	260	0	308	101	0	311	182	3555	1112	56	3161	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	94.4	0.0	82.1	106.9	0.0	79.9	101.5	37.0	11.6	115.9	31.3	18.2
Incr Delay (d2), s/veh	10.0	0.0	0.2	6.8	0.0	0.0	0.2	4.3	0.0	13.8	1.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	0.0	2.5	3.4	0.0	0.3	4.8	64.9	0.3	1.9	28.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.3	0.0	82.3	113.7	0.0	80.0	101.7	41.3	11.6	129.7	32.6	18.2
LnGrp LOS	F	A	F	F	A	E	F	D	B	F	C	B
Approach Vol, veh/h		229			57			3651			2267	
Approach Delay, s/veh		99.9			110.7			42.5			33.7	
Approach LOS		F			F			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.9	155.0		53.1	13.5	173.4		53.1				
Change Period (Y+Rc), s	7.6	7.6		* 8.7	7.6	7.6		* 8.7				
Max Green Setting (Gmax), s	22.4	147.4		* 46	7.4	162.4		* 46				
Max Q Clear Time (g_c+I1), s	12.2	71.8		44.4	5.7	167.2		38.0				
Green Ext Time (p_c), s	0.1	31.2		0.0	0.0	0.0		0.7				

Intersection Summary			
HCM 6th Ctrl Delay			42.0
HCM 6th LOS			D

Notes

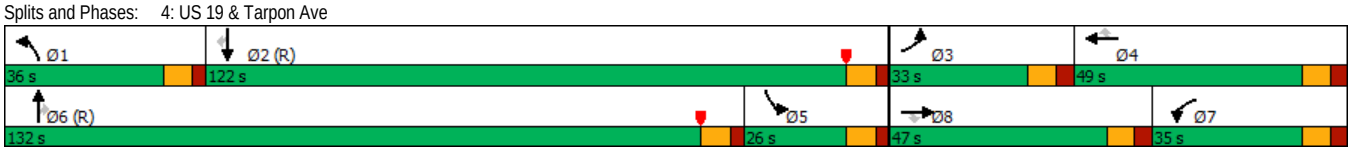
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	363	364	188	521	365	263	183	2954	940	304	1830	133
Future Volume (vph)	363	364	188	521	365	263	183	2954	940	304	1830	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	500		270	320		200	300		200
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			80			230			300		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		686			1067			6497			2346	
Travel Time (s)		10.4			16.2			80.5			29.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	1%	1%	1%	4%	1%	1%	1%	2%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	382	383	198	548	384	277	193	3109	989	320	1926	140
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8			4			6			2
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	15.2	26.2	26.2	15.2	26.2	26.2	14.6	27.6	27.6	14.6	27.6	27.6
Total Split (s)	33.0	47.0	47.0	35.0	49.0	49.0	36.0	132.0	132.0	26.0	122.0	122.0
Total Split (%)	13.8%	19.6%	19.6%	14.6%	20.4%	20.4%	15.0%	55.0%	55.0%	10.8%	50.8%	50.8%
Yellow Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	5.2	5.2	5.2	5.2	5.2	5.2
All-Red Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	2.4	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2	8.2	8.2	8.2	8.2	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	1.07	0.82	0.53	1.10	0.63	0.75	0.72	1.17	1.05	1.22	0.73	0.16
Control Delay	162.0	115.6	15.6	157.5	97.9	64.1	140.6	118.7	62.3	195.5	35.7	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	162.0	115.6	15.6	157.5	97.9	64.1	140.6	118.7	62.3	195.5	35.7	2.4
Queue Length 50th (ft)	~342	316	7	~511	303	239	165	~2126	~455	~313	977	16
Queue Length 95th (ft)	#468	374	98	#721	371	369	m184	m#2080	m#868	#444	1053	16
Internal Link Dist (ft)		606			987			6417			2266	
Turn Bay Length (ft)	375			500		270	320		200	300		200
Base Capacity (vph)	358	583	420	496	607	369	410	2662	945	263	2656	899
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.07	0.66	0.47	1.10	0.63	0.75	0.47	1.17	1.05	1.22	0.73	0.16

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 100 (42%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: US 19 & Tarpon Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	363	364	188	521	365	263	183	2954	940	304	1830	133
Future Volume (veh/h)	363	364	188	521	365	263	183	2954	940	304	1830	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1885	1885	1841	1885	1885	1885	1870	1885	1900
Adj Flow Rate, veh/h	382	383	0	548	384	0	193	3109	0	320	1926	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	1	1	1	4	1	1	1	2	1	0
Cap, veh/h	360	433		389	459		227	2668		409	2943	
Arrive On Green	0.10	0.12	0.00	0.11	0.13	0.00	0.07	0.52	0.00	0.16	0.76	0.00
Sat Flow, veh/h	3483	3610	1598	3483	3582	1560	3483	5147	1598	3456	5147	1610
Grp Volume(v), veh/h	382	383	0	548	384	0	193	3109	0	320	1926	0
Grp Sat Flow(s),veh/h/ln	1742	1805	1598	1742	1791	1560	1742	1716	1598	1728	1716	1610
Q Serve(g_s), s	24.8	25.1	0.0	26.8	25.1	0.0	13.2	124.4	0.0	21.4	42.8	0.0
Cycle Q Clear(g_c), s	24.8	25.1	0.0	26.8	25.1	0.0	13.2	124.4	0.0	21.4	42.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	360	433		389	459		227	2668		409	2943	
V/C Ratio(X)	1.06	0.89		1.41	0.84		0.85	1.17		0.78	0.65	
Avail Cap(c_a), veh/h	360	584		389	609		412	2668		409	2943	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.71	0.71	0.00
Uniform Delay (d), s/veh	107.6	104.0	0.0	106.6	102.2	0.0	111.0	57.8	0.0	98.1	17.4	0.0
Incr Delay (d2), s/veh	64.6	12.0	0.0	198.8	7.6	0.0	8.7	78.9	0.0	6.9	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.5	12.5	0.0	22.9	12.2	0.0	6.2	71.4	0.0	9.7	13.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	172.2	116.0	0.0	305.4	109.8	0.0	119.7	136.7	0.0	105.0	18.3	0.0
LnGrp LOS	F	F		F	F		F	F		F	B	
Approach Vol, veh/h		765	A		932	A		3302	A		2246	A
Approach Delay, s/veh		144.1			224.8			135.7			30.6	
Approach LOS		F			F			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.2	144.8	33.0	39.0	36.0	132.0	35.0	37.0
Change Period (Y+Rc), s	7.6	7.6	* 8.2	* 8.2	7.6	7.6	* 8.2	* 8.2
Max Green Setting (Gmax), s	28.4	114.4	* 25	* 41	18.4	124.4	* 27	* 39
Max Q Clear Time (g_c+I1), s	15.2	44.8	26.8	27.1	23.4	126.4	28.8	27.1
Green Ext Time (p_c), s	0.5	35.3	0.0	1.8	0.0	0.0	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	115.5
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

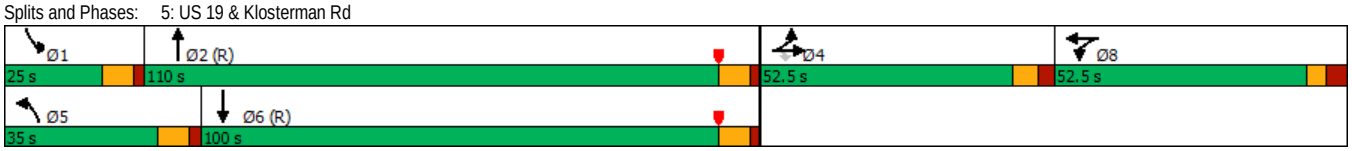
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	954	12	121	22	15	13	176	3312	19	31	2079	363
Future Volume (vph)	954	12	121	22	15	13	176	3312	19	31	2079	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		350	0		0	500		0	300		0
Storage Lanes	1		1	0		0	2		0	1		0
Taper Length (ft)	100			25			100			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		626			411			1496			1992	
Travel Time (s)		10.7			7.0			18.5			24.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	0%	5%	0%	0%	0%	2%	1%	11%	0%	1%	1%
Shared Lane Traffic (%)	33%											
Lane Group Flow (vph)	652	333	123	0	50	0	180	3399	0	32	2491	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	25.4	25.4	25.4	25.6	25.6		13.6	27.6		14.6	27.6	
Total Split (s)	52.5	52.5	52.5	52.5	52.5		35.0	110.0		25.0	100.0	
Total Split (%)	21.9%	21.9%	21.9%	21.9%	21.9%		14.6%	45.8%		10.4%	41.7%	
Yellow Time (s)	4.5	4.5	4.5	3.7	3.7		5.6	5.6		5.6	5.6	
All-Red Time (s)	2.9	2.9	2.9	3.9	3.9		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.4	7.4	7.4		7.6		7.6	7.6		7.6	7.6	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
v/c Ratio	1.07	1.08	0.32		0.56		0.67	0.86		0.46	0.70	
Control Delay	143.1	160.6	11.9		119.7		119.5	42.4		148.5	51.1	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay	143.1	160.6	11.9		119.7		119.5	42.4		148.5	51.1	
Queue Length 50th (ft)	~624	~646	0		70		146	1300		48	1096	
Queue Length 95th (ft)	#771	#902	68		127		193	1416		m64	m1158	
Internal Link Dist (ft)		546			331			1416			1912	
Turn Bay Length (ft)	175		350				500			300		
Base Capacity (vph)	611	307	390		340		391	3951		130	3554	
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	1.07	1.08	0.32		0.15		0.46	0.86		0.25	0.70	

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 35 (15%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: US 19 & Klosterman Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	954	12	121	22	15	13	176	3312	19	31	2079	363
Future Volume (veh/h)	954	12	121	22	15	13	176	3312	19	31	2079	363
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1826	1900	1900	1900	1870	1885	1737	1900	1885	1885
Adj Flow Rate, veh/h	982	0	36	22	15	9	180	3380	18	32	2121	324
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	0	5	0	0	0	2	1	11	0	1	1
Cap, veh/h	1012	0	291	28	19	12	216	4228	22	41	3380	514
Arrive On Green	0.19	0.00	0.19	0.03	0.03	0.03	0.06	0.63	0.63	0.02	0.59	0.59
Sat Flow, veh/h	5386	0	1547	858	585	351	3456	6707	36	1810	5722	870
Grp Volume(v), veh/h	982	0	36	46	0	0	180	2450	948	32	1801	644
Grp Sat Flow(s),veh/h/ln	1795	0	1547	1794	0	0	1728	1621	1879	1810	1621	1729
Q Serve(g_s), s	43.5	0.0	4.6	6.1	0.0	0.0	12.4	90.0	90.4	4.2	57.8	58.3
Cycle Q Clear(g_c), s	43.5	0.0	4.6	6.1	0.0	0.0	12.4	90.0	90.4	4.2	57.8	58.3
Prop In Lane	1.00		1.00	0.48		0.20	1.00		0.02	1.00		0.50
Lane Grp Cap(c), veh/h	1012	0	291	59	0	0	216	3066	1184	41	2873	1021
V/C Ratio(X)	0.97	0.00	0.12	0.78	0.00	0.00	0.83	0.80	0.80	0.77	0.63	0.63
Avail Cap(c_a), veh/h	1012	0	291	336	0	0	395	3066	1184	131	2873	1021
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	96.8	0.0	81.0	115.2	0.0	0.0	111.3	33.0	33.1	116.6	31.9	32.0
Incr Delay (d2), s/veh	21.3	0.0	0.2	19.3	0.0	0.0	11.1	2.3	5.7	19.7	1.0	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	22.3	0.0	1.9	3.2	0.0	0.0	5.9	34.6	41.4	2.2	22.5	24.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	118.1	0.0	81.2	134.4	0.0	0.0	122.4	35.3	38.8	136.3	33.0	35.0
LnGrp LOS	F	A	F	F	A	A	F	D	D	F	C	C
Approach Vol, veh/h		1018			46			3578			2477	
Approach Delay, s/veh		116.8			134.4			40.6			34.8	
Approach LOS		F			F			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.1	158.9		52.5	22.6	149.4		15.5				
Change Period (Y+Rc), s	7.6	7.6		7.4	7.6	7.6		7.6				
Max Green Setting (Gmax), s	17.4	102.4		45.1	27.4	92.4		44.9				
Max Q Clear Time (g_c+I1), s	6.2	92.4		45.5	14.4	60.3		8.1				
Green Ext Time (p_c), s	0.0	10.0		0.0	0.6	29.3		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		50.1
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	127	17	126	187	113	15	691	195	135	427	5
Future Volume (vph)	14	127	17	126	187	113	15	691	195	135	427	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	125		0	120		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			125			125			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		313			430			527			338	
Travel Time (s)		7.1			9.8			12.0			7.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	0%	1%	1%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	161	0	129	306	0	15	904	0	138	441	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		20.0	20.0		5.0	20.0	
Minimum Split (s)	24.9	24.9		11.0	24.9		26.1	26.1		10.9	26.1	
Total Split (s)	27.0	27.0		18.0	45.0		82.0	82.0		13.0	95.0	
Total Split (%)	19.3%	19.3%		12.9%	32.1%		58.6%	58.6%		9.3%	67.9%	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.4	3.4		3.4	3.4	
All-Red Time (s)	2.9	2.9		2.0	2.9		2.7	2.7		2.5	2.7	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.9		6.0	6.9		6.1	6.1		5.9	6.1	
Lead/Lag	Lag	Lag		Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	
v/c Ratio		0.75		0.55	0.68		0.03	0.87		0.68	0.35	
Control Delay		78.9		50.7	52.2		15.1	37.5		29.0	11.8	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		78.9		50.7	52.2		15.1	37.5		29.0	11.8	
Queue Length 50th (ft)		139		94	234		6	711		44	170	
Queue Length 95th (ft)		216		150	331		18	#1021		#97	245	
Internal Link Dist (ft)		233			350			447			258	
Turn Bay Length (ft)				115			125			120		
Base Capacity (vph)		255		242	503		544	1035		204	1260	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.63		0.53	0.61		0.03	0.87		0.68	0.35	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

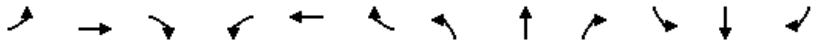
Offset: 66 (47%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

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

Splits and Phases: 10: Alt US 19 & Tarpon Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	127	17	126	187	113	15	691	195	135	427	5
Future Volume (veh/h)	14	127	17	126	187	113	15	691	195	135	427	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1900	1900	1900	1885	1885	1870	1900	1900
Adj Flow Rate, veh/h	14	130	17	129	191	115	15	705	199	138	436	5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	2	0	0	0	1	1	2	0	0
Cap, veh/h	37	159	20	264	249	150	617	845	239	250	1281	15
Arrive On Green	0.10	0.10	0.10	0.08	0.22	0.22	0.60	0.60	0.60	0.04	0.68	0.68
Sat Flow, veh/h	89	1521	190	1781	1111	669	963	1414	399	1781	1875	21
Grp Volume(v), veh/h	161	0	0	129	0	306	15	0	904	138	0	441
Grp Sat Flow(s),veh/h/ln	1800	0	0	1781	0	1780	963	0	1813	1781	0	1896
Q Serve(g_s), s	6.1	0.0	0.0	8.8	0.0	22.6	0.9	0.0	56.0	4.1	0.0	13.4
Cycle Q Clear(g_c), s	12.2	0.0	0.0	8.8	0.0	22.6	2.4	0.0	56.0	4.1	0.0	13.4
Prop In Lane	0.09		0.11	1.00		0.38	1.00		0.22	1.00		0.01
Lane Grp Cap(c), veh/h	216	0	0	264	0	399	617	0	1084	250	0	1295
V/C Ratio(X)	0.75	0.00	0.00	0.49	0.00	0.77	0.02	0.00	0.83	0.55	0.00	0.34
Avail Cap(c_a), veh/h	285	0	0	280	0	484	617	0	1084	264	0	1295
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.5	0.0	0.0	48.9	0.0	50.9	12.1	0.0	22.6	24.5	0.0	9.2
Incr Delay (d2), s/veh	7.3	0.0	0.0	0.5	0.0	6.0	0.1	0.0	7.6	1.1	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	0.0	4.0	0.0	10.8	0.2	0.0	25.3	2.4	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.9	0.0	0.0	49.4	0.0	56.9	12.2	0.0	30.1	25.6	0.0	9.9
LnGrp LOS	E	A	A	D	A	E	B	A	C	C	A	A
Approach Vol, veh/h		161			435			919			579	
Approach Delay, s/veh		68.9			54.7			29.8			13.6	
Approach LOS		E			D			C			B	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		101.7		38.3	11.9	89.8	16.7	21.5				
Change Period (Y+Rc), s		* 6.1		6.9	5.9	* 6.1	6.0	6.9				
Max Green Setting (Gmax), s		* 89		38.1	7.1	* 76	12.0	20.1				
Max Q Clear Time (g_c+I1), s		15.4		24.6	6.1	58.0	10.8	14.2				
Green Ext Time (p_c), s		3.9		1.5	0.0	8.2	0.0	0.4				

Intersection Summary		
HCM 6th Ctrl Delay		33.5
HCM 6th LOS		C

Notes

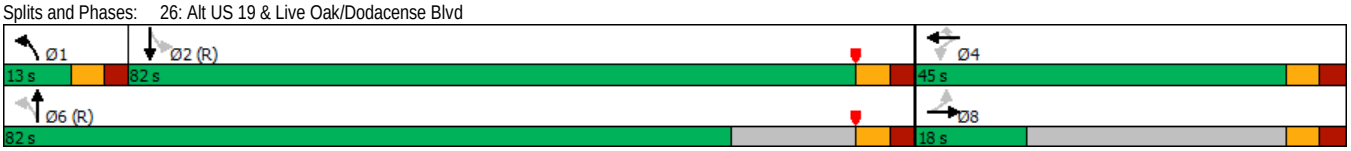
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

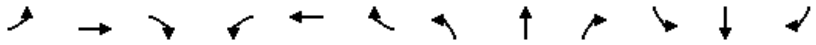
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	42	49	20	38	186	57	828	14	106	577	69
Future Volume (vph)	119	42	49	20	38	186	57	828	14	106	577	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	400		0	100		0	230		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	125			150			225			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			497			312			175	
Travel Time (s)		9.5			11.3			7.1			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	0%	2%	0%	0%	0%	2%	1%	0%	4%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	129	99	0	22	41	202	62	915	0	115	702	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		8			4		1	6			2	
Permitted Phases	8			4		4	6			2		
Detector Phase	8	8		4	4	4	1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	20.0		20.0	20.0	
Minimum Split (s)	11.4	11.4		24.4	24.4	24.4	10.9	26.2		26.2	26.2	
Total Split (s)	18.0	18.0		45.0	45.0	45.0	13.0	82.0		82.0	82.0	
Total Split (%)	12.9%	12.9%		32.1%	32.1%	32.1%	9.3%	58.6%		58.6%	58.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.4	3.5		3.5	3.5	
All-Red Time (s)	2.9	2.9		2.9	2.9	2.9	2.5	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.4	6.4		6.4	6.4	6.4	5.9	6.2		6.2	6.2	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		C-Max	C-Max	
v/c Ratio	0.73	0.38		0.13	0.16	0.56	0.13	0.63		0.32	0.54	
Control Delay	80.7	35.6		52.7	52.9	18.1	4.8	9.8		13.0	13.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	80.7	35.6		52.7	52.9	18.1	4.8	9.8		13.0	13.1	
Queue Length 50th (ft)	114	48		18	34	27	11	312		39	292	
Queue Length 95th (ft)	179	100		43	67	101	27	532		92	478	
Internal Link Dist (ft)		338			417			232			95	
Turn Bay Length (ft)	250			400			100			230		
Base Capacity (vph)	371	506		349	523	567	492	1462		358	1308	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.35	0.20		0.06	0.08	0.36	0.13	0.63		0.32	0.54	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 22 (16%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 26: Alt US 19 & Live Oak/Dodacense Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	42	49	20	38	186	57	828	14	106	577	69
Future Volume (veh/h)	119	42	49	20	38	186	57	828	14	106	577	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1870	1900	1900	1900	1870	1885	1900	1841	1885	1900
Adj Flow Rate, veh/h	129	46	53	22	41	202	62	900	15	115	627	75
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, %	3	0	2	0	0	0	2	1	0	4	1	0
Cap, veh/h	192	116	133	172	273	231	484	1417	24	379	1143	137
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.03	0.77	0.77	0.69	0.69	0.69
Sat Flow, veh/h	1128	805	928	1317	1900	1610	1781	1849	31	601	1652	198
Grp Volume(v), veh/h	129	0	99	22	41	202	62	0	915	115	0	702
Grp Sat Flow(s),veh/h/ln	1128	0	1733	1317	1900	1610	1781	0	1880	601	0	1850
Q Serve(g_s), s	15.8	0.0	7.3	2.2	2.6	17.2	1.3	0.0	31.0	15.1	0.0	26.4
Cycle Q Clear(g_c), s	18.5	0.0	7.3	9.4	2.6	17.2	1.3	0.0	31.0	35.6	0.0	26.4
Prop In Lane	1.00		0.54	1.00		1.00	1.00		0.02	1.00		0.11
Lane Grp Cap(c), veh/h	192	0	249	172	273	231	484	0	1441	379	0	1280
V/C Ratio(X)	0.67	0.00	0.40	0.13	0.15	0.87	0.13	0.00	0.64	0.30	0.00	0.55
Avail Cap(c_a), veh/h	192	0	249	346	524	444	517	0	1441	379	0	1280
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.6	0.0	54.5	58.7	52.5	58.7	8.1	0.0	7.4	17.9	0.0	10.7
Incr Delay (d2), s/veh	8.8	0.0	1.0	0.3	0.3	10.0	0.1	0.0	2.1	2.1	0.0	1.7
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	5.0	0.0	3.3	0.7	1.3	7.7	0.5	0.0	11.9	2.3	0.0	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.4	0.0	55.5	59.1	52.7	68.7	8.2	0.0	9.6	20.0	0.0	12.4
LnGrp LOS	E	A	E	E	D	E	A	A	A	B	A	B
Approach Vol, veh/h		228			265			977			817	
Approach Delay, s/veh		63.4			65.4			9.5			13.5	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.5	103.1		26.5		113.5		26.5				
Change Period (Y+Rc), s	5.9	* 6.2		6.4		* 6.2		6.4				
Max Green Setting (Gmax), s	7.1	* 76		38.6		* 76		11.6				
Max Q Clear Time (g_c+I1), s	3.3	37.6		19.2		33.0		20.5				
Green Ext Time (p_c), s	0.0	7.6		0.9		9.3		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		22.8	
HCM 6th LOS		C	

Notes

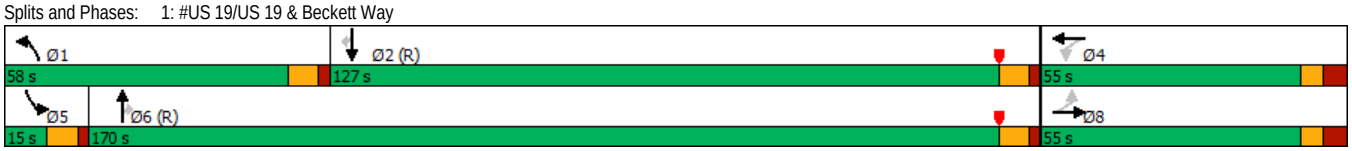
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

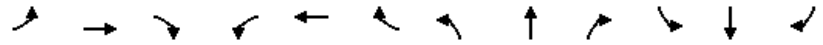
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	1	163	51	4	41	164	3396	6	18	1946	80
Future Volume (vph)	99	1	163	51	4	41	164	3396	6	18	1946	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	0		0	650		635	300		755
Storage Lanes	1		0	0		0	1		1	1		1
Taper Length (ft)	50			25			125			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		688			312			3610			2676	
Travel Time (s)		13.4			6.1			44.8			33.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	0%	2%	0%	0%	0%	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	171	0	0	100	0	171	3538	6	19	2027	83
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	8	8		4	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	54.7	54.7		51.7	51.7		14.5	29.5	29.5	14.5	29.5	29.5
Total Split (s)	55.0	55.0		55.0	55.0		58.0	170.0	170.0	15.0	127.0	127.0
Total Split (%)	22.9%	22.9%		22.9%	22.9%		24.2%	70.8%	70.8%	6.3%	52.9%	52.9%
Yellow Time (s)	4.1	4.1		4.1	4.1		5.5	5.5	5.5	5.5	5.5	5.5
All-Red Time (s)	4.6	4.6		4.6	4.6		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.7	8.7			8.7		7.5	7.5	7.5	7.5	7.5	7.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	0.78	0.52			1.19		0.78	0.89	0.00	0.28	0.59	0.08
Control Delay	137.7	15.9			229.7		120.7	13.2	0.0	121.7	24.3	2.2
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	137.7	15.9			229.7		120.7	13.2	0.0	121.7	24.3	2.2
Queue Length 50th (ft)	162	1			~171		279	483	0	30	625	0
Queue Length 95th (ft)	235	85			#278		m304	638	m0	66	838	22
Internal Link Dist (ft)		608			232			3530			2596	
Turn Bay Length (ft)	85						650		635	300		755
Base Capacity (vph)	231	442			135		376	3992	1268	69	3433	1100
Starvation Cap Reductn	0	0			0		0	0	0	0	0	0
Spillback Cap Reductn	0	0			0		0	0	0	0	0	0
Storage Cap Reductn	0	0			0		0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.39			0.74		0.45	0.89	0.00	0.28	0.59	0.08

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 180 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: #US 19/US 19 & Beckett Way

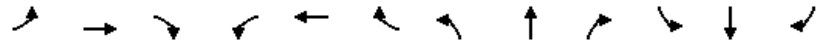




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	1	163	51	4	41	164	3396	6	18	1946	80
Future Volume (veh/h)	99	1	163	51	4	41	164	3396	6	18	1946	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1870	1900	1900	1900	1885	1885	1900	1900	1885	1885
Adj Flow Rate, veh/h	103	1	45	53	4	13	171	3538	5	19	2027	41
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	0	2	0	0	0	1	1	0	0	1	1
Cap, veh/h	147	3	129	86	9	16	189	4110	1286	38	3675	1141
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.11	0.80	0.80	0.02	0.71	0.71
Sat Flow, veh/h	1407	35	1580	732	104	191	1795	5147	1610	1810	5147	1598
Grp Volume(v), veh/h	103	0	46	70	0	0	171	3538	5	19	2027	41
Grp Sat Flow(s),veh/h/ln	1407	0	1616	1027	0	0	1795	1716	1610	1810	1716	1598
Q Serve(g_s), s	0.0	0.0	6.5	10.7	0.0	0.0	22.6	106.3	0.2	2.5	44.6	1.8
Cycle Q Clear(g_c), s	17.1	0.0	6.5	17.2	0.0	0.0	22.6	106.3	0.2	2.5	44.6	1.8
Prop In Lane	1.00		0.98	0.76		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	147	0	132	110	0	0	189	4110	1286	38	3675	1141
V/C Ratio(X)	0.70	0.00	0.35	0.63	0.00	0.00	0.90	0.86	0.00	0.50	0.55	0.04
Avail Cap(c_a), veh/h	303	0	312	271	0	0	378	4110	1286	57	3675	1141
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	109.0	0.0	104.1	111.5	0.0	0.0	106.1	15.6	4.9	116.2	16.2	10.1
Incr Delay (d2), s/veh	6.0	0.0	1.6	5.9	0.0	0.0	19.0	2.6	0.0	13.8	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	2.8	4.6	0.0	0.0	11.5	36.6	0.0	1.3	17.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	115.0	0.0	105.7	117.4	0.0	0.0	125.1	18.2	4.9	130.1	16.8	10.1
LnGrp LOS	F	A	F	F	A	A	F	B	A	F	B	B
Approach Vol, veh/h		149			70			3714			2087	
Approach Delay, s/veh		112.2			117.4			23.1			17.7	
Approach LOS		F			F			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.8	178.9		28.3	12.5	199.2		28.3				
Change Period (Y+Rc), s	7.5	7.5		8.7	7.5	7.5		8.7				
Max Green Setting (Gmax), s	50.5	119.5		46.3	7.5	162.5		46.3				
Max Q Clear Time (g_c+I1), s	24.6	46.6		19.2	4.5	108.3		19.1				
Green Ext Time (p_c), s	0.7	40.2		0.3	0.0	53.0		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		24.5
HCM 6th LOS		C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	16	0	0	5	0	3654	11	5	2168	34
Future Volume (vph)	0	0	16	0	0	5	0	3654	11	5	2168	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		500	420		420
Storage Lanes	0		1	0		1	0		1	1		1
Taper Length (ft)	25			25			25			115		
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		410			292			564			981	
Travel Time (s)		9.3			6.6			7.0			12.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	17	0	0	5	0	3806	11	5	2258	35
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	16	0	0	5	0	3654	11	5	2168	34
Future Vol, veh/h	0	0	16	0	0	5	0	3654	11	5	2168	34
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	-	-	0	-	-	0	-	-	500	420	-	420
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	0	0	17	0	0	5	0	3806	11	5	2258	35

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1129	-	-	1903	-	0	0	3817	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.1	-	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.9	-	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	173	0	0	51	0	-	-	14	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	173	-	-	51	-	-	-	14	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

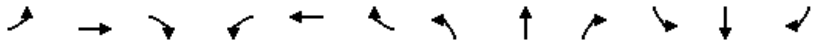
Approach	EB	WB	NB	SB
HCM Control Delay, s	28	83.5	0	0.8
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	173	51	14	-	-
HCM Lane V/C Ratio	-	-	0.096	0.102	0.372	-	-
HCM Control Delay (s)	-	-	28	83.5	$ 371.9	-	-
HCM Lane LOS	-	-	D	F	F	-	-
HCM 95th %tile Q(veh)	-	-	0.3	0.3	1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	16	185	29	20	29	77	3373	21	27	2101	41
Future Volume (vph)	158	16	185	29	20	29	77	3373	21	27	2101	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		160	0		50	300		500	275		175
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	70			25			125			115		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		635			737			2346			564	
Travel Time (s)		14.4			16.8			29.1			7.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	1%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	183	195	0	52	31	81	3551	22	28	2212	43
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4			6			2
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	7.0	30.0	30.0	7.0	30.0	30.0
Minimum Split (s)	54.7	54.7	54.7	54.7	54.7	54.7	14.6	42.6	42.6	14.6	42.6	42.6
Total Split (s)	55.0	55.0	55.0	55.0	55.0	55.0	30.0	170.0	170.0	15.0	155.0	155.0
Total Split (%)	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	12.5%	70.8%	70.8%	6.3%	64.6%	64.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		8.7	8.7		8.7	8.7	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag							Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio		0.88	0.52		0.38	0.09	0.49	0.96	0.02	0.45	0.66	0.04
Control Delay		136.1	28.2		96.7	0.6	82.4	14.7	0.0	113.5	43.4	10.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		136.1	28.2		96.7	0.6	82.4	14.7	0.0	113.5	43.4	10.9
Queue Length 50th (ft)		289	67		75	0	133	345	0	45	878	4
Queue Length 95th (ft)		385	162		127	0	m118	m308	m0	m78	1208	m42
Internal Link Dist (ft)		555			657			2266			484	
Turn Bay Length (ft)			160			50	300		500	275		175
Base Capacity (vph)		257	427		171	384	166	3707	1182	63	3344	1072
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.71	0.46		0.30	0.08	0.49	0.96	0.02	0.44	0.66	0.04

Intersection Summary	
Area Type:	Other
Cycle Length: 240	
Actuated Cycle Length: 240	
Offset: 115 (48%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 3: #US 19 & Spruce St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	16	185	29	20	29	77	3373	21	27	2101	41
Future Volume (veh/h)	158	16	185	29	20	29	77	3373	21	27	2101	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1900	1900	1900	1885	1885	1900	1900	1885	1900
Adj Flow Rate, veh/h	166	17	46	31	21	5	81	3551	19	28	2212	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	1	0	0	0	1	1	0	0	1	0
Cap, veh/h	228	20	296	56	32	298	182	3555	1112	45	3161	989
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.10	0.69	0.69	0.02	0.61	0.61
Sat Flow, veh/h	1079	110	1598	173	175	1610	1795	5147	1610	1810	5147	1610
Grp Volume(v), veh/h	183	0	46	52	0	5	81	3551	19	28	2212	27
Grp Sat Flow(s),veh/h/ln	1189	0	1598	349	0	1610	1795	1716	1610	1810	1716	1610
Q Serve(g_s), s	0.0	0.0	5.8	6.4	0.0	0.6	10.2	165.2	0.9	3.7	69.8	1.6
Cycle Q Clear(g_c), s	36.0	0.0	5.8	42.4	0.0	0.6	10.2	165.2	0.9	3.7	69.8	1.6
Prop In Lane	0.91		1.00	0.60		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	0	296	88	0	298	182	3555	1112	45	3161	989
V/C Ratio(X)	0.74	0.00	0.16	0.59	0.00	0.02	0.45	1.00	0.02	0.63	0.70	0.03
Avail Cap(c_a), veh/h	260	0	308	101	0	311	182	3555	1112	56	3161	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	94.4	0.0	82.1	106.9	0.0	79.9	101.5	37.0	11.6	115.9	31.3	18.2
Incr Delay (d2), s/veh	10.0	0.0	0.2	6.8	0.0	0.0	0.2	4.3	0.0	13.8	1.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	0.0	2.5	3.4	0.0	0.3	4.8	64.9	0.3	1.9	28.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.3	0.0	82.3	113.7	0.0	80.0	101.7	41.3	11.6	129.7	32.6	18.2
LnGrp LOS	F	A	F	F	A	E	F	D	B	F	C	B
Approach Vol, veh/h		229			57			3651			2267	
Approach Delay, s/veh		99.9			110.7			42.5			33.7	
Approach LOS		F			F			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.9	155.0		53.1	13.5	173.4		53.1				
Change Period (Y+Rc), s	7.6	7.6		* 8.7	7.6	7.6		* 8.7				
Max Green Setting (Gmax), s	22.4	147.4		* 46	7.4	162.4		* 46				
Max Q Clear Time (g_c+I1), s	12.2	71.8		44.4	5.7	167.2		38.0				
Green Ext Time (p_c), s	0.1	31.2		0.0	0.0	0.0		0.7				

Intersection Summary		
HCM 6th Ctrl Delay		42.0
HCM 6th LOS		D

Notes

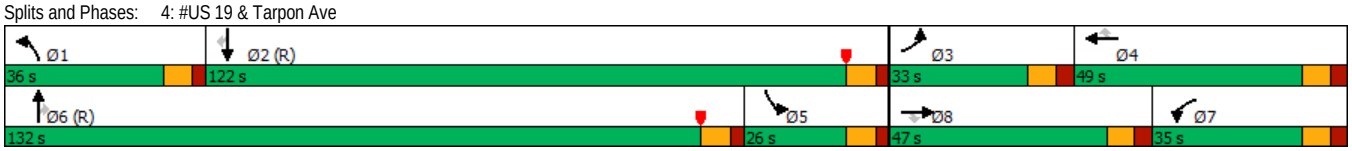
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

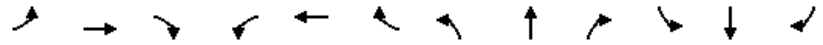
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	379	364	188	521	365	272	183	2978	940	310	1855	144
Future Volume (vph)	379	364	188	521	365	272	183	2978	940	310	1855	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	500		270	320		200	300		200
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			80			230			300		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		686			1067			6497			2346	
Travel Time (s)		10.4			16.2			80.5			29.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	1%	1%	1%	4%	1%	1%	1%	2%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	399	383	198	548	384	286	193	3135	989	326	1953	152
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8			4			6			2
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	15.2	26.2	26.2	15.2	26.2	26.2	14.6	27.6	27.6	14.6	27.6	27.6
Total Split (s)	33.0	47.0	47.0	35.0	49.0	49.0	36.0	132.0	132.0	26.0	122.0	122.0
Total Split (%)	13.8%	19.6%	19.6%	14.6%	20.4%	20.4%	15.0%	55.0%	55.0%	10.8%	50.8%	50.8%
Yellow Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	5.2	5.2	5.2	5.2	5.2	5.2
All-Red Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	2.4	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.2	8.2	8.2	8.2	8.2	8.2	7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
v/c Ratio	1.11	0.82	0.53	1.10	0.63	0.78	0.72	1.18	1.05	1.24	0.74	0.17
Control Delay	172.8	115.6	15.6	157.5	97.9	67.3	140.3	122.8	62.8	202.0	34.5	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	172.8	115.6	15.6	157.5	97.9	67.3	140.3	122.8	62.8	202.0	34.5	2.3
Queue Length 50th (ft)	~371	316	7	~511	303	255	165	~2157	~494	~325	1010	17
Queue Length 95th (ft)	#496	374	98	#721	371	390	m183	m#2108	m#868	#455	978	11
Internal Link Dist (ft)		606			987			6417			2266	
Turn Bay Length (ft)	375			500		270	320		200	300		200
Base Capacity (vph)	358	583	420	496	607	369	410	2662	944	263	2656	899
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.66	0.47	1.10	0.63	0.78	0.47	1.18	1.05	1.24	0.74	0.17

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 100 (42%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: #US 19 & Tarpon Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	379	364	188	521	365	272	183	2978	940	310	1855	144
Future Volume (veh/h)	379	364	188	521	365	272	183	2978	940	310	1855	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1885	1885	1841	1885	1885	1885	1870	1885	1900
Adj Flow Rate, veh/h	399	383	0	548	384	0	193	3135	0	326	1953	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	1	1	1	4	1	1	1	2	1	0
Cap, veh/h	360	433		389	459		227	2668		409	2943	
Arrive On Green	0.10	0.12	0.00	0.11	0.13	0.00	0.07	0.52	0.00	0.16	0.76	0.00
Sat Flow, veh/h	3483	3610	1598	3483	3582	1560	3483	5147	1598	3456	5147	1610
Grp Volume(v), veh/h	399	383	0	548	384	0	193	3135	0	326	1953	0
Grp Sat Flow(s),veh/h/ln	1742	1805	1598	1742	1791	1560	1742	1716	1598	1728	1716	1610
Q Serve(g_s), s	24.8	25.1	0.0	26.8	25.1	0.0	13.2	124.4	0.0	21.8	44.1	0.0
Cycle Q Clear(g_c), s	24.8	25.1	0.0	26.8	25.1	0.0	13.2	124.4	0.0	21.8	44.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	360	433		389	459		227	2668		409	2943	
V/C Ratio(X)	1.11	0.89		1.41	0.84		0.85	1.18		0.80	0.66	
Avail Cap(c_a), veh/h	360	584		389	609		412	2668		409	2943	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.71	0.71	0.00
Uniform Delay (d), s/veh	107.6	104.0	0.0	106.6	102.2	0.0	111.0	57.8	0.0	98.3	17.6	0.0
Incr Delay (d2), s/veh	80.0	12.0	0.0	198.8	7.6	0.0	8.7	83.1	0.0	7.7	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.3	12.5	0.0	22.9	12.2	0.0	6.2	72.4	0.0	9.9	14.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	187.6	116.0	0.0	305.4	109.8	0.0	119.7	140.9	0.0	105.9	18.4	0.0
LnGrp LOS	F	F		F	F		F	F		F	B	
Approach Vol, veh/h		782	A		932	A		3328	A		2279	A
Approach Delay, s/veh		152.6			224.8			139.7			31.0	
Approach LOS		F			F			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.2	144.8	33.0	39.0	36.0	132.0	35.0	37.0
Change Period (Y+Rc), s	7.6	7.6	* 8.2	* 8.2	7.6	7.6	* 8.2	* 8.2
Max Green Setting (Gmax), s	28.4	114.4	* 25	* 41	18.4	124.4	* 27	* 39
Max Q Clear Time (g_c+I1), s	15.2	46.1	26.8	27.1	23.8	126.4	28.8	27.1
Green Ext Time (p_c), s	0.5	35.9	0.0	1.8	0.0	0.0	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	118.1
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

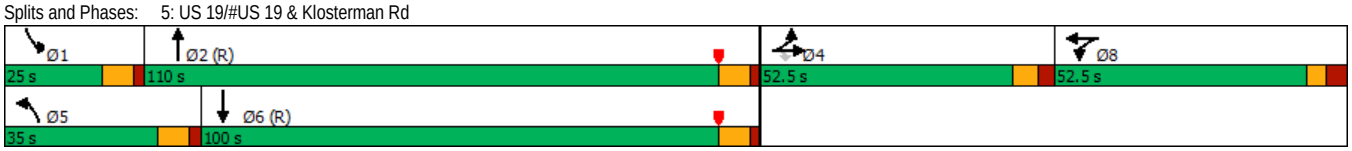
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	956	12	121	22	15	13	176	3344	19	31	2100	365
Future Volume (vph)	956	12	121	22	15	13	176	3344	19	31	2100	365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		350	0		0	500		0	300		0
Storage Lanes	1		1	0		0	2		0	1		0
Taper Length (ft)	100			25			100			125		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		626			411			1496			1992	
Travel Time (s)		10.7			7.0			18.5			24.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	0%	5%	0%	0%	0%	2%	1%	11%	0%	1%	1%
Shared Lane Traffic (%)	33%											
Lane Group Flow (vph)	654	334	123	0	50	0	180	3431	0	32	2515	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	25.4	25.4	25.4	25.6	25.6		13.6	27.6		14.6	27.6	
Total Split (s)	52.5	52.5	52.5	52.5	52.5		35.0	110.0		25.0	100.0	
Total Split (%)	21.9%	21.9%	21.9%	21.9%	21.9%		14.6%	45.8%		10.4%	41.7%	
Yellow Time (s)	4.5	4.5	4.5	3.7	3.7		5.6	5.6		5.6	5.6	
All-Red Time (s)	2.9	2.9	2.9	3.9	3.9		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.4	7.4	7.4		7.6		7.6	7.6		7.6	7.6	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
v/c Ratio	1.07	1.09	0.32		0.56		0.67	0.87		0.46	0.71	
Control Delay	143.9	161.4	11.9		119.7		119.5	42.9		148.6	51.3	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay	143.9	161.4	11.9		119.7		119.5	42.9		148.6	51.3	
Queue Length 50th (ft)	~627	~650	0		70		146	1326		48	1132	
Queue Length 95th (ft)	#773	#905	68		127		193	1444		m61	m1170	
Internal Link Dist (ft)		546			331			1416			1912	
Turn Bay Length (ft)	175		350				500			300		
Base Capacity (vph)	611	307	390		340		391	3951		130	3554	
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	1.07	1.09	0.32		0.15		0.46	0.87		0.25	0.71	

Intersection Summary

Area Type: Other
Cycle Length: 240
Actuated Cycle Length: 240
Offset: 35 (15%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: US 19/#US 19 & Klosterman Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	956	12	121	22	15	13	176	3344	19	31	2100	365
Future Volume (veh/h)	956	12	121	22	15	13	176	3344	19	31	2100	365
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1826	1900	1900	1900	1870	1885	1737	1900	1885	1885
Adj Flow Rate, veh/h	985	0	36	22	15	9	180	3412	18	32	2143	326
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	0	5	0	0	0	2	1	11	0	1	1
Cap, veh/h	1012	0	291	28	19	12	216	4228	22	41	3383	512
Arrive On Green	0.19	0.00	0.19	0.03	0.03	0.03	0.06	0.63	0.63	0.02	0.59	0.59
Sat Flow, veh/h	5386	0	1547	858	585	351	3456	6707	35	1810	5726	867
Grp Volume(v), veh/h	985	0	36	46	0	0	180	2473	957	32	1819	650
Grp Sat Flow(s),veh/h/ln	1795	0	1547	1794	0	0	1728	1621	1879	1810	1621	1729
Q Serve(g_s), s	43.6	0.0	4.6	6.1	0.0	0.0	12.4	91.8	92.1	4.2	58.7	59.2
Cycle Q Clear(g_c), s	43.6	0.0	4.6	6.1	0.0	0.0	12.4	91.8	92.1	4.2	58.7	59.2
Prop In Lane	1.00		1.00	0.48		0.20	1.00		0.02	1.00		0.50
Lane Grp Cap(c), veh/h	1012	0	291	59	0	0	216	3066	1184	41	2873	1021
V/C Ratio(X)	0.97	0.00	0.12	0.78	0.00	0.00	0.83	0.81	0.81	0.77	0.63	0.64
Avail Cap(c_a), veh/h	1012	0	291	336	0	0	395	3066	1184	131	2873	1021
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	96.8	0.0	81.0	115.2	0.0	0.0	111.3	33.4	33.4	116.6	32.1	32.2
Incr Delay (d2), s/veh	21.9	0.0	0.2	19.3	0.0	0.0	11.1	2.4	6.0	19.7	1.1	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	22.5	0.0	1.9	3.2	0.0	0.0	5.9	35.3	42.3	2.2	22.8	25.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	118.8	0.0	81.2	134.4	0.0	0.0	122.4	35.7	39.4	136.3	33.2	35.3
LnGrp LOS	F	A	F	F	A	A	F	D	D	F	C	D
Approach Vol, veh/h		1021			46			3610			2501	
Approach Delay, s/veh		117.5			134.4			41.0			35.0	
Approach LOS		F			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.1	158.9		52.5	22.6	149.4		15.5				
Change Period (Y+Rc), s	7.6	7.6		7.4	7.6	7.6		7.6				
Max Green Setting (Gmax), s	17.4	102.4		45.1	27.4	92.4		44.9				
Max Q Clear Time (g_c+I1), s	6.2	94.1		45.6	14.4	61.2		8.1				
Green Ext Time (p_c), s	0.0	8.2		0.0	0.6	28.6		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		50.4
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	129	17	127	188	115	15	691	197	138	427	5
Future Volume (vph)	14	129	17	127	188	115	15	691	197	138	427	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	125		0	120		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			125			125			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		313			430			527			338	
Travel Time (s)		7.1			9.8			12.0			7.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	0%	1%	1%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	0	130	309	0	15	906	0	141	441	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		pm+pt	NA	
Protected Phases		8		7	4			6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		7	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		20.0	20.0		5.0	20.0	
Minimum Split (s)	24.9	24.9		11.0	24.9		26.1	26.1		10.9	26.1	
Total Split (s)	27.0	27.0		18.0	45.0		82.0	82.0		13.0	95.0	
Total Split (%)	19.3%	19.3%		12.9%	32.1%		58.6%	58.6%		9.3%	67.9%	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.4	3.4		3.4	3.4	
All-Red Time (s)	2.9	2.9		2.0	2.9		2.7	2.7		2.5	2.7	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.9		6.0	6.9		6.1	6.1		5.9	6.1	
Lead/Lag	Lag	Lag		Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	
v/c Ratio		0.76		0.55	0.68		0.03	0.88		0.69	0.35	
Control Delay		79.8		50.8	52.1		15.1	38.1		31.2	11.8	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		79.8		50.8	52.1		15.1	38.1		31.2	11.8	
Queue Length 50th (ft)		142		95	235		6	714		46	171	
Queue Length 95th (ft)		219		151	334		18	#1023		#104	245	
Internal Link Dist (ft)		233			350			447			258	
Turn Bay Length (ft)				115			125			120		
Base Capacity (vph)		255		242	503		543	1032		203	1258	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.64		0.54	0.61		0.03	0.88		0.69	0.35	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 66 (47%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

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

Splits and Phases: 10: Alt US 19 & Tarpon Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	129	17	127	188	115	15	691	197	138	427	5
Future Volume (veh/h)	14	129	17	127	188	115	15	691	197	138	427	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1900	1900	1900	1885	1885	1870	1900	1900
Adj Flow Rate, veh/h	14	132	17	130	192	117	15	705	201	141	436	5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	2	0	0	0	1	1	2	0	0
Cap, veh/h	37	161	20	265	249	152	615	840	240	248	1278	15
Arrive On Green	0.11	0.11	0.11	0.08	0.23	0.23	0.60	0.60	0.60	0.04	0.68	0.68
Sat Flow, veh/h	87	1526	188	1781	1105	674	963	1411	402	1781	1875	21
Grp Volume(v), veh/h	163	0	0	130	0	309	15	0	906	141	0	441
Grp Sat Flow(s),veh/h/ln	1801	0	0	1781	0	1779	963	0	1813	1781	0	1896
Q Serve(g_s), s	6.2	0.0	0.0	8.9	0.0	22.8	0.9	0.0	56.6	4.2	0.0	13.5
Cycle Q Clear(g_c), s	12.4	0.0	0.0	8.9	0.0	22.8	2.4	0.0	56.6	4.2	0.0	13.5
Prop In Lane	0.09		0.10	1.00		0.38	1.00		0.22	1.00		0.01
Lane Grp Cap(c), veh/h	218	0	0	265	0	401	615	0	1080	248	0	1293
V/C Ratio(X)	0.75	0.00	0.00	0.49	0.00	0.77	0.02	0.00	0.84	0.57	0.00	0.34
Avail Cap(c_a), veh/h	285	0	0	280	0	484	615	0	1080	260	0	1293
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.5	0.0	0.0	48.7	0.0	50.8	12.2	0.0	22.9	25.0	0.0	9.2
Incr Delay (d2), s/veh	7.6	0.0	0.0	0.5	0.0	6.2	0.1	0.0	7.8	1.5	0.0	0.7
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	6.2	0.0	0.0	4.0	0.0	10.9	0.2	0.0	25.6	2.6	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.1	0.0	0.0	49.2	0.0	57.0	12.3	0.0	30.7	26.5	0.0	10.0
LnGrp LOS	E	A	A	D	A	E	B	A	C	C	A	A
Approach Vol, veh/h		163			439			921			582	
Approach Delay, s/veh		69.1			54.7			30.4			14.0	
Approach LOS		E			D			C			B	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		101.5		38.5	12.1	89.5	16.8	21.7				
Change Period (Y+Rc), s		* 6.1		6.9	5.9	* 6.1	6.0	6.9				
Max Green Setting (Gmax), s		* 89		38.1	7.1	* 76	12.0	20.1				
Max Q Clear Time (g_c+I1), s		15.5		24.8	6.2	58.6	10.9	14.4				
Green Ext Time (p_c), s		3.9		1.5	0.0	8.0	0.0	0.4				

Intersection Summary		
HCM 6th Ctrl Delay		33.9
HCM 6th LOS		C

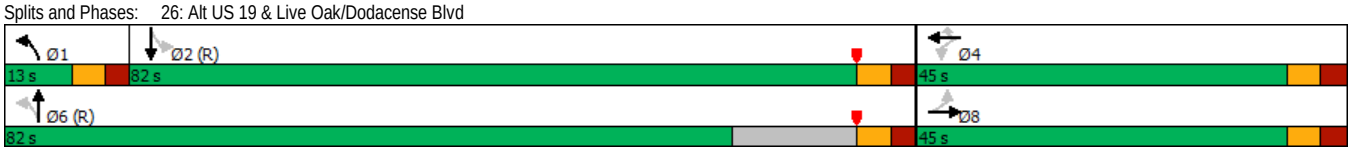
Notes

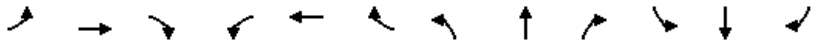
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	42	49	22	38	186	57	828	14	106	577	69
Future Volume (vph)	119	42	49	22	38	186	57	828	14	106	577	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	400		0	100		0	230		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	125			150			225			50		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			497			312			175	
Travel Time (s)		9.5			11.3			7.1			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	0%	2%	0%	0%	0%	2%	1%	0%	4%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	129	99	0	24	41	202	62	915	0	115	702	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		8			4		1	6			2	
Permitted Phases	8			4		4	6			2		
Detector Phase	8	8		4	4	4	1	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	20.0		20.0	20.0	
Minimum Split (s)	11.4	11.4		24.4	24.4	24.4	10.9	26.2		26.2	26.2	
Total Split (s)	45.0	45.0		45.0	45.0	45.0	13.0	82.0		82.0	82.0	
Total Split (%)	32.1%	32.1%		32.1%	32.1%	32.1%	9.3%	58.6%		58.6%	58.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.4	3.5		3.5	3.5	
All-Red Time (s)	2.9	2.9		2.9	2.9	2.9	2.5	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.4	6.4		6.4	6.4	6.4	5.9	6.2		6.2	6.2	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		C-Max	C-Max	
v/c Ratio	0.72	0.37		0.14	0.16	0.56	0.13	0.63		0.32	0.54	
Control Delay	78.5	35.1		52.4	52.3	17.7	5.0	10.1		13.3	13.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	78.5	35.1		52.4	52.3	17.7	5.0	10.1		13.3	13.5	
Queue Length 50th (ft)	114	48		20	34	27	11	315		39	295	
Queue Length 95th (ft)	178	100		46	66	101	28	547		95	488	
Internal Link Dist (ft)		338			417			232			95	
Turn Bay Length (ft)	250			400			100			230		
Base Capacity (vph)	371	506		350	523	567	488	1457		355	1303	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.35	0.20		0.07	0.08	0.36	0.13	0.63		0.32	0.54	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 22 (16%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 26: Alt US 19 & Live Oak/Dodacense Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	42	49	22	38	186	57	828	14	106	577	69
Future Volume (veh/h)	119	42	49	22	38	186	57	828	14	106	577	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1870	1900	1900	1900	1870	1885	1900	1841	1885	1900
Adj Flow Rate, veh/h	129	46	53	24	41	202	62	900	15	115	627	75
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, %	3	0	2	0	0	0	2	1	0	4	1	0
Cap, veh/h	202	122	141	184	288	244	474	1402	23	369	1129	135
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.03	0.76	0.76	0.68	0.68	0.68
Sat Flow, veh/h	1128	805	928	1317	1900	1610	1781	1849	31	601	1652	198
Grp Volume(v), veh/h	129	0	99	24	41	202	62	0	915	115	0	702
Grp Sat Flow(s),veh/h/ln	1128	0	1733	1317	1900	1610	1781	0	1880	601	0	1850
Q Serve(g_s), s	15.7	0.0	7.2	2.3	2.6	17.0	1.4	0.0	32.1	15.6	0.0	27.1
Cycle Q Clear(g_c), s	18.3	0.0	7.2	9.5	2.6	17.0	1.4	0.0	32.1	37.3	0.0	27.1
Prop In Lane	1.00		0.54	1.00		1.00	1.00		0.02	1.00		0.11
Lane Grp Cap(c), veh/h	202	0	263	184	288	244	474	0	1425	369	0	1264
V/C Ratio(X)	0.64	0.00	0.38	0.13	0.14	0.83	0.13	0.00	0.64	0.31	0.00	0.56
Avail Cap(c_a), veh/h	341	0	478	347	524	444	507	0	1425	369	0	1264
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.4	0.0	53.4	57.7	51.5	57.6	8.6	0.0	8.0	19.2	0.0	11.3
Incr Delay (d2), s/veh	3.4	0.0	0.9	0.3	0.2	7.0	0.1	0.0	2.2	2.2	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	3.2	0.8	1.3	7.4	0.5	0.0	12.5	2.4	0.0	11.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.8	0.0	54.3	58.0	51.7	64.5	8.7	0.0	10.2	21.4	0.0	13.1
LnGrp LOS	E	A	D	E	D	E	A	A	B	C	A	B
Approach Vol, veh/h		228			267			977			817	
Approach Delay, s/veh		59.1			62.0			10.1			14.2	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.5	101.9		27.7		112.3		27.7				
Change Period (Y+Rc), s	5.9	* 6.2		6.4		* 6.2		6.4				
Max Green Setting (Gmax), s	7.1	* 76		38.6		* 76		38.6				
Max Q Clear Time (g_c+I1), s	3.4	39.3		19.0		34.1		20.3				
Green Ext Time (p_c), s	0.0	7.5		0.9		9.3		1.0				

Intersection Summary		
HCM 6th Ctrl Delay	22.5	
HCM 6th LOS	C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	70	3614	108	0	2295
Future Volume (vph)	0	70	3614	108	0	2295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		300	0	
Storage Lanes	0	1		1	0	
Taper Length (ft)	25				25	
Link Speed (mph)	30		55			55
Link Distance (ft)	1300		981			3610
Travel Time (s)	29.5		12.2			44.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	76	3928	117	0	2495
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	70	3614	108	0	2295
Future Vol, veh/h	0	70	3614	108	0	2295
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	-	300	-	-
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	76	3928	117	0	2495

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1964	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	*~ 70	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		1	-	-		-
Mov Cap-1 Maneuver	-	*~ 70	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	235.8	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	70	-
HCM Lane V/C Ratio	-	-	1.087	-
HCM Control Delay (s)	-	-	235.8	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	5.7	-

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

Arterial Level of Service: NB #US 19

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Tarpon Ave	I	55	105.2	122.8	228.0	1.61	25.4	D
Spruce St	I	55	34.7	14.7	49.4	0.44	32.4	C
Beckett Way	I	55	64.0	13.2	77.2	0.98	45.5	A
Total	I		203.9	150.7	354.6	3.03	30.7	C

Arterial Level of Service: SB #US 19

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Spruce St	I	55	64.0	43.4	107.4	0.98	32.7	C
Tarpon Ave	I	55	34.7	34.5	69.2	0.44	23.1	D
Klosterman Rd	I	55	105.2	51.3	156.5	1.61	37.0	B
Total	I		203.9	129.2	333.1	3.03	32.7	C