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urbanxroads.com

May 14, 2018

Mr. Tony Spinrad
Irwindale Partners II
1618 Yeager Avenue
La Verne, CA 91750

SUBJECT: THE PARK @ LIVE OAK ACCESS EVALUATION

Dear Mr. Tony Spinrad:

The following Access Evaluation has been prepared for the proposed The Park @ Live Oak development (referred to as "Project") located west of the I-605 Freeway between Arrow Highway and Live Oak Avenue in the City of Irwindale (City). The Park @ Live Oak Traffic Impact Analysis (April 2018, Urban Crossroads, Inc., referred to as "2018 Traffic Study") evaluated the land use plan shown on Exhibit 1. Although a specific site plan was not evaluated for the purposes of the 2018 Traffic Study, the commercial retail uses proposed for Planning Area (PA) 1A was assumed to be located in the northeast corner of the site, while PA 3A commercial retail uses were assumed to be located in the northwest corner of the site. The total square footage of commercial retail uses within PA 1A and PA 3A is 51,600 square feet. The purpose of this access evaluation is to determine the peak hour intersection operations analysis and resulting intersection improvement requirements if all 51,600 square feet of the commercial retail uses were to be located within PA 1A, PA 2A, or PA 3A. Exhibit 2 shows the study area intersections.

SUMMARY OF FINDINGS

As shown on Exhibit 3, the development of all 51,600 square feet of commercial retail uses within PA 1A would result in the need for a second westbound left turn lane (with 250-feet of storage) at Avenida Barbosa/Private Drive A & Arrow Highway (#15) starting in Opening Year Cumulative (2020) traffic conditions. Similarly, the same improvement at Avenida Barbosa/Private Drive A (#15) (with 200-feet of storage) is required if the 51,600 square feet of commercial uses were to be located within PA 2A (also starting in Opening Year Cumulative (2020) traffic conditions), in conjunction with the installation of a traffic signal at Private Drive B & Arrow Highway (#11) starting in E+P traffic conditions (see Exhibit 4). Lastly, if 51,600 square feet of the commercial retail uses were to be located within PA 3A, the only additional improvement would be the installation of a traffic signal at Private Drive B & Arrow Highway (#11) starting in E+P traffic conditions (see Exhibit 5). All other site adjacent intersection improvements are consistent with the recommendations in the 2018 Traffic Study. Queuing analysis worksheets for the 3 alternatives are provided in Attachment A.

PROJECT TRAFFIC

The Project traffic includes the warehouse/industrial and PA 4 commercial trips assumed from the 2018 Traffic Study in conjunction with the anticipated Project trips for each of the alternatives where the commercial retail uses are to be located within either PA 1A, PA 2A, or PA 3A. It should be noted that the Project only volumes shown subsequently also reflect the pass-by trips that have been accounted for at each of the applicable Project driveways.

PLANNING AREA 1A

For the alternative where the 51,600 square feet of commercial retail uses are assumed to be located within Planning Area 1A, the trips are assumed to be distributed via Private Drive A, Driveway 8, and Driveway 9 on Arrow Highway. Exhibit 3 shows the Project only traffic volumes for the affected intersections. Exhibit 6 also shows the peak hour turning movement volumes for E+P, Opening Year Cumulative (2020) With Project, and Horizon Year (2040) With Project traffic conditions, respectively.

Tables 1 through 3 show the resulting LOS for E+P, Opening Year Cumulative (2020) With Project, and Horizon Year (2040) With Project traffic conditions, respectively. The LOS results from the 2018 Traffic Study are also shown on these tables for comparison purposes. The analysis worksheets for Alternative 1A are in Attachment B.

As shown on Table 4, the improvements for PA 1A are consistent with the 2018 Traffic Study with the exception of the intersection of Avenida Barbosa/Private Drive A & Arrow Highway (#15). The improvement recommendation is to construct a 2nd westbound left turn lane turn lane starting in Opening Year Cumulative (2020) traffic conditions in conjunction with the other improvements identified in the 2018 Traffic Study. The analysis worksheets, with improvements, for Alternative 1A are in Attachment C.

PLANNING AREA 2A

For the alternative where the 51,600 square feet of commercial retail uses are assumed to be located within Planning Area 2A, the trips are assumed to be distributed via Private Drive B, Driveway 6, and Private Drive A on Arrow Highway. Exhibit 4 shows the Project only traffic volumes for the affected intersections. Exhibit 7 also shows the peak hour turning movement volumes for E+P, Opening Year Cumulative (2020) With Project, and Horizon Year (2040) With Project traffic conditions, respectively.

Tables 5 through 7 show the resulting LOS for E+P, Opening Year Cumulative (2020) With Project, and Horizon Year (2040) With Project traffic conditions, respectively. The LOS results from the 2018 Traffic Study are also shown on these tables for comparison purposes. The analysis worksheets for Alternative 2A are in Attachment D.

As shown on Table 8, the improvements for PA-2A are consistent with the 2018 Traffic Study with the exception of the intersections of Private Drive B & Arrow Highway (#11) and Avenida Barbosa/Private Drive A & Arrow Highway (#15). The improvement recommendation at Avenida Barbosa/Private Drive A & Arrow Highway is to construct a 2nd westbound left turn lane starting in Opening Year Cumulative (2020) traffic conditions in conjunction with the other improvements identified in the 2018 Traffic Study. The improvement recommendation at Private Drive B & Arrow Highway is to install a traffic signal starting in E+P traffic conditions. The analysis worksheets, with improvements, for Alternative 2A are in Attachment E.

PLANNING AREA 3A

For the alternative where the 51,600 square feet of commercial retail uses are assumed to be located within Planning Area 3A, the trips are assumed to be distributed via Driveway 2 on Live Oak Avenue, Driveway 1, Driveway 3, and Private Drive B on Arrow Highway. Exhibit 8 shows the Project only traffic volumes for the affected intersections. Exhibit 5 also shows the peak hour turning movement volumes for E+P, Opening Year Cumulative (2020) With Project, and Horizon Year (2040) With Project traffic conditions, respectively.

Tables 9 through 11 show the resulting LOS for E+P, Opening Year Cumulative (2020) With Project, and Horizon Year (2040) With Project traffic conditions, respectively. The LOS results from the 2018 Traffic Study are also shown on these tables for comparison purposes. The analysis worksheets for Alternative 3A are in Attachment F.

As shown on Table 12, the improvements are consistent with the 2018 Traffic Study with the exception of the intersection of Private Drive B & Arrow Highway (#11). The improvement recommendation is to install a traffic signal at this location starting in E+P traffic conditions in conjunction with the other improvements identified in the 2018 Traffic Study. The analysis worksheets, with improvements, for Alternative 3A are in Attachment G.

If you have any questions, please contact me directly at (949) 336-5982.

Respectfully submitted,

URBAN CROSSROADS, INC.

Charlene So

Charlene So, PE

Senior Associate

EXHIBIT 1: PRELIMINARY LAND USE

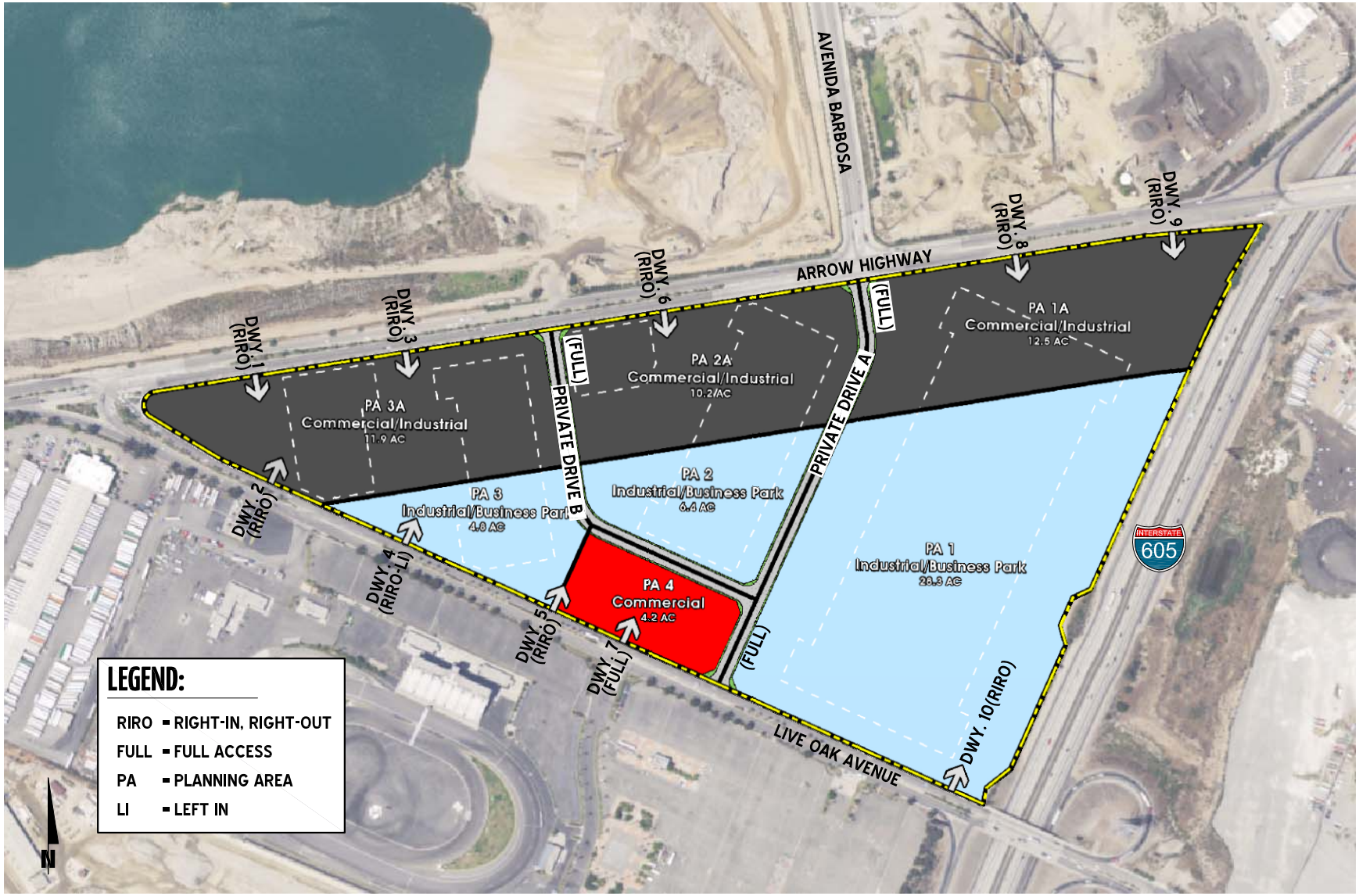
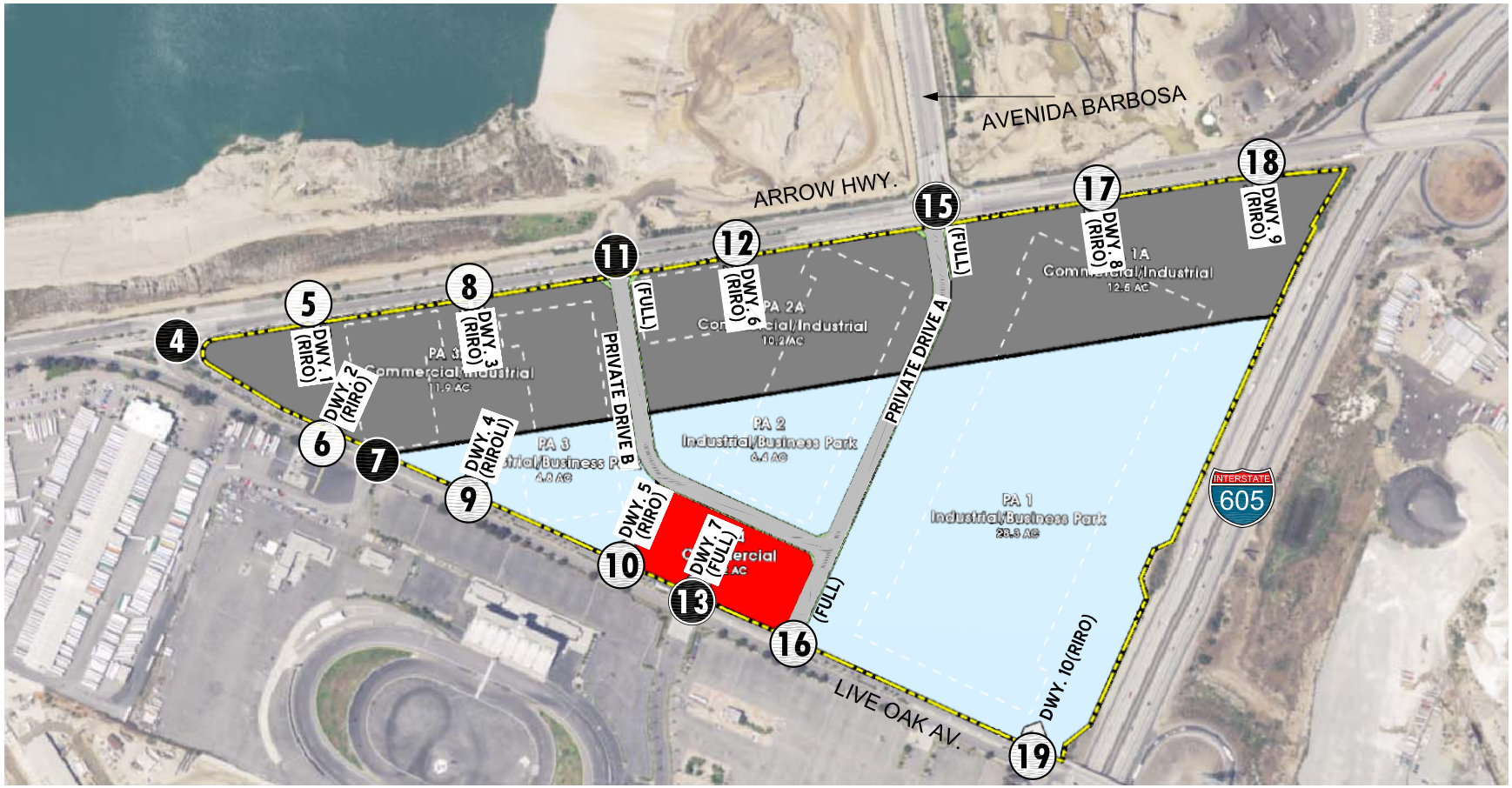


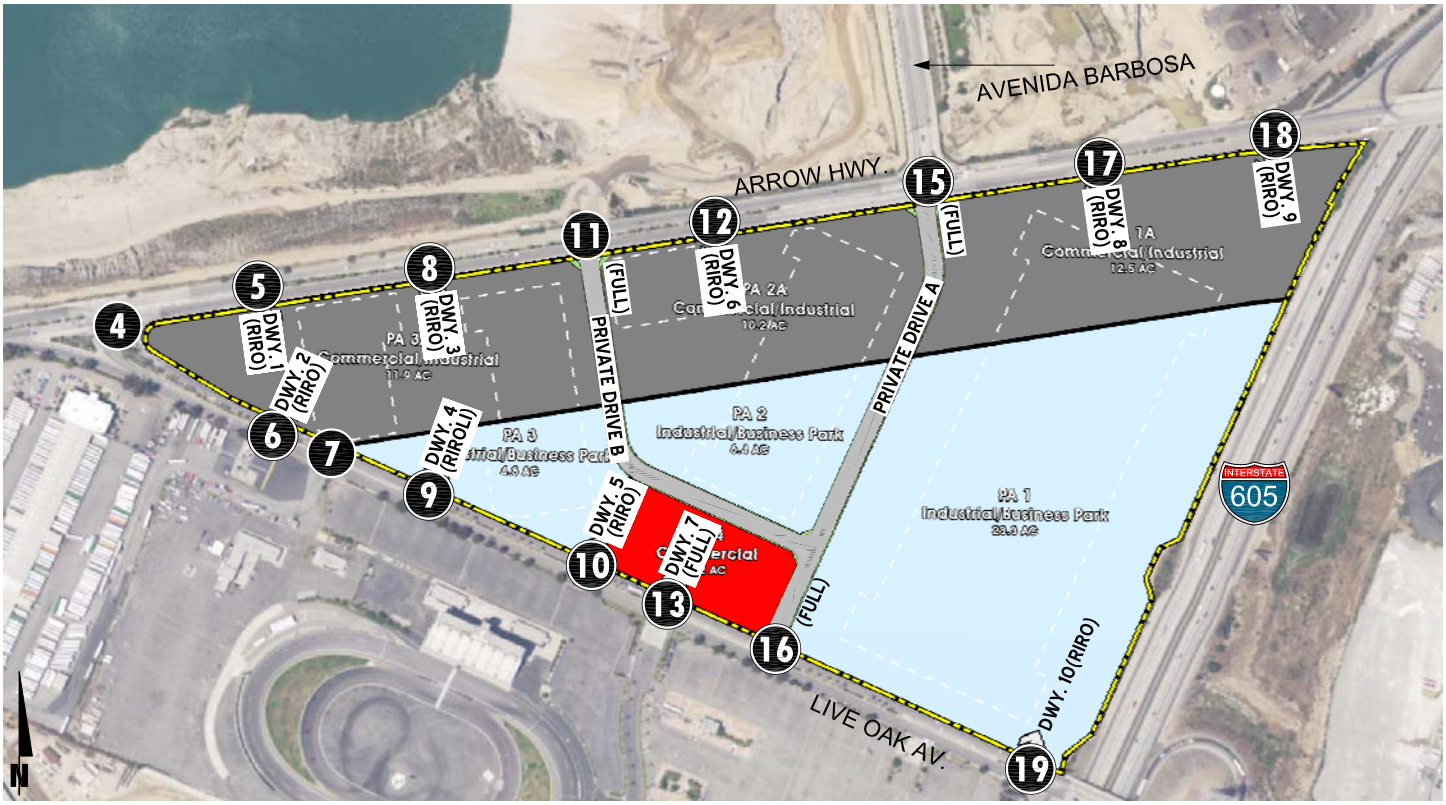
EXHIBIT 2: LOCATION MAP



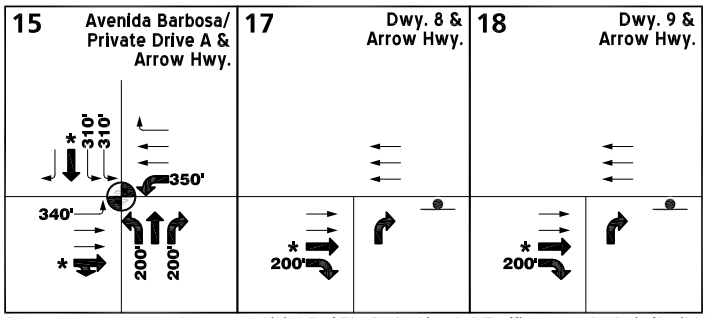
LEGEND:

- ⓪ = EXISTING INTERSECTION ANALYSIS LOCATION
- ⓪ = FUTURE INTERSECTION ANALYSIS LOCATION

EXHIBIT 3: RECOMMENDED IMPROVEMENTS FOR PA-1A

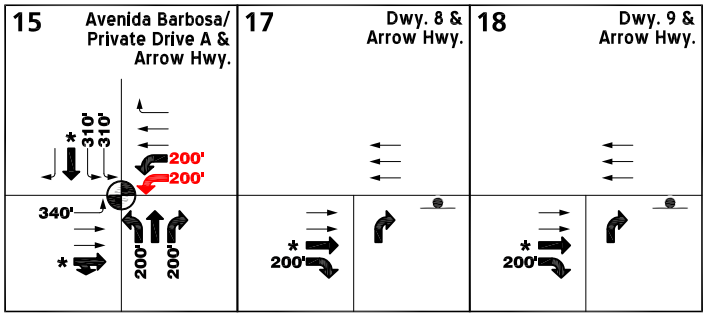


RECOMMENDED IMPROVEMENTS FROM TRAFFIC STUDY



Source: Improvements shown on exhibit 1-5 of The Park @Live Oak Traffic Impact Analysis (April 2018)

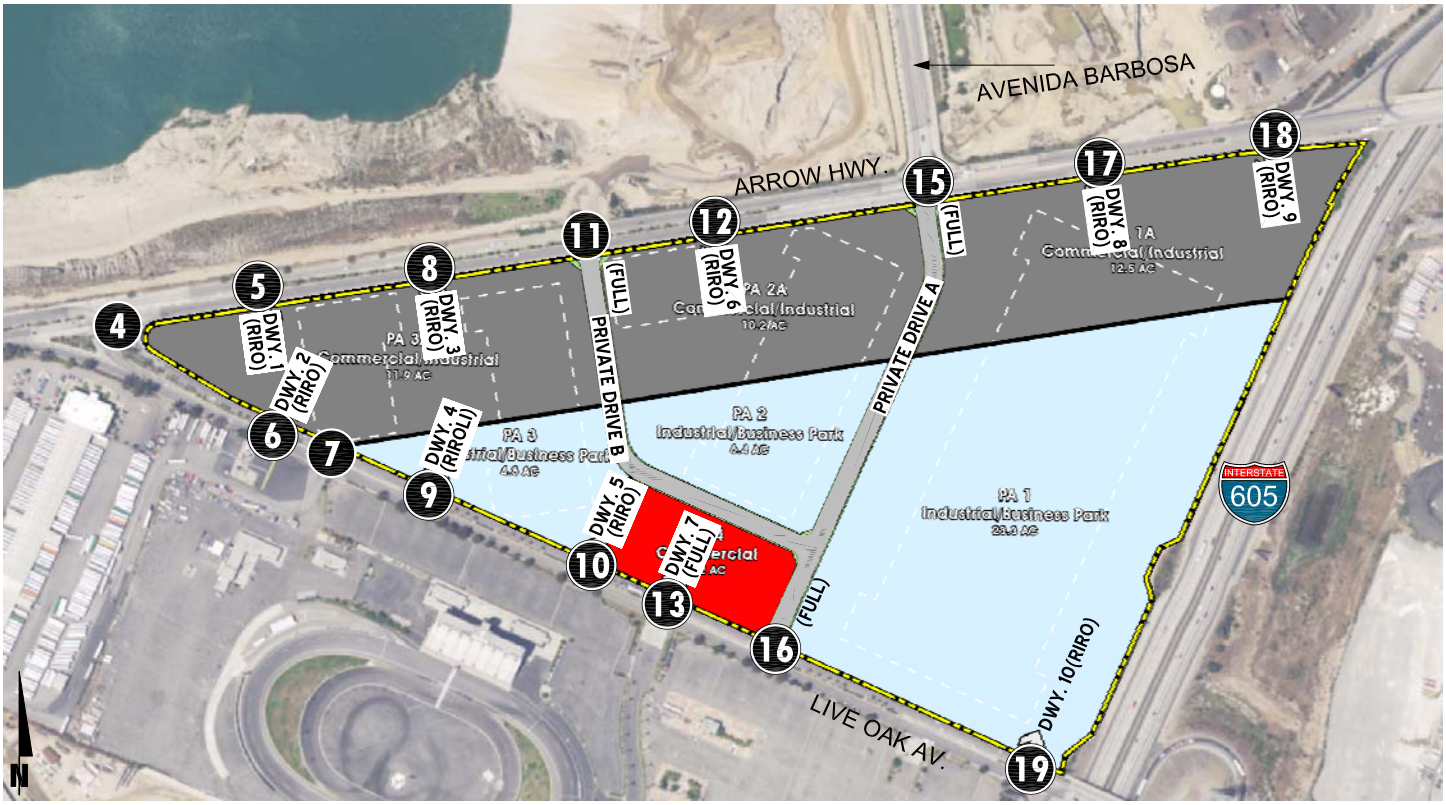
CHANGES TO RECOMMENDED IMPROVEMENTS WITH INTENSIFICATION OF COMMERCIAL IN PA-1A



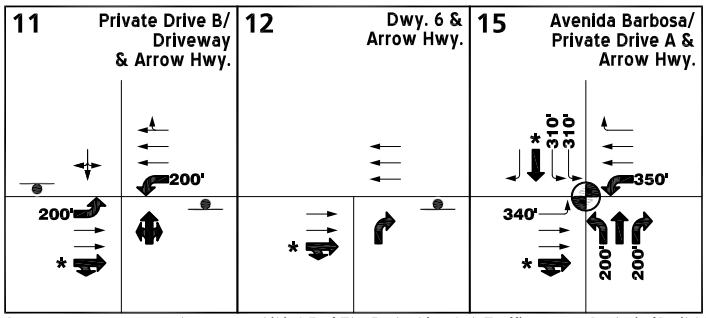
LEGEND:

- = TRAFFIC SIGNAL
- = EXISTING LANE
- = LANE IMPROVEMENT
- = PA-1A LANE IMPROVEMENT
- 150' = MINIMUM TURN POCKET LENGTH
- 150' = PA-1A MINIMUM TURN POCKET LENGTH
- * = RESTRIPE ONLY

EXHIBIT 4: RECOMMENDED IMPROVEMENTS FOR PA-2A

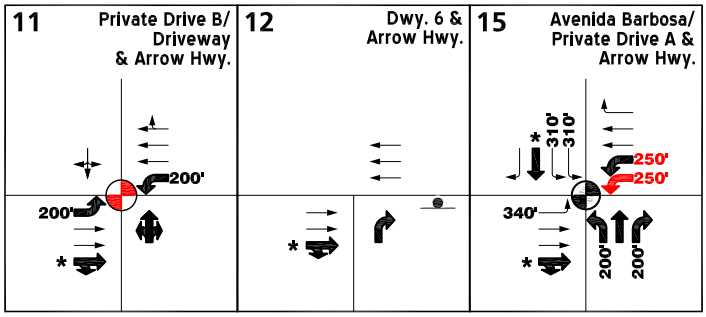


RECOMMENDED IMPROVEMENTS FROM TRAFFIC STUDY



Source: Improvements shown on exhibit 1-5 of The Park @Live Oak Traffic Impact Analysis (April 2018)

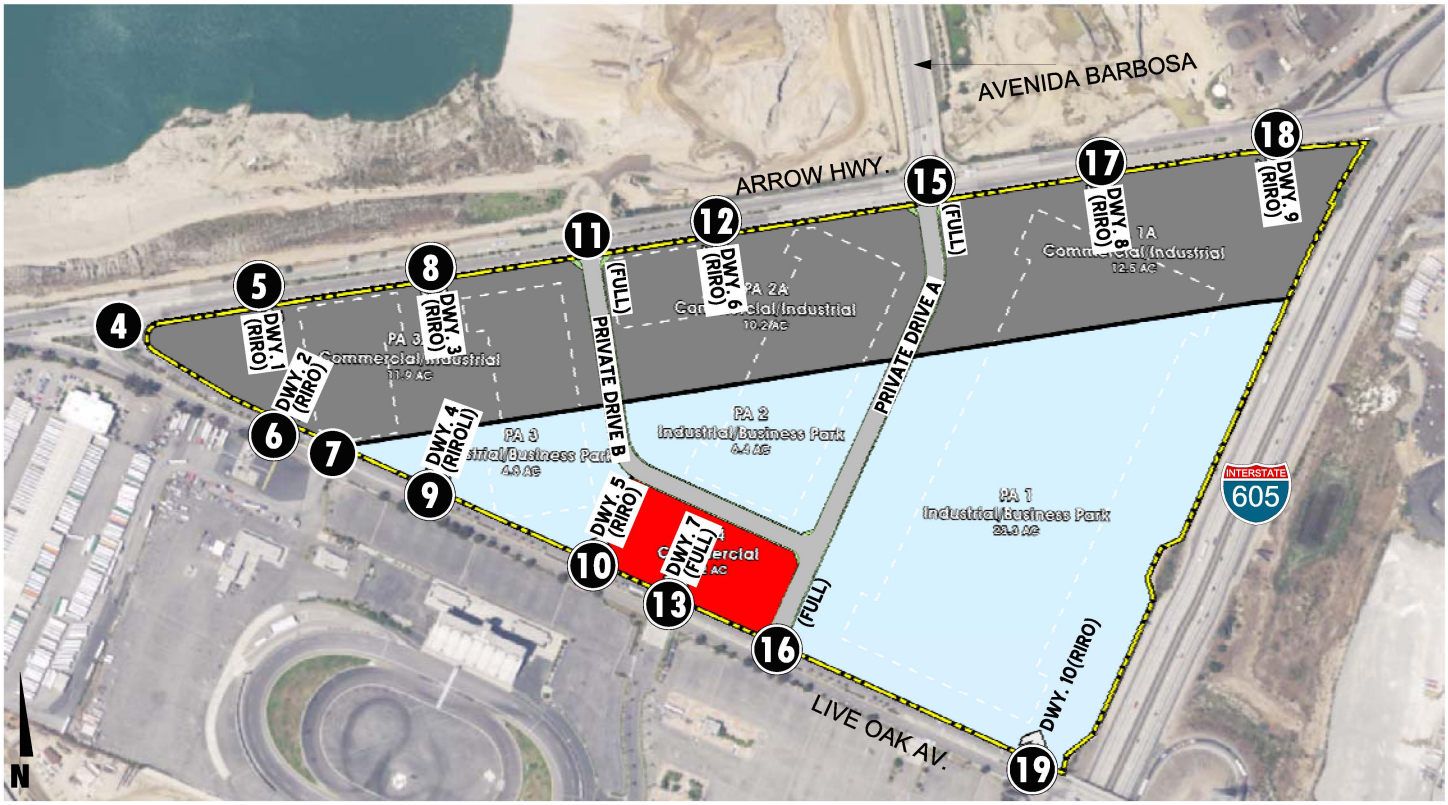
CHANGES TO RECOMMENDED IMPROVEMENTS WITH INTENSIFICATION OF COMMERCIAL IN PA-2A



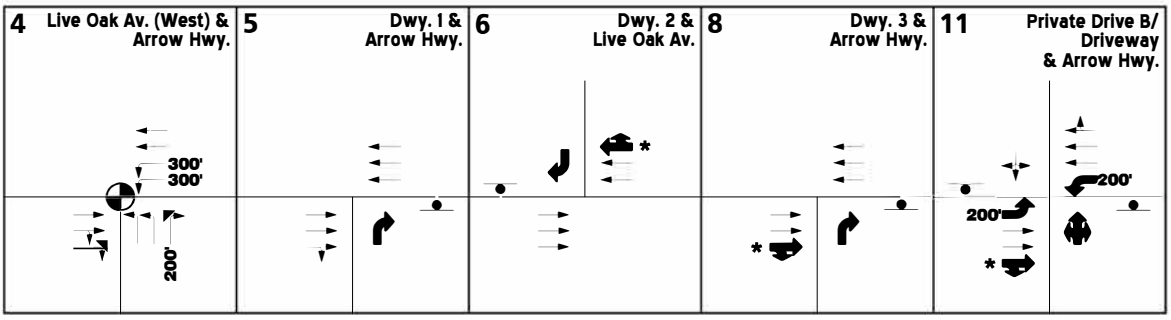
LEGEND:

- = TRAFFIC SIGNAL
- = NEW TRAFFIC SIGNAL
- = EXISTING LANE
- = LANE IMPROVEMENT
- = PA-2A LANE IMPROVEMENT
- 150' = MINIMUM TURN POCKET LENGTH
- 150' = PA-2A MINIMUM TURN POCKET LENGTH
- * = RESTRIPE ONLY

EXHIBIT 5: RECOMMENDED IMPROVEMENTS FOR PA-3A

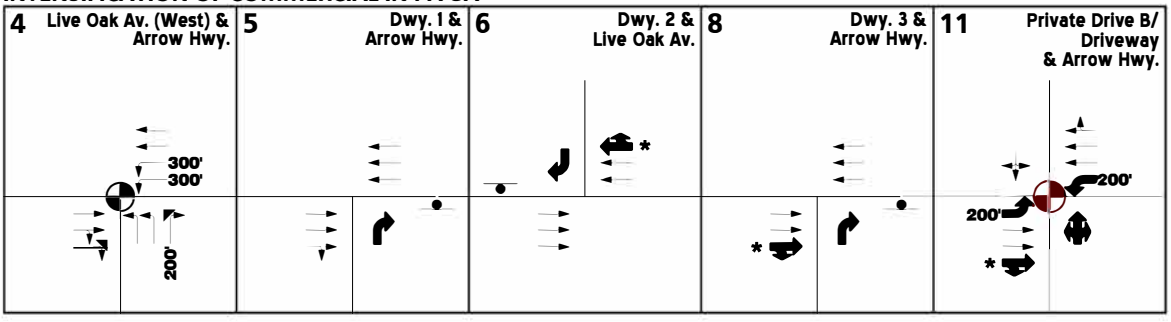


RECOMMENDED IMPROVEMENTS FROM TRAFFIC STUDY



Source: Improvements shown on exhibit 1-5 of The Park @ Live Oak Traffic Impact Analysis (April 2018)

CHANGES TO RECOMMENDED IMPROVEMENTS WITH INTENSIFICATION OF COMMERCIAL IN PA-3A

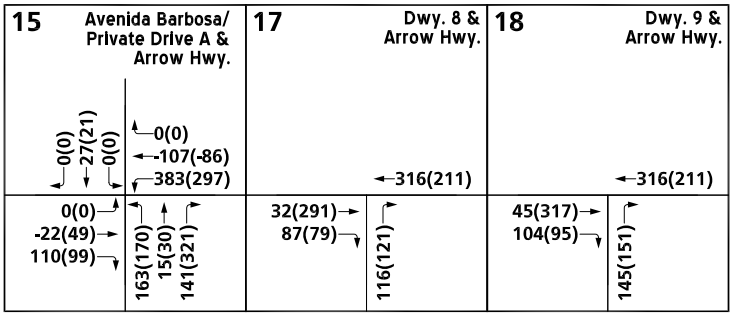


LEGEND:

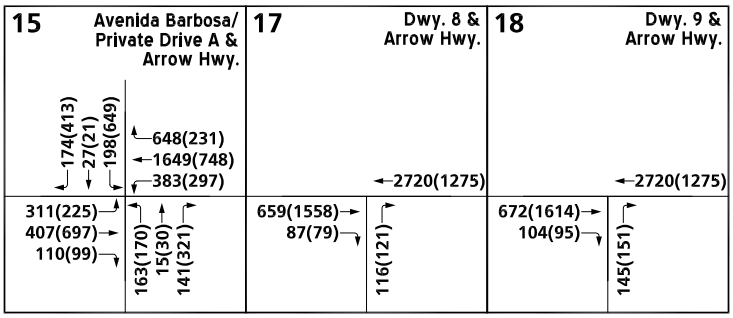
- = TRAFFIC SIGNAL
- = NEW TRAFFIC SIGNAL
- = EXISTING LANE
- = LANE IMPROVEMENT
- 150' = MINIMUM TURN POCKET LENGTH
- * = RESTRIPE ONLY

EXHIBIT 6: TRAFFIC VOLUMES FOR PA-1A (IN PCE)

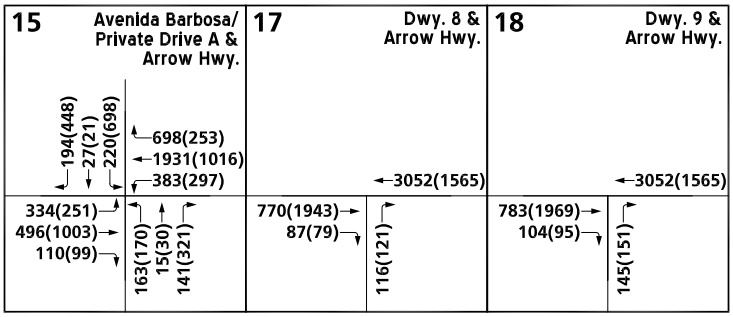
Project Only



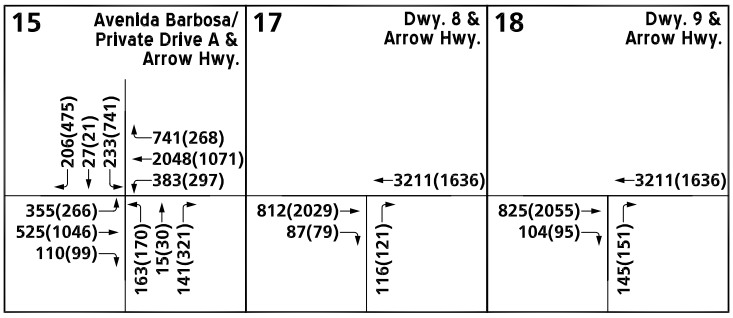
E+P



Opening Year Cumulative (2020) With Project



Horizon Year (2040) With Project

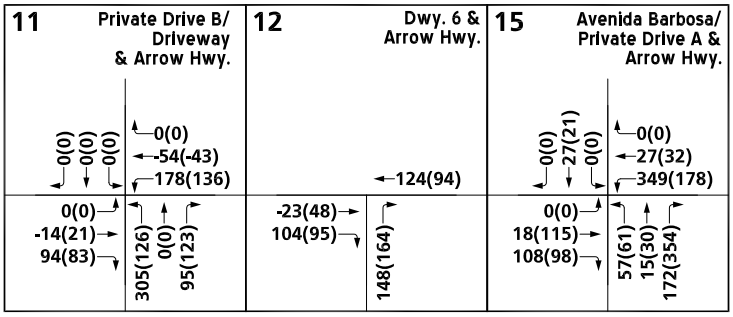


LEGEND:

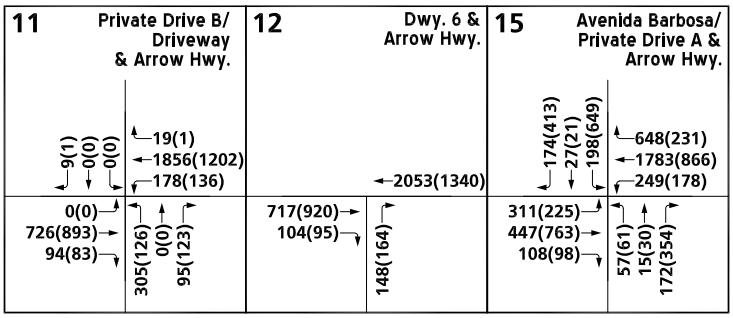
10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES

EXHIBIT 7: TRAFFIC VOLUMES FOR PA-2A (IN PCE)

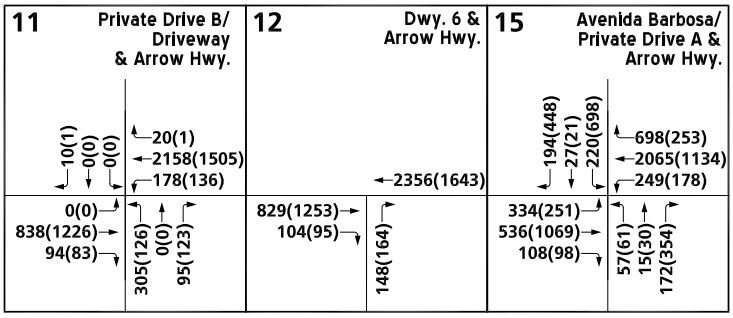
Project Only



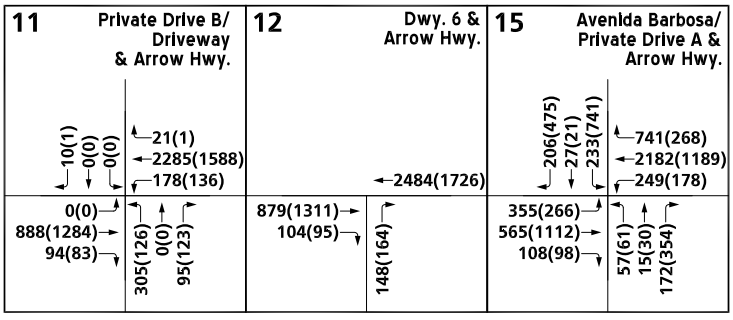
E+P



Opening Year Cumulative (2020) With Project



Horizon Year (2040) With Project

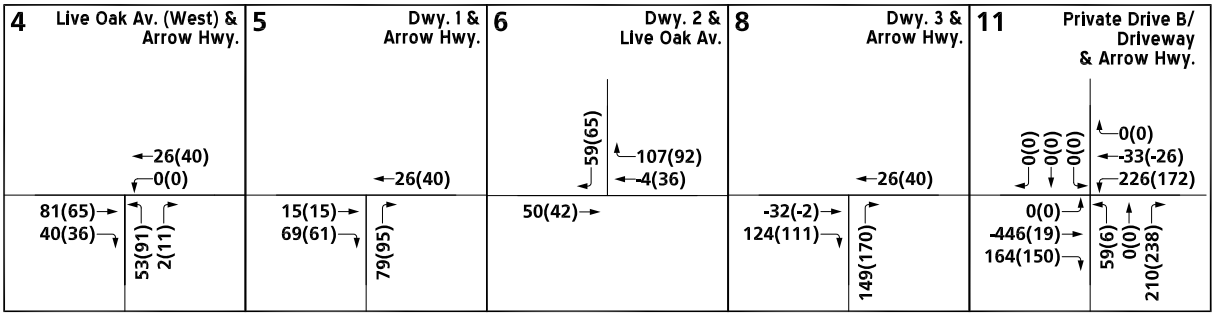


LEGEND:

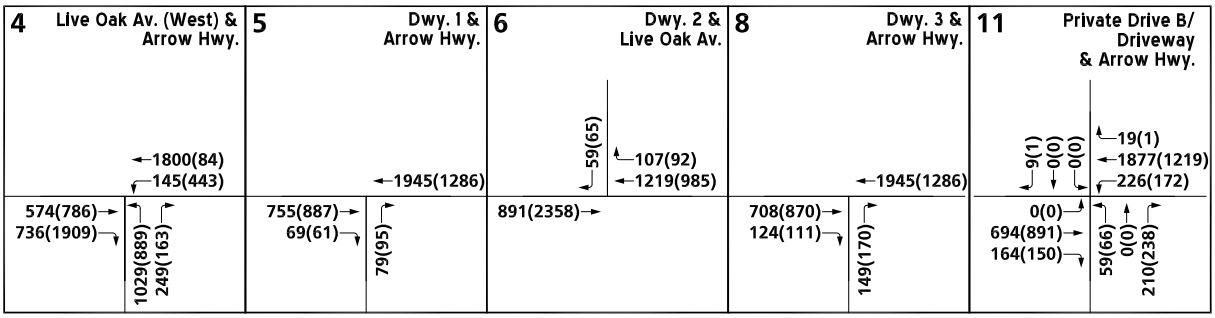
10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES

EXHIBIT 8: TRAFFIC VOLUMES FOR PA-3A (IN PCE)

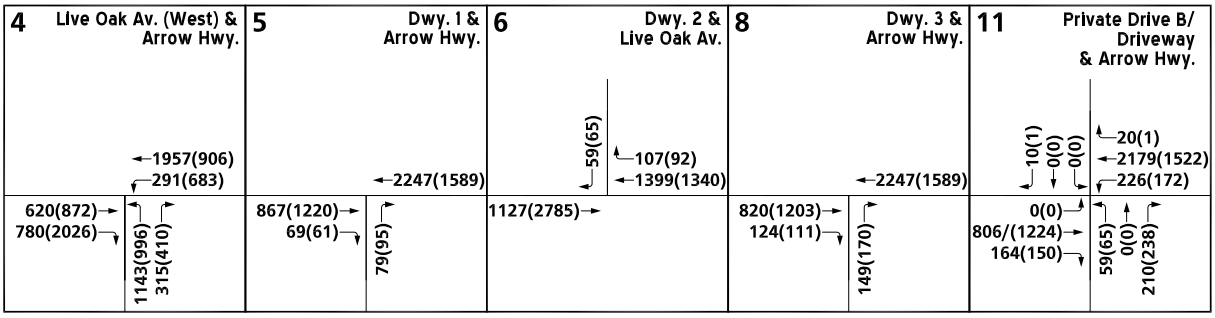
Project Only



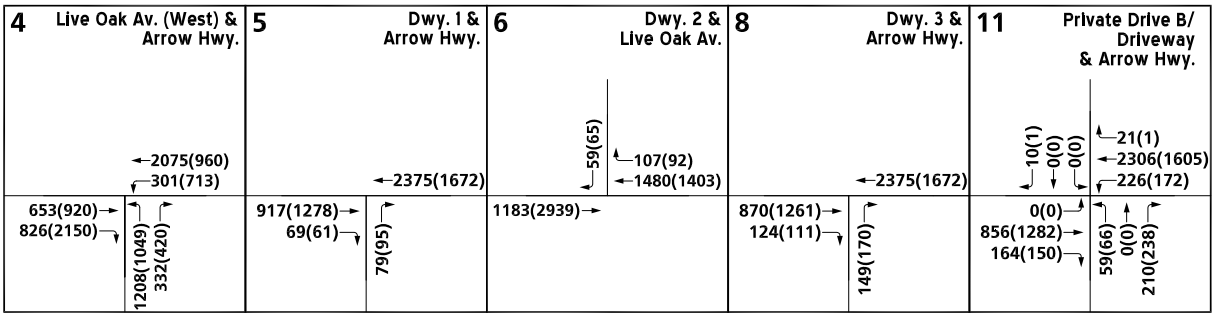
E+P



Opening Year Cumulative (2020) With Project



Horizon Year (2040) With Project



LEGEND:

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES

Table 1

Intersection Analysis for E+P PA-1A Conditions

#	Intersection	Traffic Control[3]	Existing (2017)								E+P								E+P Alternative PA-1A							
			HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
15	Avenida Barbosa/Private Drive A & Arrow Hwy.	TS	32.3	18.1	C	B	**1.02**	0.69	**F**	B	**57.0**	50.4	**E**	D	**1.12**	0.89	**F**	D	**58.2**	**73.0**	**E**	**E**	**0.97**	0.88	**E**	D
17	Dwy. 8 & Arrow Hwy.	**CSS**	Future Intersection								10.7	17.6	B	C	--[4]	--[4]	--[4]	--[4]	10.0	14.5	B	B	--[4]	--[4]	--[4]	--[4]
18	Dwy. 9 & Arrow Hwy.	**CSS**	Future Intersection								10.7	19.1	B	C	--[4]	--[4]	--[4]	--[4]	10.3	15.7	B	C	--[4]	--[4]	--[4]	--[4]

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

[3] CSS = Cross-street Stop; TS = Traffic Signal

[4] ICU not reported for intersections without a signal.

Table 2

Intersection Analysis for Opening Year Cumulative (2020) PA-1A Conditions

#	Intersection	Traffic Control[3]	2020 Without Project								2020 With Project								2020 With Project Alternative PA-1A							
			HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
15	Avenida Barbosa/Private Drive A & Arrow Hwy.	TS	**62.5**	23.7	**E**	C	**1.07**	0.86	**F**	D	**93.6**	**77.9**	**F**	**E**	**1.16**	**1.05**	**F**	**F**	**66.1**	**84.7**	**E**	**F**	**0.97**	**0.93**	**E**	**E**
17	Dwy. 8 & Arrow Hwy.	**CSS**	Future Intersection								11.2	23.1	B	C	--[4]	--[4]	--[4]	--[4]	10.4	17.6	B	C	--[4]	--[4]	--[4]	--[4]
18	Dwy. 9 & Arrow Hwy.	**CSS**	Future Intersection								11.2	26.3	B	D	--[4]	--[4]	--[4]	--[4]	10.7	19.5	B	C	--[4]	--[4]	--[4]	--[4]

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

[3] TS = Traffic Signal; CSS = Cross-street Stop

[4] ICU not reported for intersections without a signal.

Table 3

Intersection Analysis for Horizon Year (2040) PA-1A Conditions

#	Intersection	Traffic Control[3]	2040 Without Project								2040 With Project								2040 With Project Alternative PA-1A							
			HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
15	Avenida Barbosa/Private Drive A & Arrow Hwy.	TS	**82.2**	30.0	**F**	C	**1.12**	**0.93**	**F**	**E**	**115.5**	**88.5**	**F**	**F**	**1.22**	**1.12**	**F**	**F**	50.3	**83.3**	D	**F**	**1.02**	**0.96**	**F**	**E**
17	Dwy. 8 & Arrow Hwy.	**CSS**	Future Intersection								11.4	24.9	B	C	--[4]	--[4]	--[4]	--[4]	10.5	18.5	B	C	--[4]	--[4]	--[4]	--[4]
18	Dwy. 9 & Arrow Hwy.	**CSS**	Future Intersection								11.4	29.0	B	D	--[4]	--[4]	--[4]	--[4]	10.9	20.7	B	C	--[4]	--[4]	--[4]	--[4]

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

[3] TS = Traffic Signal; CSS = Cross-street Stop

[4] ICU not reported for intersections without a signal.

Table 4

Intersection Analysis Summary for PA-1A Conditions

#	Intersection	Traffic Control[4]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service		ICU[3] (v/c)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound										
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
15	Avenida Barbosa/Private Drive A & Arrow Hwy.																					
	E+P Without Improvements[6]	TS	0	0	0	2	0	1	1	2	0	0	2	1	**57.0**	50.4	**E**	D	**1.116**	0.887	**F**	D
	E+P With Improvements[6]	TS	**1**	**1**	**1**	2	**1**	1	1	**3**	0	**1**	**3**	**1**	34.3	38.8	C	D	0.897	0.797	D	C
	E+P PA-1A With Improvements	TS	**1**	**1**	**1**	2	**1**	1	1	**3**	0	**1**	**3**	**1**	52.0	46.6	D	D	**0.971**	0.880	**E**	D
	OYC (2020) Without Improvements[6]	TS	0	0	0	2	0	1	1	2	0	0	2	1	**93.6**	**77.9**	**F**	**E**	**1.160**	**1.048**	**F**	**F**
	OYC (2020) With Improvements[6]	TS	**1**	**1**	**1**	2	**1**	1	1	**3**	0	**1**	**3**	**1**	41.1	52.0	D	D	0.893	0.879	D	D
	OYC (2020) PA-1A With Improvements	TS	**1**	**1**	**1**	2	**1**	1	1	**3**	0	**2**	**3**	**1**	54.4	53.2	D	D	**0.968**	0.887	**E**	D
	HY (2040) Without Improvements[6]	TS	0	0	0	2	0	1	1	2	0	0	2	1	**115.5**	**88.5**	**F**	**F**	**1.217**	**1.116**	**F**	**F**
	HY (2040) With Improvements[6]	TS	**1**	**1**	**1**	2	**1**	1	**2**	**3**	0	**1**	**3**	**1>**	30.7	46.7	C	D	0.818	0.875	D	D
	HY (2040) PA-1A With Improvements	TS	**1**	**1**	**1**	2	**1**	1	**2**	**3**	0	**2**	**3**	**1>**	48.6	39.4	D	D	0.868	0.864	D	D
17	Dwy. 8 & Arrow Hwy.																					
	E+P Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	1	0	3	0	10.7	17.6	B	C	--[5]	--[5]	--[5]	--[5]
	E+P With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	E+P PA-1A With Improvements	CSS	No Additional Improvements Necessary												10.0	14.5	B	B	--[5]	--[5]	--[5]	--[5]
	OYC (2020) Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	1	0	3	0	11.2	23.1	B	C	--[5]	--[5]	--[5]	--[5]
	OYC (2020) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	OYC (2020) PA-1A With Improvements	CSS	No Additional Improvements Necessary												10.4	17.6	B	C	--[5]	--[5]	--[5]	--[5]
	HY (2040) Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	1	0	3	0	11.4	24.9	B	C	--[5]	--[5]	--[5]	--[5]
	HY (2040) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	HY (2040) PA-1A With Improvements	CSS	No Additional Improvements Necessary												10.5	18.5	B	C	--[5]	--[5]	--[5]	--[5]
18	Dwy. 9 & Arrow Hwy.																					
	E+P Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	1	0	3	0	10.7	19.1	B	C	--[5]	--[5]	--[5]	--[5]
	E+P With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	E+P PA-1A With Improvements	CSS	No Additional Improvements Necessary												10.3	15.7	B	C	--[5]	--[5]	--[5]	--[5]
	OYC (2020) Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	1	0	3	0	11.2	26.3	B	D	--[5]	--[5]	--[5]	--[5]
	OYC (2020) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	OYC (2020) PA-1A With Improvements	CSS	No Additional Improvements Necessary												10.7	19.5	B	C	--[5]	--[5]	--[5]	--[5]
	HY (2040) Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	1	0	3	0	11.4	29.0	B	D	--[5]	--[5]	--[5]	--[5]
	HY (2040) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	HY (2040) PA-1A With Improvements	CSS	No Additional Improvements Necessary												10.9	20.7	B	C	--[5]	--[5]	--[5]	--[5]

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

[4] TS = Traffic Signal; CSS = Cross-Street Stop; **TS** = Improvement

[5] ICU not reported for intersections without a signal.

[6] Results are from The Park @ Live Oak Traffic Impact Analysis

Table 5

Intersection Analysis for E+P Alternative PA-2A Conditions

#	Intersection	Traffic Control[3]	Existing (2017)								E+P								E+P Alternative PA-2A							
			HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
11	Driveway/Private Drive B & Arrow Hwy.	CSS	0.0	15.0	A	C	--[4]	--[4]	--[4]	--[4]	24.4	16.2	C	C	--[4]	--[4]	--[4]	--[4]	**>200.0**	**>200.0**	**F**	**F**	--[4]	--[4]	--[4]	--[4]
12	Dwy. 6 & Arrow Hwy.	**CSS**	Future Intersection								12.3	13.8	B	B	--[4]	--[4]	--[4]	--[4]	16.1	20.2	C	C	--[4]	--[4]	--[4]	--[4]
15	Avenida Barbosa/Private Drive A & Arrow Hw	TS	32.3	18.1	C	B	**1.02**	0.69	**F**	B	**57.0**	50.4	**E**	D	**1.12**	0.89	**F**	D	53.4	47.7	D	D	**0.93**	0.87	**E**	D

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

[3] CSS = Cross-street Stop; TS = Traffic Signal

[4] ICU not reported for intersections without a signal.

Table 6

Intersection Analysis for Opening Year Cumulative (2020) Alternative PA-2A Conditions

#	Intersection	Traffic Control[3]	2020 Without Project								2020 With Project								2020 With Project Alternative PA-2A							
			HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
11	Driveway/Private Drive B & Arrow Hwy.	CSS	30.5	16.9	D	C	--[4]	--[4]	--[4]	--[4]	30.7	22.0	D	C	--[4]	--[4]	--[4]	--[4]	**>200.0**	**>200.0**	**F**	**F**	--[4]	--[4]	--[4]	--[4]
12	Dwy. 6 & Arrow Hwy.	**CSS**	Future Intersection								12.9	16.6	B	C	--[4]	--[4]	--[4]	--[4]	17.8	30.3	C	C	--[4]	--[4]	--[4]	--[4]
15	Avenida Barbosa/Private Drive A & Arrow Hwy.	TS	**62.5**	23.7	**E**	C	**1.07**	0.86	**F**	D	**93.6**	**77.9**	**F**	**E**	**1.16**	**1.05**	**F**	**F**	**60.7**	**59.1**	**E**	**E**	**0.92**	**0.93**	**E**	**E**

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

[3] TS = Traffic Signal; CSS = Cross-street Stop

[4] ICU not reported for intersections without a signal.

[5] ICU not reported for intersections under Caltrans' jurisdiction.

Table 7

Intersection Analysis for Horizon Year (2040) Alternative PA-2A Conditions

#	Intersection	Traffic Control[3]	2040 Without Project								2040 With Project								2040 With Project Alternative PA-2A							
			HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
11	Driveway/Private Drive B & Arrow Hwy.	CSS	33.8	18.5	D	C	--[4]	--[4]	--[4]	--[4]	33.8	23.3	D	C	--[4]	--[4]	--[4]	--[4]	**>200.0**	**>200.0**	**F**	**F**	--[4]	--[4]	--[4]	--[4]
12	Dwy. 6 & Arrow Hwy.	**CSS**	Future Intersection								13.3	17.2	B	C	--[4]	--[4]	--[4]	--[4]	18.6	32.9	C	D	--[4]	--[4]	--[4]	--[4]
15	Avenida Barbosa/Private Drive A & Arrow Hwy.	TS	**82.2**	30.0	**F**	C	**1.12**	**0.93**	**F**	**E**	**115.5**	**88.5**	**F**	**F**	**1.22**	**1.12**	**F**	**F**	48.3	**56.5**	D	**E**	**0.97**	**0.97**	**E**	**E**

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

[3] TS = Traffic Signal; CSS = Cross-street Stop

[4] ICU not reported for intersections without a signal.

[5] ICU not reported for intersections under Caltrans' jurisdiction.

Table 8

Intersection Analysis Summary for PA-2A Conditions

#	Intersection	Traffic Control[4]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service		ICU[3] (v/c)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound										
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
11	Driveway/Private Drive B & Arrow Hwy.																					
	E+P Without Improvements[6]	CSS	0	**1**	0	0	1	0	1	**3**	0	**1**	**3**	**0**	24.4	16.2	C	C	--[5]	--[5]	--[5]	--[5]
	E+P With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	E+P PA-2A With Improvements	**TS**	0	**1**	0	0	1	0	1	**3**	0	**1**	**3**	**0**	19.7	10.9	B	B	0.793	0.544	C	A
	OYC (2020) Without Improvements[6]	CSS	0	**1**	0	0	1	0	1	**3**	0	**1**	**3**	**0**	30.7	22.0	D	C	--[5]	--[5]	--[5]	--[5]
	OYC (2020) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	OYC (2020) PA-2A With Improvements	**TS**	0	**1**	0	0	1	0	1	**3**	0	**1**	**3**	**0**	23.1	11.6	C	B	0.804	0.613	D	B
	HY (2040) Without Improvements[6]	CSS	0	**1**	0	0	1	0	1	**3**	0	**1**	**3**	**0**	33.8	23.3	D	C	--[5]	--[5]	--[5]	--[5]
	HY (2040) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	HY (2040) PA-2A With Improvements	**TS**	0	**1**	0	0	1	0	1	**3**	0	**1**	**3**	**0**	24.2	11.7	C	B	0.830	0.625	D	B
12	Dwy. 6 & Arrow Hwy.																					
	E+P Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	1	0	3	0	12.3	13.8	B	B	--[5]	--[5]	--[5]	--[5]
	E+P With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	E+P PA-2A With Improvements	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	OYC (2020) Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	1	0	3	0	12.9	16.6	B	C	--[5]	--[5]	--[5]	--[5]
	OYC (2020) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	OYC (2020) PA-2A With Improvements	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	HY (2040) Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	1	0	3	0	13.3	17.2	B	C	--[5]	--[5]	--[5]	--[5]
	HY (2040) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	HY (2040) PA-2A With Improvements	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
15	Avenida Barbosa/Private Drive A & Arrow Hwy.																					
	E+P Without Improvements[6]	TS	0	0	0	2	0	1	1	2	0	0	2	1	**57.0**	50.4	**E**	D	**1.116**	0.887	**F**	D
	E+P With Improvements[6]	TS	**1**	**1**	**1**	2	**1**	1	1	**3**	0	**1**	**3**	**1**	34.3	41.1	C	D	0.897	0.797	D	C
	E+P PA-2A With Improvements	TS	**1**	**1**	**1**	2	**1**	1	1	**3**	0	**1**	**3**	**1**	47.3	49.1	D	D	**0.927**	0.870	**E**	D
	OYC (2020) Without Improvements[6]	TS	0	0	1	0	0	0	0	3	1	0	3	0	**93.6**	**77.9**	**F**	**E**	**1.160**	**1.048**	**F**	**F**
	OYC (2020) With Improvements[6]	TS	**1**	**1**	**1**	2	**1**	1	1	**3**	0	**1**	**3**	**1**	41.1	52.0	D	D	0.893	0.879	D	D
	OYC (2020) PA-2A With Improvements	TS	**1**	**1**	**1**	2	**1**	1	1	**3**	0	**2**	**3**	**1**	53.4	53.1	D	D	**0.921**	**0.932**	**E**	**E**
	HY (2040) Without Improvements[6]	TS	0	0	1	0	0	0	0	3	1	0	3	0	**115.5**	**88.5**	**F**	**F**	**1.217**	**1.116**	**F**	**F**
	HY (2040) With Improvements[6]	TS	**1**	**1**	**1**	2	**1**	1	**2**	**3**	0	**1**	**3**	**1>**	30.7	46.7	C	D	0.818	0.875	D	D
	HY (2040) PA-2A With Improvements	TS	**1**	**1**	**1**	2	**1**	1	**2**	**3**	0	**2**	**3**	**1>**	37.9	49.5	D	D	0.846	0.884	D	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

[4] TS = Traffic Signal; CSS = Cross-Street Stop; **TS** = Improvement

[5] ICU not reported for intersections without a signal.

[6] Results are from The Park @ Live Oak Traffic Impact Analysis

Table 9

Intersection Analysis for E+P Alternative PA-3A Conditions

#	Intersection	Traffic Control[3]	Existing (2017)								E+P								E+P Alternative PA-3A							
			HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
4	Live Oak Av. & Arrow Hwy. (West)	TS	27.3	17.9	C	B	**0.99**	0.69	**E**	B	30.3	20.4	C	C	**1.01**	0.74	**F**	C	18.3	18.8	B	B	0.82	0.69	D	B
5	Dwy. 1 & Arrow Hwy.	**CSS**	Future Intersection								14.2	16.4	B	C	--[4]	--[4]	--[4]	--[4]	14.1	15.8	B	C	--[4]	--[4]	--[4]	--[4]
6	Dwy. 2 & Live Oak Av.	**CSS**	Future Intersection								22.7	19.1	C	C	--[4]	--[4]	--[4]	--[4]	19.0	16.2	C	C	--[4]	--[4]	--[4]	--[4]
8	Dwy. 3 & Arrow Hwy.	**CSS**	Future Intersection								12.2	13.6	B	B	--[4]	--[4]	--[4]	--[4]	16.3	19.9	C	C	--[4]	--[4]	--[4]	--[4]
11	Driveway/Private Drive B & Arrow Hwy.	CSS	0.0	15.0	A	C	--[4]	--[4]	--[4]	--[4]	24.4	16.2	C	C	--[4]	--[4]	--[4]	--[4]	**>200.0**	**187.4**	**F**	**F**	--[4]	--[4]	--[4]	--[4]

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

[3] CSS = Cross-street Stop; TS = Traffic Signal

[4] ICU not reported for intersections without a signal.

Table 10

Intersection Analysis for Opening Year Cumulative (2020) Alternative PA-3A Conditions

#	Intersection	Traffic Control[3]	2020 Without Project								2020 With Project								2020 With Project Alternative PA-3A							
			HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
4	Live Oak Av. & Arrow Hwy. (West)	TS	44.4	40.0	D	D	**1.04**	**1.82**	**F**	**F**	48.7	**67.9**	D	**E**	**1.07**	**1.85**	**F**	**F**	23.6	23.3	C	C	0.87	0.81	D	D
5	Dwy. 1 & Arrow Hwy.	**CSS**	Future Intersection								15.3	22.1	C	C	--[4]	--[4]	--[4]	--[4]	15.2	20.6	C	C	--[4]	--[4]	--[4]	--[4]
6	Dwy. 2 & Live Oak Av.	**CSS**	Future Intersection								27.6	28.1	D	D	--[4]	--[4]	--[4]	--[4]	21.9	21.1	C	C	--[4]	--[4]	--[4]	--[4]
8	Dwy. 3 & Arrow Hwy.	**CSS**	Future Intersection								12.9	16.4	B	C	--[4]	--[4]	--[4]	--[4]	18.0	29.9	C	D	--[4]	--[4]	--[4]	--[4]
11	Driveway/Private Drive B & Arrow Hwy.	CSS	30.5	16.9	D	C	--[4]	--[4]	--[4]	--[4]	30.7	22.0	D	C	--[4]	--[4]	--[4]	--[4]	**>200.0**	**>200.0**	**F**	**F**	--[4]	--[4]	--[4]	--[4]

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

[3] TS = Traffic Signal; CSS = Cross-street Stop

[4] ICU not reported for intersections without a signal.

Table 11

Intersection Analysis for Horizon Year (2040) Alternative PA-3A Conditions

#	Intersection	Traffic Control[3]	2040 Without Project								2040 With Project								2040 With Project Alternative PA-3A							
			HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service		HCM Delay[1] (secs.)		Level of Service		ICU[2] (v/c)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
4	Live Oak Av. & Arrow Hwy. (West)	TS	**57.3**	**70.8**	**E**	**E**	**1.10**	0.89	**F**	D	**61.4**	**85.1**	**E**	**F**	**1.12**	**0.94**	**F**	**E**	27.4	26.8	C	C	**0.91**	0.84	**E**	D
5	Dwy. 1 & Arrow Hwy.	**CSS**	Future Intersection								15.9	23.4	C	C	--[4]	--[4]	--[4]	--[4]	15.7	21.7	C	C	--[4]	--[4]	--[4]	--[4]
6	Dwy. 2 & Live Oak Av.	**CSS**	Future Intersection								30.3	30.5	D	D	--[4]	--[4]	--[4]	--[4]	23.4	22.2	C	C	--[4]	--[4]	--[4]	--[4]
8	Dwy. 3 & Arrow Hwy.	**CSS**	Future Intersection								13.3	17.0	B	C	--[4]	--[4]	--[4]	--[4]	18.9	32.6	C	D	--[4]	--[4]	--[4]	--[4]
11	Driveway/Private Drive B & Arrow Hwy.	CSS	33.8	18.5	D	C	--[4]	--[4]	--[4]	--[4]	33.8	23.3	D	C	--[4]	--[4]	--[4]	--[4]	**>200.0**	**>200.0**	**F**	**F**	--[4]	--[4]	--[4]	--[4]

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

[3] TS = Traffic Signal; CSS = Cross-street Stop

[4] ICU not reported for intersections without a signal.

Table 12

Intersection Analysis Summary for PA-3A Conditions

#	Intersection	Traffic Control[4]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service		ICU[3] (v/c)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound										
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
4	Live Oak Av. & Arrow Hwy. (West)																					
	E+P Without Improvements[6]	TS	2	0	1>>	0	0	0	0	2	1>>	2	2	0	30.3	20.4	C	C	**1.010**	0.738	**F**	C
	E+P With Improvements[6]	TS	2	0	1>>	0	0	0	0	2	1>>	2	**3**	0	18.3	18.8	B	B	0.819	0.738	D	C
	E+P PA-3A With Improvements	TS	No Additional Improvements Necessary												18.3	18.8	B	B	0.820	0.690	D	B
	OYC (2020) Without Improvements[6]	TS	2	0	1>>	0	0	0	0	2	1>>	2	2	0	48.7	**67.9**	D	**E**	**1.07**	**1.85**	**F**	**F**
	OYC (2020) With Improvements[6]	TS	2	0	1>>	0	0	0	0	**3**	1>>	2	**3**	0	23.6	23.4	C	C	0.863	0.781	D	C
	OYC (2020) PA-3A With Improvements	TS	No Additional Improvements Necessary												23.6	23.3	C	C	0.843	0.806	D	D
	HY (2040) Without Improvements[6]	TS	2	0	1>>	0	0	0	0	2	1>>	2	2	0	**61.4**	**85.1**	**E**	**F**	**1.122**	**0.935**	**F**	**E**
	HY (2040) With Improvements[6]	TS	2	0	1>>	0	0	0	0	**3**	1>>	2	**3**	0	27.5	26.8	C	C	**0.908**	0.841	**E**	D
	HY (2040) PA-3A With Improvements	TS	No Additional Improvements Necessary												27.4	26.8	C	C	0.888	0.842	D	D
5	Dwy. 1 & Arrow Hwy.																					
	E+P Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	0	0	3	0	14.2	16.4	B	C	--[5]	--[5]	--[5]	--[5]
	E+P With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	E+P PA-3A With Improvements	CSS	No Additional Improvements Necessary												14.1	15.8	B	C	--[5]	--[5]	--[5]	--[5]
	OYC (2020) Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	0	0	3	0	15.3	22.1	C	C	--[5]	--[5]	--[5]	--[5]
	OYC (2020) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	OYC (2020) PA-3A With Improvements	CSS	No Additional Improvements Necessary												15.2	20.6	C	C	--[5]	--[5]	--[5]	--[5]
	HY (2040) Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	0	0	3	0	15.9	23.4	C	C	--[5]	--[5]	--[5]	--[5]
	HY (2040) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	HY (2040) PA-3A With Improvements	CSS	No Additional Improvements Necessary												15.7	21.7	C	C	--[5]	--[5]	--[5]	--[5]
6	Dwy. 2 & Live Oak Av.																					
	E+P Without Improvements[6]	CSS	0	0	0	0	0	1	0	3	0	0	3	0	22.7	19.1	C	C	--[5]	--[5]	--[5]	--[5]
	E+P With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	E+P PA-3A With Improvements	CSS	No Additional Improvements Necessary												19.0	16.2	C	C	--[5]	--[5]	--[5]	--[5]
	OYC (2020) Without Improvements[6]	CSS	0	0	0	0	0	1	0	3	0	0	3	0	27.6	28.1	D	D	--[5]	--[5]	--[5]	--[5]
	OYC (2020) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	OYC (2020) PA-3A With Improvements	CSS	No Additional Improvements Necessary												21.9	21.1	C	C	--[5]	--[5]	--[5]	--[5]
	HY (2040) Without Improvements[6]	CSS	0	0	0	0	0	1	0	3	0	0	3	0	30.3	30.5	D	D	--[5]	--[5]	--[5]	--[5]
	HY (2040) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	HY (2040) PA-3A With Improvements	CSS	No Additional Improvements Necessary												23.4	22.2	C	C	--[5]	--[5]	--[5]	--[5]
8	Dwy. 3 & Arrow Hwy.																					
	E+P Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	0	0	3	0	12.2	13.6	B	B	--[5]	--[5]	--[5]	--[5]
	E+P With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	E+P PA-3A With Improvements	CSS	No Additional Improvements Necessary												16.3	19.9	C	C	--[5]	--[5]	--[5]	--[5]
	OYC (2020) Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	0	0	3	0	12.9	16.4	B	C	--[5]	--[5]	--[5]	--[5]
	OYC (2020) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	OYC (2020) PA-3A With Improvements	CSS	No Additional Improvements Necessary												18.0	29.9	C	D	--[5]	--[5]	--[5]	--[5]
	HY (2040) Without Improvements[6]	CSS	0	0	1	0	0	0	0	3	0	0	3	0	13.3	17.0	B	C	--[5]	--[5]	--[5]	--[5]
	HY (2040) With Improvements[6]	CSS	No Additional Improvements Necessary												--	--	--	--	--	--	--	--
	HY (2040) PA-3A With Improvements	CSS	No Additional Improvements Necessary												18.9	32.6	C	D	--[5]	--[5]	--[5]	--[5]
11	Driveway/Private Drive B & Arrow Hwy.																					
	E+P Without Improvements[6]	CSS	0	0	0	2	0	1	1	2	0	0	2	1	24.4	16.2	C	C	--[5]	--[5]	--[5]	--[5]
	E+P With Improvements[6]	CSS	No Additional Improvements Necessary												**--**	**--**	**--**	**--**	--	--	--	--
	E+P PA-3A With Improvements	**TS**	0	0	0	2	0	1	1	2	0	0	2	1	13.4	13.0	B	B	0.709	0.614	C	B
	OYC (2020) Without Improvements[6]	CSS	0	0	0	2	0	1	1	2	0	0	2	1	30.7	22.0	D	C	--[5]	--[5]	--[5]	--[5]
	OYC (2020) With Improvements[6]	CSS	No Additional Improvements Necessary												**--**	**--**	**--**	**--**	--	--	--	--
	OYC (2020) PA-3A With Improvements	**TS**	0	0	0	2	0	1	1	2	0	0	2	1	14.6	14.2	B	B	0.726	0.684	C	B
	HY (2040) Without Improvements[6]	CSS	0	0	0	2	0	1	1	2	0	0	2	1	33.8	23.3	D	C	--[5]	--[5]	--[5]	--[5]
	HY (2040) With Improvements[6]	CSS	No Additional Improvements Necessary												**--**	**--**	**--**	**--**	--	--	--	--
	HY (2040) PA-3A With Improvements	**TS**	0	0	0	2	0	1	1	2	0	0	2	1	15.3	14.5	B	B	0.753	0.696	C	B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; >> = Free-Right Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] Intersection capacity utilization (ICU) methodology results are presented as a volume-to-capacity ratio.

[4] TS = Traffic Signal; CSS = Cross-Street Stop; **TS** = Improvement

[5] ICU not reported for intersections without a signal.

[6] Results are from The Park @ Live Oak Traffic Impact Analysis

ATTACHMENT A
SITE ADJACENT QUEUING ANALYSIS

Alternative PA-1A

Intersection: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	TR	L	L	T	T	T	R	L
Maximum Queue (ft)	192	205	135	161	231	177	224	324	346	342	214	214
Average Queue (ft)	121	124	38	61	104	93	115	194	207	202	96	111
95th Queue (ft)	181	190	98	126	195	147	178	299	310	301	177	189
Link Distance (ft)			491	491	491			428	428	428	428	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	340	340				300	300					200
Storage Blk Time (%)								0				1
Queuing Penalty (veh)								2				2

Intersection: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	R
Maximum Queue (ft)	58	88	147	175	76	188
Average Queue (ft)	15	46	48	107	21	80
95th Queue (ft)	46	74	118	168	56	146
Link Distance (ft)	462			1553	1553	1553
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		200	310			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 17: Driveway 8 & Arrow Hwy.

Movement	NB
Directions Served	R
Maximum Queue (ft)	15
Average Queue (ft)	1
95th Queue (ft)	8
Link Distance (ft)	178
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: Driveway 9 & Arrow Hwy.

Movement	WB	WB	WB	NB
Directions Served	T	T	T	R
Maximum Queue (ft)	247	268	302	98
Average Queue (ft)	36	97	74	38
95th Queue (ft)	165	293	285	69
Link Distance (ft)	211	211	211	164
Upstream Blk Time (%)	0	3	4	
Queuing Penalty (veh)	3	27	42	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 76

Intersection: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	TR	L	L	T	T	T	R	L
Maximum Queue (ft)	165	179	264	268	293	156	194	262	251	260	103	217
Average Queue (ft)	95	93	175	171	187	87	116	155	169	167	39	114
95th Queue (ft)	152	154	257	259	284	134	166	230	240	242	81	190
Link Distance (ft)			491	491	491			428	428	428	428	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	340	340				300	300					200
Storage Blk Time (%)								0				1
Queuing Penalty (veh)								0				4

Intersection: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	R
Maximum Queue (ft)	112	196	317	337	44	282
Average Queue (ft)	27	97	208	239	12	148
95th Queue (ft)	75	167	296	320	36	237
Link Distance (ft)	462			1553	1553	1553
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		200	310			
Storage Blk Time (%)		0	0	1		
Queuing Penalty (veh)		0	0	3		

Intersection: 17: Driveway 8 & Arrow Hwy.

Movement	NB
Directions Served	R
Maximum Queue (ft)	55
Average Queue (ft)	7
95th Queue (ft)	33
Link Distance (ft)	178
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: Driveway 9 & Arrow Hwy.

Movement	EB	EB	WB	WB	WB	NB
Directions Served	T	T	T	T	T	R
Maximum Queue (ft)	35	36	215	246	138	156
Average Queue (ft)	2	2	10	18	5	81
95th Queue (ft)	17	20	79	120	60	155
Link Distance (ft)	500	500	211	211	211	164
Upstream Blk Time (%)			0	0	0	2
Queuing Penalty (veh)			0	3	0	0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Zone Summary

Zone wide Queuing Penalty: 12

Alternative PA-2A

Intersection: 11: Private Drive B/Driveway & Arrow Hwy.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	T	T	TR	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	256	219	264	249	339	333	337	401	30
Average Queue (ft)	113	88	140	109	132	143	159	214	8
95th Queue (ft)	211	183	238	196	296	308	320	335	29
Link Distance (ft)	450	450	450		350	350	350	483	273
Upstream Blk Time (%)					0	0	0		
Queuing Penalty (veh)					1	1	1		
Storage Bay Dist (ft)				200					
Storage Blk Time (%)	2			0	3				
Queuing Penalty (veh)	0			0	6				

Intersection: 12: Driveway 6 & Arrow Hwy.

Movement	EB	WB	WB	WB	NB
Directions Served	TR	T	T	T	R
Maximum Queue (ft)	16	27	31	31	82
Average Queue (ft)	1	1	2	3	45
95th Queue (ft)	9	17	17	21	72
Link Distance (ft)	350	491	491	491	243
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	TR	L	L	T	T	T	R	L
Maximum Queue (ft)	204	206	164	183	268	111	258	393	380	372	228	112
Average Queue (ft)	117	122	53	81	132	59	95	221	223	215	107	45
95th Queue (ft)	186	194	126	151	223	103	198	355	348	343	199	91
Link Distance (ft)			491	491	491			428	428	428	428	
Upstream Blk Time (%)								0				
Queuing Penalty (veh)								0				
Storage Bay Dist (ft)	340	340				300	300					300
Storage Blk Time (%)								2				
Queuing Penalty (veh)								6				

Intersection: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	R
Maximum Queue (ft)	59	107	163	193	66	188
Average Queue (ft)	16	50	63	113	20	86
95th Queue (ft)	45	82	142	179	53	153
Link Distance (ft)	462	462		1553	1553	1553
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			310			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Zone Summary

Zone wide Queuing Penalty: 16

Intersection: 11: Private Drive B/Driveway & Arrow Hwy.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	T	T	TR	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	251	250	263	162	236	240	249	226	12
Average Queue (ft)	136	118	148	76	84	100	116	99	1
95th Queue (ft)	220	208	242	138	181	202	211	173	8
Link Distance (ft)	450	450	450		350	350	350	483	273
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)				200					
Storage Blk Time (%)	1			0	0				
Queuing Penalty (veh)	0			0	0				

Intersection: 12: Driveway 6 & Arrow Hwy.

Movement	EB	EB	NB
Directions Served	T	TR	R
Maximum Queue (ft)	9	23	107
Average Queue (ft)	0	1	54
95th Queue (ft)	6	11	91
Link Distance (ft)	350	350	243
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	TR	L	L	T	T	T	R	L
Maximum Queue (ft)	162	184	289	326	357	97	134	286	268	279	106	130
Average Queue (ft)	87	104	181	207	233	45	71	168	175	176	36	53
95th Queue (ft)	147	163	269	298	330	87	114	253	251	251	78	108
Link Distance (ft)			491	491	491			428	428	428	428	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	340	340				300	300					300
Storage Blk Time (%)								0				
Queuing Penalty (veh)								0				

Intersection: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	R
Maximum Queue (ft)	64	251	351	423	48	336
Average Queue (ft)	22	121	212	245	11	153
95th Queue (ft)	55	201	314	351	36	268
Link Distance (ft)	462	462		1553	1553	1553
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			310			
Storage Blk Time (%)			1	3		
Queuing Penalty (veh)			2	10		

Zone Summary

Zone wide Queuing Penalty: 13

Alternative PA-3A

Intersection: 4: Live Oak Av. & Arrow Hwy.

Movement	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	T	L	L	T	T	T	L	L	R
Maximum Queue (ft)	162	159	179	161	209	329	384	391	409	403	172
Average Queue (ft)	103	82	103	89	90	179	211	222	257	255	8
95th Queue (ft)	155	144	167	142	151	330	366	376	388	382	74
Link Distance (ft)	2305	2305	2305			498	498	498	576	576	576
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)				300	300						
Storage Blk Time (%)						1					
Queuing Penalty (veh)						2					

Intersection: 5: Driveway 1 & Arrow Hwy.

Movement	EB	WB	NB
Directions Served	TR	T	R
Maximum Queue (ft)	24	5	58
Average Queue (ft)	1	0	28
95th Queue (ft)	10	4	49
Link Distance (ft)	498	422	139
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Live Oak Av. & Driveway 2

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	T	T	T	T	T	TR	R
Maximum Queue (ft)	99	117	121	6	6	17	69
Average Queue (ft)	18	28	47	0	0	1	31
95th Queue (ft)	65	84	111	4	4	10	57
Link Distance (ft)	576	576	576	70	70	70	106
Upstream Blk Time (%)						0	
Queuing Penalty (veh)						0	
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 8: Driveway 3 & Arrow Hwy.

Movement	EB	NB
Directions Served	TR	R
Maximum Queue (ft)	18	83
Average Queue (ft)	1	50
95th Queue (ft)	9	80
Link Distance (ft)	422	68
Upstream Blk Time (%)		3
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: Private Drive B/Driveway & Arrow Hwy.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	T	T	TR	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	244	190	273	233	311	314	331	248	34
Average Queue (ft)	106	82	130	127	123	118	135	103	8
95th Queue (ft)	199	155	224	210	273	277	293	194	29
Link Distance (ft)	450	450	450		350	350	350	483	273
Upstream Blk Time (%)					0	0	0		
Queuing Penalty (veh)					0	0	1		
Storage Bay Dist (ft)				200					
Storage Blk Time (%)	1			2	2				
Queuing Penalty (veh)	0			12	5				

Zone Summary

Zone wide Queuing Penalty: 20

Intersection: 4: Live Oak Av. & Arrow Hwy.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	T	R	R	L	L	T	T	T	L	L
Maximum Queue (ft)	228	221	226	288	307	230	216	128	163	166	391	364
Average Queue (ft)	154	142	136	89	52	145	117	47	80	79	221	219
95th Queue (ft)	220	210	210	267	229	212	196	110	150	149	332	326
Link Distance (ft)	2305	2305	2305	2305	2305			498	498	498	576	576
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)						300	300					
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 4: Live Oak Av. & Arrow Hwy.

Movement	NB
Directions Served	R
Maximum Queue (ft)	239
Average Queue (ft)	31
95th Queue (ft)	154
Link Distance (ft)	576
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Driveway 1 & Arrow Hwy.

Movement	NB
Directions Served	R
Maximum Queue (ft)	76
Average Queue (ft)	35
95th Queue (ft)	62
Link Distance (ft)	139
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Live Oak Av. & Driveway 2

Movement	EB	EB	EB	WB	WB	SB
Directions Served	T	T	T	T	TR	R
Maximum Queue (ft)	400	410	390	5	21	72
Average Queue (ft)	188	219	231	0	1	34
95th Queue (ft)	331	359	354	3	10	57
Link Distance (ft)	576	576	576	70	70	106
Upstream Blk Time (%)					0	
Queuing Penalty (veh)					0	
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 8: Driveway 3 & Arrow Hwy.

Movement	EB	NB
Directions Served	TR	R
Maximum Queue (ft)	32	83
Average Queue (ft)	2	58
95th Queue (ft)	14	89
Link Distance (ft)	422	68
Upstream Blk Time (%)		8
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: Private Drive B/Driveway & Arrow Hwy.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	T	T	TR	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	246	293	311	142	231	138	130	258	12
Average Queue (ft)	107	127	153	68	97	44	60	117	0
95th Queue (ft)	217	229	257	122	191	105	112	211	6
Link Distance (ft)	450	450	450		350	350	350	483	273
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)				200					
Storage Blk Time (%)	1				1				
Queuing Penalty (veh)	0				1				

Zone Summary

Zone wide Queuing Penalty: 1

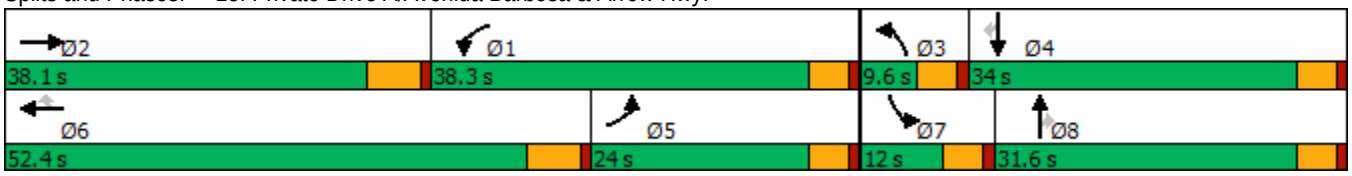
ATTACHMENT B
ALTERNATIVE 1A ANALYSIS WORKSHEETS

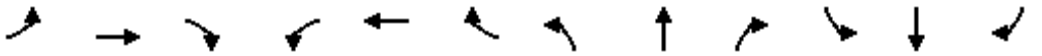
E+P Conditions

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	311	407	383	1649	648	163	15	141	198	27	174
Future Volume (vph)	311	407	383	1649	648	163	15	141	198	27	174
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	24.0	38.1	38.3	52.4	52.4	9.6	31.6	31.6	12.0	34.0	34.0
Total Split (%)	20.0%	31.8%	31.9%	43.7%	43.7%	8.0%	26.3%	26.3%	10.0%	28.3%	28.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 102.8
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	311	407	110	383	1649	648	163	15	141	198	27	174
Future Volume (veh/h)	311	407	110	383	1649	648	163	15	141	198	27	174
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		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	334	438	120	416	1773	624	177	16	153	213	29	144
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	367	656	174	894	2344	718	98	103	87	281	152	129
Arrive On Green	0.20	0.16	0.16	0.49	0.45	0.45	0.05	0.05	0.05	0.08	0.08	0.08
Sat Flow, veh/h	1810	4082	1081	1810	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	334	369	189	416	1773	624	177	16	153	213	29	144
Grp Sat Flow(s),veh/h/ln	1810	1729	1705	1810	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	16.7	9.3	9.7	14.0	26.4	21.3	5.0	0.7	1.9	5.5	1.3	5.0
Cycle Q Clear(g_c), s	16.7	9.3	9.7	14.0	26.4	21.3	5.0	0.7	1.9	5.5	1.3	5.0
Prop In Lane	1.00		0.63	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	367	555	274	894	2344	718	98	103	87	281	152	129
V/C Ratio(X)	0.91	0.66	0.69	0.47	0.76	0.87	1.81	0.16	1.76	0.76	0.19	1.12
Avail Cap(c_a), veh/h	379	1206	595	894	2611	800	98	554	470	281	603	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	36.5	36.7	15.4	21.1	9.7	43.8	41.8	6.1	41.7	39.8	19.2
Incr Delay (d2), s/veh	24.4	1.4	3.1	0.4	1.2	9.4	402.4	0.7	351.9	10.3	0.2	62.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	3.8	4.1	5.2	9.7	8.5	13.2	0.4	10.4	2.7	0.6	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.5	37.9	39.8	15.8	22.3	19.0	446.2	42.5	358.0	52.0	40.0	81.8
LnGrp LOS	E	D	D	B	C	B	F	D	F	D	D	F
Approach Vol, veh/h		892			2813			346			386	
Approach Delay, s/veh		46.8			20.6			388.5			62.2	
Approach LOS		D			C			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	50.3	20.7	9.6	12.0	23.4	47.6	12.0	9.6
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	33.7	32.3	5.0	29.4	19.4	46.6	7.4	27.0
Max Q Clear Time (g_c+I1), s	16.0	11.7	7.0	7.0	18.7	28.4	7.5	3.9
Green Ext Time (p_c), s	1.1	3.2	0.0	0.3	0.0	13.5	0.0	0.6

Intersection Summary			
HCM 6th Ctrl Delay		58.2	
HCM 6th LOS		E	

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	659	87	0	2720	0	116
Future Vol, veh/h	659	87	0	2720	0	116
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	716	95	0	2957	0	126

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	358
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	-	-	0	-	0	844
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	844
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	844	-	-	-
HCM Lane V/C Ratio	0.149	-	-	-
HCM Control Delay (s)	10	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.5	-	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	672	104	0	2720	0	145
Future Vol, veh/h	672	104	0	2720	0	145
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	730	113	0	2957	0	158

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	365
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	-	-	0	-	0	838
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	838
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

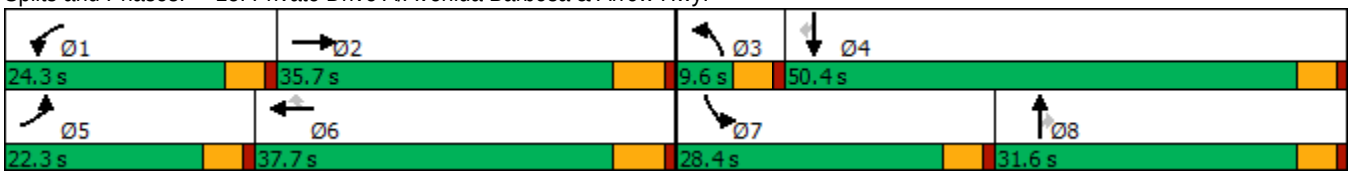
Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

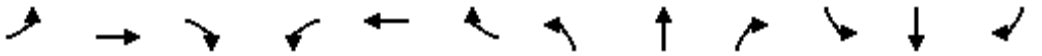
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	838	-	-	-
HCM Lane V/C Ratio	0.188	-	-	-
HCM Control Delay (s)	10.3	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.7	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	225	697	297	748	231	170	30	321	649	21	413
Future Volume (vph)	225	697	297	748	231	170	30	321	649	21	413
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	22.3	35.7	24.3	37.7	37.7	9.6	31.6	31.6	28.4	50.4	50.4
Total Split (%)	18.6%	29.8%	20.3%	31.4%	31.4%	8.0%	26.3%	26.3%	23.7%	42.0%	42.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 95.2
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	697	99	297	748	231	170	30	321	649	21	413
Future Volume (veh/h)	225	697	99	297	748	231	170	30	321	649	21	413
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	232	719	102	306	771	160	175	31	331	669	22	290
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	262	934	131	331	1253	384	84	425	360	730	732	621
Arrive On Green	0.14	0.20	0.20	0.18	0.24	0.24	0.05	0.22	0.22	0.21	0.39	0.39
Sat Flow, veh/h	1810	4582	643	1810	5187	1589	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	232	541	280	306	771	160	175	31	331	669	22	290
Grp Sat Flow(s),veh/h/ln	1810	1729	1767	1810	1729	1589	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	13.6	15.9	16.2	17.9	14.3	9.2	5.0	1.4	21.7	20.1	0.8	14.6
Cycle Q Clear(g_c), s	13.6	15.9	16.2	17.9	14.3	9.2	5.0	1.4	21.7	20.1	0.8	14.6
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262	705	360	331	1253	384	84	425	360	730	732	621
V/C Ratio(X)	0.89	0.77	0.78	0.93	0.62	0.42	2.09	0.07	0.92	0.92	0.03	0.47
Avail Cap(c_a), veh/h	297	959	490	331	1534	470	84	476	403	775	807	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	40.5	40.6	43.4	36.4	34.5	51.4	33.0	40.9	41.8	20.6	24.8
Incr Delay (d2), s/veh	22.1	2.6	5.5	31.1	0.5	0.7	526.9	0.1	24.4	14.5	0.0	0.2
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	7.5	6.8	7.3	10.6	5.8	3.6	14.6	0.7	11.0	9.9	0.3	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.4	43.1	46.1	74.4	36.9	35.2	578.4	33.1	65.3	56.3	20.6	25.0
LnGrp LOS	E	D	D	E	D	D	F	C	E	E	C	C
Approach Vol, veh/h		1053			1237			537			981	
Approach Delay, s/veh		49.3			46.0			230.7			46.3	
Approach LOS		D			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.3	27.8	9.6	46.2	20.2	31.9	27.0	28.7
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	19.7	29.9	5.0	45.8	17.7	31.9	23.8	27.0
Max Q Clear Time (g_c+I1), s	19.9	18.2	7.0	16.6	15.6	16.3	22.1	23.7
Green Ext Time (p_c), s	0.0	3.8	0.0	0.5	0.1	4.8	0.3	0.5

Intersection Summary	
HCM 6th Ctrl Delay	73.0
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1588	79	0	1275	0	121
Future Vol, veh/h	1588	79	0	1275	0	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1726	86	0	1386	0	132

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	863
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	-	-	0	-	0	508
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	508
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	508	-	-	-
HCM Lane V/C Ratio	0.259	-	-	-
HCM Control Delay (s)	14.5	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	1	-	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1614	95	0	1275	0	151
Future Vol, veh/h	1614	95	0	1275	0	151
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1754	103	0	1386	0	164

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	877
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	-	-	0	-	0	500
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	500
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	15.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	500	-	-	-
HCM Lane V/C Ratio	0.328	-	-	-
HCM Control Delay (s)	15.7	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.4	-	-	-

The Park @ Live Oak (JN 11110)
E+P
AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.971
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	155	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	163	15	141	198	27	174	311	407	110	383	1649	648
Growth 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
Initial Bse:	163	15	141	198	27	174	311	407	110	383	1649	648
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	163	15	141	198	27	174	311	407	110	383	1649	648
User 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
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	175	16	152	213	29	187	334	438	118	412	1773	697
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	175	16	152	213	29	187	334	438	118	412	1773	697
PCE 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
MLF 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
FinalVolume:	175	16	152	213	29	187	334	438	118	412	1773	697
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.36	0.64	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	3779	1021	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.01	0.09	0.07	0.02	0.12	0.21	0.12	0.12	0.26	0.37	0.44
Crit Moves:	****					****	****					****

The Park @ Live Oak (JN 11110)
E+P
PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.880
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	91	Level Of Service:	D

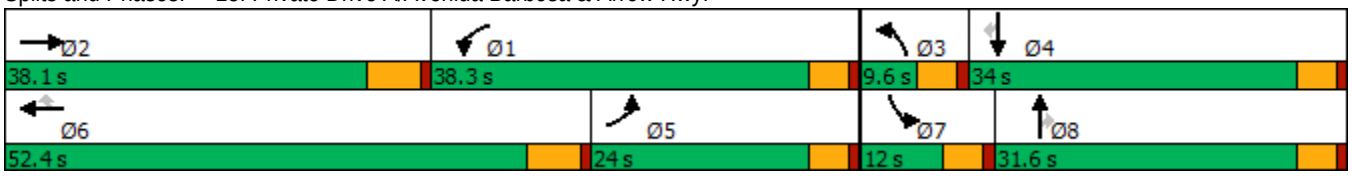
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1	0 1		2 0 1	0 1		1 0 2	1 0		1 0 3	0 1	
Volume Module:												
Base Vol:	170	30	321	649	21	413	225	697	99	297	748	231
Growth 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
Initial Bse:	170	30	321	649	21	413	225	697	99	297	748	231
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	170	30	321	649	21	413	225	697	99	297	748	231
User 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
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	176	31	332	670	22	427	232	720	102	307	773	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	31	332	670	22	427	232	720	102	307	773	239
PCE 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
MLF 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
FinalVolume:	176	31	332	670	22	427	232	720	102	307	773	239
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.63	0.37	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	4203	597	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.02	0.21	0.21	0.01	0.27	0.15	0.17	0.17	0.19	0.16	0.15
Crit Moves:			****	****				****		****		

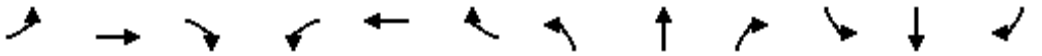
Opening Year Cumulative (2020) With Project Conditions

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	334	496	383	1931	698	163	15	141	220	27	194
Future Volume (vph)	334	496	383	1931	698	163	15	141	220	27	194
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	24.0	38.1	38.3	52.4	52.4	9.6	31.6	31.6	12.0	34.0	34.0
Total Split (%)	20.0%	31.8%	31.9%	43.7%	43.7%	8.0%	26.3%	26.3%	10.0%	28.3%	28.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 103.4
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	496	110	383	1931	698	163	15	141	220	27	194
Future Volume (veh/h)	334	496	110	383	1931	698	163	15	141	220	27	194
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		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	359	533	120	416	2076	678	177	16	153	237	29	166
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	363	761	168	887	2433	746	93	98	83	268	145	123
Arrive On Green	0.20	0.18	0.18	0.49	0.47	0.47	0.05	0.05	0.05	0.08	0.08	0.08
Sat Flow, veh/h	1810	4253	936	1810	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	359	431	222	416	2076	678	177	16	153	237	29	166
Grp Sat Flow(s),veh/h/ln	1810	1729	1731	1810	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	19.2	11.3	11.7	14.7	34.3	25.0	5.0	0.8	1.9	6.5	1.4	5.0
Cycle Q Clear(g_c), s	19.2	11.3	11.7	14.7	34.3	25.0	5.0	0.8	1.9	6.5	1.4	5.0
Prop In Lane	1.00		0.54	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	363	619	310	887	2433	746	93	98	83	268	145	123
V/C Ratio(X)	0.99	0.70	0.72	0.47	0.85	0.91	1.89	0.16	1.84	0.88	0.20	1.35
Avail Cap(c_a), veh/h	363	1154	578	887	2497	766	93	530	449	268	577	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	37.3	37.4	16.3	22.8	10.2	45.9	43.9	6.7	44.3	41.9	20.7
Incr Delay (d2), s/veh	44.3	1.4	3.1	0.4	3.0	14.6	439.4	0.8	387.7	26.5	0.2	161.2
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	12.5	4.7	5.0	5.6	13.1	10.9	13.7	0.4	10.9	3.7	0.6	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.9	38.7	40.5	16.7	25.8	24.8	485.3	44.7	394.5	70.7	42.2	181.9
LnGrp LOS	F	D	D	B	C	C	F	D	F	E	D	F
Approach Vol, veh/h		1012			3170			346			432	
Approach Delay, s/veh		54.8			24.4			424.8			111.5	
Approach LOS		D			C			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	52.1	23.1	9.6	12.0	24.0	51.2	12.0	9.6
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	33.7	32.3	5.0	29.4	19.4	46.6	7.4	27.0
Max Q Clear Time (g_c+I1), s	16.7	13.7	7.0	7.0	21.2	36.3	8.5	3.9
Green Ext Time (p_c), s	1.1	3.7	0.0	0.3	0.0	9.1	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	66.1
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	770	87	0	3052	0	116
Future Vol, veh/h	770	87	0	3052	0	116
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	837	95	0	3317	0	126

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	419
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	-	-	0	-	0	794
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	794
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	794	-	-	-
HCM Lane V/C Ratio	0.159	-	-	-
HCM Control Delay (s)	10.4	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.6	-	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	783	104	0	3052	0	145
Future Vol, veh/h	783	104	0	3052	0	145
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	851	113	0	3317	0	158

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	426
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	-	-	0	-	0	789
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	789
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

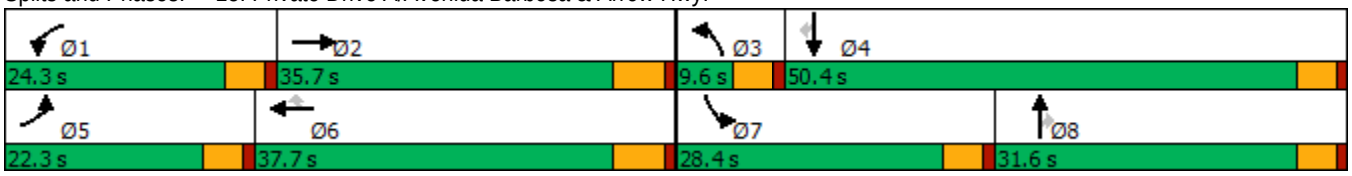
Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.7
HCM LOS			B

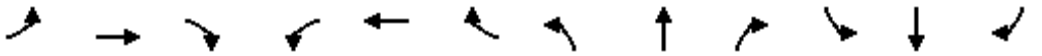
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	789	-	-	-
HCM Lane V/C Ratio	0.2	-	-	-
HCM Control Delay (s)	10.7	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.7	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	251	1003	297	1016	253	170	30	321	698	21	448
Future Volume (vph)	251	1003	297	1016	253	170	30	321	698	21	448
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	22.3	35.7	24.3	37.7	37.7	9.6	31.6	31.6	28.4	50.4	50.4
Total Split (%)	18.6%	29.8%	20.3%	31.4%	31.4%	8.0%	26.3%	26.3%	23.7%	42.0%	42.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 103
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	1003	99	297	1016	253	170	30	321	698	21	448
Future Volume (veh/h)	251	1003	99	297	1016	253	170	30	321	698	21	448
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	259	1034	102	306	1047	183	175	31	331	720	22	326
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	272	1164	115	303	1349	413	77	419	355	710	722	612
Arrive On Green	0.15	0.24	0.24	0.17	0.26	0.26	0.04	0.22	0.22	0.20	0.38	0.38
Sat Flow, veh/h	1810	4789	472	1810	5187	1589	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	259	746	390	306	1047	183	175	31	331	720	22	326
Grp Sat Flow(s),veh/h/ln	1810	1729	1803	1810	1729	1589	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	16.7	24.5	24.6	19.7	22.0	11.3	5.0	1.5	23.7	23.8	0.9	18.5
Cycle Q Clear(g_c), s	16.7	24.5	24.6	19.7	22.0	11.3	5.0	1.5	23.7	23.8	0.9	18.5
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	272	841	438	303	1349	413	77	419	355	710	722	612
V/C Ratio(X)	0.95	0.89	0.89	1.01	0.78	0.44	2.28	0.07	0.93	1.01	0.03	0.53
Avail Cap(c_a), veh/h	272	879	458	303	1407	431	77	436	370	710	740	627
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	43.0	43.0	49.0	40.3	36.4	56.3	36.3	45.0	46.9	22.9	28.3
Incr Delay (d2), s/veh	40.9	10.6	18.5	54.2	2.7	0.7	612.9	0.1	29.7	37.2	0.0	0.4
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	10.4	11.3	12.8	13.2	9.3	4.5	15.4	0.7	12.4	13.8	0.4	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.5	53.6	61.5	103.1	43.0	37.1	669.2	36.4	74.7	84.1	22.9	28.7
LnGrp LOS	F	D	E	F	D	D	F	D	E	F	C	C
Approach Vol, veh/h		1395			1536			537			1068	
Approach Delay, s/veh		62.6			54.3			266.2			65.9	
Approach LOS		E			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.3	34.4	9.6	49.3	22.3	36.4	28.4	30.5
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	19.7	29.9	5.0	45.8	17.7	31.9	23.8	27.0
Max Q Clear Time (g_c+I1), s	21.7	26.6	7.0	20.5	18.7	24.0	25.8	25.7
Green Ext Time (p_c), s	0.0	2.0	0.0	0.6	0.0	4.3	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	84.7
HCM 6th LOS	F

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↱		↑↑↑		↱
Traffic Vol, veh/h	1943	79	0	1565	0	121
Future Vol, veh/h	1943	79	0	1565	0	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2112	86	0	1701	0	132

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	1056
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	-	-	0	-	0	416
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	416
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	416	-	-	-
HCM Lane V/C Ratio	0.316	-	-	-
HCM Control Delay (s)	17.6	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.3	-	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1969	95	0	1565	0	151
Future Vol, veh/h	1969	95	0	1565	0	151
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2140	103	0	1701	0	164

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	1070
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	-	-	0	-	0	410
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	410
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	19.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	410	-	-	-
HCM Lane V/C Ratio	0.4	-	-	-
HCM Control Delay (s)	19.5	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.9	-	-	-

The Park @ Live Oak (JN 11110)
OYC 2020 WP
AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.968
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	152	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	163	15	141	220	27	194	334	496	110	383	1931	698
Growth 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
Initial Bse:	163	15	141	220	27	194	334	496	110	383	1931	698
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	163	15	141	220	27	194	334	496	110	383	1931	698
User 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
PHF 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
PHF Volume:	163	15	141	220	27	194	334	496	110	383	1931	698
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	163	15	141	220	27	194	334	496	110	383	1931	698
PCE 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
MLF 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
FinalVolume:	163	15	141	220	27	194	334	496	110	383	1931	698
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.46	0.54	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	3929	871	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.01	0.09	0.07	0.02	0.12	0.21	0.13	0.13	0.24	0.40	0.44
Crit Moves:	****					****	****					****

The Park @ Live Oak (JN 11110)
OYC 2020 WP
PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.934
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	120	Level Of Service:	E

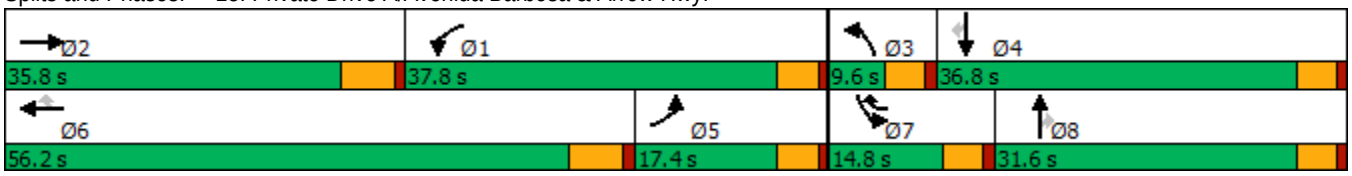
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	170	30	321	698	21	448	251	1003	99	297	1016	253
Growth 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
Initial Bse:	170	30	321	698	21	448	251	1003	99	297	1016	253
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	170	30	321	698	21	448	251	1003	99	297	1016	253
User 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
PHF 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
PHF Volume:	170	30	321	698	21	448	251	1003	99	297	1016	253
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	30	321	698	21	448	251	1003	99	297	1016	253
PCE 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
MLF 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
FinalVolume:	170	30	321	698	21	448	251	1003	99	297	1016	253
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.73	0.27	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	4369	431	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.02	0.20	0.22	0.01	0.28	0.16	0.23	0.23	0.19	0.21	0.16
Crit Moves:			****	****				****		****		

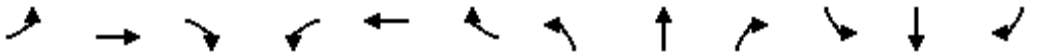
Horizon Year (2040) With Project Conditions

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	355	525	383	2048	741	163	15	141	233	27	206
Future Volume (vph)	355	525	383	2048	741	163	15	141	233	27	206
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	7	3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	7	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	9.6	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	17.4	35.8	37.8	56.2	14.8	9.6	31.6	31.6	14.8	36.8	36.8
Total Split (%)	14.5%	29.8%	31.5%	46.8%	12.3%	8.0%	26.3%	26.3%	12.3%	30.7%	30.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 103
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	355	525	110	383	2048	741	163	15	141	233	27	206
Future Volume (veh/h)	355	525	110	383	2048	741	163	15	141	233	27	206
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		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	382	565	120	416	2202	724	177	16	153	251	29	179
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	450	797	166	825	2662	964	95	115	97	322	189	160
Arrive On Green	0.13	0.19	0.19	0.46	0.51	0.51	0.05	0.06	0.06	0.09	0.10	0.10
Sat Flow, veh/h	3510	4301	896	1810	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	382	452	233	416	2202	724	177	16	153	251	29	179
Grp Sat Flow(s),veh/h/ln	1755	1729	1739	1810	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	10.1	11.6	12.0	15.4	34.1	13.7	5.0	0.8	2.4	6.6	1.3	7.1
Cycle Q Clear(g_c), s	10.1	11.6	12.0	15.4	34.1	13.7	5.0	0.8	2.4	6.6	1.3	7.1
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	450	641	322	825	2662	964	95	115	97	322	189	160
V/C Ratio(X)	0.85	0.71	0.72	0.50	0.83	0.75	1.86	0.14	1.58	0.78	0.15	1.12
Avail Cap(c_a), veh/h	473	1093	550	825	2754	992	95	541	458	377	645	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	36.2	36.4	18.2	19.5	4.9	45.0	42.3	7.6	42.2	39.1	24.0
Incr Delay (d2), s/veh	12.2	1.4	3.1	0.5	2.2	3.2	422.8	0.6	270.0	7.0	0.1	60.5
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	4.9	4.8	5.1	5.9	12.4	3.5	13.4	0.4	9.5	3.1	0.6	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.7	37.7	39.4	18.7	21.7	8.1	467.8	42.8	277.5	49.2	39.2	84.6
LnGrp LOS	D	D	D	B	C	A	F	D	F	D	D	F
Approach Vol, veh/h		1067			3342			346			459	
Approach Delay, s/veh		43.4			18.4			364.0			62.4	
Approach LOS		D			B			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	47.9	23.4	9.6	14.0	16.8	54.5	13.3	10.3
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	33.2	30.0	5.0	32.2	12.8	50.4	10.2	27.0
Max Q Clear Time (g_c+I1), s	17.4	14.0	7.0	9.1	12.1	36.1	8.6	4.4
Green Ext Time (p_c), s	1.1	3.6	0.0	0.4	0.1	12.6	0.1	0.5

Intersection Summary	
HCM 6th Ctrl Delay	50.3
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	812	87	0	3211	0	116
Future Vol, veh/h	812	87	0	3211	0	116
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	883	95	0	3490	0	126

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	442
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	-	-	0	-	0	776
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	776
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	776	-	-	-
HCM Lane V/C Ratio	0.162	-	-	-
HCM Control Delay (s)	10.5	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.6	-	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	825	104	0	3211	0	145
Future Vol, veh/h	825	104	0	3211	0	145
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	897	113	0	3490	0	158

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	449
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	-	-	0	-	0	771
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	771
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

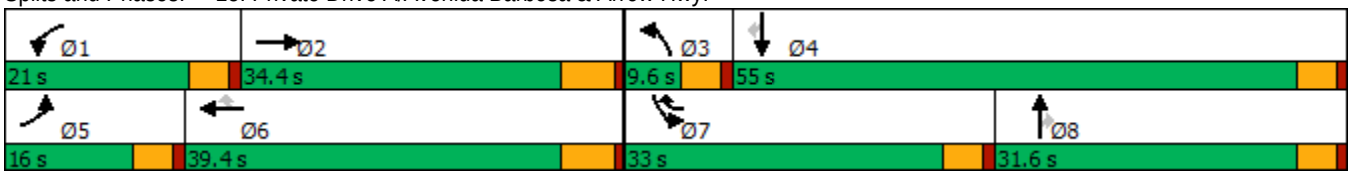
Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.9
HCM LOS			B

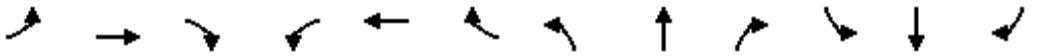
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	771	-	-	-
HCM Lane V/C Ratio	0.204	-	-	-
HCM Control Delay (s)	10.9	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.8	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	266	1046	297	1071	268	170	30	321	741	21	475
Future Volume (vph)	266	1046	297	1071	268	170	30	321	741	21	475
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	7	3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	7	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	9.6	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	16.0	34.4	21.0	39.4	33.0	9.6	31.6	31.6	33.0	55.0	55.0
Total Split (%)	13.3%	28.7%	17.5%	32.8%	27.5%	8.0%	26.3%	26.3%	27.5%	45.8%	45.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 105.8
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	1046	99	297	1071	268	170	30	321	741	21	475
Future Volume (veh/h)	266	1046	99	297	1071	268	170	30	321	741	21	475
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	274	1078	102	306	1104	198	175	31	331	764	22	354
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	330	1159	110	252	1485	830	77	419	355	818	781	662
Arrive On Green	0.09	0.24	0.24	0.14	0.29	0.29	0.04	0.22	0.22	0.23	0.41	0.41
Sat Flow, veh/h	3510	4810	455	1810	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	274	775	405	306	1104	198	175	31	331	764	22	354
Grp Sat Flow(s),veh/h/ln	1755	1729	1806	1810	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	9.0	25.8	25.9	16.4	22.7	8.1	5.0	1.5	23.8	25.1	0.8	19.5
Cycle Q Clear(g_c), s	9.0	25.8	25.9	16.4	22.7	8.1	5.0	1.5	23.8	25.1	0.8	19.5
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	833	435	252	1485	830	77	419	355	818	781	662
V/C Ratio(X)	0.83	0.93	0.93	1.21	0.74	0.24	2.28	0.07	0.93	0.93	0.03	0.54
Avail Cap(c_a), veh/h	340	840	439	252	1485	830	77	436	369	847	813	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	43.7	43.7	50.7	38.1	15.5	56.4	36.4	45.0	44.3	20.7	26.2
Incr Delay (d2), s/veh	14.5	16.5	26.6	127.1	2.1	0.1	614.0	0.1	29.7	16.5	0.0	0.3
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	4.5	12.5	14.3	16.1	9.5	3.0	15.4	0.7	12.4	12.5	0.4	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.0	60.2	70.3	177.8	40.2	15.7	670.4	36.5	74.8	60.7	20.7	26.5
LnGrp LOS	E	E	E	F	D	B	F	D	E	E	C	C
Approach Vol, veh/h		1454			1608			537			1140	
Approach Delay, s/veh		64.3			63.3			266.7			49.3	
Approach LOS		E			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	34.2	9.6	53.0	15.7	39.5	32.0	30.5
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	16.4	28.6	5.0	50.4	11.4	33.6	28.4	27.0
Max Q Clear Time (g_c+I1), s	18.4	27.9	7.0	21.5	11.0	24.7	27.1	25.8
Green Ext Time (p_c), s	0.0	0.5	0.0	0.7	0.0	4.9	0.3	0.2

Intersection Summary	
HCM 6th Ctrl Delay	83.3
HCM 6th LOS	F

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2029	79	0	1636	0	121
Future Vol, veh/h	2029	79	0	1636	0	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2205	86	0	1778	0	132

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	1103
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	-	-	0	-	0	397
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	397
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	397	-	-	-
HCM Lane V/C Ratio	0.331	-	-	-
HCM Control Delay (s)	18.5	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.4	-	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2055	95	0	1636	0	151
Future Vol, veh/h	2055	95	0	1636	0	151
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2234	103	0	1778	0	164

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	1117
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	-	-	0	-	0	391
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	391
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	20.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	391	-	-	-
HCM Lane V/C Ratio	0.42	-	-	-
HCM Control Delay (s)	20.7	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	2	-	-	-

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	1.016
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	163	15	141	233	27	206	355	525	110	383	2048	741
Growth 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
Initial Bse:	163	15	141	233	27	206	355	525	110	383	2048	741
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	163	15	141	233	27	206	355	525	110	383	2048	741
User 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
PHF 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
PHF Volume:	163	15	141	233	27	206	355	525	110	383	2048	741
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	163	15	141	233	27	206	355	525	110	383	2048	741
PCE 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
MLF 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
FinalVolume:	163	15	141	233	27	206	355	525	110	383	2048	741
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.48	0.52	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	3969	831	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.01	0.09	0.07	0.02	0.13	0.22	0.13	0.13	0.24	0.43	0.46
Crit Moves:	****					****	****					****

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.956
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	139	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1		0 1	2 0 1		0 1	1 0 2		1 0	1 0 3		0 1
Volume Module:												
Base Vol:	170	30	321	741	21	475	266	1046	99	297	1071	268
Growth 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
Initial Bse:	170	30	321	741	21	475	266	1046	99	297	1071	268
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	170	30	321	741	21	475	266	1046	99	297	1071	268
User 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
PHF 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
PHF Volume:	170	30	321	741	21	475	266	1046	99	297	1071	268
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	30	321	741	21	475	266	1046	99	297	1071	268
PCE 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
MLF 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
FinalVolume:	170	30	321	741	21	475	266	1046	99	297	1071	268
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.74	0.26	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	4385	415	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.02	0.20	0.23	0.01	0.30	0.17	0.24	0.24	0.19	0.22	0.17
Crit Moves:			****	****				****		****		

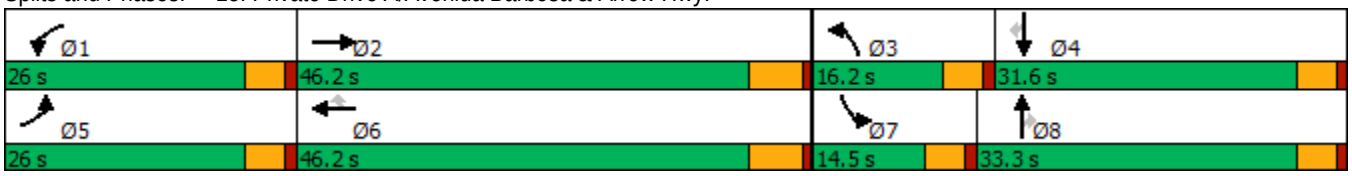
ATTACHMENT C
ALTERNATIVE 1A ANALYSIS WORKSHEETS WITH IMPROVEMENTS

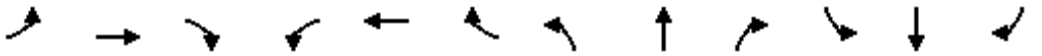
E+P Conditions

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	311	407	383	1649	648	163	15	141	198	27	174
Future Volume (vph)	311	407	383	1649	648	163	15	141	198	27	174
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	26.0	46.2	26.0	46.2	46.2	16.2	33.3	33.3	14.5	31.6	31.6
Total Split (%)	21.7%	38.5%	21.7%	38.5%	38.5%	13.5%	27.8%	27.8%	12.1%	26.3%	26.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	21.5	40.6	21.5	40.6	40.6	11.7	11.7	11.7	9.4	9.5	9.5
Actuated g/C Ratio	0.21	0.39	0.21	0.39	0.39	0.11	0.11	0.11	0.09	0.09	0.09
v/c Ratio	0.89	0.28	1.10	0.87	0.73	0.87	0.07	0.48	0.67	0.17	0.59
Control Delay	66.4	20.0	117.0	35.1	11.9	83.0	39.7	11.5	57.3	43.3	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.4	20.0	117.0	35.1	11.9	83.0	39.7	11.5	57.3	43.3	13.9
LOS	E	C	F	D	B	F	D	B	E	D	B
Approach Delay		37.4		41.3			49.4			37.4	
Approach LOS		D		D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 40.8	Intersection LOS: D
Intersection Capacity Utilization 77.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	311	407	110	383	1649	648	163	15	141	198	27	174
Future Volume (veh/h)	311	407	110	383	1649	648	163	15	141	198	27	174
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		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	334	438	120	416	1773	624	177	16	153	213	29	144
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	363	1566	415	373	2020	619	202	269	228	279	208	176
Arrive On Green	0.20	0.38	0.38	0.21	0.39	0.39	0.11	0.14	0.14	0.08	0.11	0.11
Sat Flow, veh/h	1810	4082	1081	1810	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	334	369	189	416	1773	624	177	16	153	213	29	144
Grp Sat Flow(s),veh/h/ln	1810	1729	1705	1810	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	18.8	7.6	8.0	21.4	32.9	40.4	10.0	0.8	9.4	6.2	1.4	9.1
Cycle Q Clear(g_c), s	18.8	7.6	8.0	21.4	32.9	40.4	10.0	0.8	9.4	6.2	1.4	9.1
Prop In Lane	1.00		0.63	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	363	1327	654	373	2020	619	202	269	228	279	208	176
V/C Ratio(X)	0.92	0.28	0.29	1.11	0.88	1.01	0.87	0.06	0.67	0.76	0.14	0.82
Avail Cap(c_a), veh/h	373	1347	664	373	2020	619	202	526	445	335	494	419
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	22.1	22.2	41.2	29.4	31.7	45.4	38.5	42.2	46.8	41.8	45.2
Incr Delay (d2), s/veh	26.5	0.1	0.2	81.3	4.8	38.1	31.9	0.1	3.4	6.5	0.1	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	3.0	3.1	17.5	13.5	21.7	6.3	0.4	3.9	2.9	0.7	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.2	22.2	22.4	122.5	34.1	69.8	77.3	38.6	45.6	53.3	41.9	48.8
LnGrp LOS	E	C	C	F	C	F	E	D	D	D	D	D
Approach Vol, veh/h		892			2813			346			386	
Approach Delay, s/veh		39.1			55.1			61.5			50.8	
Approach LOS		D			E			E			D	

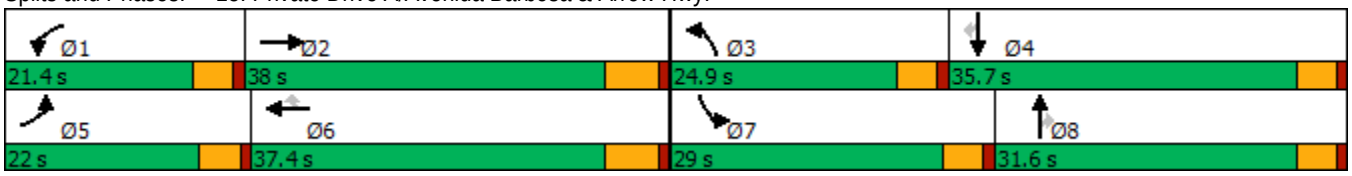
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	45.6	16.2	15.9	25.4	46.2	12.8	19.3
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	21.4	40.4	11.6	27.0	21.4	40.4	9.9	28.7
Max Q Clear Time (g_c+I1), s	23.4	10.0	12.0	11.1	20.8	42.4	8.2	11.4
Green Ext Time (p_c), s	0.0	3.5	0.0	0.3	0.0	0.0	0.1	0.5

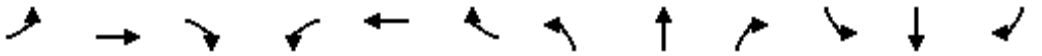
Intersection Summary	
HCM 6th Ctrl Delay	52.0
HCM 6th LOS	D

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	225	697	297	748	231	170	30	321	649	21	413
Future Volume (vph)	225	697	297	748	231	170	30	321	649	21	413
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	22.0	38.0	21.4	37.4	37.4	24.9	31.6	31.6	29.0	35.7	35.7
Total Split (%)	18.3%	31.7%	17.8%	31.2%	31.2%	20.8%	26.3%	26.3%	24.2%	29.8%	29.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	16.1	22.1	17.3	23.4	23.4	14.2	11.0	11.0	21.4	18.3	18.3
Actuated g/C Ratio	0.17	0.24	0.19	0.25	0.25	0.15	0.12	0.12	0.23	0.20	0.20
v/c Ratio	0.74	0.66	0.90	0.59	0.41	0.63	0.14	0.74	0.80	0.06	0.70
Control Delay	53.9	34.3	70.3	33.4	6.7	49.7	38.7	18.5	42.9	32.5	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.9	34.3	70.3	33.4	6.7	49.7	38.7	18.5	42.9	32.5	13.8
LOS	D	C	E	C	A	D	D	B	D	C	B
Approach Delay		38.6		37.2			29.8			31.6	
Approach LOS		D		D			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 92.1	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 35.0	Intersection LOS: D
Intersection Capacity Utilization 69.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	697	99	297	748	231	170	30	321	649	21	413
Future Volume (veh/h)	225	697	99	297	748	231	170	30	321	649	21	413
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	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	1900	1900	1900	1900	1900	1976	1976	1900	1900
Adj Flow Rate, veh/h	232	719	102	306	771	160	175	31	331	669	22	290
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	265	971	136	304	1211	371	211	417	367	750	585	496
Arrive On Green	0.15	0.21	0.21	0.17	0.23	0.23	0.12	0.22	0.22	0.21	0.31	0.31
Sat Flow, veh/h	1810	4582	643	1810	5187	1589	1810	1900	1675	3651	1900	1610
Grp Volume(v), veh/h	232	541	280	306	771	160	175	31	331	669	22	290
Grp Sat Flow(s),veh/h/ln	1810	1729	1767	1810	1729	1589	1810	1900	1675	1825	1900	1610
Q Serve(g_s), s	12.6	14.6	14.9	16.8	13.4	8.6	9.5	1.3	19.3	17.9	0.8	15.2
Cycle Q Clear(g_c), s	12.6	14.6	14.9	16.8	13.4	8.6	9.5	1.3	19.3	17.9	0.8	15.2
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	733	374	304	1211	371	211	417	367	750	585	496
V/C Ratio(X)	0.88	0.74	0.75	1.01	0.64	0.43	0.83	0.07	0.90	0.89	0.04	0.58
Avail Cap(c_a), veh/h	314	1112	568	304	1637	502	367	512	451	890	590	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	36.9	37.0	41.7	34.6	32.7	43.3	31.0	38.0	38.7	24.3	29.2
Incr Delay (d2), s/veh	18.7	1.5	3.0	53.7	0.6	0.8	8.1	0.1	18.4	9.1	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	6.7	6.0	6.4	11.7	5.4	3.4	4.7	0.6	9.7	8.6	0.4	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.6	38.3	40.0	95.4	35.1	33.5	51.3	31.1	56.4	47.8	24.3	30.4
LnGrp LOS	E	D	D	F	D	C	D	C	E	D	C	C
Approach Vol, veh/h		1053			1237			537			981	
Approach Delay, s/veh		43.7			49.8			53.3			42.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.4	27.0	16.3	35.4	19.2	29.2	25.2	26.6
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	16.8	32.2	20.3	31.1	17.4	31.6	24.4	27.0
Max Q Clear Time (g_c+I1), s	18.8	16.9	11.5	17.2	14.6	15.4	19.9	21.3
Green Ext Time (p_c), s	0.0	4.3	0.3	0.5	0.1	4.9	0.7	0.7

Intersection Summary	
HCM 6th Ctrl Delay	46.6
HCM 6th LOS	D

The Park @ Live Oak (JN 11110)
E+P Conditions WITH IMPROVEMENTS
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.971
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	155	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	163	15	141	198	27	174	311	407	110	383	1649	648
Growth 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
Initial Bse:	163	15	141	198	27	174	311	407	110	383	1649	648
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	163	15	141	198	27	174	311	407	110	383	1649	648
User 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
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	175	16	152	213	29	187	334	438	118	412	1773	697
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	175	16	152	213	29	187	334	438	118	412	1773	697
PCE 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
MLF 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
FinalVolume:	175	16	152	213	29	187	334	438	118	412	1773	697
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.36	0.64	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	3779	1021	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.01	0.09	0.07	0.02	0.12	0.21	0.12	0.12	0.26	0.37	0.44
Crit Moves:	****					****	****					****

The Park @ Live Oak (JN 11110)
E+P Conditions WITH IMPROVEMENTS
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.880
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	91	Level Of Service:	D

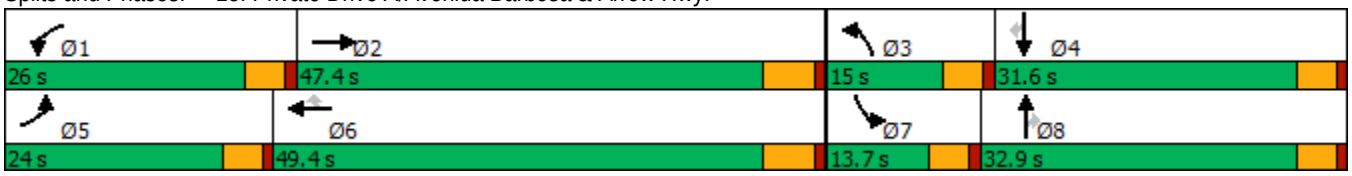
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1	0 1		2 0 1	0 1		1 0 2	1 0		1 0 3	0 1	
Volume Module:												
Base Vol:	170	30	321	649	21	413	225	697	99	297	748	231
Growth 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
Initial Bse:	170	30	321	649	21	413	225	697	99	297	748	231
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	170	30	321	649	21	413	225	697	99	297	748	231
User 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
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	176	31	332	670	22	427	232	720	102	307	773	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	31	332	670	22	427	232	720	102	307	773	239
PCE 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
MLF 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
FinalVolume:	176	31	332	670	22	427	232	720	102	307	773	239
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.63	0.37	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	4203	597	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.02	0.21	0.21	0.01	0.27	0.15	0.17	0.17	0.19	0.16	0.15
Crit Moves:			****	****				****		****		

Opening Year Cumulative (2020) With Project Conditions

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	334	496	383	1931	698	163	15	141	220	27	194
Future Volume (vph)	334	496	383	1931	698	163	15	141	220	27	194
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	24.0	47.4	26.0	49.4	49.4	15.0	32.9	32.9	13.7	31.6	31.6
Total Split (%)	20.0%	39.5%	21.7%	41.2%	41.2%	12.5%	27.4%	27.4%	11.4%	26.3%	26.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	19.5	46.7	16.7	43.9	43.9	10.5	10.8	10.8	9.2	9.5	9.5
Actuated g/C Ratio	0.19	0.45	0.16	0.43	0.43	0.10	0.10	0.10	0.09	0.09	0.09
v/c Ratio	1.05	0.28	0.73	0.94	0.77	0.97	0.08	0.50	0.76	0.17	0.62
Control Delay	104.8	18.3	49.8	38.9	14.7	107.3	40.2	12.2	63.7	43.3	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	104.8	18.3	49.8	38.9	14.7	107.3	40.2	12.2	63.7	43.3	14.0
LOS	F	B	D	D	B	F	D	B	E	D	B
Approach Delay		49.0		34.7			62.2			40.5	
Approach LOS		D		C			E			D	

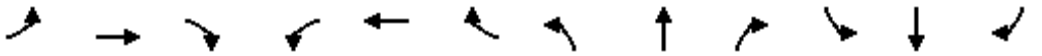
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.1	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 40.0	Intersection LOS: D
Intersection Capacity Utilization 84.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.



HCM 6th Signalized Intersection Summary
15: Private Drive A/Avenida Barbosa & Arrow Hwy.

04/12/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	496	110	383	1931	698	163	15	141	220	27	194
Future Volume (veh/h)	334	496	110	383	1931	698	163	15	141	220	27	194
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		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	359	533	120	416	2076	678	177	16	153	237	29	166
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	331	1923	423	500	2134	654	178	257	218	299	233	197
Arrive On Green	0.18	0.45	0.45	0.14	0.41	0.41	0.10	0.14	0.14	0.09	0.12	0.12
Sat Flow, veh/h	1810	4253	936	3510	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	359	431	222	416	2076	678	177	16	153	237	29	166
Grp Sat Flow(s),veh/h/ln	1810	1729	1731	1755	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	19.4	8.3	8.5	12.2	41.6	43.6	10.4	0.8	9.6	7.0	1.4	10.7
Cycle Q Clear(g_c), s	19.4	8.3	8.5	12.2	41.6	43.6	10.4	0.8	9.6	7.0	1.4	10.7
Prop In Lane	1.00		0.54	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	331	1563	783	500	2134	654	178	257	218	299	233	197
V/C Ratio(X)	1.08	0.28	0.28	0.83	0.97	1.04	1.00	0.06	0.70	0.79	0.12	0.84
Avail Cap(c_a), veh/h	331	1563	783	709	2134	654	178	507	430	301	484	410
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	18.2	18.2	44.2	30.6	31.2	47.8	39.9	43.8	47.6	41.4	45.5
Incr Delay (d2), s/veh	73.7	0.1	0.2	5.8	13.7	45.0	66.5	0.1	4.1	12.4	0.1	3.7
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	15.1	3.1	3.2	5.5	18.6	24.4	8.0	0.4	4.1	3.5	0.7	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	116.9	18.3	18.4	50.0	44.3	76.1	114.3	40.0	47.8	59.9	41.5	49.2
LnGrp LOS	F	B	B	D	D	F	F	D	D	E	D	D
Approach Vol, veh/h		1012			3170			346			432	
Approach Delay, s/veh		53.3			51.8			81.5			54.6	
Approach LOS		D			D			F			D	

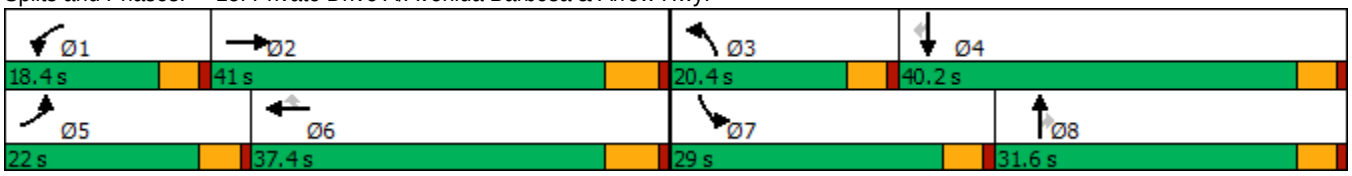
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.7	53.7	15.0	17.6	24.0	49.4	13.6	19.0
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	21.4	41.6	10.4	27.0	19.4	43.6	9.1	28.3
Max Q Clear Time (g_c+I1), s	14.2	10.5	12.4	12.7	21.4	45.6	9.0	11.6
Green Ext Time (p_c), s	0.9	4.1	0.0	0.3	0.0	0.0	0.0	0.5

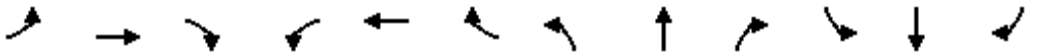
Intersection Summary	
HCM 6th Ctrl Delay	54.4
HCM 6th LOS	D

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	251	1003	297	1016	253	170	30	321	698	21	448
Future Volume (vph)	251	1003	297	1016	253	170	30	321	698	21	448
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	22.0	41.0	18.4	37.4	37.4	20.4	31.6	31.6	29.0	40.2	40.2
Total Split (%)	18.3%	34.2%	15.3%	31.2%	31.2%	17.0%	26.3%	26.3%	24.2%	33.5%	33.5%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	17.6	32.8	12.9	28.1	28.1	14.1	13.4	13.4	24.7	24.0	24.0
Actuated g/C Ratio	0.17	0.32	0.12	0.27	0.27	0.14	0.13	0.13	0.24	0.23	0.23
v/c Ratio	0.85	0.70	0.70	0.74	0.42	0.72	0.13	0.80	0.86	0.05	0.77
Control Delay	68.6	34.2	54.5	38.8	6.3	61.7	40.3	27.9	51.4	32.1	22.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.6	34.2	54.5	38.8	6.3	61.7	40.3	27.9	51.4	32.1	22.6
LOS	E	C	D	D	A	E	D	C	D	C	C
Approach Delay		40.6		36.5			39.6			40.0	
Approach LOS		D		D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.6	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 38.9	Intersection LOS: D
Intersection Capacity Utilization 73.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	1003	99	297	1016	253	170	30	321	698	21	448
Future Volume (veh/h)	251	1003	99	297	1016	253	170	30	321	698	21	448
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	259	1034	102	306	1047	183	175	31	331	720	22	326
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	274	1396	138	368	1269	389	205	420	356	745	609	516
Arrive On Green	0.15	0.29	0.29	0.10	0.24	0.24	0.11	0.22	0.22	0.21	0.32	0.32
Sat Flow, veh/h	1810	4794	472	3510	5187	1589	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	259	745	391	306	1047	183	175	31	331	720	22	326
Grp Sat Flow(s),veh/h/ln	1810	1729	1808	1755	1729	1589	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	16.3	22.4	22.5	9.8	22.0	11.3	10.9	1.5	23.2	23.4	0.9	19.8
Cycle Q Clear(g_c), s	16.3	22.4	22.5	9.8	22.0	11.3	10.9	1.5	23.2	23.4	0.9	19.8
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	274	1007	527	368	1269	389	205	420	356	745	609	516
V/C Ratio(X)	0.95	0.74	0.74	0.83	0.82	0.47	0.86	0.07	0.93	0.97	0.04	0.63
Avail Cap(c_a), veh/h	274	1059	553	421	1426	437	249	446	378	745	609	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	36.8	36.8	50.5	41.1	37.1	50.1	35.4	43.9	44.9	26.9	33.3
Incr Delay (d2), s/veh	39.5	2.7	5.1	12.0	3.7	0.9	21.1	0.1	28.2	24.8	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	9.4	10.2	4.8	9.4	4.5	6.2	0.7	12.0	12.4	0.4	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.8	39.5	41.9	62.4	44.8	37.9	71.2	35.5	72.1	69.6	26.9	35.2
LnGrp LOS	F	D	D	E	D	D	E	D	E	E	C	D
Approach Vol, veh/h		1395			1536			537			1068	
Approach Delay, s/veh		49.1			47.5			69.7			58.2	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	39.3	17.6	41.4	22.0	33.9	29.0	30.0
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	13.8	35.2	15.8	35.6	17.4	31.6	24.4	27.0
Max Q Clear Time (g_c+I1), s	11.8	24.5	12.9	21.8	18.3	24.0	25.4	25.2
Green Ext Time (p_c), s	0.2	5.0	0.1	0.5	0.0	4.2	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	53.2
HCM 6th LOS	D

The Park @ Live Oak (JN 11110)
Opening Year Cumulative (2020) With Project Conditions WITH IMPROVEMENTS
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.968
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	152	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	1 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	163	15	141	220	27	194	334	496	110	383	1931	698
Growth 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
Initial Bse:	163	15	141	220	27	194	334	496	110	383	1931	698
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	163	15	141	220	27	194	334	496	110	383	1931	698
User 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
PHF 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
PHF Volume:	163	15	141	220	27	194	334	496	110	383	1931	698
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	163	15	141	220	27	194	334	496	110	383	1931	698
PCE 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
MLF 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
FinalVolume:	163	15	141	220	27	194	334	496	110	383	1931	698
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.46	0.54	2.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	3929	871	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.01	0.09	0.07	0.02	0.12	0.21	0.13	0.13	0.12	0.40	0.44
Crit Moves:	****					****	****					****

The Park @ Live Oak (JN 11110)
Opening Year Cumulative (2020) With Project Conditions WITH IMPROVEMENTS
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.887
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	94	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	1 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	170	30	321	698	21	448	251	1003	99	297	1016	253
Growth 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
Initial Bse:	170	30	321	698	21	448	251	1003	99	297	1016	253
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	170	30	321	698	21	448	251	1003	99	297	1016	253
User 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
PHF 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
PHF Volume:	170	30	321	698	21	448	251	1003	99	297	1016	253
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	30	321	698	21	448	251	1003	99	297	1016	253
PCE 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
MLF 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
FinalVolume:	170	30	321	698	21	448	251	1003	99	297	1016	253
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.73	0.27	2.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	4369	431	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.02	0.20	0.22	0.01	0.28	0.16	0.23	0.23	0.09	0.21	0.16
Crit Moves:			****	****			****				****	

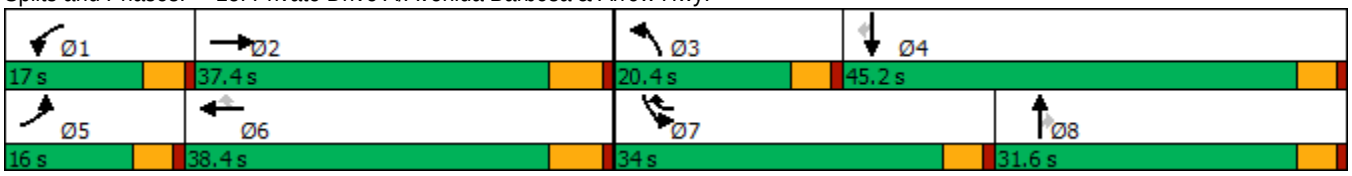
Horizon Year (2040) With Project Conditions

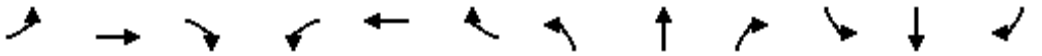
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	266	1046	297	1071	268	170	30	321	741	21	475
Future Volume (vph)	266	1046	297	1071	268	170	30	321	741	21	475
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	7	3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	7	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	9.6	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	16.0	37.4	17.0	38.4	34.0	20.4	31.6	31.6	34.0	45.2	45.2
Total Split (%)	13.3%	31.2%	14.2%	32.0%	28.3%	17.0%	26.3%	26.3%	28.3%	37.7%	37.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	None	None	Min	Min	Min

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 103.7
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	1046	99	297	1071	268	170	30	321	741	21	475
Future Volume (veh/h)	266	1046	99	297	1071	268	170	30	321	741	21	475
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	274	1078	102	306	1104	198	175	31	331	764	22	354
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	333	1257	119	366	1403	811	205	423	358	831	657	556
Arrive On Green	0.09	0.26	0.26	0.10	0.27	0.27	0.11	0.22	0.22	0.24	0.35	0.35
Sat Flow, veh/h	3510	4814	455	3510	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	274	774	406	306	1104	198	175	31	331	764	22	354
Grp Sat Flow(s),veh/h/ln	1755	1729	1811	1755	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	8.6	23.8	23.8	9.6	22.0	7.8	10.6	1.4	22.5	23.7	0.9	20.6
Cycle Q Clear(g_c), s	8.6	23.8	23.8	9.6	22.0	7.8	10.6	1.4	22.5	23.7	0.9	20.6
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	333	903	473	366	1403	811	205	423	358	831	657	556
V/C Ratio(X)	0.82	0.86	0.86	0.84	0.79	0.24	0.85	0.07	0.92	0.92	0.03	0.64
Avail Cap(c_a), veh/h	358	978	512	390	1514	845	256	459	389	924	691	585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	39.3	39.3	49.1	37.8	15.5	48.6	34.3	42.5	41.6	24.2	30.7
Incr Delay (d2), s/veh	12.3	7.2	13.0	13.9	2.7	0.2	19.6	0.1	26.4	12.5	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	4.2	10.6	11.8	4.8	9.3	2.9	5.9	0.7	11.6	11.4	0.4	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.9	46.5	52.3	63.0	40.4	15.6	68.2	34.4	68.9	54.1	24.2	32.2
LnGrp LOS	E	D	D	E	D	B	E	C	E	D	C	C
Approach Vol, veh/h		1454			1608			537			1140	
Approach Delay, s/veh		51.0			41.7			66.7			46.7	
Approach LOS		D			D			E			D	

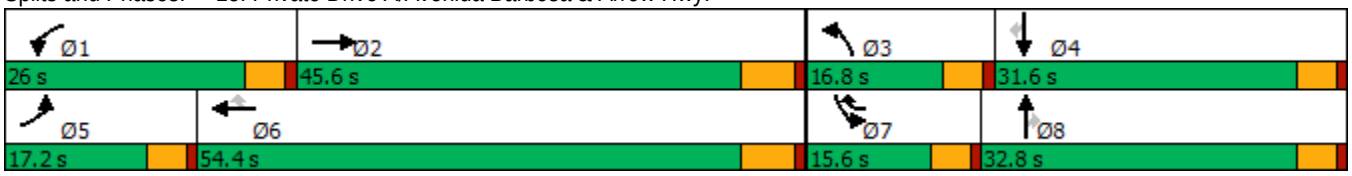
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.2	35.0	17.3	43.2	15.2	36.0	31.0	29.4
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	12.4	31.6	15.8	40.6	11.4	32.6	29.4	27.0
Max Q Clear Time (g_c+I1), s	11.6	25.8	12.6	22.6	10.6	24.0	25.7	24.5
Green Ext Time (p_c), s	0.1	3.3	0.1	0.6	0.1	4.8	0.7	0.4

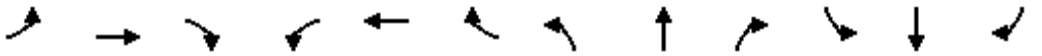
Intersection Summary	
HCM 6th Ctrl Delay	48.6
HCM 6th LOS	D

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	355	525	383	2048	741	163	15	141	233	27	206
Future Volume (vph)	355	525	383	2048	741	163	15	141	233	27	206
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	7	3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	7	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	9.6	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	17.2	45.6	26.0	54.4	15.6	16.8	32.8	32.8	15.6	31.6	31.6
Total Split (%)	14.3%	38.0%	21.7%	45.3%	13.0%	14.0%	27.3%	27.3%	13.0%	26.3%	26.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 103.1
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	355	525	110	383	2048	741	163	15	141	233	27	206
Future Volume (veh/h)	355	525	110	383	2048	741	163	15	141	233	27	206
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		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	382	565	120	416	2202	724	177	16	153	251	29	179
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	415	1848	385	499	2354	866	207	294	249	314	248	210
Arrive On Green	0.12	0.43	0.43	0.14	0.45	0.45	0.11	0.15	0.15	0.09	0.13	0.13
Sat Flow, veh/h	3510	4301	896	3510	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	382	452	233	416	2202	724	177	16	153	251	29	179
Grp Sat Flow(s),veh/h/ln	1755	1729	1739	1755	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	11.5	9.2	9.4	12.3	43.0	40.7	10.2	0.8	9.5	7.5	1.4	11.6
Cycle Q Clear(g_c), s	11.5	9.2	9.4	12.3	43.0	40.7	10.2	0.8	9.5	7.5	1.4	11.6
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	415	1486	747	499	2354	866	207	294	249	314	248	210
V/C Ratio(X)	0.92	0.30	0.31	0.83	0.94	0.84	0.86	0.05	0.61	0.80	0.12	0.85
Avail Cap(c_a), veh/h	415	1486	747	704	2362	868	207	502	426	362	481	407
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	20.0	20.0	44.5	27.7	20.4	46.4	38.4	42.1	47.6	41.0	45.4
Incr Delay (d2), s/veh	25.4	0.1	0.2	6.0	7.8	7.2	28.1	0.1	2.4	9.0	0.1	3.8
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	6.3	3.5	3.6	5.6	17.8	16.2	6.2	0.4	4.0	3.6	0.7	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.0	20.1	20.3	50.5	35.5	27.6	74.5	38.5	44.5	56.6	41.1	49.2
LnGrp LOS	E	C	C	D	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1067			3342			346			459	
Approach Delay, s/veh		38.7			35.6			59.6			52.7	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.8	51.6	16.8	18.5	17.2	54.2	14.2	21.1
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	21.4	39.8	12.2	27.0	12.6	48.6	11.0	28.2
Max Q Clear Time (g_c+I1), s	14.3	11.4	12.2	13.6	13.5	45.0	9.5	11.5
Green Ext Time (p_c), s	0.9	4.3	0.0	0.3	0.0	3.4	0.1	0.5

Intersection Summary	
HCM 6th Ctrl Delay	39.4
HCM 6th LOS	D

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions WITH IMPROVEMENTS
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.868
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	86	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	163	15	141	233	27	206	355	525	110	383	2048	741
Growth 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
Initial Bse:	163	15	141	233	27	206	355	525	110	383	2048	741
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	163	15	141	233	27	206	355	525	110	383	2048	741
User 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
PHF 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
PHF Volume:	163	15	141	233	27	206	355	525	110	383	2048	741
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	163	15	141	233	27	206	355	525	110	383	2048	741
PCE 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
MLF 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
FinalVolume:	163	15	141	233	27	206	355	525	110	383	2048	741
OvlAdjVol:												625
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	2.48	0.52	2.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	3969	831	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.01	0.09	0.07	0.02	0.13	0.11	0.13	0.13	0.12	0.43	0.46
OvlAdjV/S:												0.39
Crit Moves:	****					****	****				****	

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions WITH IMPROVEMENTS
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.864
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	85	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	170	30	321	741	21	475	266	1046	99	297	1071	268
Growth 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
Initial Bse:	170	30	321	741	21	475	266	1046	99	297	1071	268
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	170	30	321	741	21	475	266	1046	99	297	1071	268
User 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
PHF 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
PHF Volume:	170	30	321	741	21	475	266	1046	99	297	1071	268
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	30	321	741	21	475	266	1046	99	297	1071	268
PCE 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
MLF 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
FinalVolume:	170	30	321	741	21	475	266	1046	99	297	1071	268
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	2.74	0.26	2.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	4385	415	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.02	0.20	0.23	0.01	0.30	0.08	0.24	0.24	0.09	0.22	0.17
OvlAdjV/S:												0.00
Crit Moves:			****	****				****		****		

ATTACHMENT D
ALTERNATIVE 2A ANALYSIS WORKSHEETS

E+P Conditions

Intersection	
Int Delay, s/veh	202.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	726	94	178	1856	19	305	0	95	0	0	9
Future Vol, veh/h	0	726	94	178	1856	19	305	0	95	0	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	789	102	193	2017	21	332	0	103	0	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2038	0	0	891	0	0	2033	3264	446	2730	3305	1019
Stage 1	-	-	-	-	-	-	840	840	-	2414	2414	-
Stage 2	-	-	-	-	-	-	1193	2424	-	316	891	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	123	-	-	448	-	-	~ 62	9	483	23	9	204
Stage 1	-	-	-	-	-	-	~ 260	384	-	20	65	-
Stage 2	-	-	-	-	-	-	~ 181	64	-	619	363	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	123	-	-	448	-	-	~ 39	5	483	12	5	204
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 78	31	-	18	29	-
Stage 1	-	-	-	-	-	-	~ 260	384	-	20	37	-
Stage 2	-	-	-	-	-	-	~ 98	36	-	487	363	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.6	$ 1655.5	23.5
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	97	123	-	-	448	-	-	204
HCM Lane V/C Ratio	4.482	-	-	-	0.432	-	-	0.048
HCM Control Delay (s)	$ 1655.5	0	-	-	19	-	-	23.5
HCM Lane LOS	F	A	-	-	C	-	-	C
HCM 95th %tile Q(veh)	45.8	0	-	-	2.1	-	-	0.1

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

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	717	104	0	2053	0	148
Future Vol, veh/h	717	104	0	2053	0	148
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	779	113	0	2232	0	161

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	446
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	483
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	483
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

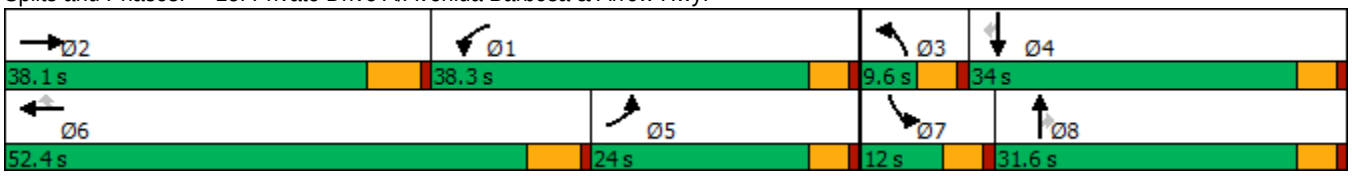
Approach	EB	WB	NB
HCM Control Delay, s	0	0	16.1
HCM LOS			C

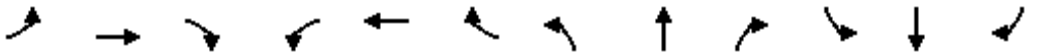
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	483	-	-	-
HCM Lane V/C Ratio	0.333	-	-	-
HCM Control Delay (s)	16.1	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.4	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	311	447	249	1783	648	57	15	172	198	27	174
Future Volume (vph)	311	447	249	1783	648	57	15	172	198	27	174
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	24.0	38.1	38.3	52.4	52.4	9.6	31.6	31.6	12.0	34.0	34.0
Total Split (%)	20.0%	31.8%	31.9%	43.7%	43.7%	8.0%	26.3%	26.3%	10.0%	28.3%	28.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 103.5
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	311	447	108	249	1783	648	57	15	172	198	27	174
Future Volume (veh/h)	311	447	108	249	1783	648	57	15	172	198	27	174
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		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	334	481	117	271	1917	624	62	16	187	213	29	144
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	365	703	166	896	2393	733	80	100	85	273	164	139
Arrive On Green	0.20	0.17	0.17	0.50	0.46	0.46	0.04	0.05	0.05	0.08	0.09	0.09
Sat Flow, veh/h	1810	4188	991	1810	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	334	395	203	271	1917	624	62	16	187	213	29	144
Grp Sat Flow(s),veh/h/ln	1810	1729	1722	1810	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	17.2	10.2	10.6	8.4	30.0	21.6	3.2	0.8	1.9	5.7	1.3	5.5
Cycle Q Clear(g_c), s	17.2	10.2	10.6	8.4	30.0	21.6	3.2	0.8	1.9	5.7	1.3	5.5
Prop In Lane	1.00		0.58	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	581	289	896	2393	733	80	100	85	273	164	139
V/C Ratio(X)	0.91	0.68	0.70	0.30	0.80	0.85	0.77	0.16	2.21	0.78	0.18	1.04
Avail Cap(c_a), veh/h	370	1176	585	896	2545	780	95	540	458	273	588	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.1	37.1	37.3	14.2	21.9	9.7	44.9	43.0	6.3	43.0	40.3	19.7
Incr Delay (d2), s/veh	25.9	1.4	3.1	0.2	1.8	8.5	27.5	0.7	551.1	12.2	0.2	31.7
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	9.8	4.2	4.5	3.2	11.2	8.5	2.1	0.4	14.9	2.8	0.6	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.0	38.5	40.4	14.4	23.7	18.2	72.4	43.7	557.5	55.2	40.5	51.4
LnGrp LOS	E	D	D	B	C	B	E	D	F	E	D	F
Approach Vol, veh/h		932			2812			265			386	
Approach Delay, s/veh		47.7			21.6			413.0			52.7	
Approach LOS		D			C			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	51.6	21.8	8.8	12.8	23.8	49.6	12.0	9.6
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	33.7	32.3	5.0	29.4	19.4	46.6	7.4	27.0
Max Q Clear Time (g_c+I1), s	10.4	12.6	5.2	7.5	19.2	32.0	7.7	3.9
Green Ext Time (p_c), s	0.7	3.4	0.0	0.3	0.0	11.8	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	53.4
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	21.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	893	83	136	1202	1	126	0	123	0	0	1
Future Vol, veh/h	0	893	83	136	1202	1	126	0	123	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
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	0	0	0	0	0
Mvmt Flow	0	921	86	140	1239	1	130	0	127	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1240	0	0	1007	0	0	1740	2484	504	1888	2527	620
Stage 1	-	-	-	-	-	-	964	964	-	1520	1520	-
Stage 2	-	-	-	-	-	-	776	1520	-	368	1007	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	304	-	-	394	-	-	~ 94	30	443	76	28	373
Stage 1	-	-	-	-	-	-	214	336	-	87	183	-
Stage 2	-	-	-	-	-	-	327	183	-	576	321	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	304	-	-	394	-	-	~ 68	19	443	39	18	373
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 128	86	-	72	73	-
Stage 1	-	-	-	-	-	-	214	336	-	87	118	-
Stage 2	-	-	-	-	-	-	210	118	-	411	321	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.9	215.4	14.7
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	197	304	-	-	394	-	-	373
HCM Lane V/C Ratio	1.303	-	-	-	0.356	-	-	0.003
HCM Control Delay (s)	215.4	0	-	-	19.1	-	-	14.7
HCM Lane LOS	F	A	-	-	C	-	-	B
HCM 95th %tile Q(veh)	14.2	0	-	-	1.6	-	-	0

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

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	920	95	0	1340	0	164
Future Vol, veh/h	920	95	0	1340	0	164
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1000	103	0	1457	0	178

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	552
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	413
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	413
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

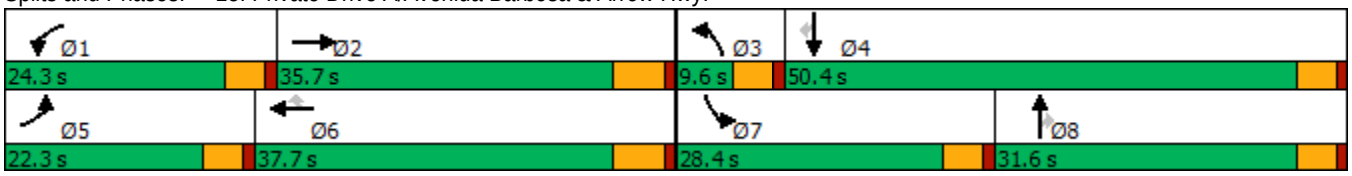
Approach	EB	WB	NB
HCM Control Delay, s	0	0	20.2
HCM LOS			C

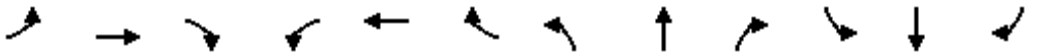
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	413	-	-	-
HCM Lane V/C Ratio	0.432	-	-	-
HCM Control Delay (s)	20.2	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	2.1	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	225	763	178	866	231	61	30	354	649	21	413
Future Volume (vph)	225	763	178	866	231	61	30	354	649	21	413
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	22.3	35.7	24.3	37.7	37.7	9.6	31.6	31.6	28.4	50.4	50.4
Total Split (%)	18.6%	29.8%	20.3%	31.4%	31.4%	8.0%	26.3%	26.3%	23.7%	42.0%	42.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 96.1
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	763	98	178	866	231	61	30	354	649	21	413
Future Volume (veh/h)	225	763	98	178	866	231	61	30	354	649	21	413
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	232	787	101	184	893	160	63	31	365	669	22	290
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	262	1161	148	217	1168	358	81	460	390	729	769	652
Arrive On Green	0.14	0.25	0.25	0.12	0.23	0.23	0.04	0.24	0.24	0.21	0.40	0.40
Sat Flow, veh/h	1810	4644	592	1810	5187	1589	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	232	584	304	184	893	160	63	31	365	669	22	290
Grp Sat Flow(s),veh/h/ln	1810	1729	1778	1810	1729	1589	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	13.7	16.6	16.8	10.8	17.5	9.4	3.7	1.4	24.1	20.3	0.8	14.2
Cycle Q Clear(g_c), s	13.7	16.6	16.8	10.8	17.5	9.4	3.7	1.4	24.1	20.3	0.8	14.2
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262	864	444	217	1168	358	81	460	390	729	769	652
V/C Ratio(X)	0.89	0.68	0.68	0.85	0.76	0.45	0.77	0.07	0.94	0.92	0.03	0.44
Avail Cap(c_a), veh/h	295	952	489	328	1523	467	83	472	400	769	801	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	36.8	36.9	46.8	39.4	36.3	51.3	31.7	40.4	42.1	19.5	23.5
Incr Delay (d2), s/veh	22.6	1.7	3.4	12.2	1.7	0.9	34.9	0.1	29.1	14.9	0.0	0.2
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	7.6	6.9	7.4	5.4	7.3	3.8	2.5	0.6	12.7	10.0	0.3	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.1	38.5	40.3	59.1	41.1	37.1	86.2	31.8	69.5	57.0	19.5	23.6
LnGrp LOS	E	D	D	E	D	D	F	C	E	E	B	C
Approach Vol, veh/h		1120			1237			459			981	
Approach Delay, s/veh		45.1			43.3			69.2			46.3	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	33.0	9.5	48.6	20.3	30.3	27.2	30.9
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	19.7	29.9	5.0	45.8	17.7	31.9	23.8	27.0
Max Q Clear Time (g_c+I1), s	12.8	18.8	5.7	16.2	15.7	19.5	22.3	26.1
Green Ext Time (p_c), s	0.3	4.0	0.0	0.5	0.1	4.9	0.3	0.2

Intersection Summary	
HCM 6th Ctrl Delay	47.7
HCM 6th LOS	D

The Park @ Live Oak (JN 11110)
E+P
AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.927
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	115	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1	0 1		2 0 1	0 1		1 0 2	1 0		1 0 3	0 1	
Volume Module:												
Base Vol:	57	15	172	198	27	174	311	447	108	249	1783	648
Growth 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
Initial Bse:	57	15	172	198	27	174	311	447	108	249	1783	648
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	15	172	198	27	174	311	447	108	249	1783	648
User 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
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	61	16	185	213	29	187	334	481	116	268	1917	697
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	16	185	213	29	187	334	481	116	268	1917	697
PCE 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
MLF 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
FinalVolume:	61	16	185	213	29	187	334	481	116	268	1917	697
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.42	0.58	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	3866	934	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.01	0.12	0.07	0.02	0.12	0.21	0.12	0.12	0.17	0.40	0.44
Crit Moves:			****	****			****					****

The Park @ Live Oak (JN 11110)
E+P
PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.870
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	87	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1	0 1		2 0 1	0 1		1 0 2	1 0		1 0 3	0 1	
Volume Module:												
Base Vol:	61	30	354	649	21	413	225	763	98	178	866	231
Growth 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
Initial Bse:	61	30	354	649	21	413	225	763	98	178	866	231
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	30	354	649	21	413	225	763	98	178	866	231
User 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
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	63	31	366	670	22	427	232	788	101	184	895	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	31	366	670	22	427	232	788	101	184	895	239
PCE 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
MLF 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
FinalVolume:	63	31	366	670	22	427	232	788	101	184	895	239
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.66	0.34	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	4254	546	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.23	0.21	0.01	0.27	0.15	0.19	0.19	0.11	0.19	0.15
Crit Moves:			****	****			****				****	

Opening Year Cumulative (2020) With Project Conditions

Intersection	
Int Delay, s/veh	258.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	838	94	178	2158	20	305	0	95	0	0	10
Future Vol, veh/h	0	838	94	178	2158	20	305	0	95	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	911	102	193	2346	22	332	0	103	0	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2368	0	0	1013	0	0	2286	3716	507	3107	3756	1184
Stage 1	-	-	-	-	-	-	962	962	-	2743	2743	-
Stage 2	-	-	-	-	-	-	1324	2754	-	364	1013	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	83	-	-	392	-	-	~ 43	5	441	13	4	159
Stage 1	-	-	-	-	-	-	~ 214	337	-	11	44	-
Stage 2	-	-	-	-	-	-	~ 150	43	-	580	319	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	83	-	-	392	-	-	~ 25	3	441	6	2	159
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 57	19	-	10	18	-
Stage 1	-	-	-	-	-	-	~ 214	337	-	11	22	-
Stage 2	-	-	-	-	-	-	~ 71	22	-	444	319	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.7	$ 2380.8	29.3
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	72	83	-	-	392	-	-	159
HCM Lane V/C Ratio	6.039	-	-	-	0.494	-	-	0.068
HCM Control Delay (s)	$ 2380.8	0	-	-	22.8	-	-	29.3
HCM Lane LOS	F	A	-	-	C	-	-	D
HCM 95th %tile Q(veh)	48.7	0	-	-	2.6	-	-	0.2

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

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	829	104	0	2356	0	148
Future Vol, veh/h	829	104	0	2356	0	148
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	901	113	0	2561	0	161

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	507
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	441
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	441
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

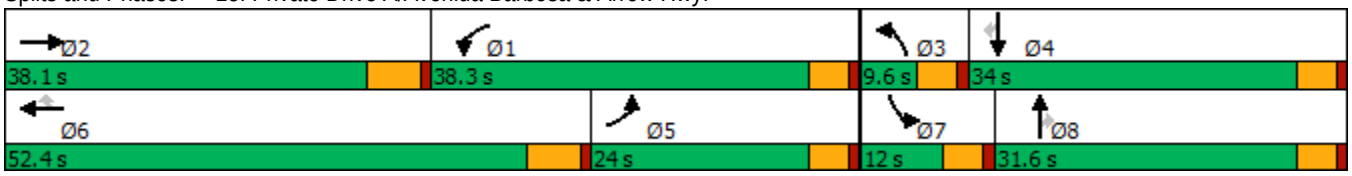
Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.8
HCM LOS			C

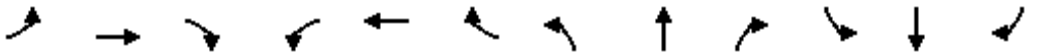
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	441	-	-	-
HCM Lane V/C Ratio	0.365	-	-	-
HCM Control Delay (s)	17.8	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.6	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	334	536	249	2065	698	57	15	172	220	27	194
Future Volume (vph)	334	536	249	2065	698	57	15	172	220	27	194
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	24.0	38.1	38.3	52.4	52.4	9.6	31.6	31.6	12.0	34.0	34.0
Total Split (%)	20.0%	31.8%	31.9%	43.7%	43.7%	8.0%	26.3%	26.3%	10.0%	28.3%	28.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 103.5
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	536	108	249	2065	698	57	15	172	220	27	194
Future Volume (veh/h)	334	536	108	249	2065	698	57	15	172	220	27	194
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		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	359	576	117	271	2220	678	62	16	187	237	29	166
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	360	811	162	878	2455	752	80	97	83	266	157	133
Arrive On Green	0.20	0.19	0.19	0.49	0.47	0.47	0.04	0.05	0.05	0.08	0.08	0.08
Sat Flow, veh/h	1810	4337	865	1810	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	359	457	236	271	2220	678	62	16	187	237	29	166
Grp Sat Flow(s),veh/h/ln	1810	1729	1744	1810	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	19.3	12.1	12.4	8.9	38.5	25.0	3.3	0.8	1.9	6.5	1.4	5.5
Cycle Q Clear(g_c), s	19.3	12.1	12.4	8.9	38.5	25.0	3.3	0.8	1.9	6.5	1.4	5.5
Prop In Lane	1.00		0.50	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	360	647	326	878	2455	752	80	97	83	266	157	133
V/C Ratio(X)	1.00	0.71	0.72	0.31	0.90	0.90	0.77	0.16	2.27	0.89	0.18	1.24
Avail Cap(c_a), veh/h	360	1145	577	878	2477	759	93	526	446	266	572	485
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	37.2	37.3	15.2	23.7	10.1	46.1	44.3	7.0	44.7	41.7	20.7
Incr Delay (d2), s/veh	46.8	1.4	3.0	0.2	5.2	13.8	28.8	0.8	578.2	27.9	0.2	115.5
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	12.8	5.0	5.3	3.4	15.0	10.8	2.1	0.4	15.2	3.8	0.6	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.9	38.6	40.3	15.4	28.8	23.9	75.0	45.1	585.2	72.6	41.9	136.2
LnGrp LOS	F	D	D	B	C	C	E	D	F	E	D	F
Approach Vol, veh/h		1052			3169			265			432	
Approach Delay, s/veh		55.1			26.6			433.2			95.0	
Approach LOS		E			C			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	51.9	24.0	8.9	12.7	24.0	52.0	12.0	9.6
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	33.7	32.3	5.0	29.4	19.4	46.6	7.4	27.0
Max Q Clear Time (g_c+I1), s	10.9	14.4	5.3	7.5	21.3	40.5	8.5	3.9
Green Ext Time (p_c), s	0.7	3.8	0.0	0.3	0.0	5.7	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	60.7
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	50

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1226	83	136	1505	1	126	0	123	0	0	1
Future Vol, veh/h	0	1226	83	136	1505	1	126	0	123	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
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	0	0	0	0	0
Mvmt Flow	0	1264	86	140	1552	1	130	0	127	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1553	0	0	1350	0	0	2208	3140	675	2339	3183	777
Stage 1	-	-	-	-	-	-	1307	1307	-	1833	1833	-
Stage 2	-	-	-	-	-	-	901	1833	-	506	1350	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	214	-	-	269	-	-	~ 48	11	344	40	10	295
Stage 1	-	-	-	-	-	-	~ 123	232	-	52	128	-
Stage 2	-	-	-	-	-	-	274	128	-	477	221	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	214	-	-	269	-	-	~ 28	5	344	15	5	295
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 71	46	-	41	34	-
Stage 1	-	-	-	-	-	-	~ 123	232	-	52	61	-
Stage 2	-	-	-	-	-	-	131	61	-	301	221	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.7	$ 624.7	17.2
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	117	214	-	-	269	-	-	295
HCM Lane V/C Ratio	2.194	-	-	-	0.521	-	-	0.003
HCM Control Delay (s)	$ 624.7	0	-	-	32.1	-	-	17.2
HCM Lane LOS	F	A	-	-	D	-	-	C
HCM 95th %tile Q(veh)	21.9	0	-	-	2.8	-	-	0

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

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1253	95	0	1643	0	164
Future Vol, veh/h	1253	95	0	1643	0	164
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1362	103	0	1786	0	178

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	733
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	315
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	315
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

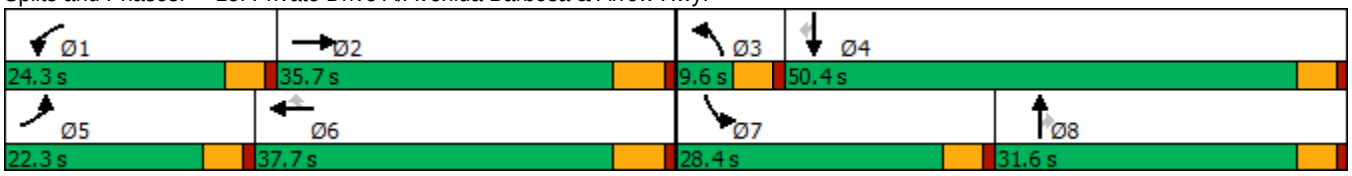
Approach	EB	WB	NB
HCM Control Delay, s	0	0	30.3
HCM LOS			D

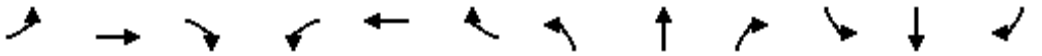
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	315	-	-	-
HCM Lane V/C Ratio	0.566	-	-	-
HCM Control Delay (s)	30.3	-	-	-
HCM Lane LOS	D	-	-	-
HCM 95th %tile Q(veh)	3.3	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	251	1069	178	1134	253	61	30	354	698	21	448
Future Volume (vph)	251	1069	178	1134	253	61	30	354	698	21	448
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	22.3	35.7	24.3	37.7	37.7	9.6	31.6	31.6	28.4	50.4	50.4
Total Split (%)	18.6%	29.8%	20.3%	31.4%	31.4%	8.0%	26.3%	26.3%	23.7%	42.0%	42.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 104.4
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	1069	98	178	1134	253	61	30	354	698	21	448
Future Volume (veh/h)	251	1069	98	178	1134	253	61	30	354	698	21	448
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	259	1102	101	184	1169	183	63	31	365	720	22	326
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	270	1389	127	214	1333	408	76	433	367	705	734	622
Arrive On Green	0.15	0.29	0.29	0.12	0.26	0.26	0.04	0.23	0.23	0.20	0.39	0.39
Sat Flow, veh/h	1810	4825	442	1810	5187	1589	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	259	789	414	184	1169	183	63	31	365	720	22	326
Grp Sat Flow(s),veh/h/ln	1810	1729	1809	1810	1729	1589	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	16.8	25.0	25.0	11.8	25.6	11.5	4.1	1.5	26.8	23.8	0.9	18.5
Cycle Q Clear(g_c), s	16.8	25.0	25.0	11.8	25.6	11.5	4.1	1.5	26.8	23.8	0.9	18.5
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	270	996	521	214	1333	408	76	433	367	705	734	622
V/C Ratio(X)	0.96	0.79	0.79	0.86	0.88	0.45	0.83	0.07	1.00	1.02	0.03	0.52
Avail Cap(c_a), veh/h	270	996	521	301	1396	428	76	433	367	705	734	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	39.0	39.0	51.3	42.3	37.0	56.3	35.9	45.7	47.4	22.6	28.0
Incr Delay (d2), s/veh	43.1	4.5	8.3	16.1	6.4	0.8	49.7	0.1	45.7	39.5	0.0	0.4
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	10.6	10.8	11.9	6.2	11.3	4.6	2.9	0.7	15.4	14.0	0.4	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.1	43.4	47.3	67.4	48.7	37.8	106.0	36.0	91.4	86.9	22.6	28.4
LnGrp LOS	F	D	D	E	D	D	F	D	F	F	C	C
Approach Vol, veh/h		1462			1536			459			1068	
Approach Delay, s/veh		53.3			49.6			89.7			67.7	
Approach LOS		D			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	39.9	9.6	50.4	22.3	36.3	28.4	31.6
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	19.7	29.9	5.0	45.8	17.7	31.9	23.8	27.0
Max Q Clear Time (g_c+I1), s	13.8	27.0	6.1	20.5	18.8	27.6	25.8	28.8
Green Ext Time (p_c), s	0.2	1.9	0.0	0.6	0.0	2.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	59.1
HCM 6th LOS	E

The Park @ Live Oak (JN 11110)
OYC 2020 WP
AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.921
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	112	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1		0 1	2 0 1		0 1	1 0 2		1 0	1 0 3		0 1
Volume Module:												
Base Vol:	57	15	172	220	27	194	334	536	108	249	2065	698
Growth 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
Initial Bse:	57	15	172	220	27	194	334	536	108	249	2065	698
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	15	172	220	27	194	334	536	108	249	2065	698
User 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
PHF 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
PHF Volume:	57	15	172	220	27	194	334	536	108	249	2065	698
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	15	172	220	27	194	334	536	108	249	2065	698
PCE 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
MLF 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
FinalVolume:	57	15	172	220	27	194	334	536	108	249	2065	698
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.50	0.50	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	3995	805	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.01	0.11	0.07	0.02	0.12	0.21	0.13	0.13	0.16	0.43	0.44
Crit Moves:			****	****			****					****

The Park @ Live Oak (JN 11110)
OYC 2020 WP
PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.932
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	119	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	61	30	354	698	21	448	251	1069	98	178	1134	253
Growth 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
Initial Bse:	61	30	354	698	21	448	251	1069	98	178	1134	253
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	30	354	698	21	448	251	1069	98	178	1134	253
User 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
PHF 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
PHF Volume:	61	30	354	698	21	448	251	1069	98	178	1134	253
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	30	354	698	21	448	251	1069	98	178	1134	253
PCE 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
MLF 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
FinalVolume:	61	30	354	698	21	448	251	1069	98	178	1134	253
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.75	0.25	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	4397	403	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.22	0.22	0.01	0.28	0.16	0.24	0.24	0.11	0.24	0.16
Crit Moves:			****	****			****				****	

Horizon Year (2040) With Project Conditions

Intersection	
Int Delay, s/veh	293.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	888	94	178	2285	21	305	0	95	0	0	10
Future Vol, veh/h	0	888	94	178	2285	21	305	0	95	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	965	102	193	2484	23	332	0	103	0	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2507	0	0	1067	0	0	2396	3909	534	3268	3949	1254
Stage 1	-	-	-	-	-	-	1016	1016	-	2882	2882	-
Stage 2	-	-	-	-	-	-	1380	2893	-	386	1067	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	71	-	-	369	-	-	~ 37	3	424	10	3	142
Stage 1	-	-	-	-	-	-	~ 197	318	-	9	37	-
Stage 2	-	-	-	-	-	-	~ 138	36	-	562	301	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	71	-	-	369	-	-	~ 20	1	424	4	1	142
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 49	15	-	8	14	-
Stage 1	-	-	-	-	-	-	~ 197	318	-	9	18	-
Stage 2	-	-	-	-	-	-	~ 61	17	-	425	301	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.8	$ 2834.9	32.4
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	62	71	-	-	369	-	-	142
HCM Lane V/C Ratio	7.013	-	-	-	0.524	-	-	0.077
HCM Control Delay (s)	$ 2834.9	0	-	-	25	-	-	32.4
HCM Lane LOS	F	A	-	-	D	-	-	D
HCM 95th %tile Q(veh)	49.9	0	-	-	2.9	-	-	0.2

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

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	879	104	0	2484	0	148
Future Vol, veh/h	879	104	0	2484	0	148
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	955	113	0	2700	0	161

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	534
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	424
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	424
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.6
HCM LOS			C

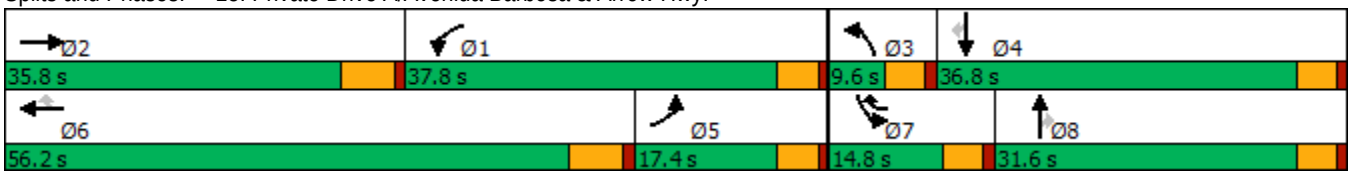
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	424	-	-	-
HCM Lane V/C Ratio	0.379	-	-	-
HCM Control Delay (s)	18.6	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.7	-	-	-

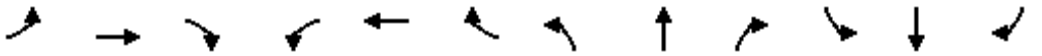
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	355	565	249	2182	741	57	15	172	233	27	206
Future Volume (vph)	355	565	249	2182	741	57	15	172	233	27	206
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	7	3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	7	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	9.6	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	17.4	35.8	37.8	56.2	14.8	9.6	31.6	31.6	14.8	36.8	36.8
Total Split (%)	14.5%	29.8%	31.5%	46.8%	12.3%	8.0%	26.3%	26.3%	12.3%	30.7%	30.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	None	None	Min	Min	Min

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 103.1
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	355	565	108	249	2182	741	57	15	172	233	27	206
Future Volume (veh/h)	355	565	108	249	2182	741	57	15	172	233	27	206
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		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	382	608	117	271	2346	724	62	16	187	251	29	179
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	450	847	161	825	2704	977	80	100	85	322	190	161
Arrive On Green	0.13	0.19	0.19	0.46	0.52	0.52	0.04	0.05	0.05	0.09	0.10	0.10
Sat Flow, veh/h	3510	4379	829	1810	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	382	478	247	271	2346	724	62	16	187	251	29	179
Grp Sat Flow(s),veh/h/ln	1755	1729	1751	1810	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	10.1	12.3	12.6	9.1	37.6	13.1	3.2	0.8	2.1	6.6	1.3	7.1
Cycle Q Clear(g_c), s	10.1	12.3	12.6	9.1	37.6	13.1	3.2	0.8	2.1	6.6	1.3	7.1
Prop In Lane	1.00		0.47	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	450	669	339	825	2704	977	80	100	85	322	190	161
V/C Ratio(X)	0.85	0.71	0.73	0.33	0.87	0.74	0.77	0.16	2.21	0.78	0.15	1.11
Avail Cap(c_a), veh/h	473	1091	552	825	2750	991	95	540	457	377	644	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	35.9	36.0	16.6	19.9	4.7	45.0	43.0	7.8	42.2	39.1	24.1
Incr Delay (d2), s/veh	12.3	1.4	3.0	0.2	3.2	3.0	27.5	0.7	551.9	7.1	0.1	57.3
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	4.9	5.0	5.4	3.5	13.8	3.4	2.1	0.4	14.9	3.1	0.6	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.8	37.3	39.0	16.8	23.1	7.7	72.5	43.8	559.7	49.3	39.2	81.4
LnGrp LOS	D	D	D	B	C	A	E	D	F	D	D	F
Approach Vol, veh/h		1107			3341			265			459	
Approach Delay, s/veh		43.1			19.2			414.5			61.2	
Approach LOS		D			B			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	47.9	24.2	8.8	14.1	16.8	55.3	13.3	9.6
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	33.2	30.0	5.0	32.2	12.8	50.4	10.2	27.0
Max Q Clear Time (g_c+I1), s	11.1	14.6	5.2	9.1	12.1	39.6	8.6	4.1
Green Ext Time (p_c), s	0.7	3.8	0.0	0.4	0.1	10.0	0.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	48.3
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	56.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1284	83	136	1588	1	126	0	123	0	0	1
Future Vol, veh/h	0	1284	83	136	1588	1	126	0	123	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
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	0	0	0	0	0
Mvmt Flow	0	1324	86	140	1637	1	130	0	127	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1638	0	0	1410	0	0	2302	3285	705	2448	3328	819
Stage 1	-	-	-	-	-	-	1367	1367	-	1918	1918	-
Stage 2	-	-	-	-	-	-	935	1918	-	530	1410	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	194	-	-	252	-	-	~ 42	9	329	34	8	277
Stage 1	-	-	-	-	-	-	~ 112	217	-	45	116	-
Stage 2	-	-	-	-	-	-	262	116	-	461	207	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	194	-	-	252	-	-	~ 23	4	329	12	4	277
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 63	39	-	35	29	-
Stage 1	-	-	-	-	-	-	~ 112	217	-	45	52	-
Stage 2	-	-	-	-	-	-	~ 116	52	-	283	207	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.8	$ 743	18
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	105	194	-	-	252	-	-	277
HCM Lane V/C Ratio	2.445	-	-	-	0.556	-	-	0.004
HCM Control Delay (s)	$ 743	0	-	-	35.8	-	-	18
HCM Lane LOS	F	A	-	-	E	-	-	C
HCM 95th %tile Q(veh)	23.1	0	-	-	3.1	-	-	0

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

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1311	95	0	1726	0	164
Future Vol, veh/h	1311	95	0	1726	0	164
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1425	103	0	1876	0	178

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	764
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	301
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	301
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

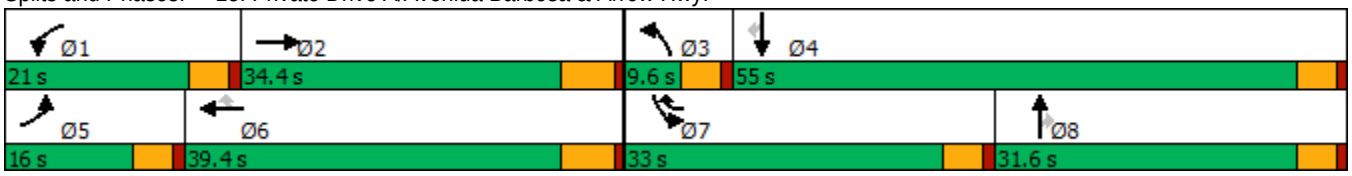
Approach	EB	WB	NB
HCM Control Delay, s	0	0	32.9
HCM LOS			D

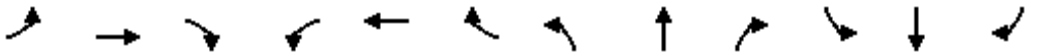
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	301	-	-	-
HCM Lane V/C Ratio	0.592	-	-	-
HCM Control Delay (s)	32.9	-	-	-
HCM Lane LOS	D	-	-	-
HCM 95th %tile Q(veh)	3.5	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	266	1112	178	1189	268	61	30	354	741	21	475
Future Volume (vph)	266	1112	178	1189	268	61	30	354	741	21	475
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	7	3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	7	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	9.6	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	16.0	34.4	21.0	39.4	33.0	9.6	31.6	31.6	33.0	55.0	55.0
Total Split (%)	13.3%	28.7%	17.5%	32.8%	27.5%	8.0%	26.3%	26.3%	27.5%	45.8%	45.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 106.8
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	1112	98	178	1189	268	61	30	354	741	21	475
Future Volume (veh/h)	266	1112	98	178	1189	268	61	30	354	741	21	475
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	274	1146	101	184	1226	198	63	31	365	764	22	354
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	330	1206	106	213	1415	809	78	440	373	820	802	680
Arrive On Green	0.09	0.25	0.25	0.12	0.27	0.27	0.04	0.23	0.23	0.23	0.42	0.42
Sat Flow, veh/h	3510	4844	427	1810	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	274	818	429	184	1226	198	63	31	365	764	22	354
Grp Sat Flow(s),veh/h/ln	1755	1729	1812	1810	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	8.9	27.1	27.2	11.6	26.2	8.2	4.0	1.5	26.3	24.9	0.8	19.0
Cycle Q Clear(g_c), s	8.9	27.1	27.2	11.6	26.2	8.2	4.0	1.5	26.3	24.9	0.8	19.0
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	861	451	213	1415	809	78	440	373	820	802	680
V/C Ratio(X)	0.83	0.95	0.95	0.86	0.87	0.24	0.81	0.07	0.98	0.93	0.03	0.52
Avail Cap(c_a), veh/h	343	861	451	255	1495	834	78	440	373	855	821	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.9	43.1	43.1	50.5	40.4	16.2	55.3	35.0	44.5	43.8	19.7	24.9
Incr Delay (d2), s/veh	14.1	19.5	30.1	22.2	5.4	0.2	45.8	0.1	40.8	15.9	0.0	0.3
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	4.5	13.5	15.5	6.4	11.4	3.0	2.8	0.7	14.7	12.3	0.3	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.0	62.6	73.2	72.7	45.8	16.4	101.1	35.1	85.3	59.7	19.7	25.2
LnGrp LOS	E	E	E	E	D	B	F	D	F	E	B	C
Approach Vol, veh/h		1521			1608			459			1140	
Approach Delay, s/veh		66.2			45.3			84.1			48.2	
Approach LOS		E			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	34.8	9.6	53.8	15.6	37.6	31.8	31.6
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	16.4	28.6	5.0	50.4	11.4	33.6	28.4	27.0
Max Q Clear Time (g_c+I1), s	13.6	29.2	6.0	21.0	10.9	28.2	26.9	28.3
Green Ext Time (p_c), s	0.1	0.0	0.0	0.7	0.0	3.6	0.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	56.5
HCM 6th LOS	E

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.965
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	148	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	57	15	172	233	27	206	355	565	108	249	2182	741
Growth 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
Initial Bse:	57	15	172	233	27	206	355	565	108	249	2182	741
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	15	172	233	27	206	355	565	108	249	2182	741
User 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
PHF 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
PHF Volume:	57	15	172	233	27	206	355	565	108	249	2182	741
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	15	172	233	27	206	355	565	108	249	2182	741
PCE 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
MLF 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
FinalVolume:	57	15	172	233	27	206	355	565	108	249	2182	741
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.52	0.48	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	4030	770	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.01	0.11	0.07	0.02	0.13	0.22	0.14	0.14	0.16	0.45	0.46
Crit Moves:			****	****			****					****

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.967
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	150	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1		0 1	2 0 1		0 1	1 0 2		1 0	1 0 3		0 1
Volume Module:												
Base Vol:	61	30	354	741	21	475	266	1112	98	178	1189	268
Growth 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
Initial Bse:	61	30	354	741	21	475	266	1112	98	178	1189	268
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	30	354	741	21	475	266	1112	98	178	1189	268
User 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
PHF 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
PHF Volume:	61	30	354	741	21	475	266	1112	98	178	1189	268
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	30	354	741	21	475	266	1112	98	178	1189	268
PCE 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
MLF 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
FinalVolume:	61	30	354	741	21	475	266	1112	98	178	1189	268
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.76	0.24	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	4411	389	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.22	0.23	0.01	0.30	0.17	0.25	0.25	0.11	0.25	0.17
Crit Moves:			****	****			****				****	

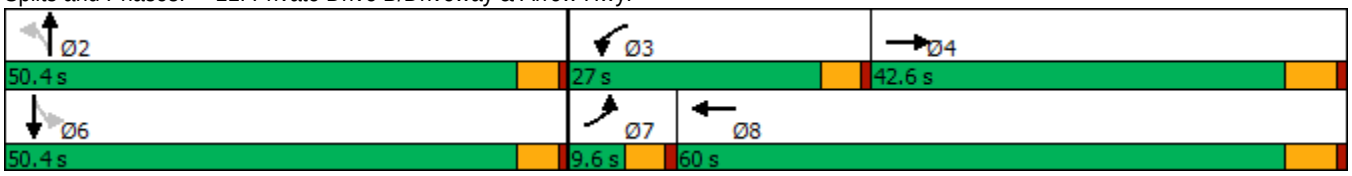
ATTACHMENT E
ALTERNATIVE 2A ANALYSIS WORKSHEETS WITH IMPROVEMENTS

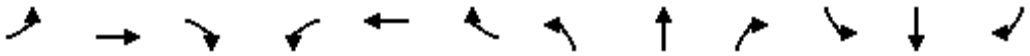
E+P Conditions

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø7
Lane Configurations							
Traffic Volume (vph)	726	178	1856	305	0	0	
Future Volume (vph)	726	178	1856	305	0	0	
Turn Type	NA	Prot	NA	Perm	NA	NA	
Protected Phases	4	3	8		2	6	7
Permitted Phases				2			
Detector Phase	4	3	8	2	2	6	
Switch Phase							
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	23.8	28.6	28.6	28.6	9.6
Total Split (s)	42.6	27.0	60.0	50.4	50.4	50.4	9.6
Total Split (%)	35.5%	22.5%	50.0%	42.0%	42.0%	42.0%	8%
Yellow Time (s)	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.8	4.6	5.8		4.6	4.6	
Lead/Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	Min	Min	Min	None
Act Effct Green (s)	28.5	14.5	47.9		28.4	28.4	
Actuated g/C Ratio	0.33	0.17	0.55		0.33	0.33	
v/c Ratio	0.53	0.65	0.72		0.81	0.02	
Control Delay	26.5	47.9	17.5		33.8	0.0	
Queue Delay	0.0	0.0	0.0		0.0	0.0	
Total Delay	26.5	47.9	17.5		33.8	0.0	
LOS	C	D	B		C	A	
Approach Delay	26.5		20.1		33.8		
Approach LOS	C		C		C		

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 87.3	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 23.3	Intersection LOS: C
Intersection Capacity Utilization 82.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 11: Private Drive B/Driveway & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	726	94	178	1856	19	305	0	95	0	0	9
Future Volume (veh/h)	0	726	94	178	1856	19	305	0	95	0	0	9
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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	789	102	193	2017	21	332	0	103	0	0	10
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	2	1588	204	234	2792	29	459	0	118	0	0	553
Arrive On Green	0.00	0.34	0.34	0.13	0.53	0.53	0.34	0.00	0.34	0.00	0.00	0.34
Sat Flow, veh/h	1810	4653	598	1810	5293	55	1106	0	343	0	0	1610
Grp Volume(v), veh/h	0	585	306	193	1317	721	435	0	0	0	0	10
Grp Sat Flow(s),veh/h/ln	1810	1729	1792	1810	1729	1890	1449	0	0	0	0	1610
Q Serve(g_s), s	0.0	10.8	10.9	8.4	23.5	23.5	22.5	0.0	0.0	0.0	0.0	0.3
Cycle Q Clear(g_c), s	0.0	10.8	10.9	8.4	23.5	23.5	22.8	0.0	0.0	0.0	0.0	0.3
Prop In Lane	1.00		0.33	1.00		0.03	0.76		0.24	0.00		1.00
Lane Grp Cap(c), veh/h	2	1180	612	234	1824	997	577	0	0	0	0	553
V/C Ratio(X)	0.00	0.50	0.50	0.82	0.72	0.72	0.75	0.00	0.00	0.00	0.00	0.02
Avail Cap(c_a), veh/h	112	1576	817	502	2321	1269	904	0	0	0	0	913
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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	21.1	21.1	34.3	14.6	14.6	25.0	0.0	0.0	0.0	0.0	17.5
Incr Delay (d2), s/veh	0.0	0.3	0.6	2.8	0.8	1.5	2.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.0	4.2	3.6	7.7	8.6	7.8	0.0	0.0	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	21.4	21.8	37.1	15.4	16.1	27.1	0.0	0.0	0.0	0.0	17.5
LnGrp LOS	A	C	C	D	B	B	C	A	A	A	A	B
Approach Vol, veh/h		891			2231			435			10	
Approach Delay, s/veh		21.5			17.5			27.1			17.5	
Approach LOS		C			B			C			B	

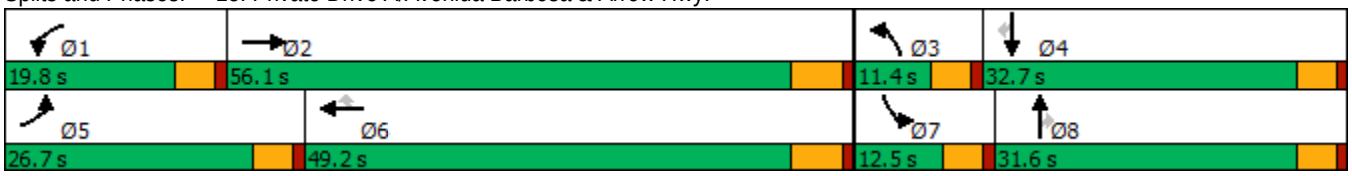
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		32.4	15.0	33.4		32.4	0.0	48.4				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		45.8	22.4	36.8		45.8	5.0	54.2				
Max Q Clear Time (g_c+I1), s		24.8	10.4	12.9		2.3	0.0	25.5				
Green Ext Time (p_c), s		2.9	0.2	5.6		0.0	0.0	17.1				

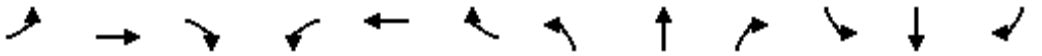
Intersection Summary												
HCM 6th Ctrl Delay			19.7									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	311	447	249	1783	648	57	15	172	198	27	174
Future Volume (vph)	311	447	249	1783	648	57	15	172	198	27	174
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	26.7	56.1	19.8	49.2	49.2	11.4	31.6	31.6	12.5	32.7	32.7
Total Split (%)	22.3%	46.8%	16.5%	41.0%	41.0%	9.5%	26.3%	26.3%	10.4%	27.3%	27.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	22.2	50.6	15.3	43.6	43.6	6.7	10.0	10.0	7.9	13.5	13.5
Actuated g/C Ratio	0.21	0.49	0.15	0.42	0.42	0.06	0.10	0.10	0.08	0.13	0.13
v/c Ratio	0.86	0.24	1.02	0.88	0.72	0.53	0.09	0.58	0.79	0.12	0.50
Control Delay	62.6	14.9	105.3	34.0	11.7	66.1	41.3	13.3	69.6	41.1	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.6	14.9	105.3	34.0	11.7	66.1	41.3	13.3	69.6	41.1	10.7
LOS	E	B	F	C	B	E	D	B	E	D	B
Approach Delay		32.0		35.3			27.4			42.0	
Approach LOS		C		D			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.5	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 34.8	Intersection LOS: C
Intersection Capacity Utilization 76.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	311	447	108	249	1783	648	57	15	172	198	27	174
Future Volume (veh/h)	311	447	108	249	1783	648	57	15	172	198	27	174
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		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	334	481	117	271	1917	624	62	16	187	213	29	144
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	362	1942	460	257	2104	645	80	261	221	259	317	268
Arrive On Green	0.20	0.46	0.46	0.14	0.41	0.41	0.04	0.14	0.14	0.07	0.17	0.17
Sat Flow, veh/h	1810	4188	991	1810	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	334	395	203	271	1917	624	62	16	187	213	29	144
Grp Sat Flow(s),veh/h/ln	1810	1729	1722	1810	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	19.4	7.4	7.7	15.2	37.3	41.1	3.6	0.8	12.1	6.4	1.4	8.8
Cycle Q Clear(g_c), s	19.4	7.4	7.7	15.2	37.3	41.1	3.6	0.8	12.1	6.4	1.4	8.8
Prop In Lane	1.00		0.58	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	362	1603	798	257	2104	645	80	261	221	259	317	268
V/C Ratio(X)	0.92	0.25	0.25	1.05	0.91	0.97	0.77	0.06	0.85	0.82	0.09	0.54
Avail Cap(c_a), veh/h	374	1626	810	257	2105	645	115	480	406	259	499	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	17.4	17.4	45.9	30.0	31.1	50.6	40.2	45.1	48.8	37.7	40.8
Incr Delay (d2), s/veh	26.8	0.1	0.2	71.0	6.5	27.4	18.0	0.1	8.7	17.6	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	2.8	2.9	11.6	15.5	20.3	2.1	0.4	5.4	3.4	0.6	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.7	17.4	17.6	116.9	36.5	58.5	68.5	40.3	53.7	66.4	37.8	41.4
LnGrp LOS	E	B	B	F	D	E	E	D	D	E	D	D
Approach Vol, veh/h		932			2812			265			386	
Approach Delay, s/veh		35.9			49.1			56.4			54.9	
Approach LOS		D			D			E			D	

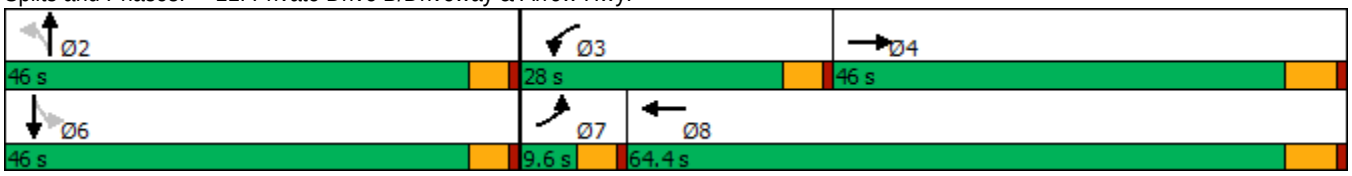
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.8	55.4	9.3	22.4	26.0	49.2	12.5	19.3
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	15.2	50.3	6.8	28.1	22.1	43.4	7.9	27.0
Max Q Clear Time (g_c+I1), s	17.2	9.7	5.6	10.8	21.4	43.1	8.4	14.1
Green Ext Time (p_c), s	0.0	3.8	0.0	0.3	0.0	0.3	0.0	0.5

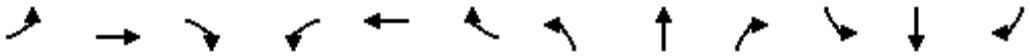
Intersection Summary	
HCM 6th Ctrl Delay	47.3
HCM 6th LOS	D

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø7
Lane Configurations							
Traffic Volume (vph)	893	136	1202	126	0	0	
Future Volume (vph)	893	136	1202	126	0	0	
Turn Type	NA	Prot	NA	Perm	NA	NA	
Protected Phases	4	3	8		2	6	7
Permitted Phases				2			
Detector Phase	4	3	8	2	2	6	
Switch Phase							
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	23.8	28.6	28.6	28.6	9.6
Total Split (s)	46.0	28.0	64.4	46.0	46.0	46.0	9.6
Total Split (%)	38.3%	23.3%	53.7%	38.3%	38.3%	38.3%	8%
Yellow Time (s)	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.8	4.6	5.8		4.6	4.6	
Lead/Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	Min	Min	Min	None
Act Effct Green (s)	20.1	9.9	34.9		14.1	14.1	
Actuated g/C Ratio	0.34	0.17	0.58		0.24	0.24	
v/c Ratio	0.58	0.47	0.41		0.59	0.00	
Control Delay	18.4	30.9	7.5		19.2	0.0	
Queue Delay	0.0	0.0	0.0		0.0	0.0	
Total Delay	18.4	30.9	7.5		19.2	0.0	
LOS	B	C	A		B	A	
Approach Delay	18.4		9.9		19.2		
Approach LOS	B		A		B		

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 59.9	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 14.0	Intersection LOS: B
Intersection Capacity Utilization 61.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 11: Private Drive B/Driveway & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	893	83	136	1202	1	126	0	123	0	0	1
Future Volume (veh/h)	0	893	83	136	1202	1	126	0	123	0	0	1
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		0.98	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	921	86	140	1239	1	130	0	127	0	0	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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	4	1667	155	184	2918	2	273	24	177	0	0	374
Arrive On Green	0.00	0.35	0.35	0.10	0.55	0.55	0.23	0.00	0.23	0.00	0.00	0.23
Sat Flow, veh/h	1810	4828	449	1810	5353	4	677	105	764	0	0	1610
Grp Volume(v), veh/h	0	659	348	140	800	440	257	0	0	0	0	1
Grp Sat Flow(s),veh/h/ln	1810	1729	1819	1810	1729	1899	1545	0	0	0	0	1610
Q Serve(g_s), s	0.0	7.2	7.2	3.5	6.4	6.4	5.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.2	7.2	3.5	6.4	6.4	7.1	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.25	1.00		0.00	0.51		0.49	0.00		1.00
Lane Grp Cap(c), veh/h	4	1194	628	184	1885	1035	475	0	0	0	0	374
V/C Ratio(X)	0.00	0.55	0.55	0.76	0.42	0.42	0.54	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	194	2973	1564	906	4334	2380	1467	0	0	0	0	1426
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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	12.4	12.4	20.5	6.3	6.3	16.4	0.0	0.0	0.0	0.0	13.8
Incr Delay (d2), s/veh	0.0	0.4	0.8	2.5	0.2	0.3	1.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.1	2.3	1.4	1.3	1.4	2.4	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	12.8	13.2	22.9	6.4	6.6	17.4	0.0	0.0	0.0	0.0	13.8
LnGrp LOS	A	B	B	C	A	A	B	A	A	A	A	B
Approach Vol, veh/h		1007			1380			257			1	
Approach Delay, s/veh		12.9			8.2			17.4			13.8	
Approach LOS		B			A			B			B	

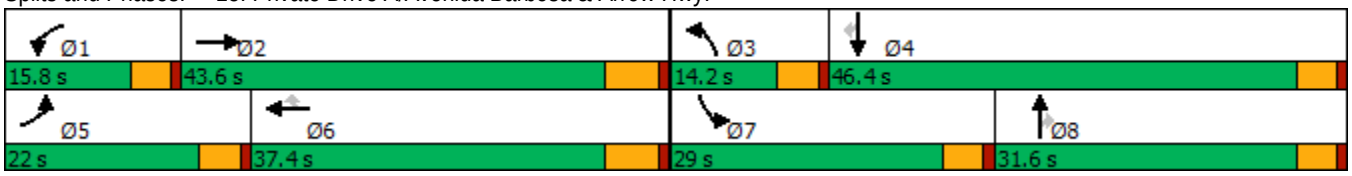
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.5	9.3	21.9		15.5	0.0	31.3				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		41.4	23.4	40.2		41.4	5.0	58.6				
Max Q Clear Time (g_c+I1), s		9.1	5.5	9.2		2.0	0.0	8.4				
Green Ext Time (p_c), s		1.8	0.1	6.9		0.0	0.0	9.8				

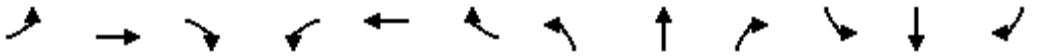
Intersection Summary												
HCM 6th Ctrl Delay			10.9									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	225	763	178	866	231	61	30	354	649	21	413
Future Volume (vph)	225	763	178	866	231	61	30	354	649	21	413
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	22.0	43.6	15.8	37.4	37.4	14.2	31.6	31.6	29.0	46.4	46.4
Total Split (%)	18.3%	36.3%	13.2%	31.2%	31.2%	11.8%	26.3%	26.3%	24.2%	38.7%	38.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	16.3	30.3	11.6	25.6	25.6	8.3	16.3	16.3	22.9	33.7	33.7
Actuated g/C Ratio	0.16	0.30	0.11	0.25	0.25	0.08	0.16	0.16	0.23	0.33	0.33
v/c Ratio	0.80	0.58	0.90	0.68	0.41	0.43	0.10	0.83	0.84	0.03	0.56
Control Delay	64.8	31.5	89.4	38.1	6.7	58.4	38.0	34.6	50.5	26.1	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.8	31.5	89.4	38.1	6.7	58.4	38.0	34.6	50.5	26.1	10.1
LOS	E	C	F	D	A	E	D	C	D	C	B
Approach Delay		38.4		39.6			38.1			34.6	
Approach LOS		D		D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 101.3	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 37.7	Intersection LOS: D
Intersection Capacity Utilization 69.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	763	98	178	866	231	61	30	354	649	21	413
Future Volume (veh/h)	225	763	98	178	866	231	61	30	354	649	21	413
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	232	787	101	184	893	160	63	31	365	669	22	290
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	262	1236	157	186	1165	357	82	460	390	732	770	653
Arrive On Green	0.14	0.27	0.27	0.10	0.22	0.22	0.05	0.24	0.24	0.21	0.41	0.41
Sat Flow, veh/h	1810	4645	592	1810	5187	1589	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	232	584	304	184	893	160	63	31	365	669	22	290
Grp Sat Flow(s),veh/h/ln	1810	1729	1778	1810	1729	1589	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	13.7	16.2	16.4	11.0	17.5	9.4	3.7	1.4	24.1	20.3	0.8	14.2
Cycle Q Clear(g_c), s	13.7	16.2	16.4	11.0	17.5	9.4	3.7	1.4	24.1	20.3	0.8	14.2
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262	920	473	186	1165	357	82	460	390	732	770	653
V/C Ratio(X)	0.89	0.64	0.64	0.99	0.77	0.45	0.77	0.07	0.94	0.91	0.03	0.44
Avail Cap(c_a), veh/h	290	1203	619	186	1508	462	160	472	400	788	770	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	35.2	35.3	48.7	39.5	36.3	51.3	31.7	40.4	42.1	19.4	23.4
Incr Delay (d2), s/veh	23.4	0.7	1.5	61.8	1.8	0.9	14.0	0.1	29.1	13.9	0.0	0.2
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	7.6	6.6	7.0	8.0	7.3	3.8	2.0	0.6	12.7	9.9	0.3	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.0	36.0	36.7	110.5	41.3	37.2	65.3	31.8	69.5	55.9	19.4	23.6
LnGrp LOS	E	D	D	F	D	D	E	C	E	E	B	C
Approach Vol, veh/h		1120			1237			459			981	
Approach Delay, s/veh		43.0			51.0			66.4			45.6	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	34.7	9.5	48.6	20.3	30.2	27.3	30.9
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	11.2	37.8	9.6	41.8	17.4	31.6	24.4	27.0
Max Q Clear Time (g_c+I1), s	13.0	18.4	5.7	16.2	15.7	19.5	22.3	26.1
Green Ext Time (p_c), s	0.0	5.2	0.0	0.5	0.1	4.9	0.4	0.2

Intersection Summary	
HCM 6th Ctrl Delay	49.1
HCM 6th LOS	D

The Park @ Live Oak (JN 11110)
E+P Conditions WITH IMPROVEMENTS
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Dwy B / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.793
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	1	1	0	2	1 0
Volume Module:												
Base Vol:	305	0	95	0	0	9	0	726	94	178	1856	19
Growth 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
Initial Bse:	305	0	95	0	0	9	0	726	94	178	1856	19
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	305	0	95	0	0	9	0	726	94	178	1856	19
User 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
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	330	0	103	0	0	10	0	786	102	193	2009	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	330	0	103	0	0	10	0	786	102	193	2009	21
PCE 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
MLF 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
FinalVolume:	330	0	103	0	0	10	0	786	102	193	2009	21
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.76	0.00	0.24	0.00	0.00	1.00	1.00	2.66	0.34	1.00	2.97	0.03
Final Sat.:	1220	0	380	0	0	1600	1600	4250	550	1600	4751	49
Capacity Analysis Module:												
Vol/Sat:	0.21	0.00	0.27	0.00	0.00	0.01	0.00	0.18	0.18	0.12	0.42	0.42
Crit Moves:			****	****			****				****	

The Park @ Live Oak (JN 11110)
E+P Conditions WITH IMPROVEMENTS
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.927
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	115	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1	0 1		2 0 1	0 1		1 0 2	1 0		1 0 3	0 1	
Volume Module:												
Base Vol:	57	15	172	198	27	174	311	447	108	249	1783	648
Growth 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
Initial Bse:	57	15	172	198	27	174	311	447	108	249	1783	648
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	15	172	198	27	174	311	447	108	249	1783	648
User 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
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	61	16	185	213	29	187	334	481	116	268	1917	697
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	16	185	213	29	187	334	481	116	268	1917	697
PCE 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
MLF 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
FinalVolume:	61	16	185	213	29	187	334	481	116	268	1917	697
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.42	0.58	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	3866	934	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.01	0.12	0.07	0.02	0.12	0.21	0.12	0.12	0.17	0.40	0.44
Crit Moves:			****	****			****					****

The Park @ Live Oak (JN 11110)
E+P Conditions WITH IMPROVEMENTS
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Dwy B / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.544
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	1	1	0	2	1 0
Volume Module:												
Base Vol:	126	0	123	0	0	1	0	893	83	136	1202	1
Growth 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
Initial Bse:	126	0	123	0	0	1	0	893	83	136	1202	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	126	0	123	0	0	1	0	893	83	136	1202	1
User 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
PHF 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
PHF Volume:	126	0	123	0	0	1	0	893	83	136	1202	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	0	123	0	0	1	0	893	83	136	1202	1
PCE 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
MLF 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
FinalVolume:	126	0	123	0	0	1	0	893	83	136	1202	1
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.51	0.00	0.49	0.00	0.00	1.00	1.00	2.74	0.26	1.00	2.99	0.01
Final Sat.:	810	0	790	0	0	1600	1600	4392	408	1600	4796	4
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.16	0.00	0.00	0.00	0.00	0.20	0.20	0.09	0.25	0.25
Crit Moves:			****	****				****		****		

The Park @ Live Oak (JN 11110)
E+P Conditions WITH IMPROVEMENTS
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.870
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	87	Level Of Service:	D

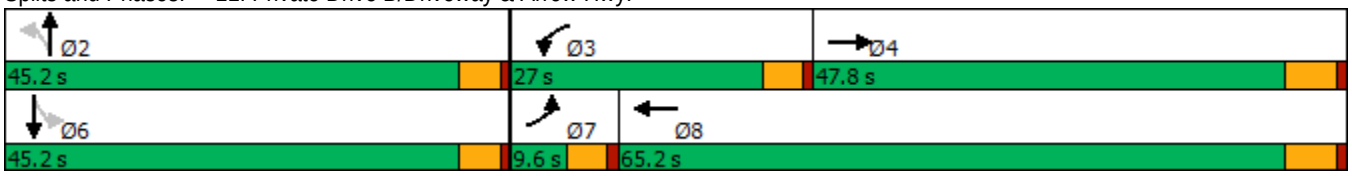
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	61	30	354	649	21	413	225	763	98	178	866	231
Growth 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
Initial Bse:	61	30	354	649	21	413	225	763	98	178	866	231
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	30	354	649	21	413	225	763	98	178	866	231
User 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
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	63	31	366	670	22	427	232	788	101	184	895	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	31	366	670	22	427	232	788	101	184	895	239
PCE 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
MLF 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
FinalVolume:	63	31	366	670	22	427	232	788	101	184	895	239
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.66	0.34	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	4254	546	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.23	0.21	0.01	0.27	0.15	0.19	0.19	0.11	0.19	0.15
Crit Moves:			****	****			****				****	

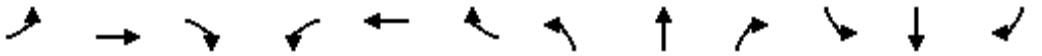
Opening Year Cumulative (2020) With Project Conditions

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø7
Lane Configurations							
Traffic Volume (vph)	838	178	2158	305	0	0	
Future Volume (vph)	838	178	2158	305	0	0	
Turn Type	NA	Prot	NA	Perm	NA	NA	
Protected Phases	4	3	8		2	6	7
Permitted Phases				2			
Detector Phase	4	3	8	2	2	6	
Switch Phase							
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	23.8	28.6	28.6	28.6	9.6
Total Split (s)	47.8	27.0	65.2	45.2	45.2	45.2	9.6
Total Split (%)	39.8%	22.5%	54.3%	37.7%	37.7%	37.7%	8%
Yellow Time (s)	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.8	4.6	5.8		4.6	4.6	
Lead/Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	Min	Min	Min	None
Act Effct Green (s)	37.5	15.1	57.4		29.7	29.7	
Actuated g/C Ratio	0.38	0.15	0.59		0.30	0.30	
v/c Ratio	0.51	0.69	0.78		0.86	0.02	
Control Delay	25.7	54.1	18.7		41.7	0.1	
Queue Delay	0.0	0.0	0.0		0.0	0.0	
Total Delay	25.7	54.1	18.7		41.7	0.1	
LOS	C	D	B		D	A	
Approach Delay	25.7		21.4		41.7	0.1	
Approach LOS	C		C		D	A	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 97.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 24.6	Intersection LOS: C
Intersection Capacity Utilization 88.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 11: Private Drive B/Driveway & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	838	94	178	2158	20	305	0	95	0	0	10
Future Volume (veh/h)	0	838	94	178	2158	20	305	0	95	0	0	10
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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	911	102	193	2346	22	332	0	103	0	0	11
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	2	1819	203	229	2961	28	433	0	114	0	0	535
Arrive On Green	0.00	0.38	0.38	0.13	0.56	0.56	0.33	0.00	0.33	0.00	0.00	0.33
Sat Flow, veh/h	1810	4735	528	1810	5299	50	1103	0	342	0	0	1610
Grp Volume(v), veh/h	0	665	348	193	1530	838	435	0	0	0	0	11
Grp Sat Flow(s),veh/h/ln	1810	1729	1805	1810	1729	1891	1445	0	0	0	0	1610
Q Serve(g_s), s	0.0	14.0	14.1	10.0	33.4	33.5	27.1	0.0	0.0	0.0	0.0	0.4
Cycle Q Clear(g_c), s	0.0	14.0	14.1	10.0	33.4	33.5	27.5	0.0	0.0	0.0	0.0	0.4
Prop In Lane	1.00		0.29	1.00		0.03	0.76		0.24	0.00		1.00
Lane Grp Cap(c), veh/h	2	1328	693	229	1932	1056	547	0	0	0	0	535
V/C Ratio(X)	0.00	0.50	0.50	0.84	0.79	0.79	0.80	0.00	0.00	0.00	0.00	0.02
Avail Cap(c_a), veh/h	95	1522	795	425	2153	1177	683	0	0	0	0	685
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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.4	22.4	40.8	16.7	16.7	30.7	0.0	0.0	0.0	0.0	21.4
Incr Delay (d2), s/veh	0.0	0.3	0.6	3.3	1.9	3.5	5.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.3	5.6	4.4	11.7	13.3	10.2	0.0	0.0	0.0	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	22.7	23.0	44.0	18.6	20.1	35.9	0.0	0.0	0.0	0.0	21.4
LnGrp LOS	A	C	C	D	B	C	D	A	A	A	A	C
Approach Vol, veh/h		1013			2561			435			11	
Approach Delay, s/veh		22.8			21.0			35.9			21.4	
Approach LOS		C			C			D			C	

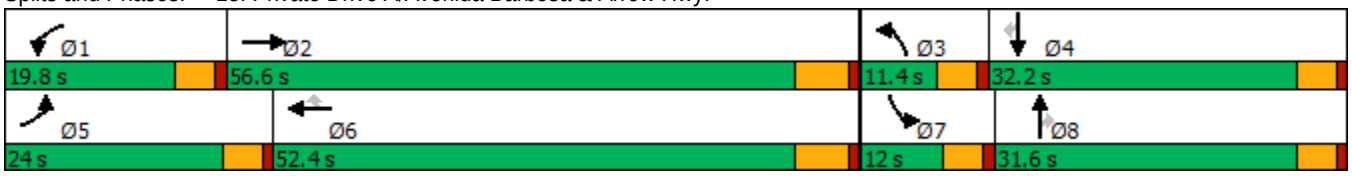
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		36.3	16.7	42.4		36.3	0.0	59.1				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		40.6	22.4	42.0		40.6	5.0	59.4				
Max Q Clear Time (g_c+I1), s		29.5	12.0	16.1		2.4	0.0	35.5				
Green Ext Time (p_c), s		2.2	0.2	6.7		0.0	0.0	17.8				

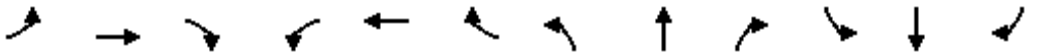
Intersection Summary												
HCM 6th Ctrl Delay			23.1									
HCM 6th LOS			C									

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	334	536	249	2065	698	57	15	172	220	27	194
Future Volume (vph)	334	536	249	2065	698	57	15	172	220	27	194
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	24.0	56.6	19.8	52.4	52.4	11.4	31.6	31.6	12.0	32.2	32.2
Total Split (%)	20.0%	47.2%	16.5%	43.7%	43.7%	9.5%	26.3%	26.3%	10.0%	26.8%	26.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	19.5	53.7	12.6	46.9	46.9	6.7	10.0	10.0	7.4	13.0	13.0
Actuated g/C Ratio	0.19	0.52	0.12	0.45	0.45	0.06	0.10	0.10	0.07	0.13	0.13
v/c Ratio	1.06	0.26	0.63	0.95	0.76	0.53	0.09	0.58	0.94	0.12	0.54
Control Delay	106.5	14.5	51.1	37.7	13.9	66.1	41.3	13.3	93.3	41.6	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	106.5	14.5	51.1	37.7	13.9	66.1	41.3	13.3	93.3	41.6	11.1
LOS	F	B	D	D	B	E	D	B	F	D	B
Approach Delay		45.9		33.3			27.4			54.0	
Approach LOS		D		C			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.5	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay: 37.6	Intersection LOS: D
Intersection Capacity Utilization 83.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	536	108	249	2065	698	57	15	172	220	27	194
Future Volume (veh/h)	334	536	108	249	2065	698	57	15	172	220	27	194
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		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	359	576	117	271	2220	678	62	16	187	237	29	166
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	326	2233	445	343	2243	688	80	260	220	241	306	260
Arrive On Green	0.18	0.51	0.51	0.10	0.43	0.43	0.04	0.14	0.14	0.07	0.16	0.16
Sat Flow, veh/h	1810	4337	865	3510	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	359	457	236	271	2220	678	62	16	187	237	29	166
Grp Sat Flow(s),veh/h/ln	1810	1729	1744	1755	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	19.4	8.0	8.2	8.1	45.8	45.5	3.7	0.8	12.2	7.3	1.4	10.4
Cycle Q Clear(g_c), s	19.4	8.0	8.2	8.1	45.8	45.5	3.7	0.8	12.2	7.3	1.4	10.4
Prop In Lane	1.00		0.50	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	326	1780	898	343	2243	688	80	260	220	241	306	260
V/C Ratio(X)	1.10	0.26	0.26	0.79	0.99	0.99	0.77	0.06	0.85	0.98	0.09	0.64
Avail Cap(c_a), veh/h	326	1780	898	495	2243	688	114	476	403	241	487	412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.2	14.6	14.7	47.5	30.3	30.3	51.0	40.5	45.4	50.1	38.5	42.3
Incr Delay (d2), s/veh	80.1	0.1	0.2	5.4	16.6	30.7	18.3	0.1	8.7	52.9	0.0	1.0
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	15.6	2.9	3.0	3.7	20.8	22.8	2.1	0.4	5.4	4.9	0.6	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	124.3	14.7	14.8	53.0	46.9	61.0	69.3	40.6	54.1	103.0	38.5	43.2
LnGrp LOS	F	B	B	D	D	E	E	D	D	F	D	D
Approach Vol, veh/h		1052			3169			265			432	
Approach Delay, s/veh		52.1			50.4			56.9			75.7	
Approach LOS		D			D			E			E	

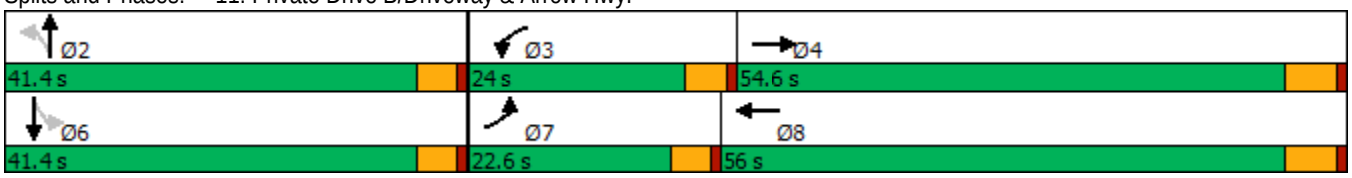
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	61.3	9.4	22.0	24.0	52.4	12.0	19.4
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	15.2	50.8	6.8	27.6	19.4	46.6	7.4	27.0
Max Q Clear Time (g_c+I1), s	10.1	10.2	5.7	12.4	21.4	47.8	9.3	14.2
Green Ext Time (p_c), s	0.4	4.5	0.0	0.3	0.0	0.0	0.0	0.5

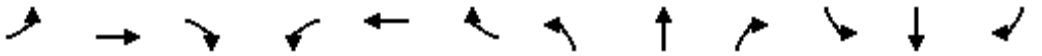
Intersection Summary	
HCM 6th Ctrl Delay	53.4
HCM 6th LOS	D

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø7
Lane Configurations							
Traffic Volume (vph)	1226	136	1505	126	0	0	
Future Volume (vph)	1226	136	1505	126	0	0	
Turn Type	NA	Prot	NA	Perm	NA	NA	
Protected Phases	4	3	8		2	6	7
Permitted Phases				2			
Detector Phase	4	3	8	2	2	6	
Switch Phase							
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	23.8	28.6	28.6	28.6	22.6
Total Split (s)	54.6	24.0	56.0	41.4	41.4	41.4	22.6
Total Split (%)	45.5%	20.0%	46.7%	34.5%	34.5%	34.5%	19%
Yellow Time (s)	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.8	4.6	5.8		4.6	4.6	
Lead/Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	Min	Min	Min	None
Act Effct Green (s)	30.8	11.1	43.8		17.0	17.0	
Actuated g/C Ratio	0.41	0.15	0.58		0.23	0.23	
v/c Ratio	0.64	0.53	0.51		0.66	0.00	
Control Delay	19.5	41.6	12.2		30.3	0.0	
Queue Delay	0.0	0.0	0.0		0.0	0.0	
Total Delay	19.5	41.6	12.2		30.3	0.0	
LOS	B	D	B		C	A	
Approach Delay	19.5		14.6		30.3		
Approach LOS	B		B		C		

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 75.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 17.8	Intersection LOS: B
Intersection Capacity Utilization 67.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 11: Private Drive B/Driveway & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1226	83	136	1505	1	126	0	123	0	0	1
Future Volume (veh/h)	0	1226	83	136	1505	1	126	0	123	0	0	1
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		0.98	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	1264	86	140	1552	1	130	0	127	0	0	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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	3	2074	141	182	3206	2	247	19	167	0	0	354
Arrive On Green	0.00	0.42	0.42	0.10	0.60	0.60	0.22	0.00	0.22	0.00	0.00	0.22
Sat Flow, veh/h	1810	4960	337	1810	5354	3	693	87	761	0	0	1610
Grp Volume(v), veh/h	0	881	469	140	1002	551	257	0	0	0	0	1
Grp Sat Flow(s),veh/h/ln	1810	1729	1839	1810	1729	1899	1541	0	0	0	0	1610
Q Serve(g_s), s	0.0	11.4	11.4	4.3	9.4	9.4	7.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.4	11.4	4.3	9.4	9.4	8.9	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.18	1.00		0.00	0.51		0.49	0.00		1.00
Lane Grp Cap(c), veh/h	3	1446	769	182	2071	1138	433	0	0	0	0	354
V/C Ratio(X)	0.00	0.61	0.61	0.77	0.48	0.48	0.59	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	568	2945	1566	613	3029	1664	1075	0	0	0	0	1034
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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	13.0	13.0	25.1	6.5	6.5	20.8	0.0	0.0	0.0	0.0	17.5
Incr Delay (d2), s/veh	0.0	0.4	0.8	2.6	0.2	0.3	1.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.4	3.7	1.8	2.0	2.3	3.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.4	13.8	27.7	6.7	6.8	22.1	0.0	0.0	0.0	0.0	17.5
LnGrp LOS	A	B	B	C	A	A	C	A	A	A	A	B
Approach Vol, veh/h		1350			1693			257			1	
Approach Delay, s/veh		13.6			8.5			22.1			17.5	
Approach LOS		B			A			C			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.2	10.4	29.8		17.2	0.0	40.1				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		36.8	19.4	48.8		36.8	18.0	50.2				
Max Q Clear Time (g_c+I1), s		10.9	6.3	13.4		2.0	0.0	11.4				
Green Ext Time (p_c), s		1.7	0.1	10.6		0.0	0.0	13.2				

Intersection Summary												
HCM 6th Ctrl Delay			11.6									
HCM 6th LOS			B									

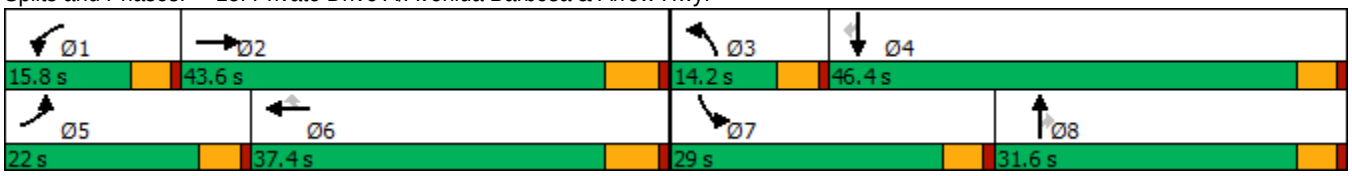
Timings

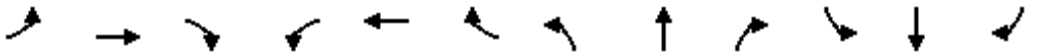
15: Private Drive A/Avenida Barbosa & Arrow Hwy. 04/12/2018

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	251	1069	178	1134	253	61	30	354	698	21	448
Future Volume (vph)	251	1069	178	1134	253	61	30	354	698	21	448
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	36.8	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	22.0	43.6	15.8	37.4	37.4	14.2	31.6	31.6	29.0	46.4	46.4
Total Split (%)	18.3%	36.3%	13.2%	31.2%	31.2%	11.8%	26.3%	26.3%	24.2%	38.7%	38.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	17.5	37.6	10.2	30.3	30.3	8.3	17.4	17.4	24.2	35.7	35.7
Actuated g/C Ratio	0.16	0.34	0.09	0.28	0.28	0.08	0.16	0.16	0.22	0.33	0.33
v/c Ratio	0.89	0.68	0.56	0.81	0.41	0.46	0.10	0.85	0.90	0.04	0.62
Control Delay	79.0	33.7	56.1	42.9	6.3	62.0	39.0	38.3	57.7	26.8	13.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.0	33.7	56.1	42.9	6.3	62.0	39.0	38.3	57.7	26.8	13.0
LOS	E	C	E	D	A	E	D	D	E	C	B
Approach Delay		41.7		38.5			41.6			40.0	
Approach LOS		D		D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 109.2	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 40.2	Intersection LOS: D
Intersection Capacity Utilization 77.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	1069	98	178	1134	253	61	30	354	698	21	448
Future Volume (veh/h)	251	1069	98	178	1134	253	61	30	354	698	21	448
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1900	1900	1900	1900	1900	1976	1976	1900	1900
Adj Flow Rate, veh/h	259	1102	101	184	1169	183	63	31	365	720	22	326
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	265	1606	147	244	1325	406	82	432	381	750	737	625
Arrive On Green	0.15	0.33	0.33	0.07	0.26	0.26	0.05	0.23	0.23	0.21	0.39	0.39
Sat Flow, veh/h	1810	4830	442	3510	5187	1589	1810	1900	1675	3651	1900	1610
Grp Volume(v), veh/h	259	789	414	184	1169	183	63	31	365	720	22	326
Grp Sat Flow(s),veh/h/ln	1810	1729	1814	1755	1729	1589	1810	1900	1675	1825	1900	1610
Q Serve(g_s), s	16.9	23.4	23.5	6.1	25.7	11.5	4.1	1.5	25.6	23.2	0.9	18.4
Cycle Q Clear(g_c), s	16.9	23.4	23.5	6.1	25.7	11.5	4.1	1.5	25.6	23.2	0.9	18.4
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	1150	603	244	1325	406	82	432	381	750	737	625
V/C Ratio(X)	0.98	0.69	0.69	0.75	0.88	0.45	0.77	0.07	0.96	0.96	0.03	0.52
Avail Cap(c_a), veh/h	265	1150	603	331	1381	423	146	432	381	750	737	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	34.3	34.3	54.2	42.5	37.2	56.1	36.0	45.3	46.7	22.5	27.9
Incr Delay (d2), s/veh	48.4	1.7	3.3	6.5	6.9	0.8	14.2	0.1	35.3	23.2	0.0	0.4
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	11.0	9.7	10.4	2.9	11.4	4.6	2.2	0.7	14.4	12.7	0.4	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	98.9	36.0	37.5	60.7	49.3	38.0	70.3	36.1	80.6	69.8	22.5	28.3
LnGrp LOS	F	D	D	E	D	D	E	D	F	E	C	C
Approach Vol, veh/h		1462			1536			459			1068	
Approach Delay, s/veh		47.6			49.4			76.2			56.2	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	45.3	10.0	50.6	22.0	36.1	29.0	31.6
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	11.2	37.8	9.6	41.8	17.4	31.6	24.4	27.0
Max Q Clear Time (g_c+I1), s	8.1	25.5	6.1	20.4	18.9	27.7	25.2	27.6
Green Ext Time (p_c), s	0.2	5.8	0.0	0.6	0.0	2.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.1
HCM 6th LOS	D

The Park @ Live Oak (JN 11110)
Opening Year Cumulative (2020) With Project Conditions WITH IMPROVEMENTS
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Dwy B / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.804
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	1	1	0	2	1	0
Volume Module:												
Base Vol:	305	0	95	0	0	10	0	838	94	178	2158	20
Growth 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
Initial Bse:	305	0	95	0	0	10	0	838	94	178	2158	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	305	0	95	0	0	10	0	838	94	178	2158	20
User 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
PHF 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
PHF Volume:	305	0	95	0	0	10	0	838	94	178	2158	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	305	0	95	0	0	10	0	838	94	178	2158	20
PCE 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
MLF 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
FinalVolume:	305	0	95	0	0	10	0	838	94	178	2158	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.76	0.00	0.24	0.00	0.00	1.00	1.00	2.70	0.30	1.00	2.97	0.03
Final Sat.:	1220	0	380	0	0	1600	1600	4316	484	1600	4756	44
Capacity Analysis Module:												
Vol/Sat:	0.19	0.00	0.25	0.00	0.00	0.01	0.00	0.19	0.19	0.11	0.45	0.45
Crit Moves:			****	****			****				****	

The Park @ Live Oak (JN 11110)
Opening Year Cumulative (2020) With Project Conditions WITH IMPROVEMENTS
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.921
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	112	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1		0 1	2 0 1		0 1	1 0 2		1 0	2 0 3		0 1
Volume Module:												
Base Vol:	57	15	172	220	27	194	334	536	108	249	2065	698
Growth 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
Initial Bse:	57	15	172	220	27	194	334	536	108	249	2065	698
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	15	172	220	27	194	334	536	108	249	2065	698
User 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
PHF 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
PHF Volume:	57	15	172	220	27	194	334	536	108	249	2065	698
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	15	172	220	27	194	334	536	108	249	2065	698
PCE 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
MLF 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
FinalVolume:	57	15	172	220	27	194	334	536	108	249	2065	698
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.50	0.50	2.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	3995	805	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.01	0.11	0.07	0.02	0.12	0.21	0.13	0.13	0.08	0.43	0.44
Crit Moves:			****	****			****					****

The Park @ Live Oak (JN 11110)
Opening Year Cumulative (2020) With Project Conditions WITH IMPROVEMENTS
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Dwy B / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	1	1	0	2	1 0
Volume Module:												
Base Vol:	126	0	123	0	0	1	0	1226	83	136	1505	1
Growth 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
Initial Bse:	126	0	123	0	0	1	0	1226	83	136	1505	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	126	0	123	0	0	1	0	1226	83	136	1505	1
User 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
PHF 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
PHF Volume:	126	0	123	0	0	1	0	1226	83	136	1505	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	0	123	0	0	1	0	1226	83	136	1505	1
PCE 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
MLF 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
FinalVolume:	126	0	123	0	0	1	0	1226	83	136	1505	1
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.51	0.00	0.49	0.00	0.00	1.00	1.00	2.81	0.19	1.00	2.99	0.01
Final Sat.:	810	0	790	0	0	1600	1600	4496	304	1600	4797	3
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.16	0.00	0.00	0.00	0.00	0.27	0.27	0.09	0.31	0.31
Crit Moves:			****	****				****		****		

The Park @ Live Oak (JN 11110)
Opening Year Cumulative (2020) With Project Conditions WITH IMPROVEMENTS
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.932
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	119	Level Of Service:	E

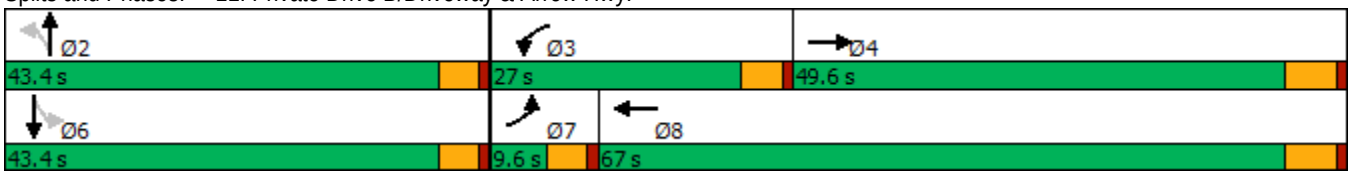
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1		0 1	2 0 1		0 1	1 0 2		1 0	2 0 3		0 1
Volume Module:												
Base Vol:	61	30	354	698	21	448	251	1069	98	178	1134	253
Growth 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
Initial Bse:	61	30	354	698	21	448	251	1069	98	178	1134	253
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	30	354	698	21	448	251	1069	98	178	1134	253
User 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
PHF 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
PHF Volume:	61	30	354	698	21	448	251	1069	98	178	1134	253
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	30	354	698	21	448	251	1069	98	178	1134	253
PCE 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
MLF 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
FinalVolume:	61	30	354	698	21	448	251	1069	98	178	1134	253
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.75	0.25	2.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	1600	4397	403	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.22	0.22	0.01	0.28	0.16	0.24	0.24	0.06	0.24	0.16
Crit Moves:			****	****			****				****	

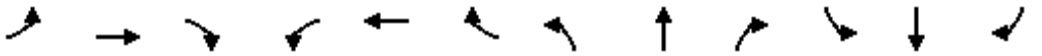
Horizon Year (2040) With Project Conditions

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø7
Lane Configurations							
Traffic Volume (vph)	888	178	2285	305	0	0	
Future Volume (vph)	888	178	2285	305	0	0	
Turn Type	NA	Prot	NA	Perm	NA	NA	
Protected Phases	4	3	8		2	6	7
Permitted Phases				2			
Detector Phase	4	3	8	2	2	6	
Switch Phase							
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	23.8	28.6	28.6	28.6	9.6
Total Split (s)	49.6	27.0	67.0	43.4	43.4	43.4	9.6
Total Split (%)	41.3%	22.5%	55.8%	36.2%	36.2%	36.2%	8%
Yellow Time (s)	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.8	4.6	5.8		4.6	4.6	
Lead/Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	Min	Min	Min	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 99.9
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Private Drive B/Driveway & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	888	94	178	2285	21	305	0	95	0	0	10
Future Volume (veh/h)	0	888	94	178	2285	21	305	0	95	0	0	10
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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	965	102	193	2484	23	332	0	103	0	0	11
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	2	1904	201	227	3028	28	421	0	111	0	0	522
Arrive On Green	0.00	0.40	0.40	0.13	0.57	0.57	0.32	0.00	0.32	0.00	0.00	0.32
Sat Flow, veh/h	1810	4765	502	1810	5300	49	1102	0	342	0	0	1610
Grp Volume(v), veh/h	0	700	367	193	1619	888	435	0	0	0	0	11
Grp Sat Flow(s),veh/h/ln	1810	1729	1810	1810	1729	1891	1445	0	0	0	0	1610
Q Serve(g_s), s	0.0	15.2	15.2	10.4	37.6	37.8	28.6	0.0	0.0	0.0	0.0	0.5
Cycle Q Clear(g_c), s	0.0	15.2	15.2	10.4	37.6	37.8	29.1	0.0	0.0	0.0	0.0	0.5
Prop In Lane	1.00		0.28	1.00		0.03	0.76		0.24	0.00		1.00
Lane Grp Cap(c), veh/h	2	1382	723	227	1976	1080	532	0	0	0	0	522
V/C Ratio(X)	0.00	0.51	0.51	0.85	0.82	0.82	0.82	0.00	0.00	0.00	0.00	0.02
Avail Cap(c_a), veh/h	91	1520	795	407	2124	1162	628	0	0	0	0	627
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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.5	22.5	42.6	17.2	17.3	32.8	0.0	0.0	0.0	0.0	22.9
Incr Delay (d2), s/veh	0.0	0.3	0.6	3.4	2.5	4.6	6.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.8	6.1	4.7	13.4	15.3	10.9	0.0	0.0	0.0	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	22.8	23.1	46.1	19.7	21.8	38.9	0.0	0.0	0.0	0.0	22.9
LnGrp LOS	A	C	C	D	B	C	D	A	A	A	A	C
Approach Vol, veh/h		1067			2700			435			11	
Approach Delay, s/veh		22.9			22.3			38.9			22.9	
Approach LOS		C			C			D			C	

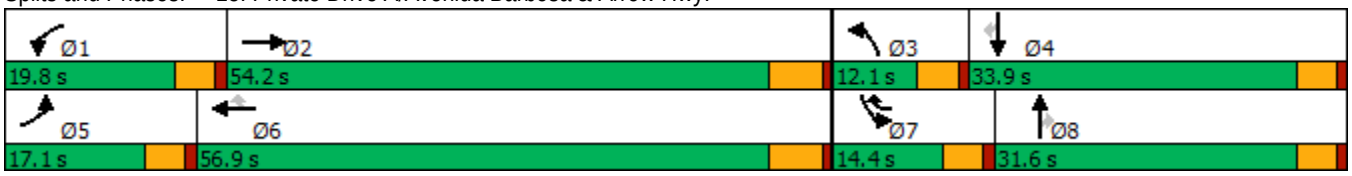
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		36.9	17.1	45.6		36.9	0.0	62.7				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		38.8	22.4	43.8		38.8	5.0	61.2				
Max Q Clear Time (g_c+I1), s		31.1	12.4	17.2		2.5	0.0	39.8				
Green Ext Time (p_c), s		1.2	0.2	7.2		0.0	0.0	17.1				

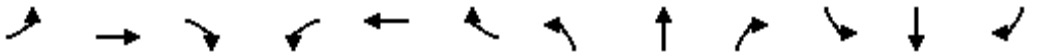
Intersection Summary												
HCM 6th Ctrl Delay			24.2									
HCM 6th LOS			C									

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	355	565	249	2182	741	57	15	172	233	27	206
Future Volume (vph)	355	565	249	2182	741	57	15	172	233	27	206
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	7	3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	7	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	9.6	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	17.1	54.2	19.8	56.9	14.4	12.1	31.6	31.6	14.4	33.9	33.9
Total Split (%)	14.3%	45.2%	16.5%	47.4%	12.0%	10.1%	26.3%	26.3%	12.0%	28.3%	28.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 103.4
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	355	565	108	249	2182	741	57	15	172	233	27	206
Future Volume (veh/h)	355	565	108	249	2182	741	57	15	172	233	27	206
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		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	382	608	117	271	2346	724	62	16	187	251	29	179
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	409	2162	410	343	2464	899	80	260	221	312	345	292
Arrive On Green	0.12	0.49	0.49	0.10	0.48	0.48	0.04	0.14	0.14	0.09	0.18	0.18
Sat Flow, veh/h	3510	4379	829	3510	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	382	478	247	271	2346	724	62	16	187	251	29	179
Grp Sat Flow(s),veh/h/ln	1755	1729	1751	1755	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	11.6	8.7	8.9	8.1	46.5	39.1	3.6	0.8	12.2	7.5	1.4	11.0
Cycle Q Clear(g_c), s	11.6	8.7	8.9	8.1	46.5	39.1	3.6	0.8	12.2	7.5	1.4	11.0
Prop In Lane	1.00		0.47	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	409	1707	864	343	2464	899	80	260	221	312	345	292
V/C Ratio(X)	0.93	0.28	0.29	0.79	0.95	0.81	0.77	0.06	0.85	0.80	0.08	0.61
Avail Cap(c_a), veh/h	409	1707	864	497	2469	900	126	478	405	320	518	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	16.0	16.0	47.4	27.0	18.7	50.8	40.3	45.2	48.0	36.5	40.5
Incr Delay (d2), s/veh	28.3	0.1	0.2	5.3	9.3	5.4	14.4	0.1	8.7	12.5	0.0	0.8
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	6.5	3.2	3.4	3.7	19.4	15.1	2.0	0.4	5.4	3.8	0.6	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.3	16.1	16.2	52.7	36.3	24.2	65.1	40.4	53.9	60.5	36.6	41.2
LnGrp LOS	E	B	B	D	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1107			3341			265			459	
Approach Delay, s/veh		36.5			35.0			55.7			51.5	
Approach LOS		D			D			E			D	

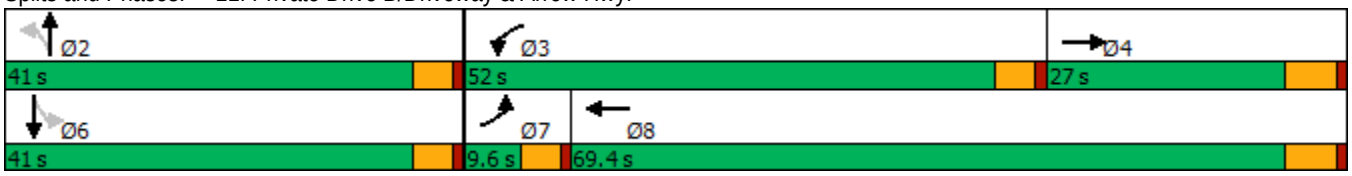
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	58.8	9.4	24.1	17.1	56.8	14.1	19.3
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	15.2	48.4	7.5	29.3	12.5	51.1	9.8	27.0
Max Q Clear Time (g_c+I1), s	10.1	10.9	5.6	13.0	13.6	48.5	9.5	14.2
Green Ext Time (p_c), s	0.4	4.8	0.0	0.3	0.0	2.5	0.0	0.5

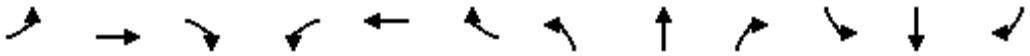
Intersection Summary	
HCM 6th Ctrl Delay	37.9
HCM 6th LOS	D

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø7
Lane Configurations							
Traffic Volume (vph)	1284	136	1588	126	0	0	
Future Volume (vph)	1284	136	1588	126	0	0	
Turn Type	NA	Prot	NA	Perm	NA	NA	
Protected Phases	4	3	8		2	6	7
Permitted Phases				2			
Detector Phase	4	3	8	2	2	6	
Switch Phase							
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.8	9.6	22.8	28.6	28.6	28.6	9.6
Total Split (s)	27.0	52.0	69.4	41.0	41.0	41.0	9.6
Total Split (%)	22.5%	43.3%	57.8%	34.2%	34.2%	34.2%	8%
Yellow Time (s)	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.8	4.6	5.8		4.6	4.6	
Lead/Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	Min	Min	Min	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 60.3
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Private Drive B/Driveway & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1284	83	136	1588	1	126	0	123	0	0	1
Future Volume (veh/h)	0	1284	83	136	1588	1	126	0	123	0	0	1
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		0.98	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	1324	86	140	1637	1	130	0	127	0	0	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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	4	1849	120	184	3040	2	262	20	167	0	0	353
Arrive On Green	0.00	0.37	0.37	0.10	0.57	0.57	0.22	0.00	0.22	0.00	0.00	0.22
Sat Flow, veh/h	1810	4977	323	1810	5354	3	687	93	762	0	0	1610
Grp Volume(v), veh/h	0	920	490	140	1057	581	257	0	0	0	0	1
Grp Sat Flow(s),veh/h/ln	1810	1729	1842	1810	1729	1899	1543	0	0	0	0	1610
Q Serve(g_s), s	0.0	11.1	11.1	3.7	9.3	9.3	6.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.1	11.1	3.7	9.3	9.3	7.6	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.18	1.00		0.00	0.51		0.49	0.00		1.00
Lane Grp Cap(c), veh/h	4	1285	684	184	1963	1078	449	0	0	0	0	353
V/C Ratio(X)	0.00	0.72	0.72	0.76	0.54	0.54	0.57	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	186	1504	801	1759	4511	2478	1250	0	0	0	0	1202
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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	13.1	13.1	21.3	6.6	6.6	17.8	0.0	0.0	0.0	0.0	14.9
Incr Delay (d2), s/veh	0.0	1.4	2.5	2.4	0.2	0.4	0.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.3	3.8	1.4	1.8	2.0	2.5	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.5	15.7	23.7	6.8	7.0	18.2	0.0	0.0	0.0	0.0	14.9
LnGrp LOS	A	B	B	C	A	A	B	A	A	A	A	B
Approach Vol, veh/h		1410			1778			257			1	
Approach Delay, s/veh		14.9			8.2			18.2			14.9	
Approach LOS		B			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.3	9.6	23.9		15.3	0.0	33.5				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		36.4	47.4	21.2		36.4	5.0	63.6				
Max Q Clear Time (g_c+I1), s		9.6	5.7	13.1		2.0	0.0	11.3				
Green Ext Time (p_c), s		1.1	0.2	5.0		0.0	0.0	15.5				

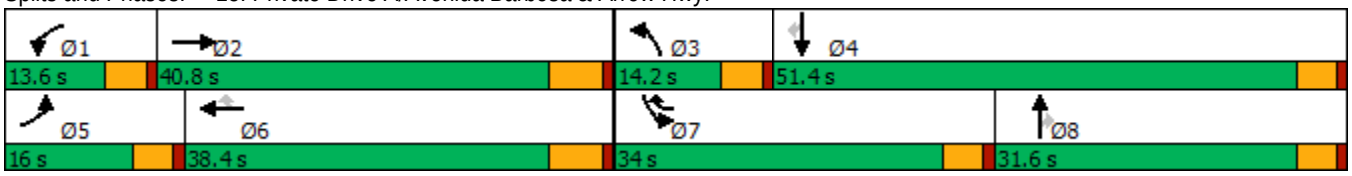
Intersection Summary												
HCM 6th Ctrl Delay			11.7									
HCM 6th LOS			B									

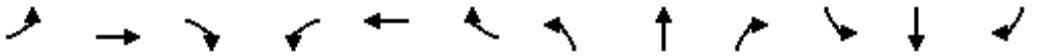
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	266	1112	178	1189	268	61	30	354	741	21	475
Future Volume (vph)	266	1112	178	1189	268	61	30	354	741	21	475
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	7	3	8		7	4	
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	7	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	27.8	9.6	36.8	9.6	9.6	31.6	31.6	9.6	31.6	31.6
Total Split (s)	16.0	40.8	13.6	38.4	34.0	14.2	31.6	31.6	34.0	51.4	51.4
Total Split (%)	13.3%	34.0%	11.3%	32.0%	28.3%	11.8%	26.3%	26.3%	28.3%	42.8%	42.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	None	None	Min	Min	Min

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 108.8
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 15: Private Drive A/Avenida Barbosa & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	1112	98	178	1189	268	61	30	354	741	21	475
Future Volume (veh/h)	266	1112	98	178	1189	268	61	30	354	741	21	475
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	274	1146	101	184	1226	198	63	31	365	764	22	354
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	331	1427	126	242	1396	806	82	442	375	825	803	680
Arrive On Green	0.09	0.29	0.29	0.07	0.27	0.27	0.05	0.23	0.23	0.24	0.42	0.42
Sat Flow, veh/h	3510	4848	427	3510	5187	1590	1810	1900	1610	3510	1900	1610
Grp Volume(v), veh/h	274	817	430	184	1226	198	63	31	365	764	22	354
Grp Sat Flow(s),veh/h/ln	1755	1729	1817	1755	1729	1590	1810	1900	1610	1755	1900	1610
Q Serve(g_s), s	8.9	25.3	25.4	6.0	26.2	8.2	4.0	1.5	26.1	24.7	0.8	18.9
Cycle Q Clear(g_c), s	8.9	25.3	25.4	6.0	26.2	8.2	4.0	1.5	26.1	24.7	0.8	18.9
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	331	1018	535	242	1396	806	82	442	375	825	803	680
V/C Ratio(X)	0.83	0.80	0.80	0.76	0.88	0.25	0.77	0.07	0.97	0.93	0.03	0.52
Avail Cap(c_a), veh/h	345	1043	548	272	1458	825	150	442	375	890	803	680
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.6	37.8	37.8	53.1	40.6	16.3	54.8	34.7	44.2	43.4	19.6	24.8
Incr Delay (d2), s/veh	13.9	4.5	8.3	10.5	6.3	0.2	14.1	0.1	39.5	14.2	0.0	0.3
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	4.4	10.9	12.0	2.9	11.5	3.0	2.2	0.7	14.5	12.0	0.3	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.5	42.4	46.2	63.5	46.8	16.4	68.9	34.8	83.6	57.6	19.6	25.1
LnGrp LOS	E	D	D	E	D	B	E	C	F	E	B	C
Approach Vol, veh/h		1521			1608			459			1140	
Approach Delay, s/veh		47.6			45.0			78.3			46.8	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	39.9	9.8	53.6	15.5	37.0	31.9	31.6
Change Period (Y+Rc), s	4.6	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	9.0	35.0	9.6	46.8	11.4	32.6	29.4	27.0
Max Q Clear Time (g_c+I1), s	8.0	27.4	6.0	20.9	10.9	28.2	26.7	28.1
Green Ext Time (p_c), s	0.1	4.3	0.0	0.7	0.0	3.0	0.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	49.5
HCM 6th LOS	D

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions WITH IMPROVEMENTS
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Dwy B / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.830
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0 0	1	0	2 1	0	1	0 2 1 0
Volume Module:												
Base Vol:	305	0	95	0	0	10	0	888	94	178	2285	21
Growth 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
Initial Bse:	305	0	95	0	0	10	0	888	94	178	2285	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	305	0	95	0	0	10	0	888	94	178	2285	21
User 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
PHF 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
PHF Volume:	305	0	95	0	0	10	0	888	94	178	2285	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	305	0	95	0	0	10	0	888	94	178	2285	21
PCE 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
MLF 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
FinalVolume:	305	0	95	0	0	10	0	888	94	178	2285	21
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.76	0.00	0.24	0.00	0.00	1.00	1.00	2.71	0.29	1.00	2.97	0.03
Final Sat.:	1220	0	380	0	0	1600	1600	4341	459	1600	4756	44
Capacity Analysis Module:												
Vol/Sat:	0.19	0.00	0.25	0.00	0.00	0.01	0.00	0.20	0.20	0.11	0.48	0.48
Crit Moves:			****	****			****				****	

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions WITH IMPROVEMENTS
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.846
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	79	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	57	15	172	233	27	206	355	565	108	249	2182	741
Growth 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
Initial Bse:	57	15	172	233	27	206	355	565	108	249	2182	741
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	15	172	233	27	206	355	565	108	249	2182	741
User 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
PHF 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
PHF Volume:	57	15	172	233	27	206	355	565	108	249	2182	741
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	15	172	233	27	206	355	565	108	249	2182	741
PCE 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
MLF 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
FinalVolume:	57	15	172	233	27	206	355	565	108	249	2182	741
OvlAdjVol:												625
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	2.52	0.48	2.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	4030	770	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.01	0.11	0.07	0.02	0.13	0.11	0.14	0.14	0.08	0.45	0.46
OvlAdjV/S:												0.39
Crit Moves:			****	****			****			****		

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions WITH IMPROVEMENTS
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Dwy B / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.625
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	1	1	0	2	1 0
Volume Module:												
Base Vol:	126	0	123	0	0	1	0	1284	83	136	1588	1
Growth 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
Initial Bse:	126	0	123	0	0	1	0	1284	83	136	1588	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	126	0	123	0	0	1	0	1284	83	136	1588	1
User 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
PHF 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
PHF Volume:	126	0	123	0	0	1	0	1284	83	136	1588	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	0	123	0	0	1	0	1284	83	136	1588	1
PCE 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
MLF 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
FinalVolume:	126	0	123	0	0	1	0	1284	83	136	1588	1
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.51	0.00	0.49	0.00	0.00	1.00	1.00	2.82	0.18	1.00	2.99	0.01
Final Sat.:	810	0	790	0	0	1600	1600	4509	291	1600	4797	3
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.16	0.00	0.00	0.00	0.00	0.28	0.28	0.09	0.33	0.33
Crit Moves:			****	****				****		****		

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions WITH IMPROVEMENTS
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Avenida Barbosa/Dwy A / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.884
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	2 0	1 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	61	30	354	741	21	475	266	1112	98	178	1189	268
Growth 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
Initial Bse:	61	30	354	741	21	475	266	1112	98	178	1189	268
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	30	354	741	21	475	266	1112	98	178	1189	268
User 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
PHF 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
PHF Volume:	61	30	354	741	21	475	266	1112	98	178	1189	268
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	30	354	741	21	475	266	1112	98	178	1189	268
PCE 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
MLF 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
FinalVolume:	61	30	354	741	21	475	266	1112	98	178	1189	268
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	2.76	0.24	2.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	4411	389	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.22	0.23	0.01	0.30	0.08	0.25	0.25	0.06	0.25	0.17
OvlAdjV/S:												0.00
Crit Moves:			****	****			****				****	

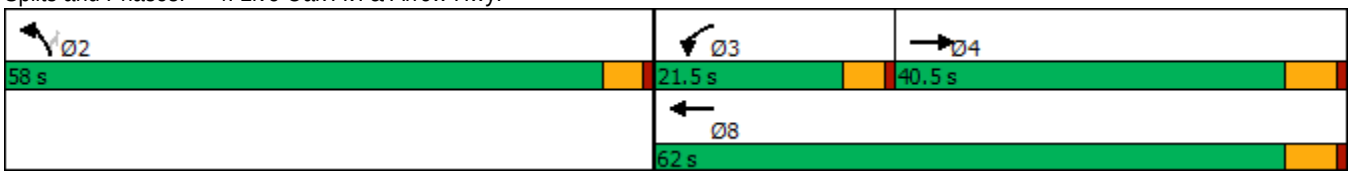
ATTACHMENT F
ALTERNATIVE 3A ANALYSIS WORKSHEETS

E+P Conditions

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	574	736	145	1800	1029	249
Future Volume (vph)	574	736	145	1800	1029	249
Turn Type	NA	Free	Prot	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		Free				2
Detector Phase	4		3	8	2	2
Switch Phase						
Minimum Initial (s)	10.0		5.0	10.0	5.0	5.0
Minimum Split (s)	15.8		9.6	15.8	29.6	29.6
Total Split (s)	40.5		21.5	62.0	58.0	58.0
Total Split (%)	33.8%		17.9%	51.7%	48.3%	48.3%
Yellow Time (s)	4.8		3.6	4.8	3.6	3.6
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	4.6	4.6
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None		None	None	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 89.7
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Live Oak Av. & Arrow Hwy.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	574	736	145	1800	1029	249
Future Volume (veh/h)	574	736	145	1800	1029	249
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	592	0	149	1856	1061	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1429		235	2713	1195	
Arrive On Green	0.40	0.00	0.07	0.52	0.34	0.00
Sat Flow, veh/h	3705	2834	3510	5358	3510	1610
Grp Volume(v), veh/h	592	0	149	1856	1061	0
Grp Sat Flow(s),veh/h/ln	1805	1417	1755	1729	1755	1610
Q Serve(g_s), s	9.0	0.0	3.1	20.2	21.8	0.0
Cycle Q Clear(g_c), s	9.0	0.0	3.1	20.2	21.8	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1429		235	2713	1195	
V/C Ratio(X)	0.41		0.63	0.68	0.89	
Avail Cap(c_a), veh/h	1646		779	3830	2463	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	16.6	0.0	34.6	13.5	23.7	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.1	0.3	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	1.3	6.4	8.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.8	0.0	35.7	13.8	24.7	0.0
LnGrp LOS	B		D	B	C	
Approach Vol, veh/h	592	A		2005	1061	A
Approach Delay, s/veh	16.8			15.4	24.7	
Approach LOS	B			B	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		30.5	9.7	35.9		45.6
Change Period (Y+Rc), s		4.6	4.6	5.8		5.8
Max Green Setting (Gmax), s		53.4	16.9	34.7		56.2
Max Q Clear Time (g_c+I1), s		23.8	5.1	11.0		22.2
Green Ext Time (p_c), s		2.2	0.2	3.7		17.6

Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	755	69	0	1945	0	79
Future Vol, veh/h	755	69	0	1945	0	79
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	821	75	0	2114	0	86

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	448
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	482
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	482
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	482	-	-	-
HCM Lane V/C Ratio	0.178	-	-	-
HCM Control Delay (s)	14.1	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.6	-	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	891	1219	107	0	59
Future Vol, veh/h	0	891	1219	107	0	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	968	1325	116	0	64

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	721
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	321
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	321
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	19
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	321
HCM Lane V/C Ratio	-	-	-	0.2
HCM Control Delay (s)	-	-	-	19
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.7

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	708	124	0	1945	0	149
Future Vol, veh/h	708	124	0	1945	0	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	770	135	0	2114	0	162

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	453
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	478
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	478
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	16.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	478	-	-	-
HCM Lane V/C Ratio	0.339	-	-	-
HCM Control Delay (s)	16.3	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.5	-	-	-

Intersection	
Int Delay, s/veh	34.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	694	164	226	1877	19	59	0	210	0	0	9
Future Vol, veh/h	0	694	164	226	1877	19	59	0	210	0	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	754	178	246	2040	21	64	0	228	0	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2061	0	0	932	0	0	2151	3396	466	2845	3475	1031
Stage 1	-	-	-	-	-	-	843	843	-	2543	2543	-
Stage 2	-	-	-	-	-	-	1308	2553	-	302	932	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	119	-	-	428	-	-	~ 52	8	469	19	7	201
Stage 1	-	-	-	-	-	-	259	382	-	16	56	-
Stage 2	-	-	-	-	-	-	153	55	-	631	348	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	119	-	-	428	-	-	~ 27	3	469	5	3	201
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 52	20	-	13	19	-
Stage 1	-	-	-	-	-	-	259	382	-	16	24	-
Stage 2	-	-	-	-	-	-	~ 62	23	-	324	348	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.6	$ 394.6	23.8
HCM LOS			F	C

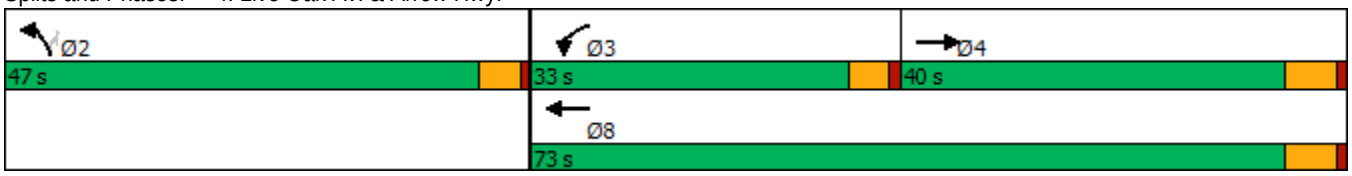
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	170	119	-	-	428	-	-	201
HCM Lane V/C Ratio	1.72	-	-	-	0.574	-	-	0.049
HCM Control Delay (s)	$ 394.6	0	-	-	24.1	-	-	23.8
HCM Lane LOS	F	A	-	-	C	-	-	C
HCM 95th %tile Q(veh)	20.6	0	-	-	3.5	-	-	0.2

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

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	786	1909	443	843	889	163
Future Volume (vph)	786	1909	443	843	889	163
Turn Type	NA	Free	Prot	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		Free				2
Detector Phase	4		3	8	2	2
Switch Phase						
Minimum Initial (s)	10.0		5.0	10.0	5.0	5.0
Minimum Split (s)	15.8		9.6	15.8	29.6	29.6
Total Split (s)	40.0		33.0	73.0	47.0	47.0
Total Split (%)	33.3%		27.5%	60.8%	39.2%	39.2%
Yellow Time (s)	4.8		3.6	4.8	3.6	3.6
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	4.6	4.6
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None		None	None	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 87.5
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Live Oak Av. & Arrow Hwy.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	786	1909	443	843	889	163
Future Volume (veh/h)	786	1909	443	843	889	163
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	802	0	452	860	907	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1099		581	2802	1056	
Arrive On Green	0.30	0.00	0.17	0.54	0.30	0.00
Sat Flow, veh/h	3705	2834	3510	5358	3510	1610
Grp Volume(v), veh/h	802	0	452	860	907	0
Grp Sat Flow(s),veh/h/ln	1805	1417	1755	1729	1755	1610
Q Serve(g_s), s	13.0	0.0	8.1	6.0	15.9	0.0
Cycle Q Clear(g_c), s	13.0	0.0	8.1	6.0	15.9	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1099		581	2802	1056	
V/C Ratio(X)	0.73		0.78	0.31	0.86	
Avail Cap(c_a), veh/h	1886		1523	5325	2274	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	20.4	0.0	26.2	8.3	21.6	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.9	0.1	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	3.1	1.7	5.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.3	0.0	27.0	8.4	22.4	0.0
LnGrp LOS	C		C	A	C	
Approach Vol, veh/h	802	A		1312	907	A
Approach Delay, s/veh	21.3			14.8	22.4	
Approach LOS	C			B	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		24.3	15.4	25.7		41.2
Change Period (Y+Rc), s		4.6	4.6	5.8		5.8
Max Green Setting (Gmax), s		42.4	28.4	34.2		67.2
Max Q Clear Time (g_c+I1), s		17.9	10.1	15.0		8.0
Green Ext Time (p_c), s		1.8	0.8	4.9		6.5

Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	887	61	0	1286	0	95
Future Vol, veh/h	887	61	0	1286	0	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	964	66	0	1398	0	103

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	515
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	436
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	436
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	15.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	436	-	-	-
HCM Lane V/C Ratio	0.237	-	-	-
HCM Control Delay (s)	15.8	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.9	-	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2358	985	92	0	65
Future Vol, veh/h	0	2358	985	92	0	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2563	1071	100	0	71

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	586
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	393
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	393
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	16.2
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	393
HCM Lane V/C Ratio	-	-	-	0.18
HCM Control Delay (s)	-	-	-	16.2
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.6

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	870	111	0	1286	0	170
Future Vol, veh/h	870	111	0	1286	0	170
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	946	121	0	1398	0	185

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	534
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	424
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	424
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	19.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	424	-	-	-
HCM Lane V/C Ratio	0.436	-	-	-
HCM Control Delay (s)	19.9	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	2.2	-	-	-

Intersection	
Int Delay, s/veh	22.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	891	150	172	1219	1	66	0	238	0	0	1
Future Vol, veh/h	0	891	150	172	1219	1	66	0	238	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
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	0	0	0	0	0
Mvmt Flow	0	919	155	177	1257	1	68	0	245	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1258	0	0	1074	0	0	1854	2609	537	1980	2686	629
Stage 1	-	-	-	-	-	-	997	997	-	1612	1612	-
Stage 2	-	-	-	-	-	-	857	1612	-	368	1074	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	298	-	-	366	-	-	80	25	422	67	22	368
Stage 1	-	-	-	-	-	-	203	325	-	75	165	-
Stage 2	-	-	-	-	-	-	292	165	-	576	299	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	298	-	-	366	-	-	~ 49	13	422	17	11	368
Mov Cap-2 Maneuver	-	-	-	-	-	-	100	65	-	39	51	-
Stage 1	-	-	-	-	-	-	203	325	-	75	85	-
Stage 2	-	-	-	-	-	-	150	85	-	241	299	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.9	187.4	14.8
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	248	298	-	-	366	-	-	368
HCM Lane V/C Ratio	1.264	-	-	-	0.484	-	-	0.003
HCM Control Delay (s)	187.4	0	-	-	23.7	-	-	14.8
HCM Lane LOS	F	A	-	-	C	-	-	B
HCM 95th %tile Q(veh)	15.7	0	-	-	2.5	-	-	0

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

The Park @ Live Oak (JN 11110)
E+P
AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Live Oak / Arrow (West)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.820
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0 0	0	0 0	0 0	3	0 0	2 0	3	0 0
Volume Module:												
Base Vol:	1029	0	249	0	0	0	0	574	0	145	1800	0
Growth 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
Initial Bse:	1029	0	249	0	0	0	0	574	0	145	1800	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1029	0	249	0	0	0	0	574	0	145	1800	0
User 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
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	1064	0	257	0	0	0	0	594	0	150	1861	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1064	0	257	0	0	0	0	594	0	150	1861	0
PCE 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
MLF 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
FinalVolume:	1064	0	257	0	0	0	0	594	0	150	1861	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	0.00	2.00	3.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	4800	0	3200	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.33	0.00	0.16	0.00	0.00	0.00	0.00	0.12	0.00	0.05	0.39	0.00
Crit Moves:	****						****				****	

The Park @ Live Oak (JN 11110)
E+P
PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Live Oak / Arrow (West)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.690
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

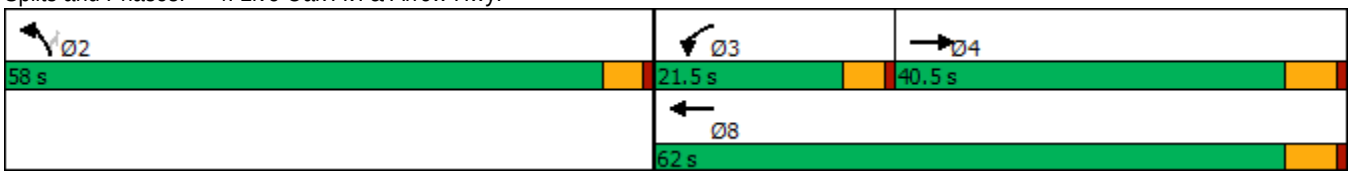
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0 0	0	0 0	0 0	3	0 0	2 0	3	0 0
Volume Module:												
Base Vol:	889	0	163	0	0	0	0	786	0	443	843	0
Growth 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
Initial Bse:	889	0	163	0	0	0	0	786	0	443	843	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	889	0	163	0	0	0	0	786	0	443	843	0
User 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
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	904	0	166	0	0	0	0	800	0	451	858	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	904	0	166	0	0	0	0	800	0	451	858	0
PCE 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
MLF 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
FinalVolume:	904	0	166	0	0	0	0	800	0	451	858	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	0.00	2.00	3.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	4800	0	3200	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.28	0.00	0.10	0.00	0.00	0.00	0.00	0.17	0.00	0.14	0.18	0.00
Crit Moves:	****							****		****		

Opening Year Cumulative (2020) With Project Conditions

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	620	780	291	1957	1143	315
Future Volume (vph)	620	780	291	1957	1143	315
Turn Type	NA	Free	Prot	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		Free				2
Detector Phase	4		3	8	2	2
Switch Phase						
Minimum Initial (s)	10.0		5.0	10.0	5.0	5.0
Minimum Split (s)	15.8		9.6	15.8	29.6	29.6
Total Split (s)	40.5		21.5	62.0	58.0	58.0
Total Split (%)	33.8%		17.9%	51.7%	48.3%	48.3%
Yellow Time (s)	4.8		3.6	4.8	3.6	3.6
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	4.6	4.6
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None		None	None	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 102
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Live Oak Av. & Arrow Hwy.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	620	780	291	1957	1143	315
Future Volume (veh/h)	620	780	291	1957	1143	315
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	639	0	300	2018	1178	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1850		383	2680	1293	
Arrive On Green	0.36	0.00	0.11	0.52	0.37	0.00
Sat Flow, veh/h	5358	2834	3510	5358	3510	1610
Grp Volume(v), veh/h	639	0	300	2018	1178	0
Grp Sat Flow(s),veh/h/ln	1729	1417	1755	1729	1755	1610
Q Serve(g_s), s	8.2	0.0	7.5	27.8	28.8	0.0
Cycle Q Clear(g_c), s	8.2	0.0	7.5	27.8	28.8	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1850		383	2680	1293	
V/C Ratio(X)	0.35		0.78	0.75	0.91	
Avail Cap(c_a), veh/h	1993		657	3227	2075	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	21.3	0.0	39.2	17.3	27.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.3	0.8	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	3.2	9.6	11.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.4	0.0	40.6	18.1	29.9	0.0
LnGrp LOS	C		D	B	C	
Approach Vol, veh/h	639	A		2318	1178	A
Approach Delay, s/veh	21.4			21.0	29.9	
Approach LOS	C			C	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		37.9	14.4	38.0		52.5
Change Period (Y+Rc), s		4.6	4.6	5.8		5.8
Max Green Setting (Gmax), s		53.4	16.9	34.7		56.2
Max Q Clear Time (g_c+I1), s		30.8	9.5	10.2		29.8
Green Ext Time (p_c), s		2.4	0.3	4.1		16.9

Intersection Summary	
HCM 6th Ctrl Delay	23.6
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	867	69	0	2247	0	79
Future Vol, veh/h	867	69	0	2247	0	79
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	942	75	0	2442	0	86

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	509
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	440
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	440
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	440	-	-	-
HCM Lane V/C Ratio	0.195	-	-	-
HCM Control Delay (s)	15.2	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.7	-	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1127	1399	107	0	59
Future Vol, veh/h	0	1127	1399	107	0	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1225	1521	116	0	64

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	819
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	277
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	277
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	21.9
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	277
HCM Lane V/C Ratio	-	-	-	0.232
HCM Control Delay (s)	-	-	-	21.9
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.9

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	820	124	0	2247	0	149
Future Vol, veh/h	820	124	0	2247	0	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	891	135	0	2442	0	162

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	513
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	437
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	437
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	437	-	-	-
HCM Lane V/C Ratio	0.371	-	-	-
HCM Control Delay (s)	18	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.7	-	-	-

Intersection	
Int Delay, s/veh	54.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	806	164	226	2179	20	59	0	210	0	0	10
Future Vol, veh/h	0	806	164	226	2179	20	59	0	210	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	876	178	246	2368	22	64	0	228	0	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2390	0	0	1054	0	0	2404	3847	527	3221	3925	1195
Stage 1	-	-	-	-	-	-	965	965	-	2871	2871	-
Stage 2	-	-	-	-	-	-	1439	2882	-	350	1054	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	81	-	-	374	-	-	~ 36	4	428	11	3	156
Stage 1	-	-	-	-	-	-	213	336	-	9	37	-
Stage 2	-	-	-	-	-	-	127	37	-	591	305	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	81	-	-	374	-	-	~ 16	1	428	2	1	156
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 34	11	-	7	10	-
Stage 1	-	-	-	-	-	-	213	336	-	9	13	-
Stage 2	-	-	-	-	-	-	~ 40	13	-	276	305	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.9	$ 719.4	29.8
HCM LOS			F	D

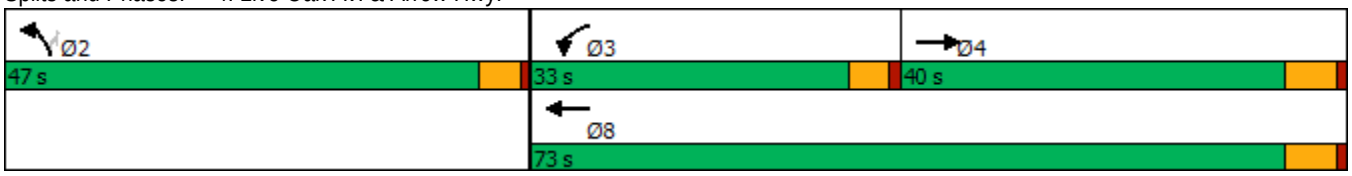
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	121	81	-	-	374	-	-	156
HCM Lane V/C Ratio	2.416	-	-	-	0.657	-	-	0.07
HCM Control Delay (s)	$ 719.4	0	-	-	31.3	-	-	29.8
HCM Lane LOS	F	A	-	-	D	-	-	D
HCM 95th %tile Q(veh)	25.7	0	-	-	4.5	-	-	0.2

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

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	872	2026	683	906	996	410
Future Volume (vph)	872	2026	683	906	996	410
Turn Type	NA	Free	Prot	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		Free				2
Detector Phase	4		3	8	2	2
Switch Phase						
Minimum Initial (s)	10.0		5.0	10.0	5.0	5.0
Minimum Split (s)	15.8		9.6	15.8	29.6	29.6
Total Split (s)	40.0		33.0	73.0	47.0	47.0
Total Split (%)	33.3%		27.5%	60.8%	39.2%	39.2%
Yellow Time (s)	4.8		3.6	4.8	3.6	3.6
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	4.6	4.6
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None		None	None	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 97.7
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Live Oak Av. & Arrow Hwy.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	872	2026	683	906	996	410
Future Volume (veh/h)	872	2026	683	906	996	410
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	890	0	697	924	1016	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1308		810	2810	1143	
Arrive On Green	0.25	0.00	0.23	0.54	0.33	0.00
Sat Flow, veh/h	5358	2834	3510	5358	3510	1610
Grp Volume(v), veh/h	890	0	697	924	1016	0
Grp Sat Flow(s),veh/h/ln	1729	1417	1755	1729	1755	1610
Q Serve(g_s), s	12.1	0.0	14.9	7.8	21.5	0.0
Cycle Q Clear(g_c), s	12.1	0.0	14.9	7.8	21.5	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1308		810	2810	1143	
V/C Ratio(X)	0.68		0.86	0.33	0.89	
Avail Cap(c_a), veh/h	2265		1273	4451	1901	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	26.4	0.0	28.9	10.0	25.1	0.0
Incr Delay (d2), s/veh	0.6	0.0	2.2	0.1	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	6.0	2.4	8.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.1	0.0	31.1	10.1	26.8	0.0
LnGrp LOS	C		C	B	C	
Approach Vol, veh/h	890	A		1621	1016	A
Approach Delay, s/veh	27.1			19.1	26.8	
Approach LOS	C			B	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		30.1	22.7	25.6		48.2
Change Period (Y+Rc), s		4.6	4.6	5.8		5.8
Max Green Setting (Gmax), s		42.4	28.4	34.2		67.2
Max Q Clear Time (g_c+I1), s		23.5	16.9	14.1		9.8
Green Ext Time (p_c), s		2.0	1.1	5.6		7.1

Intersection Summary	
HCM 6th Ctrl Delay	23.3
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1220	61	0	1589	0	95
Future Vol, veh/h	1220	61	0	1589	0	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1326	66	0	1727	0	103

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	696
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	333
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	333
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	20.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	333	-	-	-
HCM Lane V/C Ratio	0.31	-	-	-
HCM Control Delay (s)	20.6	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.3	-	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2785	1340	92	0	65
Future Vol, veh/h	0	2785	1340	92	0	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	3027	1457	100	0	71

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	779
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	294
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	294
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	21.1
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	294
HCM Lane V/C Ratio	-	-	-	0.24
HCM Control Delay (s)	-	-	-	21.1
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.9

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1203	111	0	1589	0	170
Future Vol, veh/h	1203	111	0	1589	0	170
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1308	121	0	1727	0	185

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	715
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	324
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	324
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	29.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	324	-	-	-
HCM Lane V/C Ratio	0.57	-	-	-
HCM Control Delay (s)	29.9	-	-	-
HCM Lane LOS	D	-	-	-
HCM 95th %tile Q(veh)	3.3	-	-	-

Intersection	
Int Delay, s/veh	56.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1224	150	172	1522	1	66	0	238	0	0	1
Future Vol, veh/h	0	1224	150	172	1522	1	66	0	238	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
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	0	0	0	0	0
Mvmt Flow	0	1262	155	177	1569	1	68	0	245	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1570	0	0	1417	0	0	2322	3264	709	2429	3341	785
Stage 1	-	-	-	-	-	-	1340	1340	-	1924	1924	-
Stage 2	-	-	-	-	-	-	982	1924	-	505	1417	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	210	-	-	250	-	-	~ 41	9	327	35	8	291
Stage 1	-	-	-	-	-	-	117	223	-	45	115	-
Stage 2	-	-	-	-	-	-	245	115	-	477	205	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	210	-	-	250	-	-	~ 17	3	327	4	2	291
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 48	28	-	114	15	-
Stage 1	-	-	-	-	-	-	117	223	-	45	34	-
Stage 2	-	-	-	-	-	-	71	34	-	119	205	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.9	$ 595.2	17.4
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	145	210	-	-	250	-	-	291
HCM Lane V/C Ratio	2.161	-	-	-	0.709	-	-	0.004
HCM Control Delay (s)	$ 595.2	0	-	-	48.2	-	-	17.4
HCM Lane LOS	F	A	-	-	E	-	-	C
HCM 95th %tile Q(veh)	25.6	0	-	-	4.8	-	-	0

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

The Park @ Live Oak (JN 11110)
OYC 2020 WP
AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Live Oak / Arrow (West)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.865
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	85	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0	3 0 0	2 0	3	0 0
Volume Module:												
Base Vol:	1143	0	315	0	0	0	0	620	0	291	1957	0
Growth 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
Initial Bse:	1143	0	315	0	0	0	0	620	0	291	1957	0
User 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
PHF 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
PHF Volume:	1143	0	315	0	0	0	0	620	0	291	1957	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1143	0	315	0	0	0	0	620	0	291	1957	0
PCE 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
MLF 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
FinalVolume:	1143	0	315	0	0	0	0	620	0	291	1957	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	0.00	2.00	3.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	4800	0	3200	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.36	0.00	0.20	0.00	0.00	0.00	0.00	0.13	0.00	0.09	0.41	0.00
Crit Moves:	****						****				****	

The Park @ Live Oak (JN 11110)
OYC 2020 WP
PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Live Oak / Arrow (West)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.806
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

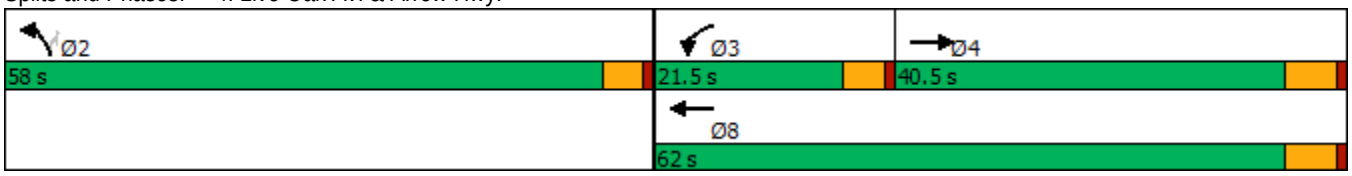
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0 0	0	0 0	0 0	3	0 0	2 0	3	0 0
Volume Module:												
Base Vol:	996	0	410	0	0	0	0	872	0	683	906	0
Growth 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
Initial Bse:	996	0	410	0	0	0	0	872	0	683	906	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	996	0	410	0	0	0	0	872	0	683	906	0
User 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
PHF 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
PHF Volume:	996	0	410	0	0	0	0	872	0	683	906	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	996	0	410	0	0	0	0	872	0	683	906	0
PCE 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
MLF 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
FinalVolume:	996	0	410	0	0	0	0	872	0	683	906	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	0.00	2.00	3.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	4800	0	3200	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.31	0.00	0.26	0.00	0.00	0.00	0.00	0.18	0.00	0.21	0.19	0.00
Crit Moves:	****							****		****		

Horizon Year (2040) With Project Conditions

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	653	826	301	2075	1208	332
Future Volume (vph)	653	826	301	2075	1208	332
Turn Type	NA	Free	Prot	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		Free				2
Detector Phase	4		3	8	2	2
Switch Phase						
Minimum Initial (s)	10.0		5.0	10.0	5.0	5.0
Minimum Split (s)	15.8		9.6	15.8	29.6	29.6
Total Split (s)	40.5		21.5	62.0	58.0	58.0
Total Split (%)	33.8%		17.9%	51.7%	48.3%	48.3%
Yellow Time (s)	4.8		3.6	4.8	3.6	3.6
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	4.6	4.6
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None		None	None	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 107.2
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Live Oak Av. & Arrow Hwy.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	653	826	301	2075	1208	332
Future Volume (veh/h)	653	826	301	2075	1208	332
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	673	0	310	2139	1245	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1844		385	2652	1349	
Arrive On Green	0.36	0.00	0.11	0.51	0.38	0.00
Sat Flow, veh/h	5358	2834	3510	5358	3510	1610
Grp Volume(v), veh/h	673	0	310	2139	1245	0
Grp Sat Flow(s),veh/h/ln	1729	1417	1755	1729	1755	1610
Q Serve(g_s), s	9.6	0.0	8.6	34.1	33.7	0.0
Cycle Q Clear(g_c), s	9.6	0.0	8.6	34.1	33.7	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1844		385	2652	1349	
V/C Ratio(X)	0.37		0.81	0.81	0.92	
Avail Cap(c_a), veh/h	1844		597	2931	1885	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	23.7	0.0	43.2	20.2	29.2	0.0
Incr Delay (d2), s/veh	0.1	0.0	2.2	1.6	5.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	3.7	12.5	13.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.9	0.0	45.5	21.8	34.4	0.0
LnGrp LOS	C		D	C	C	
Approach Vol, veh/h	673	A		2449	1245	A
Approach Delay, s/veh	23.9			24.8	34.4	
Approach LOS	C			C	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		42.8	15.5	41.1		56.6
Change Period (Y+Rc), s		4.6	4.6	5.8		5.8
Max Green Setting (Gmax), s		53.4	16.9	34.7		56.2
Max Q Clear Time (g_c+I1), s		35.7	10.6	11.6		36.1
Green Ext Time (p_c), s		2.6	0.3	4.3		14.7

Intersection Summary	
HCM 6th Ctrl Delay	27.4
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	917	69	0	2375	0	79
Future Vol, veh/h	917	69	0	2375	0	79
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	997	75	0	2582	0	86

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	536
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	423
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	423
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	15.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	423	-	-	-
HCM Lane V/C Ratio	0.203	-	-	-
HCM Control Delay (s)	15.7	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.8	-	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1183	1480	107	0	59
Future Vol, veh/h	0	1183	1480	107	0	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1286	1609	116	0	64

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	863
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	259
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	259
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	23.4
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	259
HCM Lane V/C Ratio	-	-	-	0.248
HCM Control Delay (s)	-	-	-	23.4
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	1

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	870	124	0	2375	0	149
Future Vol, veh/h	870	124	0	2375	0	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	946	135	0	2582	0	162

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	541
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	420
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	420
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	420	-	-	-
HCM Lane V/C Ratio	0.386	-	-	-
HCM Control Delay (s)	18.9	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.8	-	-	-

Intersection	
Int Delay, s/veh	66.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	856	164	226	2306	21	59	0	210	0	0	10
Future Vol, veh/h	0	856	164	226	2306	21	59	0	210	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	930	178	246	2507	23	64	0	228	0	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2530	0	0	1108	0	0	2514	4041	554	3383	4119	1265
Stage 1	-	-	-	-	-	-	1019	1019	-	3011	3011	-
Stage 2	-	-	-	-	-	-	1495	3022	-	372	1108	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	69	-	-	353	-	-	~ 31	3	412	9	2	140
Stage 1	-	-	-	-	-	-	196	317	-	7	31	-
Stage 2	-	-	-	-	-	-	117	31	-	573	288	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	69	-	-	353	-	-	~ 12	1	412	2	1	140
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 28	8	-	5	7	-
Stage 1	-	-	-	-	-	-	196	317	-	7	9	-
Stage 2	-	-	-	-	-	-	~ 33	9	-	256	288	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.1	$ 918.2	32.9
HCM LOS			F	D

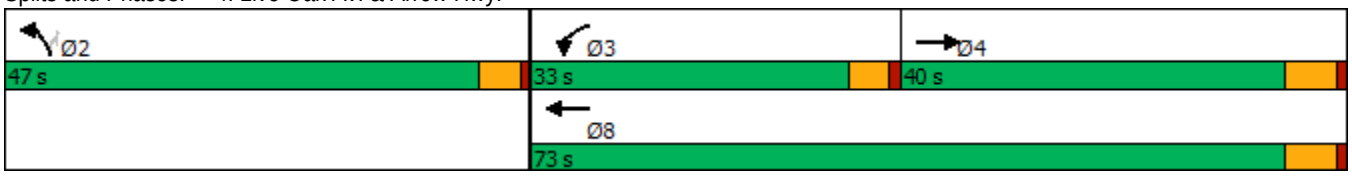
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	103	69	-	-	353	-	-	140
HCM Lane V/C Ratio	2.839	-	-	-	0.696	-	-	0.078
HCM Control Delay (s)	$ 918.2	0	-	-	35.5	-	-	32.9
HCM Lane LOS	F	A	-	-	E	-	-	D
HCM 95th %tile Q(veh)	27.6	0	-	-	5	-	-	0.2

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

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	920	2150	713	960	1049	420
Future Volume (vph)	920	2150	713	960	1049	420
Turn Type	NA	Free	Prot	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		Free				2
Detector Phase	4		3	8	2	2
Switch Phase						
Minimum Initial (s)	10.0		5.0	10.0	5.0	5.0
Minimum Split (s)	15.8		9.6	15.8	29.6	29.6
Total Split (s)	40.0		33.0	73.0	47.0	47.0
Total Split (%)	33.3%		27.5%	60.8%	39.2%	39.2%
Yellow Time (s)	4.8		3.6	4.8	3.6	3.6
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	4.6	4.6
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None		None	None	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 103.4
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Live Oak Av. & Arrow Hwy.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	920	2150	713	960	1049	420
Future Volume (veh/h)	920	2150	713	960	1049	420
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	939	0	728	980	1070	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1317		828	2815	1184	
Arrive On Green	0.25	0.00	0.24	0.54	0.34	0.00
Sat Flow, veh/h	5358	2834	3510	5358	3510	1610
Grp Volume(v), veh/h	939	0	728	980	1070	0
Grp Sat Flow(s),veh/h/ln	1729	1417	1755	1729	1755	1610
Q Serve(g_s), s	14.3	0.0	17.3	9.2	25.2	0.0
Cycle Q Clear(g_c), s	14.3	0.0	17.3	9.2	25.2	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1317		828	2815	1184	
V/C Ratio(X)	0.71		0.88	0.35	0.90	
Avail Cap(c_a), veh/h	2047		1150	4022	1718	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	29.5	0.0	31.9	11.2	27.4	0.0
Incr Delay (d2), s/veh	0.7	0.0	4.7	0.1	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	7.3	3.0	10.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	30.2	0.0	36.7	11.2	31.4	0.0
LnGrp LOS	C		D	B	C	
Approach Vol, veh/h	939	A		1708	1070	A
Approach Delay, s/veh	30.2			22.1	31.4	
Approach LOS	C			C	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		33.8	25.0	27.8		52.8
Change Period (Y+Rc), s		4.6	4.6	5.8		5.8
Max Green Setting (Gmax), s		42.4	28.4	34.2		67.2
Max Q Clear Time (g_c+I1), s		27.2	19.3	16.3		11.2
Green Ext Time (p_c), s		2.0	1.1	5.7		7.7

Intersection Summary	
HCM 6th Ctrl Delay	26.8
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1278	61	0	1672	0	95
Future Vol, veh/h	1278	61	0	1672	0	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1389	66	0	1817	0	103

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	728
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	318
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	318
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	21.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	318	-	-	-
HCM Lane V/C Ratio	0.325	-	-	-
HCM Control Delay (s)	21.7	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.4	-	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2939	1403	92	0	65
Future Vol, veh/h	0	2939	1403	92	0	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	3195	1525	100	0	71

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	813
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	279
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	279
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	22.2
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	279
HCM Lane V/C Ratio	-	-	-	0.253
HCM Control Delay (s)	-	-	-	22.2
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	1

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1261	111	0	1672	0	170
Future Vol, veh/h	1261	111	0	1672	0	170
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1371	121	0	1817	0	185

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	746
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	309
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	309
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	32.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	309	-	-	-
HCM Lane V/C Ratio	0.598	-	-	-
HCM Control Delay (s)	32.6	-	-	-
HCM Lane LOS	D	-	-	-
HCM 95th %tile Q(veh)	3.6	-	-	-

Intersection	
Int Delay, s/veh	69.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1282	150	172	1605	1	66	0	238	0	0	1
Future Vol, veh/h	0	1282	150	172	1605	1	66	0	238	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
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	0	0	0	0	0
Mvmt Flow	0	1322	155	177	1655	1	68	0	245	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1656	0	0	1477	0	0	2416	3410	739	2539	3487	828
Stage 1	-	-	-	-	-	-	1400	1400	-	2010	2010	-
Stage 2	-	-	-	-	-	-	1016	2010	-	529	1477	-
Critical Hdwy	5.3	-	-	5.3	-	-	6.4	6.5	7.1	6.4	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	7.3	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.7	5.5	-
Follow-up Hdwy	3.1	-	-	3.1	-	-	3.8	4	3.9	3.8	4	3.9
Pot Cap-1 Maneuver	190	-	-	233	-	-	~ 36	7	312	30	7	273
Stage 1	-	-	-	-	-	-	106	209	-	39	104	-
Stage 2	-	-	-	-	-	-	233	104	-	462	192	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	190	-	-	233	-	-	~ 14	2	312	2	2	273
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 39	21	-	65	9	-
Stage 1	-	-	-	-	-	-	106	209	-	39	25	-
Stage 2	-	-	-	-	-	-	~ 56	25	-	99	192	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.5	$ 766.5	18.2
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	124	190	-	-	233	-	-	273
HCM Lane V/C Ratio	2.527	-	-	-	0.761	-	-	0.004
HCM Control Delay (s)	$ 766.5	0	-	-	57.1	-	-	18.2
HCM Lane LOS	F	A	-	-	F	-	-	C
HCM 95th %tile Q(veh)	27.9	0	-	-	5.4	-	-	0

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

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Live Oak / Arrow (West)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.910
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	105	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 0	0	1	0	0 0	0	0	0	0 0	3	0	2	0	3	0 0
Volume Module:																
Base Vol:	1208	0	332		0	0	0		0	653	0		301	2075	0	
Growth 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	
Initial Bse:	1208	0	332		0	0	0		0	653	0		301	2075	0	
User 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	
PHF 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	
PHF Volume:	1208	0	332		0	0	0		0	653	0		301	2075	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	1208	0	332		0	0	0		0	653	0		301	2075	0	
PCE 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	
MLF 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	
FinalVolume:	1208	0	332		0	0	0		0	653	0		301	2075	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	0.00	1.00		0.00	0.00	0.00		0.00	3.00	0.00		2.00	3.00	0.00	
Final Sat.:	3200	0	1600		0	0	0		0	4800	0		3200	4800	0	
Capacity Analysis Module:																
Vol/Sat:	0.38	0.00	0.21		0.00	0.00	0.00		0.00	0.14	0.00		0.09	0.43	0.00	
Crit Moves:	****								****					****		

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Live Oak / Arrow (West)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.842
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0 0	0	0 0	0 0	3	0 0	2 0	3	0 0
Volume Module:												
Base Vol:	1049	0	420	0	0	0	0	920	0	713	960	0
Growth 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
Initial Bse:	1049	0	420	0	0	0	0	920	0	713	960	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1049	0	420	0	0	0	0	920	0	713	960	0
User 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
PHF 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
PHF Volume:	1049	0	420	0	0	0	0	920	0	713	960	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1049	0	420	0	0	0	0	920	0	713	960	0
PCE 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
MLF 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
FinalVolume:	1049	0	420	0	0	0	0	920	0	713	960	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	0.00	2.00	3.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	4800	0	3200	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.33	0.00	0.26	0.00	0.00	0.00	0.00	0.19	0.00	0.22	0.20	0.00
Crit Moves:	****							****		****		

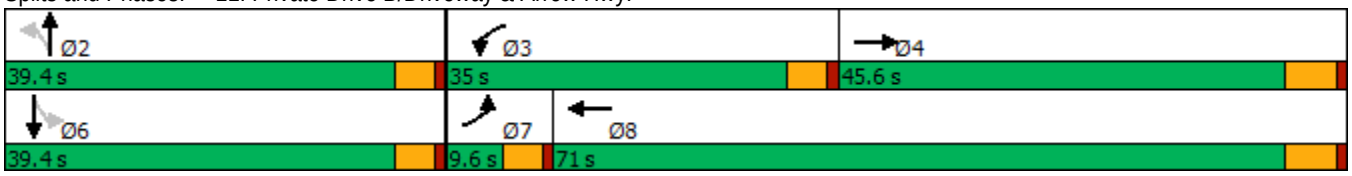
ATTACHMENT G
ALTERNATIVE 3A ANALYSIS WORKSHEETS WITH IMPROVEMENTS

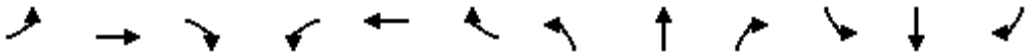
E+P Conditions

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø7
Lane Configurations							
Traffic Volume (vph)	694	226	1877	59	0	0	
Future Volume (vph)	694	226	1877	59	0	0	
Turn Type	NA	Prot	NA	Perm	NA	NA	
Protected Phases	4	3	8		2	6	7
Permitted Phases				2			
Detector Phase	4	3	8	2	2	6	
Switch Phase							
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	23.8	28.6	28.6	28.6	9.6
Total Split (s)	45.6	35.0	71.0	39.4	39.4	39.4	9.6
Total Split (%)	38.0%	29.2%	59.2%	32.8%	32.8%	32.8%	8%
Yellow Time (s)	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.8	4.6	5.8		4.6	4.6	
Lead/Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	Min	Min	Min	None
Act Effct Green (s)	23.2	15.5	43.6		14.7	14.7	
Actuated g/C Ratio	0.33	0.22	0.63		0.21	0.21	
v/c Ratio	0.54	0.61	0.63		0.65	0.02	
Control Delay	19.5	33.9	9.0		21.1	0.1	
Queue Delay	0.0	0.0	0.0		0.0	0.0	
Total Delay	19.5	33.9	9.0		21.1	0.1	
LOS	B	C	A		C	A	
Approach Delay	19.5		11.7		21.1	0.1	
Approach LOS	B		B		C	A	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 69.4	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 14.5	Intersection LOS: B
Intersection Capacity Utilization 76.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 11: Private Drive B/Driveway & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	694	164	226	1877	19	59	0	210	0	0	9
Future Volume (veh/h)	0	694	164	226	1877	19	59	0	210	0	0	9
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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	754	178	246	2040	21	64	0	228	0	0	10
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	3	1590	372	297	3241	33	125	21	287	0	0	372
Arrive On Green	0.00	0.38	0.38	0.16	0.61	0.61	0.23	0.00	0.23	0.00	0.00	0.23
Sat Flow, veh/h	1810	4200	982	1810	5294	54	256	93	1243	0	0	1610
Grp Volume(v), veh/h	0	619	313	246	1332	729	292	0	0	0	0	10
Grp Sat Flow(s),veh/h/ln	1810	1729	1723	1810	1729	1890	1592	0	0	0	0	1610
Q Serve(g_s), s	0.0	9.0	9.1	8.7	16.1	16.1	7.5	0.0	0.0	0.0	0.0	0.3
Cycle Q Clear(g_c), s	0.0	9.0	9.1	8.7	16.1	16.1	11.4	0.0	0.0	0.0	0.0	0.3
Prop In Lane	1.00		0.57	1.00		0.03	0.22		0.78	0.00		1.00
Lane Grp Cap(c), veh/h	3	1309	652	297	2117	1157	434	0	0	0	0	372
V/C Ratio(X)	0.00	0.47	0.48	0.83	0.63	0.63	0.67	0.00	0.00	0.00	0.00	0.03
Avail Cap(c_a), veh/h	136	2075	1034	829	3399	1858	894	0	0	0	0	845
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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	15.6	15.6	26.8	8.1	8.1	23.9	0.0	0.0	0.0	0.0	19.7
Incr Delay (d2), s/veh	0.0	0.3	0.5	2.3	0.3	0.6	1.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.0	3.1	3.6	4.0	4.4	4.3	0.0	0.0	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.9	16.2	29.1	8.4	8.7	25.7	0.0	0.0	0.0	0.0	19.8
LnGrp LOS	A	B	B	C	A	A	C	A	A	A	A	B
Approach Vol, veh/h		932			2307			292			10	
Approach Delay, s/veh		16.0			10.7			25.7			19.8	
Approach LOS		B			B			C			B	

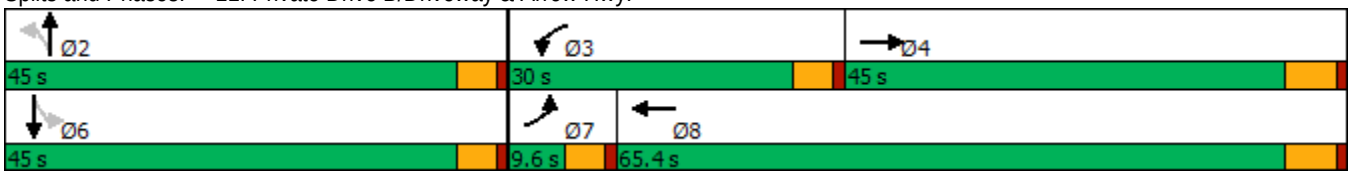
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		19.9	15.5	30.9		19.9	0.0	46.4				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		34.8	30.4	39.8		34.8	5.0	65.2				
Max Q Clear Time (g_c+I1), s		13.4	10.7	11.1		2.3	0.0	18.1				
Green Ext Time (p_c), s		1.9	0.3	6.3		0.0	0.0	22.5				

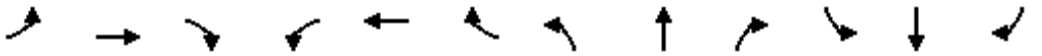
Intersection Summary												
HCM 6th Ctrl Delay			13.4									
HCM 6th LOS			B									

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø7
Lane Configurations							
Traffic Volume (vph)	891	172	1219	66	0	0	
Future Volume (vph)	891	172	1219	66	0	0	
Turn Type	NA	Prot	NA	Perm	NA	NA	
Protected Phases	4	3	8		2	6	7
Permitted Phases				2			
Detector Phase	4	3	8	2	2	6	
Switch Phase							
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	23.8	28.6	28.6	28.6	9.6
Total Split (s)	45.0	30.0	65.4	45.0	45.0	45.0	9.6
Total Split (%)	37.5%	25.0%	54.5%	37.5%	37.5%	37.5%	8%
Yellow Time (s)	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.8	4.6	5.8		4.6	4.6	
Lead/Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	Min	Min	Min	None
Act Effct Green (s)	22.4	11.8	39.1		14.6	14.6	
Actuated g/C Ratio	0.35	0.18	0.60		0.23	0.23	
v/c Ratio	0.60	0.54	0.40		0.65	0.00	
Control Delay	19.3	33.1	7.3		19.2	0.0	
Queue Delay	0.0	0.0	0.0		0.0	0.0	
Total Delay	19.3	33.1	7.3		19.2	0.0	
LOS	B	C	A		B	A	
Approach Delay	19.3		10.5		19.2		
Approach LOS	B		B		B		

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 64.7	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 14.8	Intersection LOS: B
Intersection Capacity Utilization 67.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 11: Private Drive B/Driveway & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	891	150	172	1219	1	66	0	238	0	0	1
Future Volume (veh/h)	0	891	150	172	1219	1	66	0	238	0	0	1
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		0.98	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	919	155	177	1257	1	68	0	245	0	0	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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	3	1531	257	228	2956	2	144	26	322	0	0	415
Arrive On Green	0.00	0.34	0.34	0.13	0.55	0.55	0.26	0.00	0.26	0.00	0.00	0.26
Sat Flow, veh/h	1810	4471	751	1810	5353	4	248	99	1249	0	0	1610
Grp Volume(v), veh/h	0	710	364	177	812	446	313	0	0	0	0	1
Grp Sat Flow(s),veh/h/ln	1810	1729	1765	1810	1729	1899	1596	0	0	0	0	1610
Q Serve(g_s), s	0.0	9.3	9.4	5.2	7.5	7.5	6.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.3	9.4	5.2	7.5	7.5	9.8	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.43	1.00		0.00	0.22		0.78	0.00		1.00
Lane Grp Cap(c), veh/h	3	1184	604	228	1909	1049	491	0	0	0	0	415
V/C Ratio(X)	0.00	0.60	0.60	0.78	0.43	0.43	0.64	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	165	2478	1264	840	3767	2069	1246	0	0	0	0	1189
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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	14.9	14.9	23.2	7.2	7.2	18.7	0.0	0.0	0.0	0.0	15.1
Incr Delay (d2), s/veh	0.0	0.5	1.0	2.2	0.2	0.3	1.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.9	3.1	2.0	1.8	2.0	3.5	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.4	15.9	25.4	7.3	7.4	20.0	0.0	0.0	0.0	0.0	15.1
LnGrp LOS	A	B	B	C	A	A	C	A	A	A	A	B
Approach Vol, veh/h		1074			1435			313			1	
Approach Delay, s/veh		15.5			9.6			20.0			15.1	
Approach LOS		B			A			C			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	18.7	11.5	24.5	18.7	0.0	36.0
Change Period (Y+Rc), s	4.6	4.6	5.8	4.6	4.6	5.8
Max Green Setting (Gmax), s	40.4	25.4	39.2	40.4	5.0	59.6
Max Q Clear Time (g_c+I1), s	11.8	7.2	11.4	2.0	0.0	9.5
Green Ext Time (p_c), s	2.3	0.2	7.4	0.0	0.0	10.0

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

The Park @ Live Oak (JN 11110)
E+P
AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Dwy B / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.709
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	1	1	0	2	1 0
Volume Module:												
Base Vol:	59	0	210	0	0	9	0	694	164	226	1877	19
Growth 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
Initial Bse:	59	0	210	0	0	9	0	694	164	226	1877	19
User 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
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	64	0	227	0	0	10	0	751	177	245	2031	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	0	227	0	0	10	0	751	177	245	2031	21
PCE 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
MLF 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
FinalVolume:	64	0	227	0	0	10	0	751	177	245	2031	21
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.00	0.78	0.00	0.00	1.00	1.00	2.43	0.57	1.00	2.97	0.03
Final Sat.:	351	0	1249	0	0	1600	1600	3883	917	1600	4752	48
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.18	0.00	0.00	0.01	0.00	0.19	0.19	0.15	0.43	0.43
Crit Moves:			****	****			****				****	

The Park @ Live Oak (JN 11110)
E+P
PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Dwy B / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.614
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

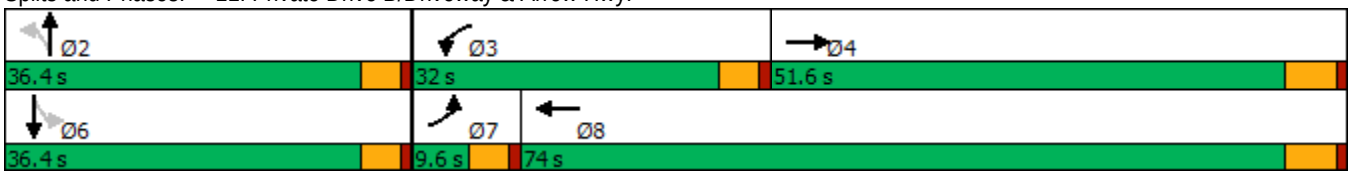
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	1	1	0	2	1 0
Volume Module:												
Base Vol:	66	0	238	0	0	1	0	891	150	172	1219	1
Growth 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
Initial Bse:	66	0	238	0	0	1	0	891	150	172	1219	1
User 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
PHF 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
PHF Volume:	66	0	238	0	0	1	0	891	150	172	1219	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	0	238	0	0	1	0	891	150	172	1219	1
PCE 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
MLF 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
FinalVolume:	66	0	238	0	0	1	0	891	150	172	1219	1
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.00	0.78	0.00	0.00	1.00	1.00	2.57	0.43	1.00	2.99	0.01
Final Sat.:	347	0	1253	0	0	1600	1600	4108	692	1600	4796	4
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.19	0.00	0.00	0.00	0.00	0.22	0.22	0.11	0.25	0.25
Crit Moves:			****	****				****		****		

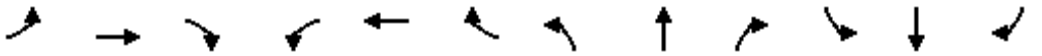
Opening Year Cumulative (2020) With Project Conditions

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø7
Lane Configurations							
Traffic Volume (vph)	806	226	2179	59	0	0	
Future Volume (vph)	806	226	2179	59	0	0	
Turn Type	NA	Prot	NA	Perm	NA	NA	
Protected Phases	4	3	8		2	6	7
Permitted Phases				2			
Detector Phase	4	3	8	2	2	6	
Switch Phase							
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	23.8	28.6	28.6	28.6	9.6
Total Split (s)	51.6	32.0	74.0	36.4	36.4	36.4	9.6
Total Split (%)	43.0%	26.7%	61.7%	30.3%	30.3%	30.3%	8%
Yellow Time (s)	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.8	4.6	5.8		4.6	4.6	
Lead/Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	Min	Min	Min	None
Act Effct Green (s)	34.3	16.6	55.8		15.4	15.4	
Actuated g/C Ratio	0.42	0.20	0.68		0.19	0.19	
v/c Ratio	0.49	0.67	0.68		0.71	0.03	
Control Delay	18.4	42.2	9.2		27.4	0.1	
Queue Delay	0.0	0.0	0.0		0.0	0.0	
Total Delay	18.4	42.2	9.2		27.4	0.1	
LOS	B	D	A		C	A	
Approach Delay	18.4		12.3		27.4	0.1	
Approach LOS	B		B		C	A	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 82	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 15.0	Intersection LOS: B
Intersection Capacity Utilization 82.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 11: Private Drive B/Driveway & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	806	164	226	2179	20	59	0	210	0	0	10
Future Volume (veh/h)	0	806	164	226	2179	20	59	0	210	0	0	10
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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	876	178	246	2368	22	64	0	228	0	0	11
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	2	1868	378	289	3441	32	113	18	274	0	0	356
Arrive On Green	0.00	0.43	0.43	0.16	0.65	0.65	0.22	0.00	0.22	0.00	0.00	0.22
Sat Flow, veh/h	1810	4326	875	1810	5300	49	265	83	1240	0	0	1610
Grp Volume(v), veh/h	0	699	355	246	1544	846	292	0	0	0	0	11
Grp Sat Flow(s),veh/h/ln	1810	1729	1743	1810	1729	1891	1589	0	0	0	0	1610
Q Serve(g_s), s	0.0	11.5	11.6	10.6	22.7	22.7	9.9	0.0	0.0	0.0	0.0	0.4
Cycle Q Clear(g_c), s	0.0	11.5	11.6	10.6	22.7	22.7	14.0	0.0	0.0	0.0	0.0	0.4
Prop In Lane	1.00		0.50	1.00		0.03	0.22		0.78	0.00		1.00
Lane Grp Cap(c), veh/h	2	1493	753	289	2245	1228	406	0	0	0	0	356
V/C Ratio(X)	0.00	0.47	0.47	0.85	0.69	0.69	0.72	0.00	0.00	0.00	0.00	0.03
Avail Cap(c_a), veh/h	113	1978	997	619	2945	1611	682	0	0	0	0	639
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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.2	16.2	32.7	8.9	8.9	29.7	0.0	0.0	0.0	0.0	24.5
Incr Delay (d2), s/veh	0.0	0.2	0.5	2.7	0.4	0.8	2.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.0	4.1	4.5	6.1	6.8	5.5	0.0	0.0	0.0	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	16.4	16.7	35.4	9.3	9.7	32.1	0.0	0.0	0.0	0.0	24.5
LnGrp LOS	A	B	B	D	A	A	C	A	A	A	A	C
Approach Vol, veh/h		1054			2636			292			11	
Approach Delay, s/veh		16.5			11.9			32.1			24.5	
Approach LOS		B			B			C			C	

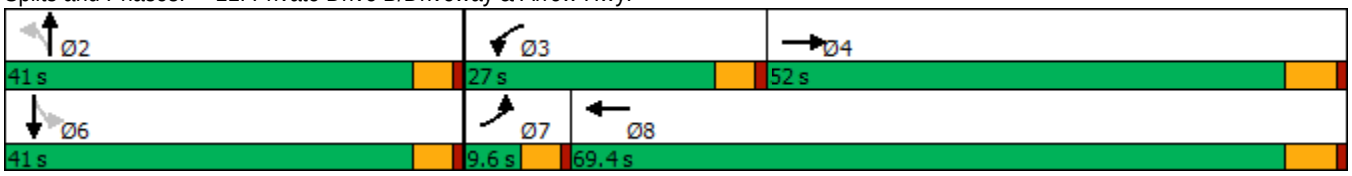
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.3	17.4	40.4		22.3	0.0	57.8				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		31.8	27.4	45.8		31.8	5.0	68.2				
Max Q Clear Time (g_c+I1), s		16.0	12.6	13.6		2.4	0.0	24.7				
Green Ext Time (p_c), s		1.7	0.3	7.5		0.0	0.0	27.2				

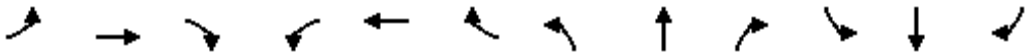
Intersection Summary												
HCM 6th Ctrl Delay			14.6									
HCM 6th LOS			B									

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø7
Lane Configurations							
Traffic Volume (vph)	1224	172	1522	66	0	0	
Future Volume (vph)	1224	172	1522	66	0	0	
Turn Type	NA	Prot	NA	Perm	NA	NA	
Protected Phases	4	3	8		2	6	7
Permitted Phases				2			
Detector Phase	4	3	8	2	2	6	
Switch Phase							
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	23.8	28.6	28.6	28.6	9.6
Total Split (s)	52.0	27.0	69.4	41.0	41.0	41.0	9.6
Total Split (%)	43.3%	22.5%	57.8%	34.2%	34.2%	34.2%	8%
Yellow Time (s)	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.8	4.6	5.8		4.6	4.6	
Lead/Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	Min	Min	Min	None
Act Effct Green (s)	31.8	12.9	49.6		16.0	16.0	
Actuated g/C Ratio	0.41	0.17	0.65		0.21	0.21	
v/c Ratio	0.67	0.58	0.47		0.70	0.00	
Control Delay	20.4	41.0	7.6		24.5	0.0	
Queue Delay	0.0	0.0	0.0		0.0	0.0	
Total Delay	20.4	41.0	7.6		24.5	0.0	
LOS	C	D	A		C	A	
Approach Delay	20.4		11.0		24.5		
Approach LOS	C		B		C		

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 76.7	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 16.0	Intersection LOS: B
Intersection Capacity Utilization 74.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 11: Private Drive B/Driveway & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1224	150	172	1522	1	66	0	238	0	0	1
Future Volume (veh/h)	0	1224	150	172	1522	1	66	0	238	0	0	1
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		0.98	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	1262	155	177	1569	1	68	0	245	0	0	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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	3	1913	235	222	3213	2	128	22	305	0	0	394
Arrive On Green	0.00	0.41	0.41	0.12	0.60	0.60	0.24	0.00	0.24	0.00	0.00	0.24
Sat Flow, veh/h	1810	4680	575	1810	5354	3	257	89	1247	0	0	1610
Grp Volume(v), veh/h	0	933	484	177	1013	557	313	0	0	0	0	1
Grp Sat Flow(s),veh/h/ln	1810	1729	1797	1810	1729	1899	1593	0	0	0	0	1610
Q Serve(g_s), s	0.0	14.7	14.7	6.4	11.1	11.1	8.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.7	14.7	6.4	11.1	11.1	12.3	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.00	0.22		0.78	0.00		1.00
Lane Grp Cap(c), veh/h	3	1414	734	222	2075	1140	455	0	0	0	0	394
V/C Ratio(X)	0.00	0.66	0.66	0.80	0.49	0.49	0.69	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	135	2380	1237	604	3277	1800	922	0	0	0	0	873
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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.1	16.1	28.6	7.6	7.6	23.7	0.0	0.0	0.0	0.0	19.2
Incr Delay (d2), s/veh	0.0	0.5	1.0	2.5	0.2	0.3	1.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.9	5.1	2.7	2.8	3.2	4.7	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	16.6	17.1	31.1	7.8	7.9	25.6	0.0	0.0	0.0	0.0	19.2
LnGrp LOS	A	B	B	C	A	A	C	A	A	A	A	B
Approach Vol, veh/h		1417			1747			313			1	
Approach Delay, s/veh		16.8			10.2			25.6			19.2	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	21.0	12.8	33.2	21.0	0.0	46.1
Change Period (Y+Rc), s	4.6	4.6	5.8	4.6	4.6	5.8
Max Green Setting (Gmax), s	36.4	22.4	46.2	36.4	5.0	63.6
Max Q Clear Time (g_c+I1), s	14.3	8.4	16.7	2.0	0.0	13.1
Green Ext Time (p_c), s	2.1	0.2	10.8	0.0	0.0	14.3

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

The Park @ Live Oak (JN 11110)
OYC 2020 WP
AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Dwy B / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	1	1	0	2	1 0
									1	0	2	1 0
Volume Module:												
Base Vol:	59	0	210	0	0	10	0	806	164	226	2179	20
Growth 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
Initial Bse:	59	0	210	0	0	10	0	806	164	226	2179	20
User 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
PHF 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
PHF Volume:	59	0	210	0	0	10	0	806	164	226	2179	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	0	210	0	0	10	0	806	164	226	2179	20
PCE 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
MLF 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
FinalVolume:	59	0	210	0	0	10	0	806	164	226	2179	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.00	0.78	0.00	0.00	1.00	1.00	2.49	0.51	1.00	2.97	0.03
Final Sat.:	351	0	1249	0	0	1600	1600	3988	812	1600	4756	44
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.17	0.00	0.00	0.01	0.00	0.20	0.20	0.14	0.46	0.46
Crit Moves:			****	****			****				****	

The Park @ Live Oak (JN 11110)
OYC 2020 WP
PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Dwy B / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.684
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

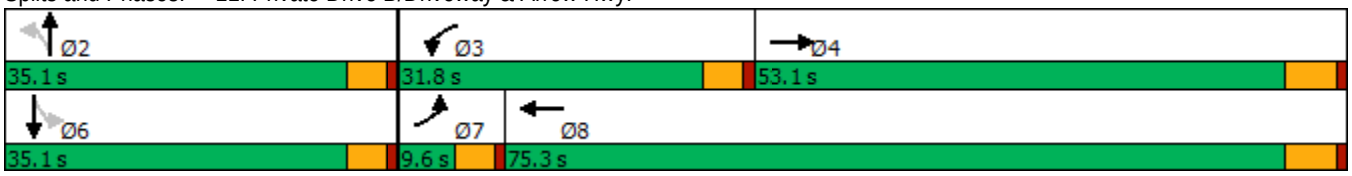
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	1	1	0	2	1 0
									1	0	2	1 0
Volume Module:												
Base Vol:	66	0	238	0	0	1	0	1224	150	172	1522	1
Growth 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
Initial Bse:	66	0	238	0	0	1	0	1224	150	172	1522	1
User 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
PHF 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
PHF Volume:	66	0	238	0	0	1	0	1224	150	172	1522	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	0	238	0	0	1	0	1224	150	172	1522	1
PCE 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
MLF 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
FinalVolume:	66	0	238	0	0	1	0	1224	150	172	1522	1
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.00	0.78	0.00	0.00	1.00	1.00	2.67	0.33	1.00	2.99	0.01
Final Sat.:	347	0	1253	0	0	1600	1600	4276	524	1600	4797	3
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.19	0.00	0.00	0.00	0.00	0.29	0.29	0.11	0.32	0.32
Crit Moves:			****	****				****		****		

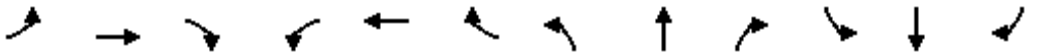
Horizon Year (2040) With Project Conditions

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø7
Lane Configurations							
Traffic Volume (vph)	856	226	2306	59	0	0	
Future Volume (vph)	856	226	2306	59	0	0	
Turn Type	NA	Prot	NA	Perm	NA	NA	
Protected Phases	4	3	8		2	6	7
Permitted Phases				2			
Detector Phase	4	3	8	2	2	6	
Switch Phase							
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	23.8	28.6	28.6	28.6	9.6
Total Split (s)	53.1	31.8	75.3	35.1	35.1	35.1	9.6
Total Split (%)	44.3%	26.5%	62.8%	29.3%	29.3%	29.3%	8%
Yellow Time (s)	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.8	4.6	5.8		4.6	4.6	
Lead/Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	Min	Min	Min	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 87.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Private Drive B/Driveway & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	856	164	226	2306	21	59	0	210	0	0	10
Future Volume (veh/h)	0	856	164	226	2306	21	59	0	210	0	0	10
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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	930	178	246	2507	23	64	0	228	0	0	11
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	2	1964	375	287	3505	32	110	17	269	0	0	350
Arrive On Green	0.00	0.45	0.45	0.16	0.66	0.66	0.22	0.00	0.22	0.00	0.00	0.22
Sat Flow, veh/h	1810	4374	834	1810	5301	49	268	80	1240	0	0	1610
Grp Volume(v), veh/h	0	735	373	246	1634	896	292	0	0	0	0	11
Grp Sat Flow(s),veh/h/ln	1810	1729	1750	1810	1729	1891	1588	0	0	0	0	1610
Q Serve(g_s), s	0.0	12.7	12.8	11.3	26.0	26.1	11.0	0.0	0.0	0.0	0.0	0.5
Cycle Q Clear(g_c), s	0.0	12.7	12.8	11.3	26.0	26.1	15.1	0.0	0.0	0.0	0.0	0.5
Prop In Lane	1.00		0.48	1.00		0.03	0.22		0.78	0.00		1.00
Lane Grp Cap(c), veh/h	2	1553	786	287	2287	1251	396	0	0	0	0	350
V/C Ratio(X)	0.00	0.47	0.48	0.86	0.71	0.72	0.74	0.00	0.00	0.00	0.00	0.03
Avail Cap(c_a), veh/h	106	1909	966	574	2805	1534	613	0	0	0	0	573
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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.5	16.5	35.1	9.3	9.3	32.0	0.0	0.0	0.0	0.0	26.4
Incr Delay (d2), s/veh	0.0	0.2	0.4	2.9	0.7	1.3	2.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.5	4.6	4.9	7.2	8.1	6.0	0.0	0.0	0.0	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	16.7	17.0	38.0	10.0	10.6	34.7	0.0	0.0	0.0	0.0	26.5
LnGrp LOS	A	B	B	D	A	B	C	A	A	A	A	C
Approach Vol, veh/h		1108			2776			292			11	
Approach Delay, s/veh		16.8			12.7			34.7			26.5	
Approach LOS		B			B			C			C	

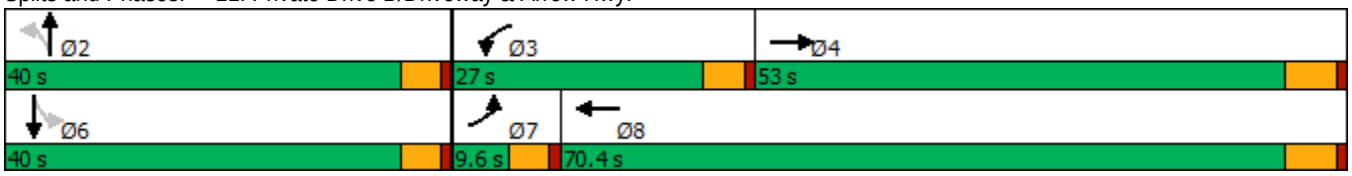
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.2	18.2	44.3		23.2	0.0	62.5				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		30.5	27.2	47.3		30.5	5.0	69.5				
Max Q Clear Time (g_c+I1), s		17.1	13.3	14.8		2.5	0.0	28.1				
Green Ext Time (p_c), s		1.6	0.3	8.0		0.0	0.0	28.5				

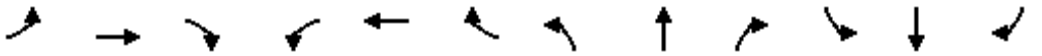
Intersection Summary												
HCM 6th Ctrl Delay			15.3									
HCM 6th LOS			B									

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø7
Lane Configurations							
Traffic Volume (vph)	1282	172	1605	66	0	0	
Future Volume (vph)	1282	172	1605	66	0	0	
Turn Type	NA	Prot	NA	Perm	NA	NA	
Protected Phases	4	3	8		2	6	7
Permitted Phases				2			
Detector Phase	4	3	8	2	2	6	
Switch Phase							
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	23.8	28.6	28.6	28.6	9.6
Total Split (s)	53.0	27.0	70.4	40.0	40.0	40.0	9.6
Total Split (%)	44.2%	22.5%	58.7%	33.3%	33.3%	33.3%	8%
Yellow Time (s)	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.8	4.6	5.8		4.6	4.6	
Lead/Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	Min	Min	Min	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 78.6
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Private Drive B/Driveway & Arrow Hwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1282	150	172	1605	1	66	0	238	0	0	1
Future Volume (veh/h)	0	1282	150	172	1605	1	66	0	238	0	0	1
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		0.98	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	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	1322	155	177	1655	1	68	0	245	0	0	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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	3	1974	231	221	3254	2	126	21	303	0	0	391
Arrive On Green	0.00	0.42	0.42	0.12	0.61	0.61	0.24	0.00	0.24	0.00	0.00	0.24
Sat Flow, veh/h	1810	4707	552	1810	5354	3	259	87	1247	0	0	1610
Grp Volume(v), veh/h	0	971	506	177	1069	587	313	0	0	0	0	1
Grp Sat Flow(s),veh/h/ln	1810	1729	1801	1810	1729	1899	1593	0	0	0	0	1610
Q Serve(g_s), s	0.0	15.8	15.8	6.6	12.2	12.2	8.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.8	15.8	6.6	12.2	12.2	12.8	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.31	1.00		0.00	0.22		0.78	0.00		1.00
Lane Grp Cap(c), veh/h	3	1450	755	221	2102	1154	450	0	0	0	0	391
V/C Ratio(X)	0.00	0.67	0.67	0.80	0.51	0.51	0.70	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	130	2347	1222	583	3212	1764	868	0	0	0	0	820
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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.3	16.3	29.7	7.7	7.7	24.7	0.0	0.0	0.0	0.0	20.0
Incr Delay (d2), s/veh	0.0	0.5	1.0	2.5	0.2	0.3	2.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.3	5.6	2.8	3.1	3.5	4.9	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	16.8	17.3	32.2	7.9	8.1	26.7	0.0	0.0	0.0	0.0	20.0
LnGrp LOS	A	B	B	C	A	A	C	A	A	A	A	B
Approach Vol, veh/h		1477			1833			313			1	
Approach Delay, s/veh		17.0			10.3			26.7			20.0	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		21.5	13.1	35.0		21.5	0.0	48.1				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		35.4	22.4	47.2		35.4	5.0	64.6				
Max Q Clear Time (g_c+I1), s		14.8	8.6	17.8		2.0	0.0	14.2				
Green Ext Time (p_c), s		2.1	0.2	11.4		0.0	0.0	15.7				

Intersection Summary												
HCM 6th Ctrl Delay			14.5									
HCM 6th LOS			B									

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Dwy B / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.753
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	1	1	0	2	1 0
Volume Module:												
Base Vol:	59	0	210	0	0	10	0	856	164	226	2306	21
Growth 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
Initial Bse:	59	0	210	0	0	10	0	856	164	226	2306	21
User 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
PHF 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
PHF Volume:	59	0	210	0	0	10	0	856	164	226	2306	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	0	210	0	0	10	0	856	164	226	2306	21
PCE 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
MLF 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
FinalVolume:	59	0	210	0	0	10	0	856	164	226	2306	21
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.00	0.78	0.00	0.00	1.00	1.00	2.52	0.48	1.00	2.97	0.03
Final Sat.:	351	0	1249	0	0	1600	1600	4028	772	1600	4757	43
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.17	0.00	0.00	0.01	0.00	0.21	0.21	0.14	0.48	0.48
Crit Moves:			****	****			****				****	

The Park @ Live Oak (JN 11110)
Horizon Year (2040) With Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Dwy B / Arrow

Cycle (sec):	100	Critical Vol./Cap.(X):	0.696
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	1	1	0	2	1 0
Volume Module:												
Base Vol:	66	0	238	0	0	1	0	1282	150	172	1605	1
Growth 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
Initial Bse:	66	0	238	0	0	1	0	1282	150	172	1605	1
User 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
PHF 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
PHF Volume:	66	0	238	0	0	1	0	1282	150	172	1605	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	0	238	0	0	1	0	1282	150	172	1605	1
PCE 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
MLF 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
FinalVolume:	66	0	238	0	0	1	0	1282	150	172	1605	1
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.00	0.78	0.00	0.00	1.00	1.00	2.69	0.31	1.00	2.99	0.01
Final Sat.:	347	0	1253	0	0	1600	1600	4297	503	1600	4797	3
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.19	0.00	0.00	0.00	0.00	0.30	0.30	0.11	0.33	0.33
Crit Moves:			****	****				****		****		