LSC TRANSPORTATION CONSULTANTS, INC.

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July 19, 2017

Mr. Corey Elliott
HR 935, LLC
7353 S. Alton Way, Suite A-100
Englewood, CO 80112

Re: Trails at Crowfoot
Traffic Impact Analysis
Parker, CO
LSC #160711

Dear Mr. Elliott:

In response to your request, LSC Transportation Consultants, Inc. has prepared this traffic impact analysis for the Trails at Crowfoot development. As shown on Figure 1, the site is located southeast of Crowfoot Valley Road and east and west of the future Bayou Gulch Road alignment in Parker, Colorado.

REPORT CONTENTS

The report contains the following: the existing roadway and traffic conditions in the vicinity of the site including the lane geometries, traffic controls, posted speed limits, etc.; the existing weekday peak-hour traffic volumes; the existing daily traffic volumes in the area; the typical weekday site-generated traffic volume projections for the site; the assignment of the projected traffic volumes to the area roadways; the projected short-term and long-term background and resulting total traffic volumes on the area roadways; the site's projected traffic impacts; and any recommended roadway improvements to mitigate the site's traffic impacts.

LAND USE AND ACCESS

The site is proposed to include about 730 single-family residential dwelling units and about 160 duplex residential dwelling units. Access is proposed to North Pinery Parkway and Bayou Gulch Road at multiple locations as shown in the conceptual site plan in Figure 2.

ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

The major roadways in the site's vicinity are shown on Figure 1 and are described below.

- **N. Crowfoot Valley Road** is a north-south, two-lane arterial roadway west of the site. The intersection with Stroh Road is signalized with auxiliary turn lanes. North of Stroh Road

it changes names to Motsenbocker Road and is four lanes. By 2037 it is expected to be a four-lane arterial roadway. The posted speed limit in the vicinity of the site is 40 mph.

- **Stroh Road** is an east-west, arterial roadway north of the site. The intersections with N. Crowfoot Valley Road/Motsenbocker Road and Parker Road are signalized with auxiliary turn lanes. It is two lanes west of J. Morgan Boulevard and four lanes east of J. Morgan Boulevard. By 2037 it is expected to be a four-lane arterial between N. Crowfoot Valley Road and Parker Road. The posted speed limit in the vicinity of the site is 40 mph.

- **N. Pinery Parkway** is a future east-west, two-lane roadway that will be constructed through the site from Crowfoot Valley Road to Parker Road. The existing intersection with Parker Road (SH 83) is signalized with auxiliary turn lanes. The posted speed limit in the vicinity of the site is 25 mph.

- **Bayou Gulch Road** is a future north-south, four-lane arterial roadway that will be constructed through the site from Crowfoot Valley Road to the south. By 2037 it is expected to be extended north to the existing Chambers Road alignment. The posted speed limit in the vicinity of the site is 30 mph.

Existing Traffic Conditions

Figure 3 shows the existing lane geometries, traffic controls, posted speed limits, and traffic volumes in the site's vicinity on a typical weekday. The weekday peak-hour traffic volumes and daily traffic counts are from the attached traffic counts conducted by Counter Measures in May, 2017.

2025 and 2037 Background Traffic

Figures 4a and 4b show the estimated 2025 background traffic, lane geometry, and traffic control and Figures 5a and 5b show the estimated 2037 background traffic, lane geometry, and traffic control. The 2025 estimates are based on projections from the April, 2013 *Town of Parker Roadway System Evaluation* by FHU and the 2037 estimates are based on the projections from the June, 2015 *Hess Ranch TIA* by David Evans and Associates.

Existing, 2025, and 2037 Background Levels of Service

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from "A" to "F." LOS A is indicative of little congestion or delay and LOS F is indicative of a high level of congestion or delay. Attached are specific level of service definitions for signalized and unsignalized intersections.

The intersections in Figures 3, 4a, 4b, 5a, and 5b were analyzed as appropriate to determine the existing, 2025, and 2037 background levels of service using Synchro. Table 1 shows the level of service analysis results. The level of service reports are attached.

- **Stroh Road/Crowfoot Valley Road/Motsenbocker Road:** This signalized intersection currently operates at LOS "B" during both morning and afternoon peak-hour and is expected to do so through 2025. In 2037, both peak-hours are expected to operate at LOS "D".

- **Crowfoot Valley Road/Chambers Road/Bayou Gulch Road:** All movements at this future unsignalized intersection are expected to operate at LOS "A" during both peak-hours in 2025. In 2037, this intersection is expected to be signalized and as such is expected to operate at LOS "D" during the morning peak-hour and LOS "E" during the afternoon peak-hour. The LOS "E" can be improved by providing a free right-turn movement from eastbound Chambers Road to southbound Crowfoot Valley Road.

- **Crowfoot Valley Road/Pinery Parkway:** All movements at this future unsignalized intersection are expected to operate at LOS "C" or better during both peak-hours through 2025. In 2037, this intersection is expected to be signalized and as such is expected to operate at LOS "A" during both peak-hours.

- **Crowfoot Valley Road/Pradera Parkway:** All movements at this unsignalized intersection currently operate at LOS "C" or better during both peak-hours and are expected to do so through 2025. In 2037, this intersection is expected to be signalized and as such is expected to operate at LOS "B" during the morning peak-hour and LOS "A" during the afternoon peak-hour.

- **Parker Road/Pinery Parkway:** This signalized intersection currently operates at LOS "C" during both morning and afternoon peak-hours. In 2025, the morning peak-hour is expected to operate at LOS "D" and the afternoon peak-hour is expected to operate at LOS "C" and is expected to do so through 2037.

- **Pinery Parkway/Bayou Gulch Road:** All movements at this future unsignalized intersection are expected to operate at "B" or better in 2025. In 2037, this intersection is expected to be signalized and as such is expected to operate at LOS "C" during both peak-hours.

- **Pinery Parkway/PA 46:** All movements at this future unsignalized intersection are expected to operate at LOS "B" or better through 2037.

TRIP GENERATION

Table 2 shows the estimated average weekday, morning peak-hour, and afternoon peak-hour trip generation for the proposed site based on the rates from *Trip Generation, 9th Edition, 2012* by the Institute of Transportation Engineers (ITE) for the proposed land use.

The site is projected to generate about 7,881 one-way vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 150 vehicles would enter and about 469 vehicles would exit the site. During the afternoon peak-hour, which generally occurs for one hour between 4:00 and 6:00 p.m., about 514 vehicles would enter and about 300 vehicles would exit.

TRIP DISTRIBUTION

Figure 6 shows the estimated directional distribution of the site-generated traffic volumes on the area roadways. The estimates were based on the location of the site with respect to the regional population, employment, and activity centers; and the site's proposed land use.

TRIP ASSIGNMENT

Figures 7a, 7b, 8a, and 8b show the estimated 2025 and 2037 site-generated traffic volumes based on the directional distribution percentages (from Figure 6) and the trip generation estimate (from Table 2).

2025 AND 2037 TOTAL TRAFFIC

Figures 9a and 9b show the 2025 total traffic which is the sum of the 2025 background traffic volumes (from Figures 4a and 4b) and the 2025 site-generated traffic volumes (from Figures 7a and 7b). Figures 9a and 9b also show the recommended 2025 lane geometry and traffic control with specific turn lane dimensions given in Table 3.

Figures 10a and 10b show the 2037 total traffic which is the sum of 2037 background traffic volumes (from Figures 5a and 5b) and the 2037 site-generated traffic volumes (from Figures 8a and 8b). Figures 10a and 10b also show the recommended 2037 lane geometry and traffic control.

PROJECTED LEVELS OF SERVICE

The intersections in Figures 9a, 9b, 10a, and 10b were analyzed to determine the 2025 and 2037 total levels of service. Table 1 shows the level of service analysis results. The level of service reports are attached.

- **Stroh Road/Crowfoot Valley Road/Motsenbocker Road:** This signalized intersection is expected to operate at LOS "C" or better during both morning and afternoon peak-hour through 2025. In 2037, the morning peak-hour is expected to operate at LOS "C" and the afternoon peak-hour is expected to operate at LOS "D".

- **Crowfoot Valley Road/Chambers Road/Bayou Gulch Road:** All movements at this future unsignalized intersection are expected to operate at LOS "D" or better during both peak-hours in 2025. In 2037, this intersection is expected to be signalized and as such is expected to operate at LOS "D" during the morning peak-hour and LOS "E" during the afternoon peak-hour with or without the addition of site traffic. The LOS "E" can be improved by providing a free right-turn movement from eastbound Chambers Road to southbound Crowfoot Valley Road.

- **Crowfoot Valley Road/Pinery Parkway:** All movements at future this unsignalized intersection are expected to operate at LOS "D" or better during both peak-hours through 2025. In 2037, this intersection is expected to be signalized and as such is expected to operate at LOS "A" during the morning peak-hour and LOS "B" during the afternoon peak-hour.

- **Crowfoot Valley Road/Pradera Parkway:** All movements at this unsignalized intersection are expected to operate at LOS "C" or better through 2025. In 2037, this intersection is expected to be signalized and as such is expected to operate at LOS "B" during the morning peak-hour and LOS "A" during the afternoon peak-hour.

- **Parker Road/Pinery Parkway:** This signalized intersection is expected to operate at LOS "D" during the morning peak-hour and LOS "C" during the afternoon peak-hours through 2037.

- **Pinery Parkway/Bayou Gulch Road:** All movements at this future unsignalized intersection are expected to operate at "B" or better in 2025 during both peak-hours. In 2037, this intersection is expected to be signalized and as such is expected to operate at LOS "D" or better during both peak-hours.

- **Bayou Gulch Road/RIRO South Access:** All movements at this future unsignalized intersection are expected to operate at LOS "A" in 2025 during both peak-hours. In 2037, all movements are expected to operate at LOS "B" or better during both peak-hours.

- **Pinery Parkway/PA 40 West/PA 34 West:** All movements at this future unsignalized intersection are expected to operate at LOS "C" or better during both peak-hours through 2037.

- **Pinery Parkway/PA 40 East/PA 34:** All movements at this future unsignalized intersection are expected to operate at LOS "B" or better through 2037.

- **Pinery Parkway/RIRO Access:** All movements at this future unsignalized intersection are expected to operate at LOS "B" or better through 2037.

- **Pinery Parkway/PA 46:** All movements at this future unsignalized intersection are expected to operate at LOS "C" or better through 2037.

- **Bayou Gulch Road/PA 36&37/PA 34&35:** All movements at this future unsignalized intersection are expected to operate at LOS "B" or better through 2025. In 2037, the eastbound and the westbound movements are expected to operate at LOS"F" during both peak-hours. Traffic signal control may be needed in the long term.

CONCLUSIONS AND RECOMMENDATIONS

Trip Generation

1. The site is projected to generate about 7,881 one-way vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, about 150 vehicles would enter and 469 vehicles would exit the site. During the afternoon peak-hour, about 514 vehicles would enter and about 300 vehicles would exit.

Projected Levels of Service

2. All of the signalized intersections are expected to operate at overall LOS "D" or better with all individual movements operating at LOS "E" or better through 2037 during both peak-hours with the following exceptions: The Crowfoot Valley Road/ Chambers Road/Bayou Gulch Road intersection is expected to operate at LOS "E" and the eastbound right-turn movement is expected to operate at LOS "F" in the 2037 afternoon peak-hour with or without the additional of site traffic. Overall operations would improve if a free movement is

provided for the eastbound right-turn movement from eastbound Chambers Road to southbound Crowfoot Valley Road. The westbound through/right movement from Pinery Parkway to Parker Road is expected to operate poorly without a dedicated right-turn lane and receiving acceleration lane on Parker Road.

3. All movements at the unsignalized intersections analyzed are expected to operate at LOS "D" or better during both morning and afternoon peak-hours through 2037 with the following exceptions: The eastbound and westbound movements at the Bayou Gulch Road/PA 36&37/PA 34&35 intersection are expected to operate at LOS "F" during the peak-hours by 2037. A traffic signal may be needed at this location in the long term.

Conclusions

4. The impact of the Trail at Crowfoot development site can be accommodated by the existing and planned roadway network with the following recommendations.

Recommended Improvements

5. The recommended 2025 improvements are shown in Figures 9a and 9b with specific turn lane dimensions given in Table 3.

6. The recommended 2037 improvements are shown in Figures 10a and 10b.

* * * * *

We trust our findings will assist you in gaining approval of the proposed Trails at Crowfoot residential development. Please contact me if you have any questions or need further assistance.

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

By_____
Christopher S. McGranahan, PE, PTOE
Principal

COLORADO LICENSED CHRISTOPHER S. MCGRANAHAN 39018 PROFESSIONAL ENGINEER
7-19-17

CSM/wc

Enclosures: Tables 1 - 3
Figures 1 - 10b
Traffic Count Reports
Level of Service Definitions
Level of Service Reports

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Table 1 (Page 1 of 2)
Intersection Levels of Service Analysis
Trails at Crowfoot
Parker, CO
LSC #160711; July, 2017

Intersection Location	Traffic Control	Existing Traffic Level of Service AM	Existing Traffic Level of Service PM	2025 Background Traffic Level of Service AM	2025 Background Traffic Level of Service PM	2025 Total Traffic Level of Service AM	2025 Total Traffic Level of Service PM	2037 Background Traffic Level of Service AM	2037 Background Traffic Level of Service PM	2037 Total Traffic Level of Service AM	2037 Total Traffic Level of Service PM
1) Stroh Road/Crowfoot Valley Road/Motsenbocker Road	Signalized										
EB Left		--	--	--	--	--	--	D	D	D	D
EB Through		--	--	--	--	--	--	D	D	D	D
EB Right		--	--	--	--	--	--	D	D	D	D
WB Left		C	C	C	C	C	C	D	E	D	E
WB Through		--	--	--	--	--	--	C	C	C	C
WB Right		C	C	C	C	C	C	C	C	C	C
NB Left		--	--	--	--	--	--	E	E	E	E
NB Through		A	A	B	B	C	B	C	C	C	C
NB Right		A	A	B	B	B	B	C	C	C	C
SB Left		A	A	A	B	B	B	B	E	B	E
SB Through		A	A	A	A	A	A	C	C	C	D
SB Right		--	--	--	--	--	--	B	D	B	D
Entire Intersection Delay (sec /veh)		15.7	13.0	17.3	13.7	24.0	15.1	35.2	44.5	34.5	45.0
Entire Intersection LOS		B	B	B	B	C	B	D	D	C	D
2) Crowfoot Valley Road/Chambers Road/Bayou Gulch Road	TWSC										
WB Left		--	--	A	A	C	D	--	--	--	--
WB Right		--	--	A	A	A	A	--	--	--	--
SB Left		--	--	A	A	A	A	--	--	--	--
Critical Movement Delay		--	--	8.8	8.6	19.2	31.2	--	--	--	--
	Signalized										
EB Left		--	--	--	--	--	--	E	E	E	E
EB Through		--	--	--	--	--	--	D	D	D	D
EB Right		--	--	--	--	--	--	C	F	C	F
WB Left		--	--	--	--	--	--	E	E	E	E
WB Through		--	--	--	--	--	--	E	E	E	E
WB Right		--	--	--	--	--	--	A	A	A	A
NB Left		--	--	--	--	--	--	D	D	D	D
NB Through		--	--	--	--	--	--	B	C	B	C
NB Right		--	--	--	--	--	--	B	B	B	C
SB Left		--	--	--	--	--	--	E	E	E	E
SB Through		--	--	--	--	--	--	D	E	D	E
SB Right		--	--	--	--	--	--	D	D	D	D
Entire Intersection Delay (sec /veh)		--	--	--	--	--	--	39.9	60.5	43.0	65.6
Entire Intersection LOS		--	--	--	--	--	--	D	E	D	E
3) Crowfoot Valley Road/Pinery Parkway	TWSC										
WB Left		--	--	C	C	C	D	--	--	--	--
WB Right		--	--	A	A	A	A	--	--	--	--
SB Left		--	--	A	A	A	A	--	--	--	--
Critical Movement Delay		--	--	17.8	16.1	24.2	30.2	--	--	--	--
	Signalized										
WB Left		--	--	--	--	--	--	E	E	E	E
WB Right		--	--	--	--	--	--	A	A	A	A
NB Through		--	--	--	--	--	--	A	B	A	B
NB Right		--	--	--	--	--	--	A	A	A	A
SB Left		--	--	--	--	--	--	A	A	A	C
SB Through		--	--	--	--	--	--	A	A	A	A
Entire Intersection Delay (sec /veh)		--	--	--	--	--	--	4.6	7.6	7.4	10.2
Entire Intersection LOS		--	--	--	--	--	--	A	A	A	B
4) Crowfoot Valley Road/Pradera Parkway	TWSC										
WB Left		C	B	C	C	C	C	--	--	--	--
WB Right		B	B	B	B	B	B	--	--	--	--
SB Left		A	A	A	A	A	A	--	--	--	--
Critical Movement Delay		16.0	14.2	18.5	16.2	20.5	17.9	--	--	--	--
	Signalized										
WB Left		--	--	--	--	--	--	E	E	E	E
WB Right		--	--	--	--	--	--	E	D	E	D
NB Through		--	--	--	--	--	--	A	A	A	A
NB Right		--	--	--	--	--	--	A	A	A	A
SB Left		--	--	--	--	--	--	A	A	A	A
SB Through		--	--	--	--	--	--	A	A	A	A
Entire Intersection Delay (sec /veh)		--	--	--	--	--	--	11.3	8.0	11.4	8.3
Entire Intersection LOS		--	--	--	--	--	--	B	A	B	A
5) Parker Road/Pinery Parkway	Signalized										
EB Left		E	E	E	E	E	E	E	E	E	E
EB Through		C	D	D	D	D	D	D	D	D	D
EB Right		A	A	A	A	A	A	A	A	A	A
WB Left		C	D	C	D	C	D	C	D	C	D
WB Through/Right		E	F	F	F	F	F	F	E	F	E
NB Left		E	F	E	F	E	E	E	E	E	E
NB Through		C	B	C	C	C	C	C	C	C	C
NB Right		C	B	C	C	D	C	C	C	D	C
SB Left		E	D	E	D	E	D	E	E	E	E
SB Through		B	B	B	B	B	B	B	C	C	C
SB Right		A	A	A	A	A	A	A	A	A	A
Entire Intersection Delay (sec /veh)		33.9	27.6	45.2	31.1	46.3	33.0	48.2	30.5	51.6	33.4
Entire Intersection LOS		C	C	D	C	D	C	D	C	D	C

Table 1 (Page 2 of 2)
Intersection Levels of Service Analysis
Trails at Crowfoot
Parker, CO
LSC #160711; July, 2017

Intersection Location	Traffic Control	Existing Traffic Level of Service AM	Existing Traffic Level of Service PM	2025 Background Traffic Level of Service AM	2025 Background Traffic Level of Service PM	2025 Total Traffic Level of Service AM	2025 Total Traffic Level of Service PM	2037 Background Traffic Level of Service AM	2037 Background Traffic Level of Service PM	2037 Total Traffic Level of Service AM	2037 Total Traffic Level of Service PM
6) Pinery Parkway/Bayou Gulch Road	TWSC										
NB Left		--	--	A	A	A	A	--	--	--	--
EB Left		--	--	A	A	B	B	--	--	--	--
EB Through		--	--	B	B	B	B	--	--	--	--
EB Right		--	--	A	A	A	A	--	--	--	--
WB Left		--	--	B	B	B	B	--	--	--	--
WB Through		--	--	B	B	B	B	--	--	--	--
WB Right		--	--	A	A	A	A	--	--	--	--
SB Left		--	--	A	A	A	A	--	--	--	--
Critical Movement Delay		--	--	10.5	11.2	11.8	14.0	--	--	--	--
	Signalized										
EB Left		--	--	--	--	--	--	C	D	C	D
EB Through		--	--	--	--	--	--	C	D	C	D
EB Right		--	--	--	--	--	--	C	D	C	D
WB Left		--	--	--	--	--	--	C	D	C	D
WB Through		--	--	--	--	--	--	D	D	D	D
WB Right		--	--	--	--	--	--	C	D	C	D
NB Left		--	--	--	--	--	--	B	B	B	B
NB Through		--	--	--	--	--	--	C	B	C	C
NB Right		--	--	--	--	--	--	B	B	C	B
SB Left		--	--	--	--	--	--	E	E	E	E
SB Through		--	--	--	--	--	--	C	C	D	B
SB Right		--	--	--	--	--	--	C	C	C	B
Entire Intersection Delay (sec /veh)		--	--	--	--	--	--	33.2	29.5	35.6	30.3
Entire Intersection LOS		--	--	--	--	--	--	C	C	D	C
7) Bayou Gulch Road/RIRO South Access	TWSC										
EB Right		--	--	--	--	A	A	--	--	B	B
Critical Movement Delay		--	--	--	--	8.6	8.7	--	--	11.0	11.5
8) Pinery Parkway/PA 40 West/PA 34 West	TWSC										
NB Approach		--	--	--	--	B	B	--	--	B	C
EB Left		--	--	--	--	A	A	--	--	A	A
WB Left/Through		--	--	--	--	A	A	--	--	A	A
SB Approach		--	--	--	--	A	A	--	--	A	B
Critical Movement Delay		--	--	--	--	10.2	11.4	--	--	11.3	16.1
9) Pinery Parkway/PA 40 East/PA 34	TWSC										
NB Approach		--	--	--	--	A	A	--	--	B	B
EB Left		--	--	--	--	A	A	--	--	A	A
WB Left		--	--	--	--	A	A	--	--	A	A
SB Approach		--	--	--	--	A	A	--	--	B	B
Critical Movement Delay		--	--	--	--	9.6	9.9	--	--	10.4	12.5
10) Pinery Parkway/RIRO	TWSC										
NB Right		--	--	--	--	A	A	--	--	B	B
SB Right		--	--	--	--	A	A	--	--	B	A
Critical Movement Delay		--	--	--	--	8.9	9.0	--	--	11.0	11.6
11) Pinery Parkway/PA 46	TWSC										
NB Approach		--	--	A	A	B	B	B	B	C	C
EB Left		--	--	--	--	A	A	--	--	A	A
WB Left		--	--	A	A	A	A	A	A	A	A
SB Approach		--	--	--	--	B	B	--	--	C	C
Critical Movement Delay		--	--	9.0	9.1	10.2	11.0	13.5	12.4	21.4	17.3
12) Bayou Gulch Road/PA 36&37/PA 34&35	TWSC										
NB Left		--	--	--	--	A	A	--	--	B	B
EB Left		--	--	--	--	B	B	--	--	F	F
EB Through/Right		--	--	--	--	B	B	--	--	F	F
WB Left		--	--	--	--	B	B	--	--	F	F
WB Through/Right		--	--	--	--	B	A	--	--	F	F
SB Left		--	--	--	--	A	A	--	--	B	C
Critical Movement Delay		--	--	--	--	13.5	14.9	--	--	>240	>240

Table 2
ESTIMATED TRAFFIC GENERATION
Trails At Crowfoot
Parker, CO
LSC #160711; July, 2017

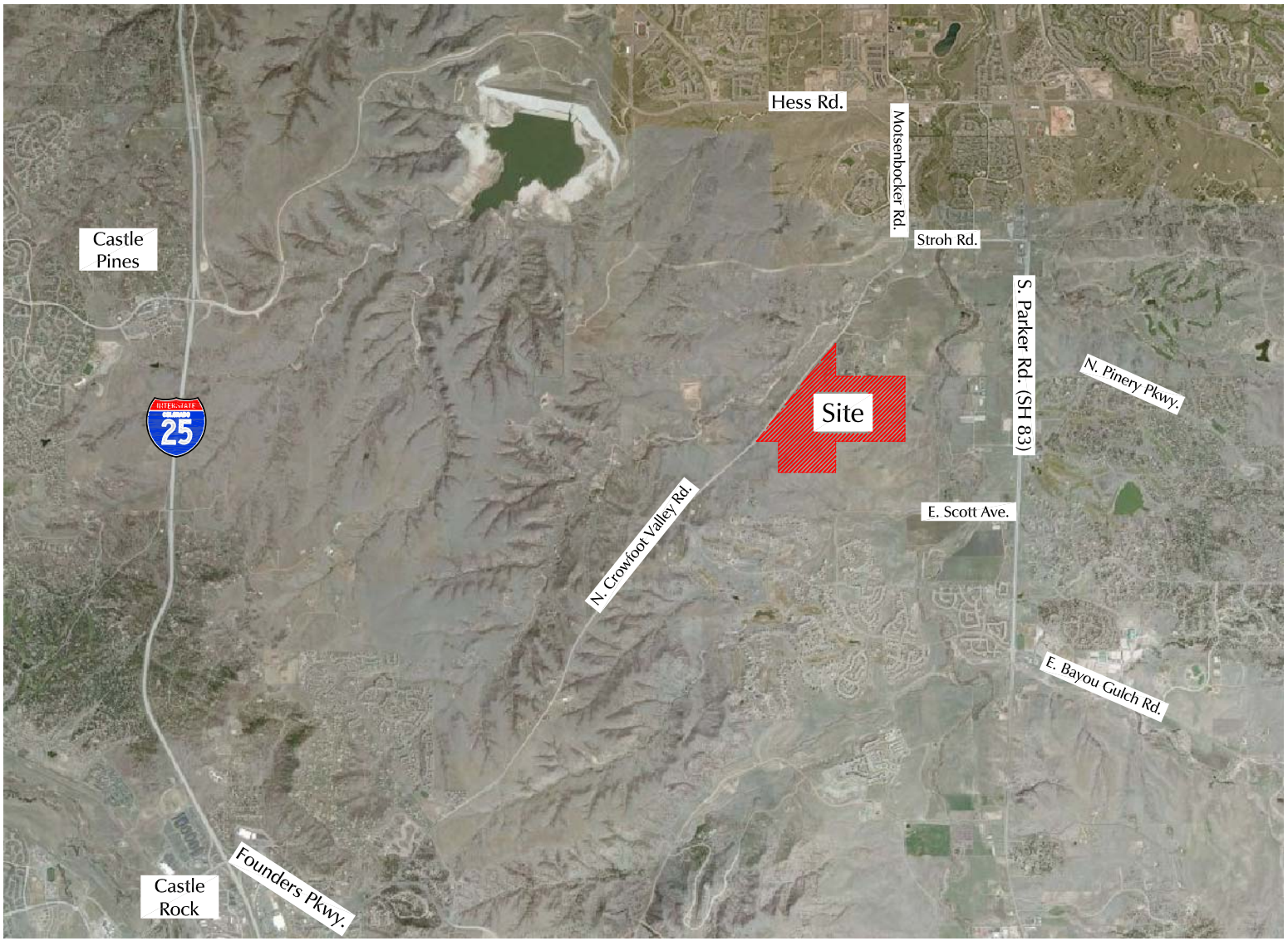
			Trip Generation Rates [1]					Vehicle - Trips Generated				
			Average	AM Peak Hour		PM Peak Hour		Average	AM Peak Hour		PM Peak - Hour	
PA	Trip Generating Category	Quantity	Weekday	In	Out	In	Out	Weekday	In	Out	In	Out
34	Single-Family Residential [2]	196 DU [3]	9.52	0.188	0.563	0.630	0.370	1,866	37	110	123	73
35	Duplex [4]	50 DU	5.81	0.075	0.365	0.348	0.172	291	4	18	17	9
36	Duplex	38 DU	5.81	0.075	0.365	0.348	0.172	221	3	14	13	7
39	Single-Family Residential	182 DU	9.52	0.188	0.563	0.630	0.370	1,733	34	102	115	67
40	Single-Family Residential	165 DU	9.52	0.188	0.563	0.630	0.370	1,571	31	93	104	61
41	Single-Family Residential	19 DU	9.52	0.188	0.563	0.630	0.370	181	4	11	12	7
42	Single-Family Residential	99 DU	9.52	0.188	0.563	0.630	0.370	942	19	56	62	37
43	Duplex	44 DU	5.81	0.075	0.365	0.348	0.172	256	3	16	15	8
44	Duplex	28 DU	5.81	0.075	0.365	0.348	0.172	163	2	10	10	5
46	Single-Family Residential	51 DU	9.52	0.188	0.563	0.630	0.370	486	10	29	32	19
47	Single-Family Residential	18 DU	9.52	0.188	0.563	0.630	0.370	171	3	10	11	7
		890 DU					**Total =**	**7,881**	**150**	**469**	**514**	**300**

Notes:
(1) Source: *Trip Generation*, Institute of Transportation Engineers, 9th Edition, 2012
(2) ITE Land Use No. 210 - Single-Family Detached Housing
(3) DU = Dwelling Units
(4) ITE Land Use No. 230 - Townhomes

Table 3
2025 Total Traffic Recommended Improvements
Trails at Crowfoot
Parker, CO
LSC #160711; July, 2017

Inter-section No.	Intersection	Recommended Improvements based on 40 mph posted speed limit and the traffic volumes shown in Figures 9a and 9b	
2	Crowfoot Valley Road/Bayou Gulch Road	NB Right	225-foot lane plus 145-foot transition taper
		SB Left	300-foot dual lane for vehicle storage, 225 feet for deceleration (one lane) plus a 12:1 transition taper
		WB Left	325-foot lane (225 feet for deceleration and 100 feet for vehicles storage) plus 145-foot transition taper - will be built as dual left to align with the opposing direction
3	Crowfoot Valley Road/Pinery Parkway	NB Right	225-foot lane plus 145-foot transition taper
		SB Left	360-foot lane (225 feet for deceleration and 135 feet for vehicle storage) plus a 145-foot transition taper
		WB Right	100-foot lane plus 145-foot transition taper
		WB Right Accel	235-foot lane plus 145-foot transition taper
6	Pinery Parkway/Bayou Gulch Road	EB Left	380-foot lane (225 feet for deceleration and 155 feet for vehicle storage) plus a 145-foot transition taper
		EB Right	225-foot lane plus 145-foot transition taper
		WB Left	250-foot lane (225 feet for deceleration and 25 feet for vehicle storage) plus a 145-foot transition taper
		WB Right	225-foot lane plus 145-foot transition taper
		NB Left	250-foot lane (225 feet for deceleration and 25 feet for vehicle storage) plus a 145-foot transition taper
		NB Right	Continuous lane from Cielo Acess
		SB Left	220-foot dual lane for vehicle storage, 225 feet for deceleration (one lane) plus a 12:1 transition taper
		SB Right	Continuous lane back to North Site Access
8	Pinery Parkway/Far West Site Access	EB Left	150-foot lane plus a 145-foot transition taper
		WB Left	150-foot lane plus a 145-foot transition taper
9	Pinery Parkway/Near West Site Access	EB Left	150-foot lane plus a 145-foot transition taper
		WB Left	150-foot lane plus a 145-foot transition taper
10	Pinery Parkway/RIRO Site Access	EB Right	Continuous lane from Bayou Gulch Road
11	Pinery Parkway/Far East Site Access	EB Left	150-foot lane plus a 145-foot transition taper
		WB Left	150-foot lane plus a 145-foot transition taper
12	Bayou Gulch Road/North Site Access	WB Left	100-foot lane plus 96-foot transition taper
		EB Left	100-foot lane plus 96-foot transition taper
		NB Left	250-foot lane (225 feet for deceleration and 25 feet for vehicle storage) plus a 145-foot transition taper
		NB Right	Continuous lane back to N. Pinery Parkway
		SB Left	320-foot lane (225 feet for deceleration and 95 feet for vehicle storage) plus a 145-foot transition taper
		SB Right	100-foot lane plus 145-foot transition taper

Note: An appropriate redirect taper for a 40 mph posted speed limit is 30:1.

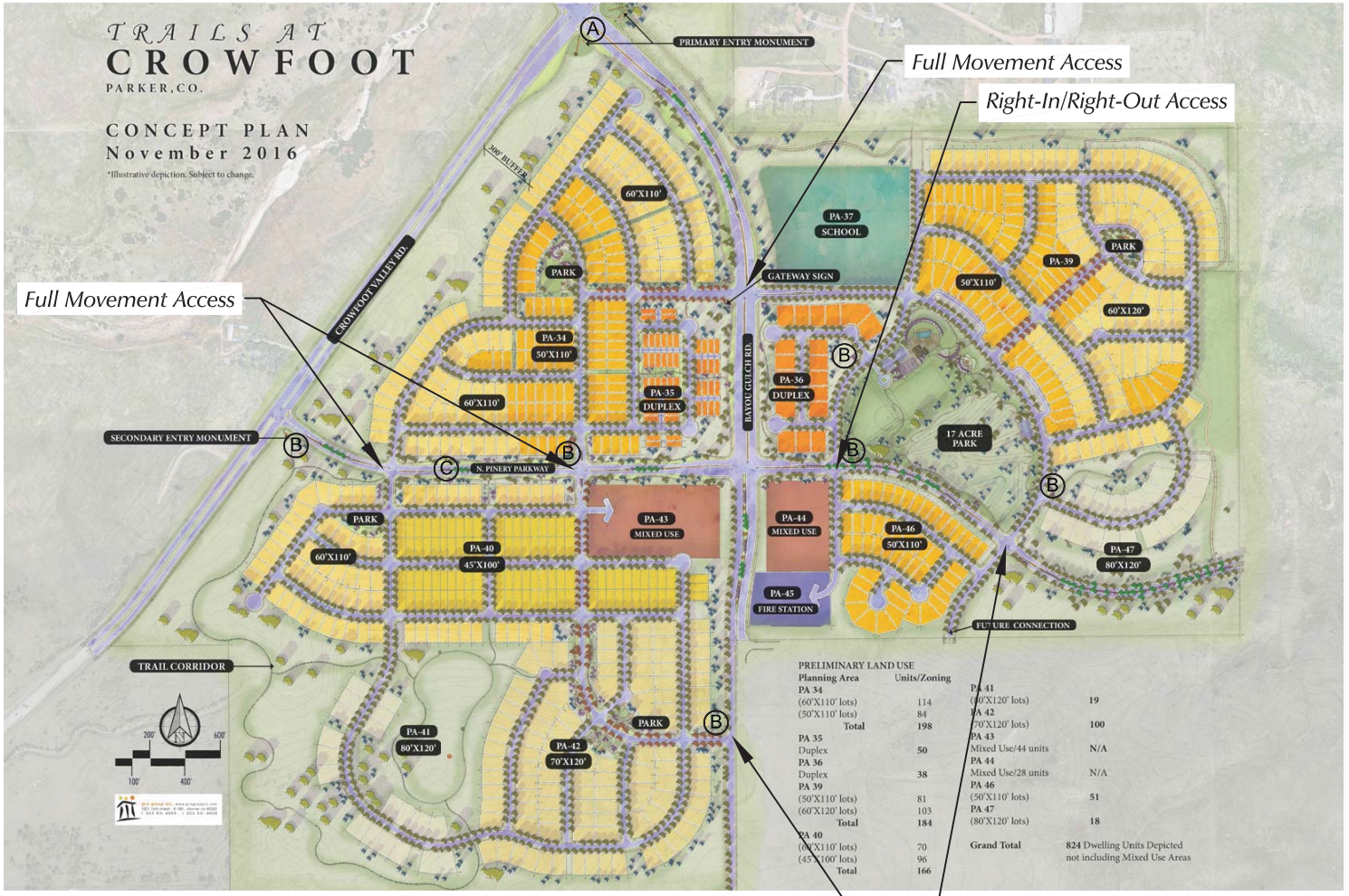


Approximate Scale
Scale: 1"=6,000'

Figure 1

Vicinity Map

Trails at Crowfoot (LSC #160711)

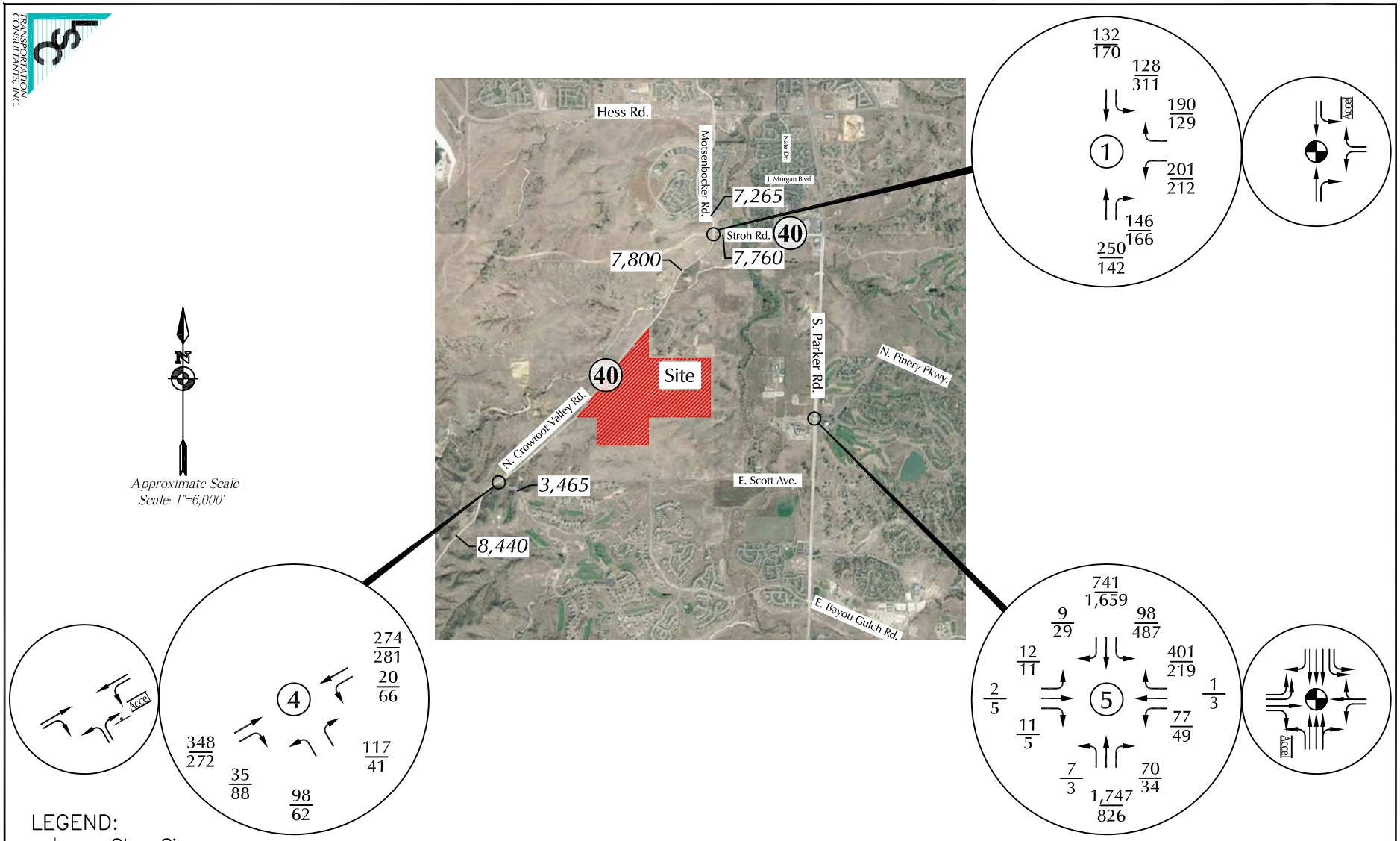


Approximate Scale
Scale: NTS

Figure 2

Site Plan

Trails at Crowfoot (LSC #160711)



LEGEND:

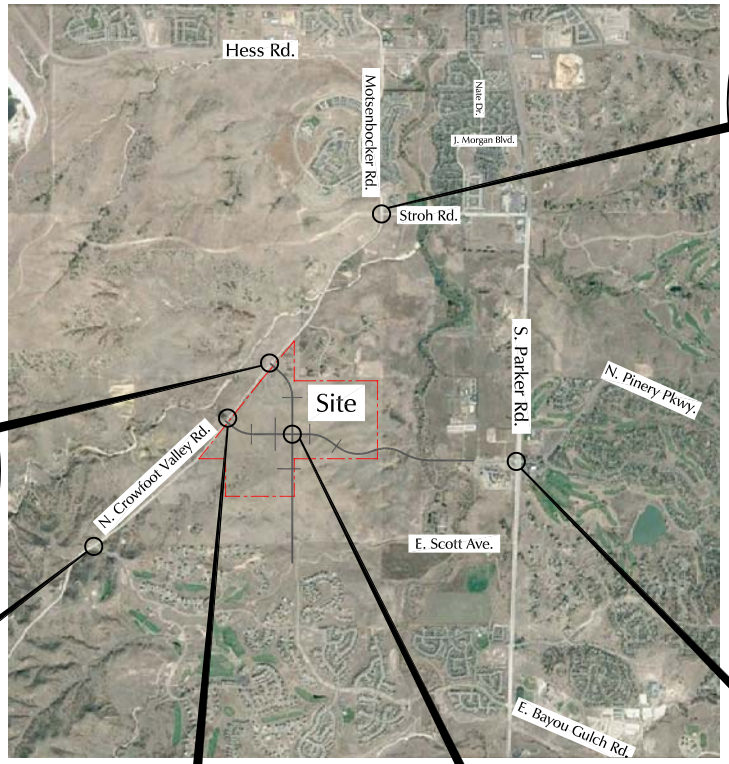
- ⊦ = Stop Sign
- ◒ = Traffic Signal
- (40) = Posted Speed Limit
- 26/35 = AM Peak Hour Traffic / PM Peak Hour Traffic
- 1,000 = Average Daily Traffic

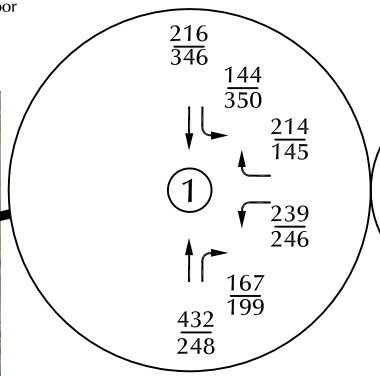
Figure 3

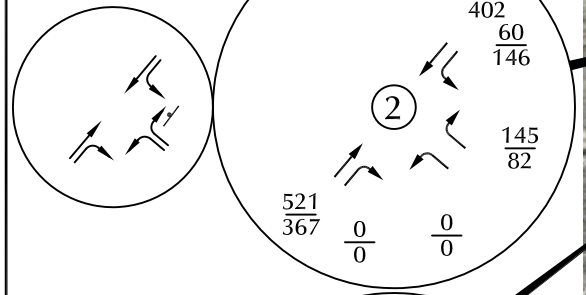
Existing Traffic, Lane Geometry and Traffic Control

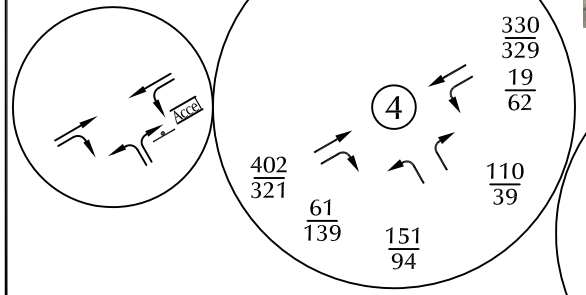
Trails at Crowfoot (LSC #160711)

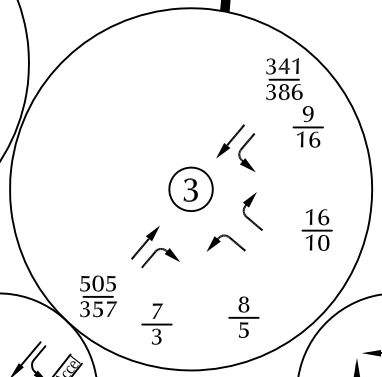
✻ A dedicated westbound right-turn lane and a right-turn acceleration lane are needed to mitigate poor levels of service.

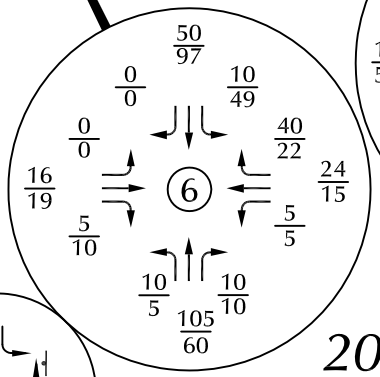


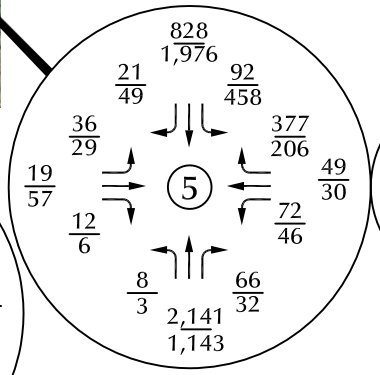












LEGEND:

= Stop Sign

= Traffic Signal

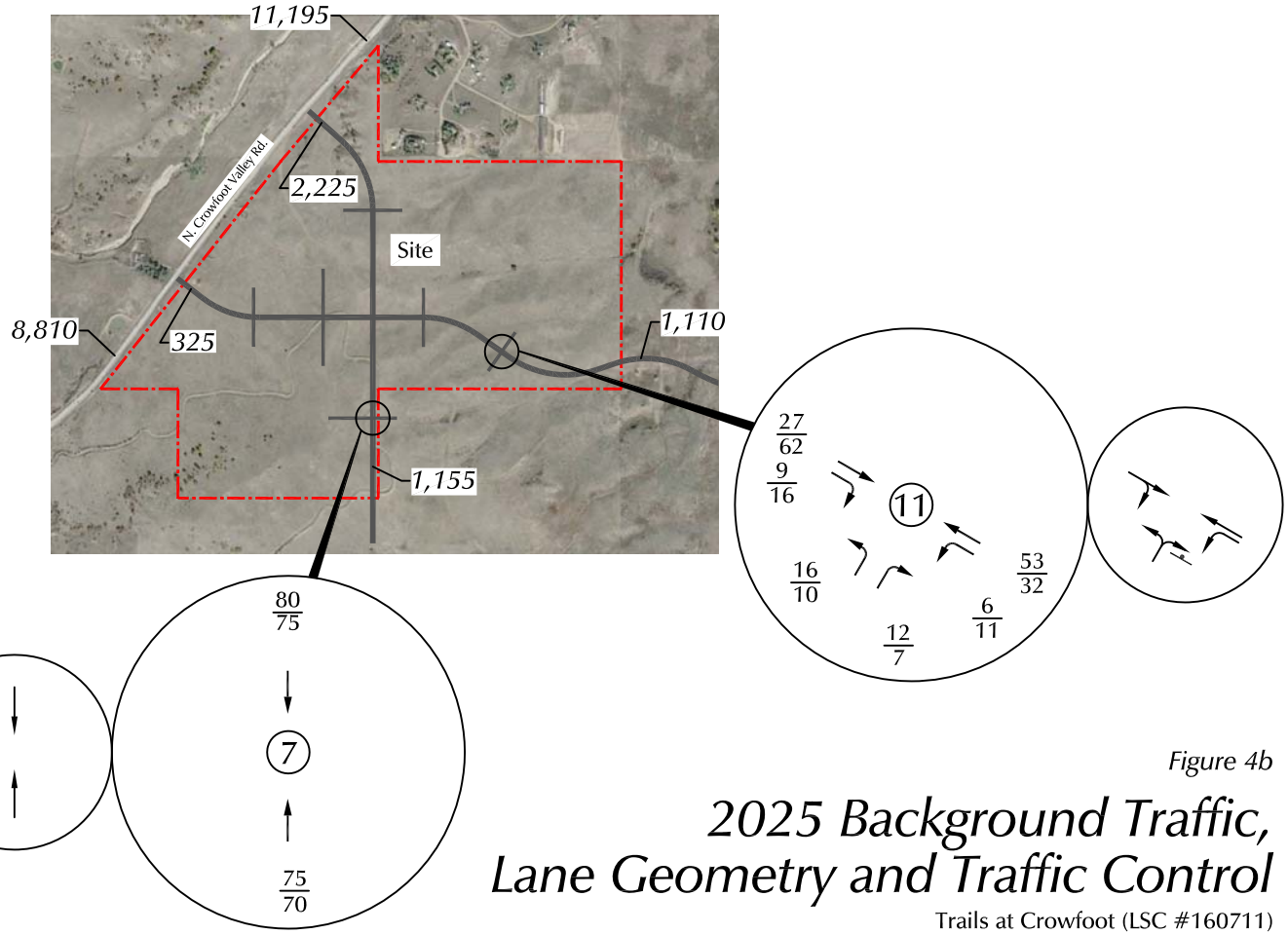
26/35 = AM Peak Hour Traffic / PM Peak Hour Traffic

1,000 = Average Daily Traffic

Figure 4a

2025 Background Traffic, Lane Geometry and Traffic Control

Trails at Crowfoot (LSC #160711)



Approximate Scale
Scale: 1"=2,000'

LEGEND:

= Stop Sign

$\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$

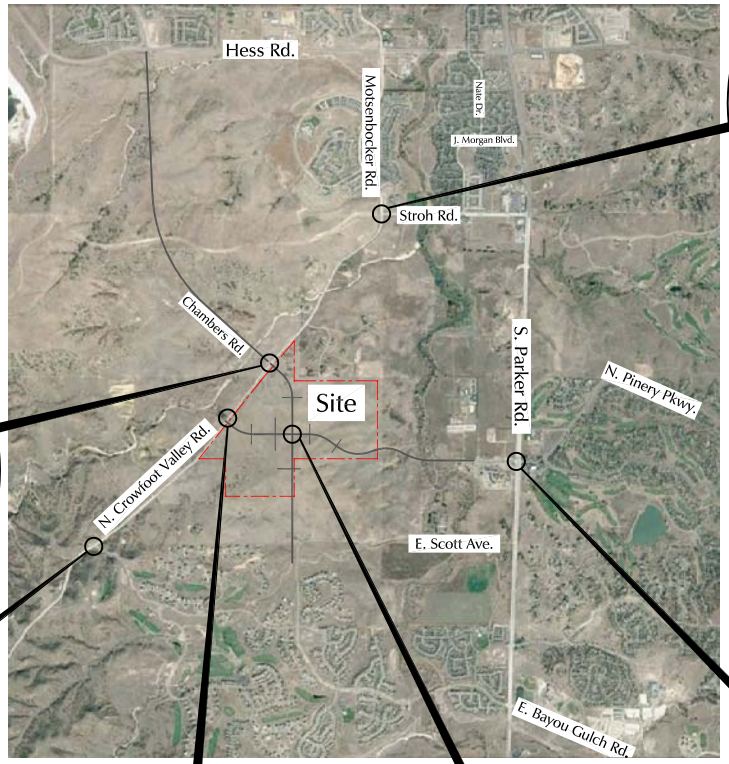
1,000 = Average Daily Traffic

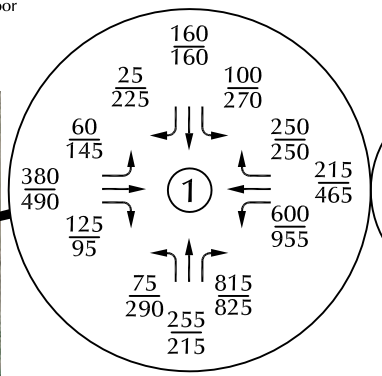
Figure 4b

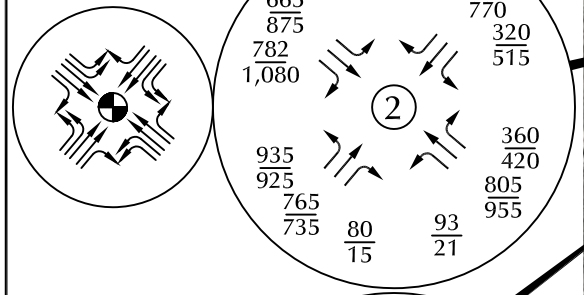
2025 Background Traffic, Lane Geometry and Traffic Control

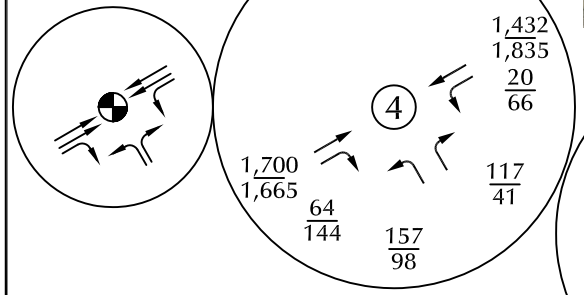
Trails at Crowfoot (LSC #160711)

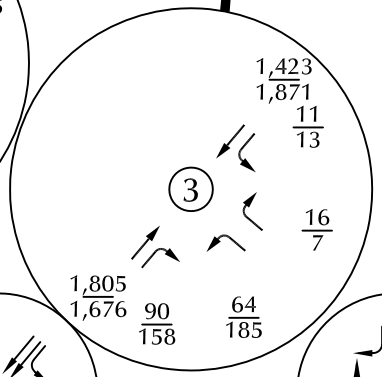
✲ A dedicated westbound right-turn lane and a right-turn acceleration lane are needed to mitigate poor levels of service.

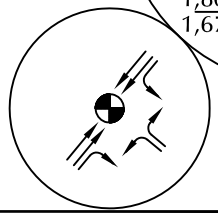


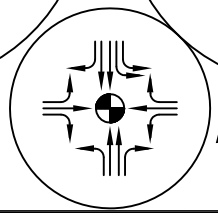


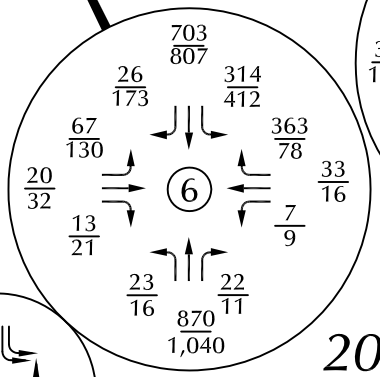


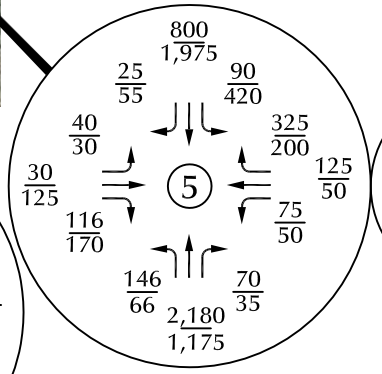


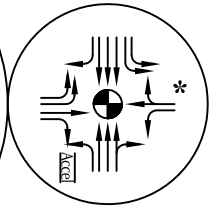












LEGEND:

= Stop Sign

= Traffic Signal

$\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$

1,000 = Average Daily Traffic

Figure 5a

2037 Background Traffic, Lane Geometry and Traffic Control

Trails at Crowfoot (LSC #160711)

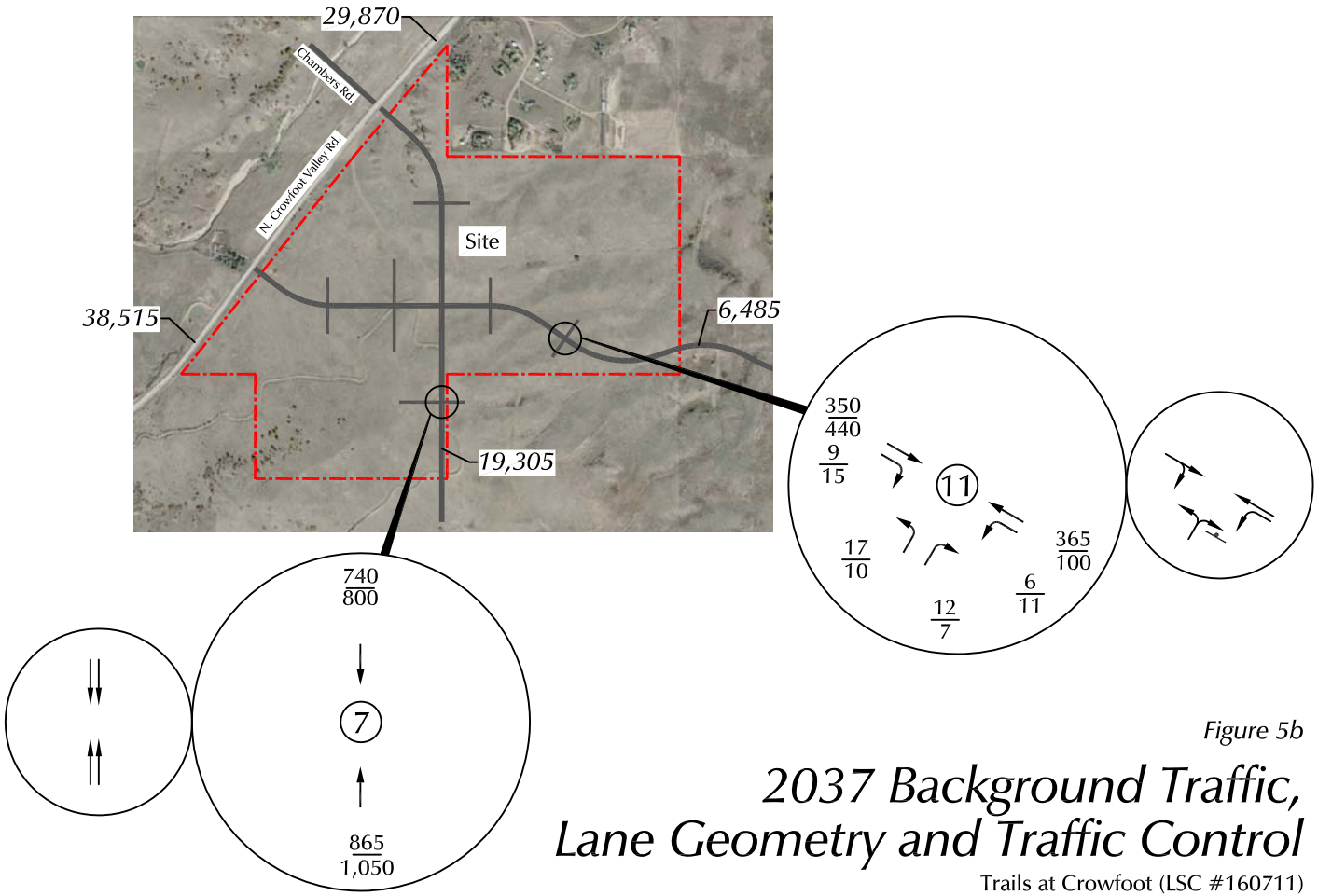


Figure 5b

2037 Background Traffic, Lane Geometry and Traffic Control

Trails at Crowfoot (LSC #160711)

Approximate Scale
Scale: 1"=6,000'

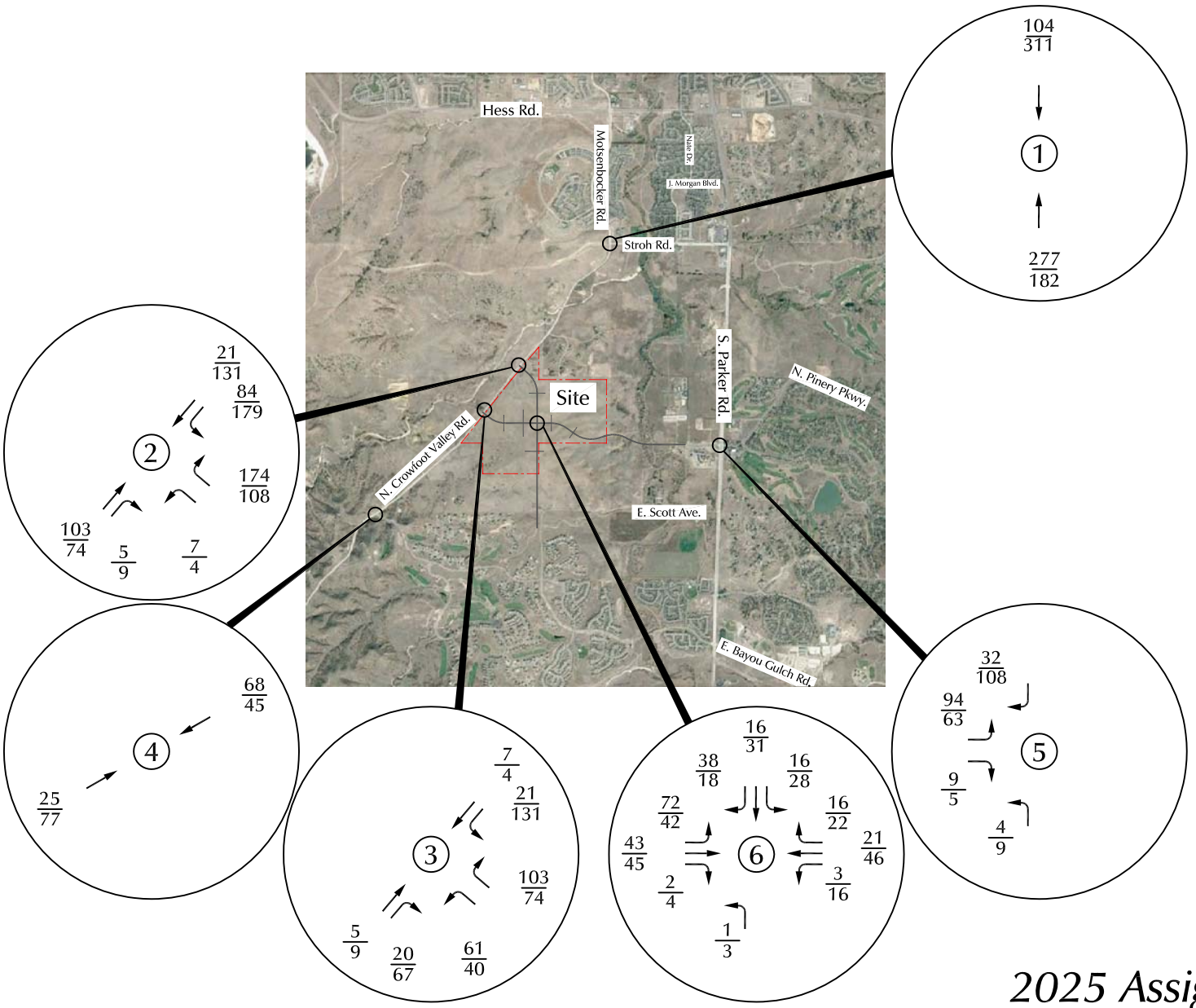
LEGEND:

$\frac{5\%}{5\%}$ = $\frac{\text{Short–Term Percent Directional Distribution}}{\text{Long–Term Percent Directional Distribution}}$

Figure 6

Directional Distribution of Site Generated Traffic

Trails at Crowfoot (LSC #160711)



LEGEND:

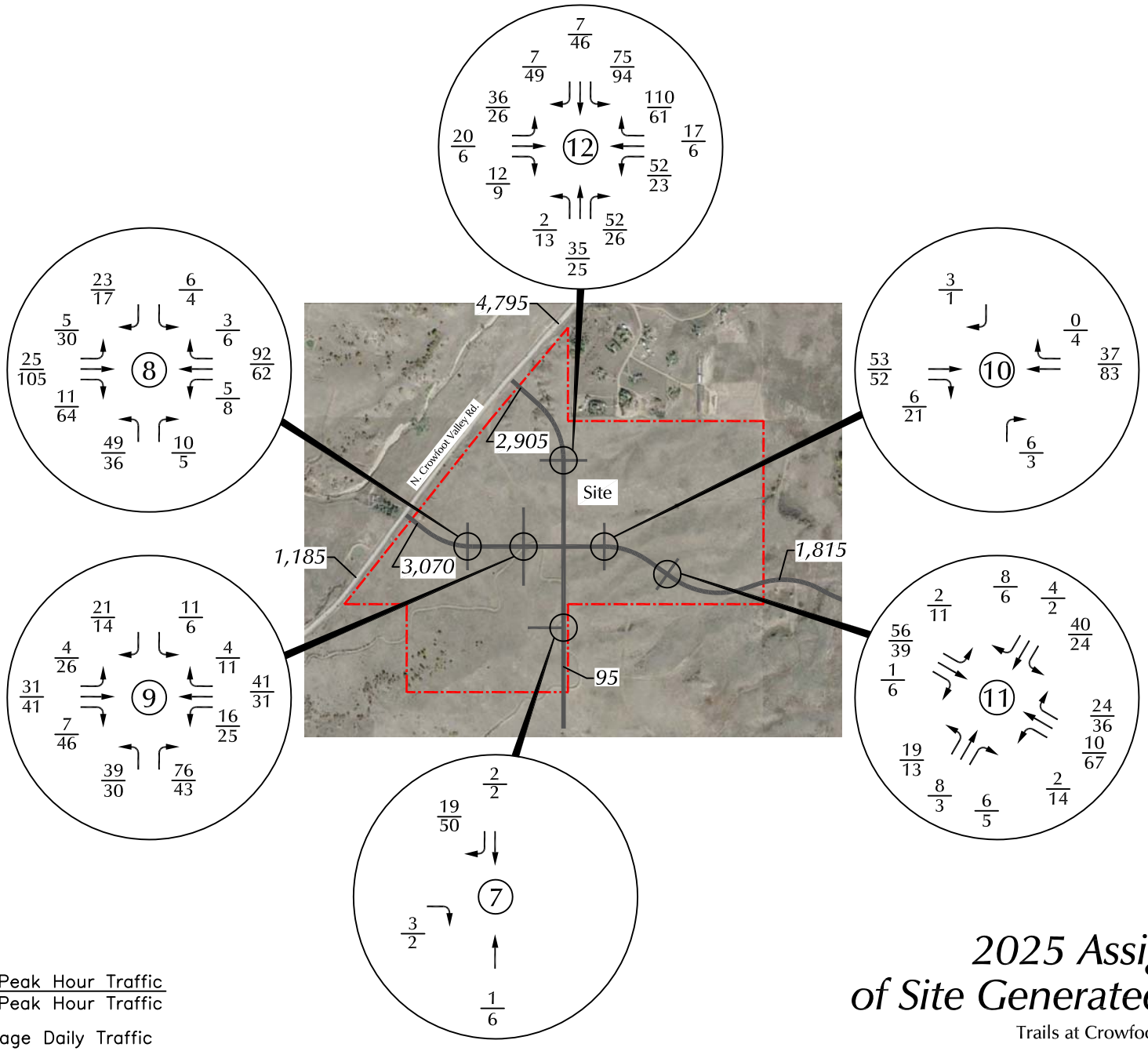
$\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$

1,000 = Average Daily Traffic

Figure 7a

2025 Assignment of Site Generated Traffic

Trails at Crowfoot (LSC #160711)



Approximate Scale
Scale: 1"=2,000'

LEGEND:

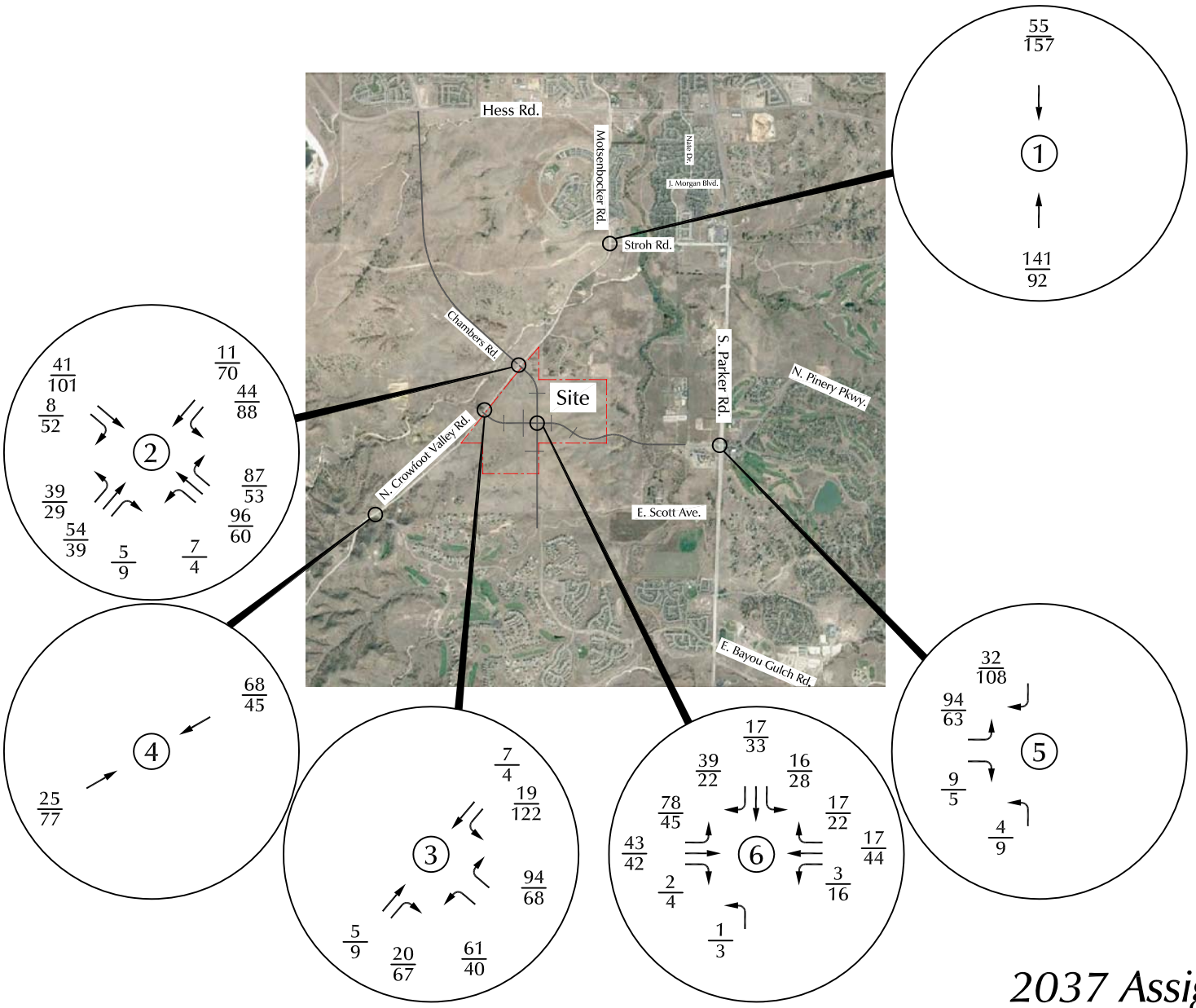
$\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$

1,000 = Average Daily Traffic

Figure 7b

2025 Assignment of Site Generated Traffic

Trails at Crowfoot (LSC #160711)



LEGEND:

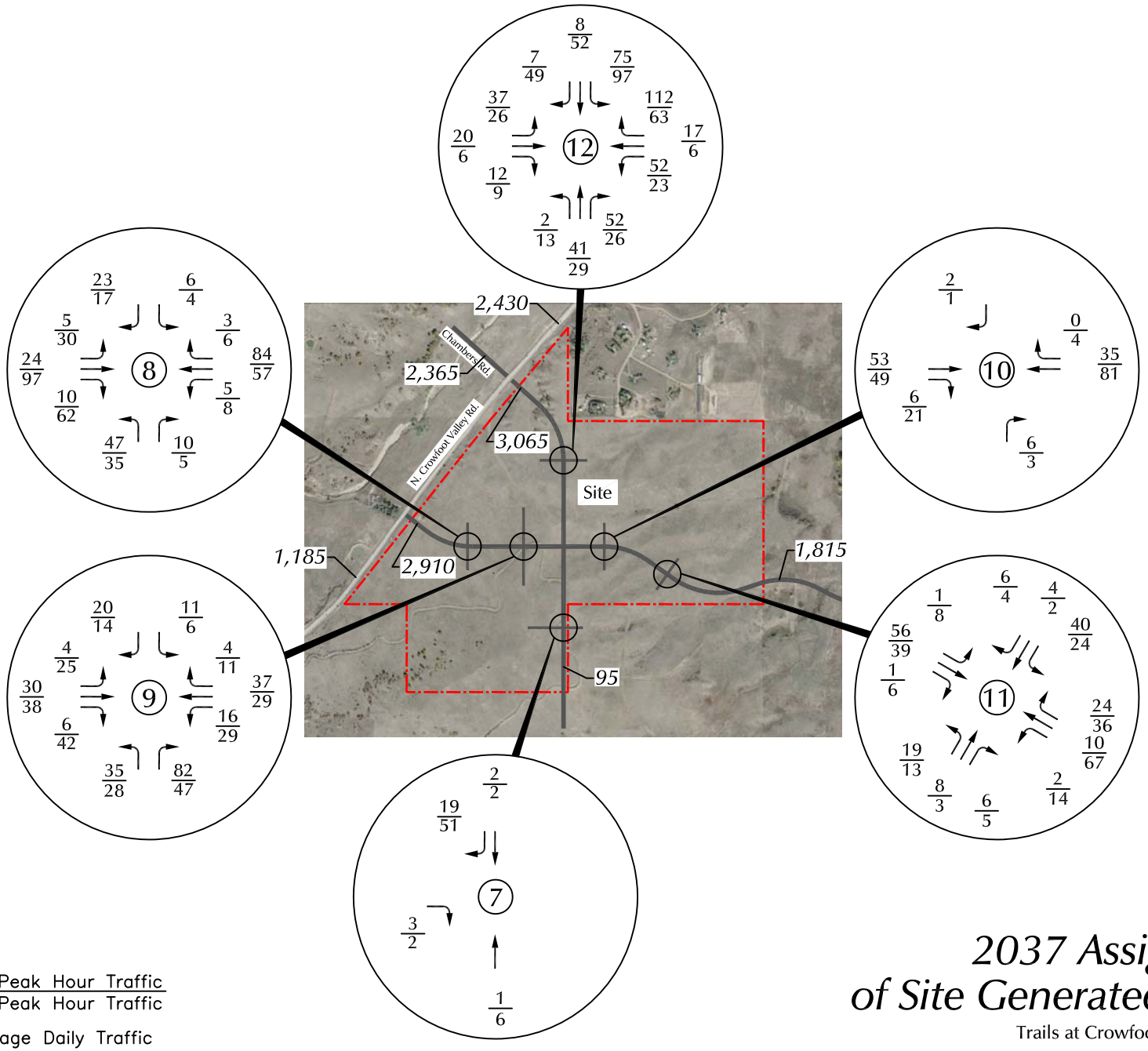
$\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$

1,000 = Average Daily Traffic

Figure 8a

2037 Assignment of Site Generated Traffic

Trails at Crowfoot (LSC #160711)



Approximate Scale
Scale: 1"=2,000'

LEGEND:

$\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$

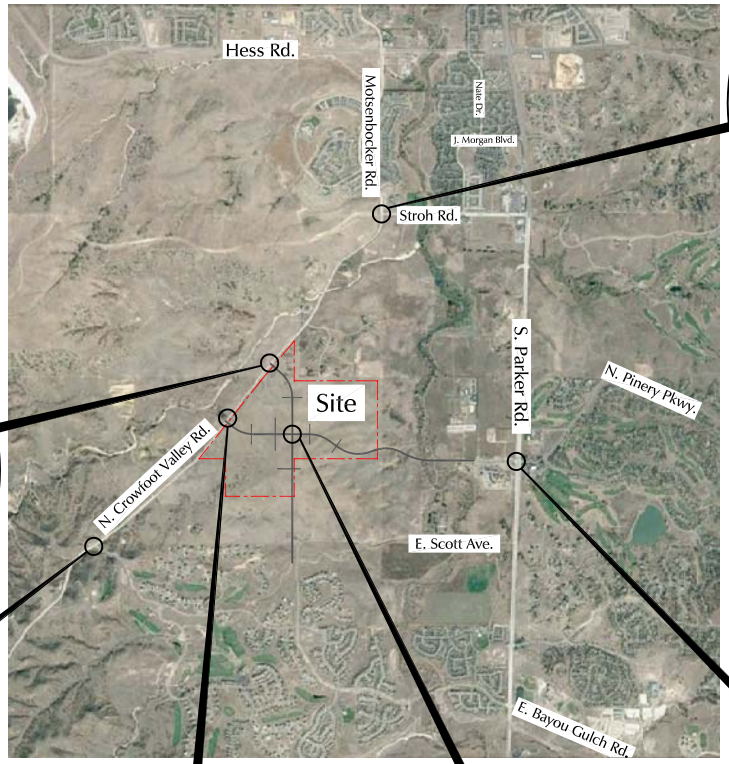
1,000 = Average Daily Traffic

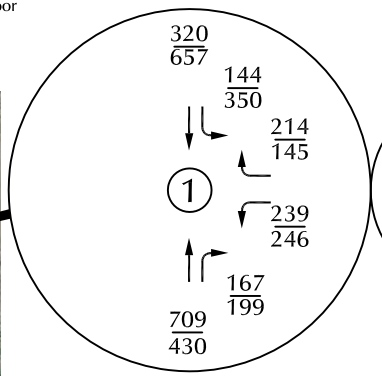
Figure 8b

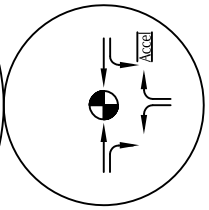
2037 Assignment of Site Generated Traffic

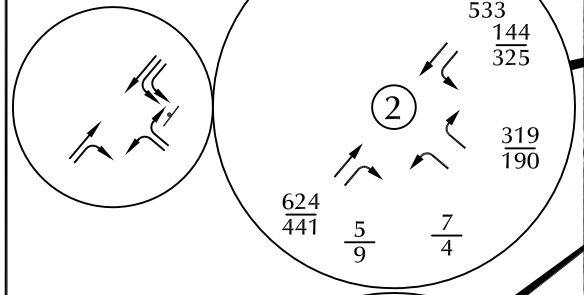
Trails at Crowfoot (LSC #160711)

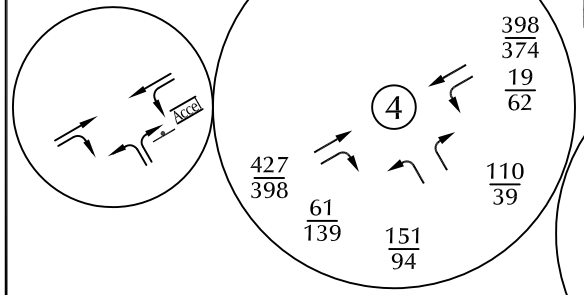
✲ A dedicated westbound right-turn lane and a right-turn acceleration lane are needed to mitigate poor levels of service.

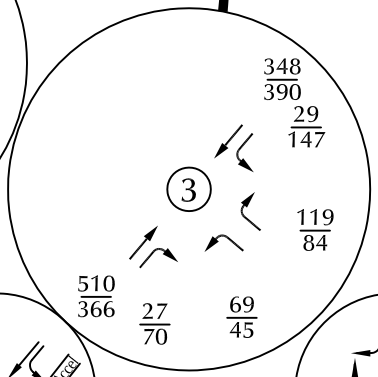


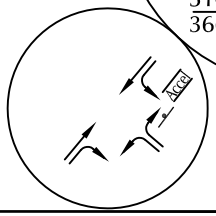


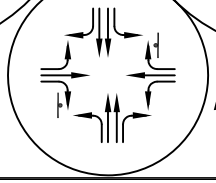


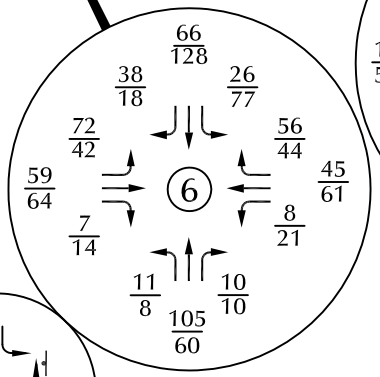


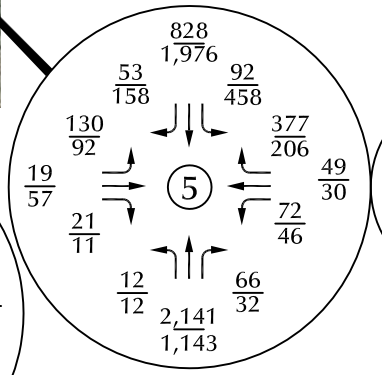


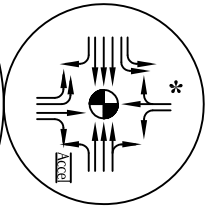












LEGEND:

= Stop Sign

= Traffic Signal

26/35 = AM Peak Hour Traffic / PM Peak Hour Traffic

1,000 = Average Daily Traffic

Figure 9a

2025 Total Traffic, Lane Geometry and Traffic Control

Trails at Crowfoot (LSC #160711)

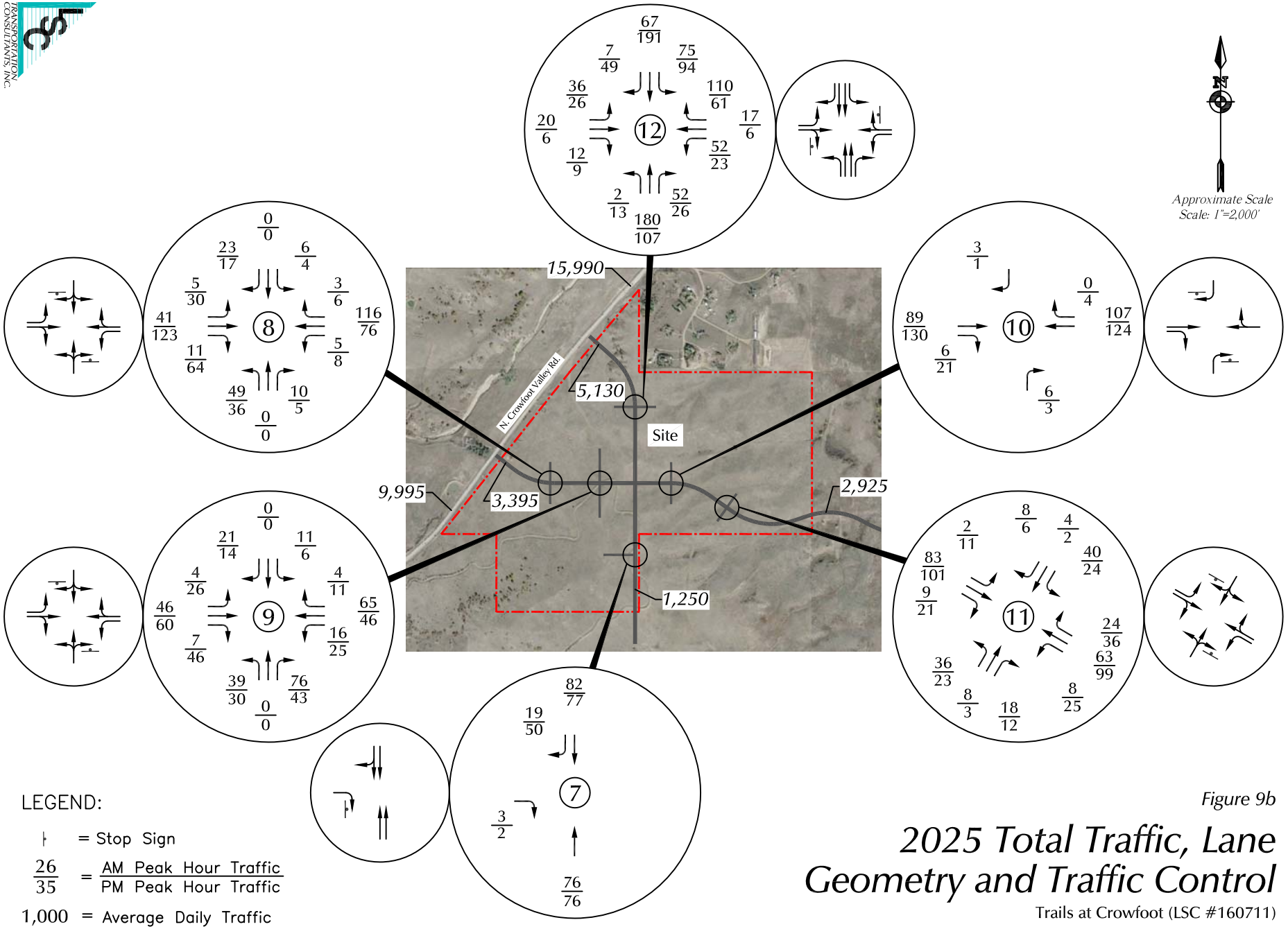
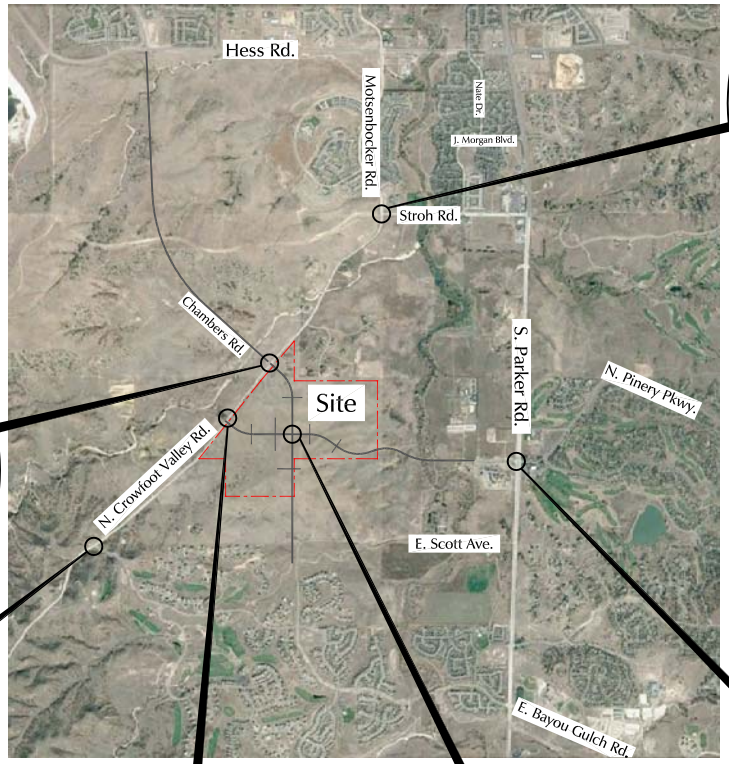


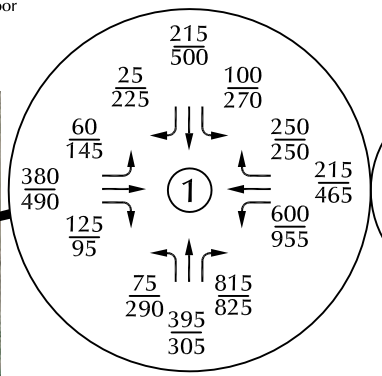
Figure 9b

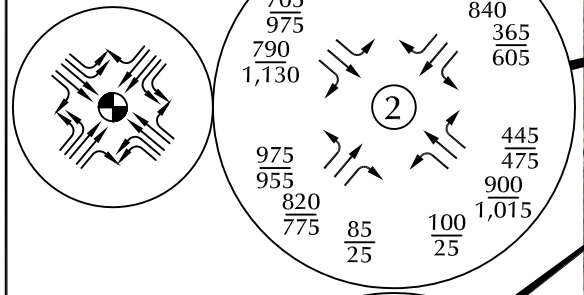
2025 Total Traffic, Lane Geometry and Traffic Control

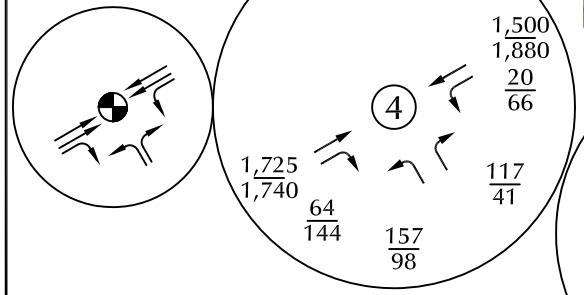
Trails at Crowfoot (LSC #160711)

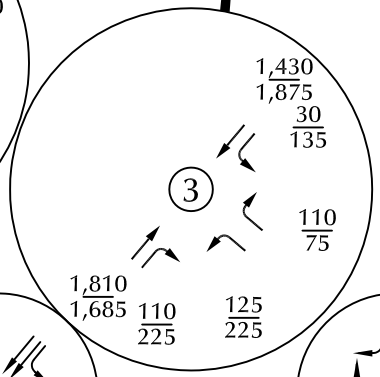
✲ A dedicated westbound right-turn lane and a right-turn acceleration lane are needed to mitigate poor levels of service.

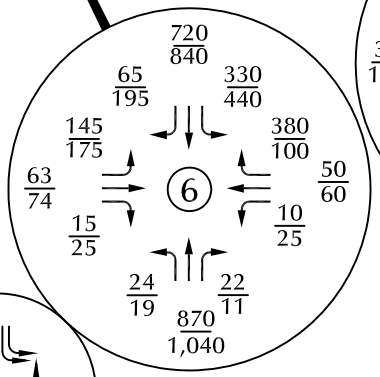


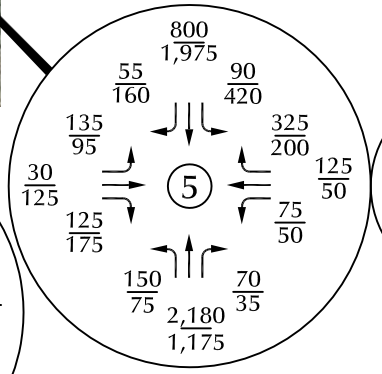


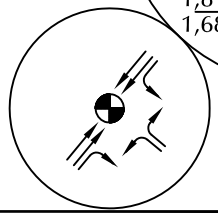


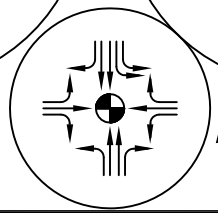


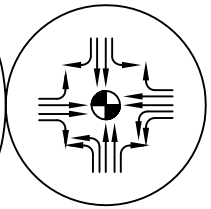


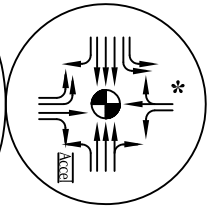












LEGEND:

= Stop Sign

= Traffic Signal

$\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$

1,000 = Average Daily Traffic

Figure 10a

2037 Total Traffic, Lane Geometry and Traffic Control

Trails at Crowfoot (LSC #160711)

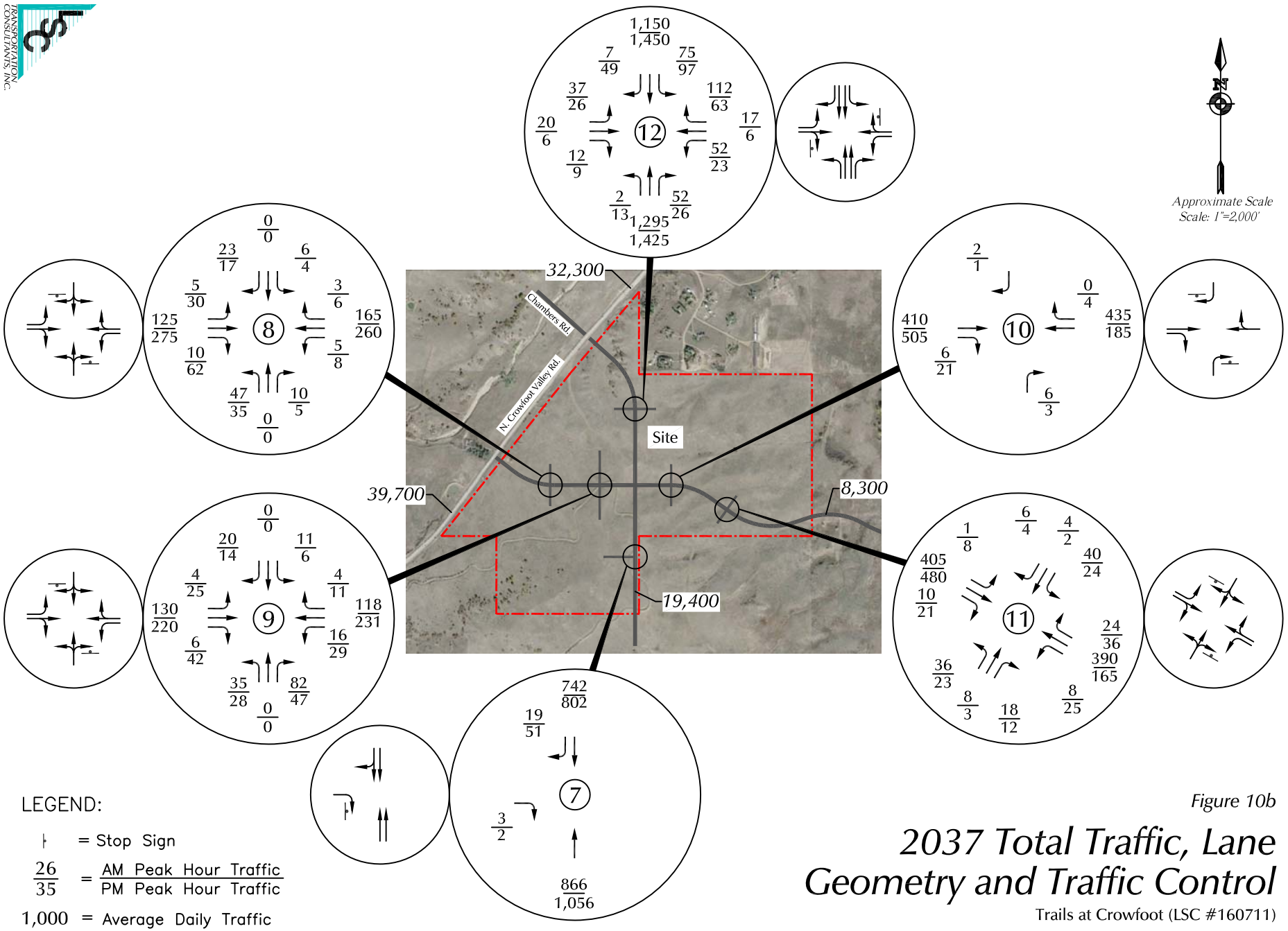


Figure 10b

2037 Total Traffic, Lane Geometry and Traffic Control

Trails at Crowfoot (LSC #160711)

COUNTER MEASURES INC.
1889 YORK STREET
DENVER,COLORADO
303-333-7409

N/S STREET: MOTSENBOCKER RD
E/W STREET: HESS RD
CITY: PARKER
COUNTY: DOUGLAS

File Name : MOTSHESSA
Site Code : 00000014
Start Date : 5/3/2017
Page No : 1

Groups Printed- VEHICLES

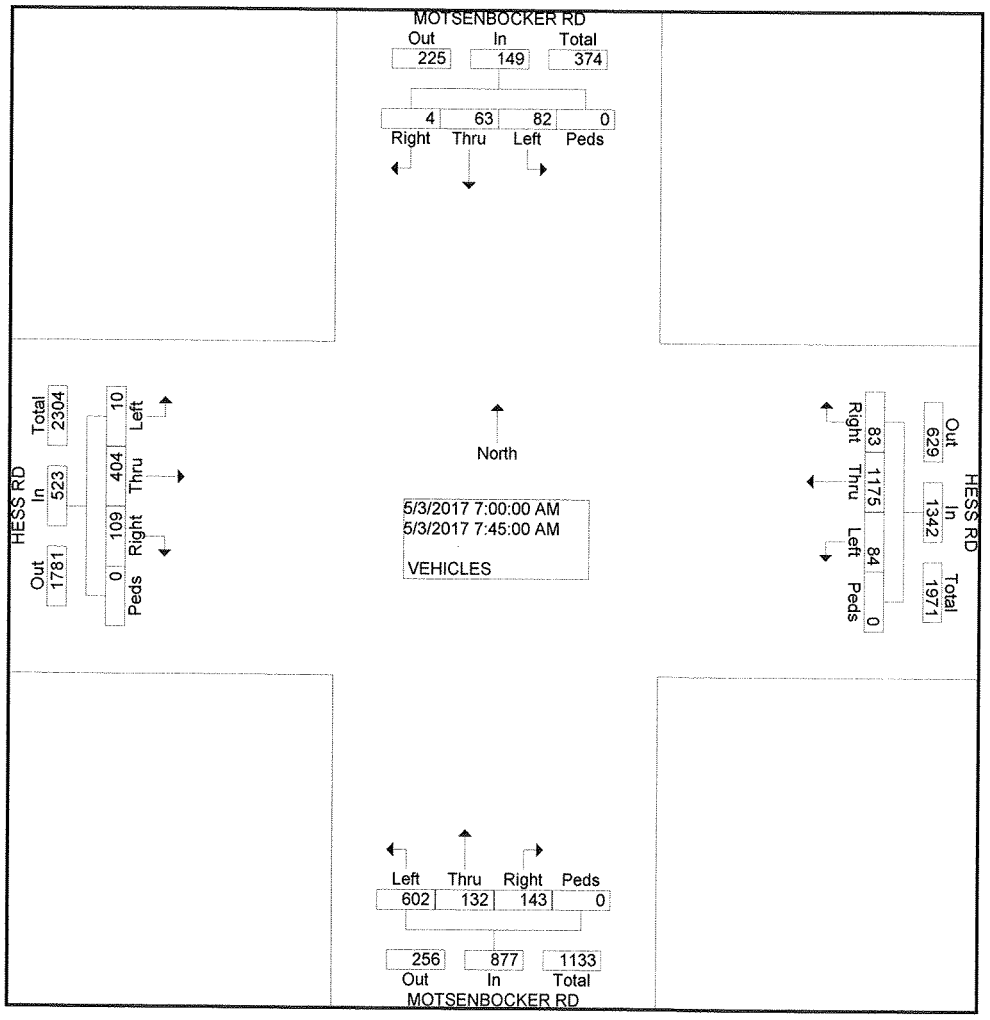
	MOTSENBOCKER RD Southbound				HESS RD Westbound				MOTSENBOCKER RD Northbound				HESS RD Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	8	5	0	0	16	233	10	0	69	4	22	0	2	52	13	0	434
06:45 AM	19	8	0	0	19	234	18	0	102	15	30	0	3	99	19	0	566
Total	27	13	0	0	35	467	28	0	171	19	52	0	5	151	32	0	1000
07:00 AM	11	7	1	0	18	270	8	0	107	18	38	0	3	103	22	0	606
07:15 AM	15	9	1	0	16	304	12	0	155	34	44	0	5	108	19	0	722
07:30 AM	21	20	0	0	23	329	37	0	165	42	33	0	0	111	29	0	810
07:45 AM	35	27	2	0	27	272	26	0	175	38	28	0	2	82	39	0	753
Total	82	63	4	0	84	1175	83	0	602	132	143	0	10	404	109	0	2891
08:00 AM	16	11	1	0	18	261	12	0	160	26	17	0	5	94	39	0	660
08:15 AM	25	14	0	0	22	232	13	0	146	30	33	0	1	146	57	0	719
Total	41	25	1	0	40	493	25	0	306	56	50	0	6	240	96	0	1379
04:00 PM	20	21	4	1	39	102	6	0	59	22	66	0	2	189	110	1	642
04:15 PM	23	21	4	0	41	138	15	2	36	17	29	0	3	267	108	0	704
04:30 PM	16	20	2	0	25	120	21	4	36	16	26	0	4	270	109	0	669
04:45 PM	6	18	3	0	31	114	14	2	34	15	28	0	3	269	103	0	640
Total	65	80	13	1	136	474	56	8	165	70	149	0	12	995	430	1	2655
05:00 PM	21	16	0	0	39	98	10	1	45	14	28	0	1	261	86	2	622
05:15 PM	11	24	1	0	19	138	10	0	31	16	28	0	3	331	128	2	742
05:30 PM	17	20	3	0	26	103	18	0	36	15	32	0	2	285	103	0	660
05:45 PM	16	12	0	0	33	113	6	0	24	12	36	0	3	285	105	2	647
Total	65	72	4	0	117	452	44	1	136	57	124	0	9	1162	422	6	2671
Grand Total	280	253	22	1	412	3061	236	9	1380	334	518	0	42	2952	1089	7	10596
Apprch %	50.4	45.5	4.0	0.2	11.1	82.3	6.3	0.2	61.8	15.0	23.2	0.0	1.0	72.2	26.6	0.2	
Total %	2.6	2.4	0.2	0.0	3.9	28.9	2.2	0.1	13.0	3.2	4.9	0.0	0.4	27.9	10.3	0.1	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER,COLORADO
303-333-7409

N/S STREET: MOTSENBOCKER RD
E/W STREET: HESS RD
CITY: PARKER
COUNTY: DOUGLAS

File Name : MOTSHESSA
Site Code : 00000014
Start Date : 5/3/2017

	MOTSENBOCKER RD Southbound					HESS RD Westbound					MOTSENBOCKER RD Northbound					HESS RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 07:45 AM - Peak 1 of 1																					
Intersection	07:00 AM																				
Volume	82	63	4	0	149	84	1175	83	0	1342	602	132	143	0	877	10	404	109	0	523	2891
Percent	55.0	42.3	2.7	0.0		6.3	87.6	6.2	0.0		68.6	15.1	16.3	0.0		1.9	77.2	20.8	0.0		
07:30 Volume	21	20	0	0	41	23	329	37	0	389	165	42	33	0	240	0	111	29	0	140	810
Peak Factor																					0.892
High Int.	07:45 AM					07:30 AM					07:45 AM					07:30 AM					
Volume	35	27	2	0	64	23	329	37	0	389	175	38	28	0	241	0	111	29	0	140	
Peak Factor					0.582					0.862					0.910					0.934	

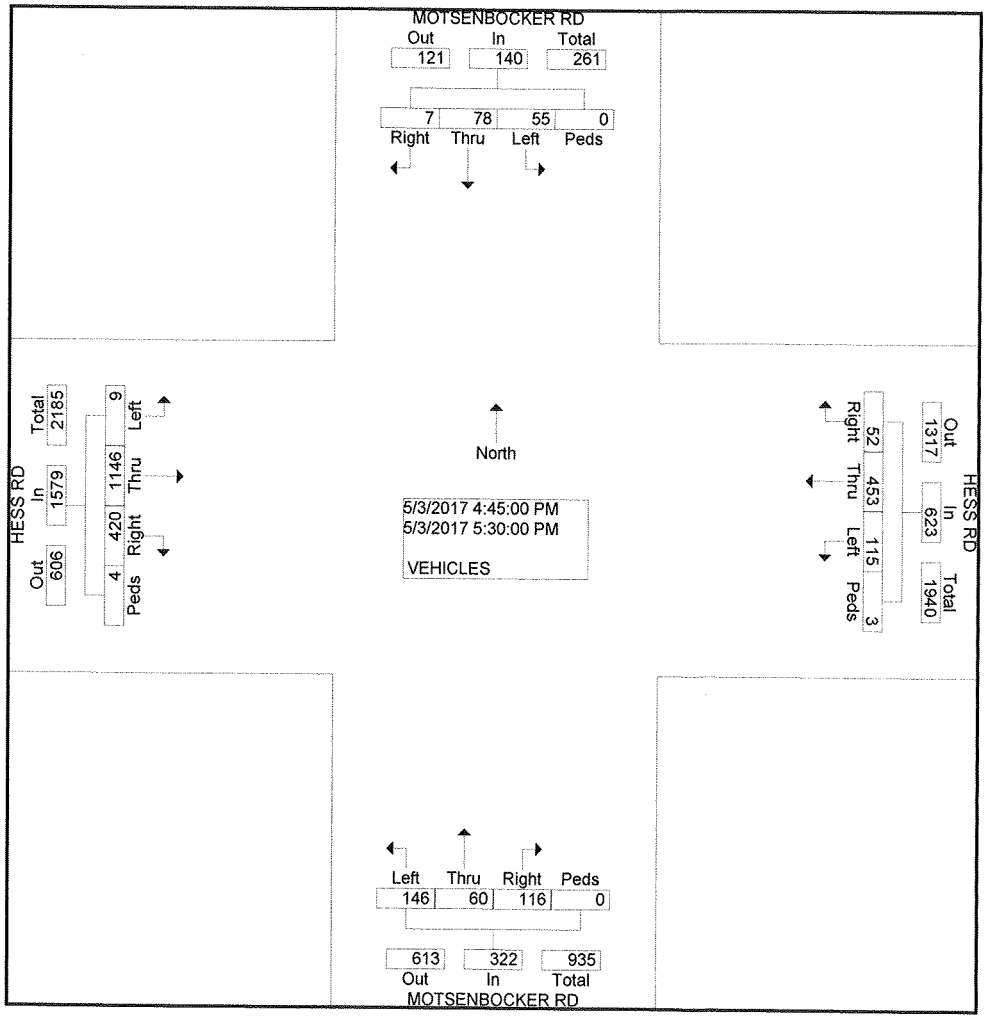


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: MOTSENBOCKER RD
E/W STREET: HESS RD
CITY: PARKER
COUNTY: DOUGLAS

File Name : MOTSHESSA
Site Code : 00000014
Start Date : 5/3/2017
Page No : 2

	MOTSENBOCKER RD Southbound					HESS RD Westbound					MOTSENBOCKER RD Northbound					HESS RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:45 PM to 05:30 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	55	78	7	0	140	115	453	52	3	623	146	60	116	0	322	9	1146	420	4	1579	2664
Percent	39.3	55.7	5.0	0.0		18.5	72.7	8.3	0.5		45.3	18.6	36.0	0.0		0.6	72.6	26.6	0.3		
05:15 Volume	11	24	1	0	36	19	138	10	0	167	31	16	28	0	75	3	331	128	2	464	742
Peak Factor																					0.898
High Int.	05:30 PM					05:15 PM					05:00 PM					05:15 PM					
Volume	17	20	3	0	40	19	138	10	0	167	45	14	28	0	87	3	331	128	2	464	
Peak Factor					0.875					0.933					0.925					0.851	



COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: MOTSENBOCKER RD/CROWFOOT RD
E/W STREET: STROH RD
CITY: PARKER
COUNTY: DOUGLAS

File Name : CROWSTRO
Site Code : 00000017
Start Date : 5/3/2017
Page No : 1

Groups Printed- VEHICLES

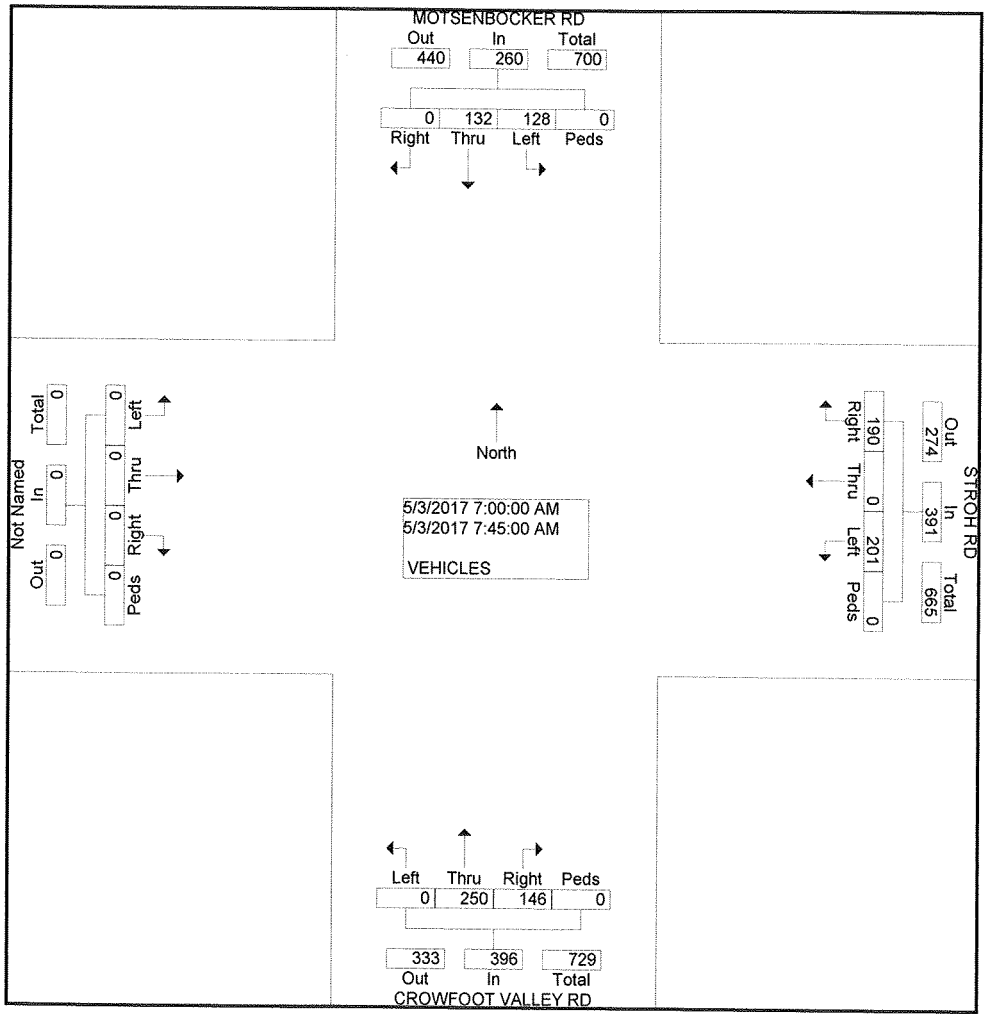
	MOTSENBOCKER RD Southbound				STROH RD Westbound				CROWFOOT VALLEY RD Northbound				Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	14	21	0	0	24	0	24	0	0	17	26	0	0	0	0	0	126
06:45 AM	22	19	0	0	30	0	26	0	0	40	25	0	0	0	0	0	162
Total	36	40	0	0	54	0	50	0	0	57	51	0	0	0	0	0	288
07:00 AM	35	28	0	0	48	0	42	0	0	47	26	0	0	0	0	0	226
07:15 AM	26	26	0	0	51	0	45	0	0	52	46	0	0	0	0	0	246
07:30 AM	26	30	0	0	59	0	58	0	0	85	48	0	0	0	0	0	306
07:45 AM	41	48	0	0	43	0	45	0	0	66	26	0	0	0	0	0	269
Total	128	132	0	0	201	0	190	0	0	250	146	0	0	0	0	0	1047
08:00 AM	27	32	0	0	32	0	43	0	0	45	27	0	0	0	0	0	206
08:15 AM	19	27	0	0	34	0	42	0	0	37	46	0	0	0	0	0	205
Total	46	59	0	0	66	0	85	0	0	82	73	0	0	0	0	0	411
04:00 PM	100	66	0	0	45	0	38	0	0	13	54	1	0	0	0	0	317
04:15 PM	63	42	0	0	47	0	33	0	0	29	56	1	0	0	0	0	271
04:30 PM	84	40	0	1	44	0	27	0	0	41	34	0	0	0	0	0	271
04:45 PM	74	54	0	0	56	0	37	0	0	39	47	1	0	0	0	0	308
Total	321	202	0	1	192	0	135	0	0	122	191	3	0	0	0	0	1167
05:00 PM	97	37	0	0	52	0	40	0	0	29	40	0	0	0	0	0	295
05:15 PM	67	42	0	0	50	0	28	0	0	41	44	0	0	0	0	0	272
05:30 PM	73	37	0	0	54	0	24	0	0	33	35	2	0	0	0	0	258
05:45 PM	73	43	0	0	47	0	37	0	0	23	44	0	0	0	0	0	267
Total	310	159	0	0	203	0	129	0	0	126	163	2	0	0	0	0	1092
Grand Total	841	592	0	1	716	0	589	0	0	637	624	5	0	0	0	0	4005
Apprch %	58.6	41.3	0.0	0.1	54.9	0.0	45.1	0.0	0.0	50.3	49.3	0.4	0.0	0.0	0.0	0.0	
Total %	21.0	14.8	0.0	0.0	17.9	0.0	14.7	0.0	0.0	15.9	15.6	0.1	0.0	0.0	0.0	0.0	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: MOTSENBOCKER RD/CROWFOOT RD
E/W STREET: STROH RD
CITY: PARKER
COUNTY: DOUGLAS

File Name : CROWSTRO
Site Code : 00000017
Start Date : 5/3/2017
Page No : 2

	MOTSENBOCKER RD Southbound					STROH RD Westbound					CROWFOOT VALLEY RD Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 08:30 AM - Peak 1 of 1																					
Intersection	07:00 AM																				
Volume	128	132	0	0	260	201	0	190	0	391	0	250	146	0	396	0	0	0	0	0	1047
Percent	49.2	50.8	0.0	0.0		51.4	0.0	48.6	0.0		0.0	63.1	36.9	0.0		0.0	0.0	0.0	0.0		
07:30 Volume	26	30	0	0	56	59	0	58	0	117	0	85	48	0	133	0	0	0	0	0	306
Peak Factor																					0.855
High Int.	07:45 AM					07:30 AM					07:30 AM					6:15:00 AM					
Volume	41	48	0	0	89	59	0	58	0	117	0	85	48	0	133						
Peak Factor					0.730					0.835					0.744						

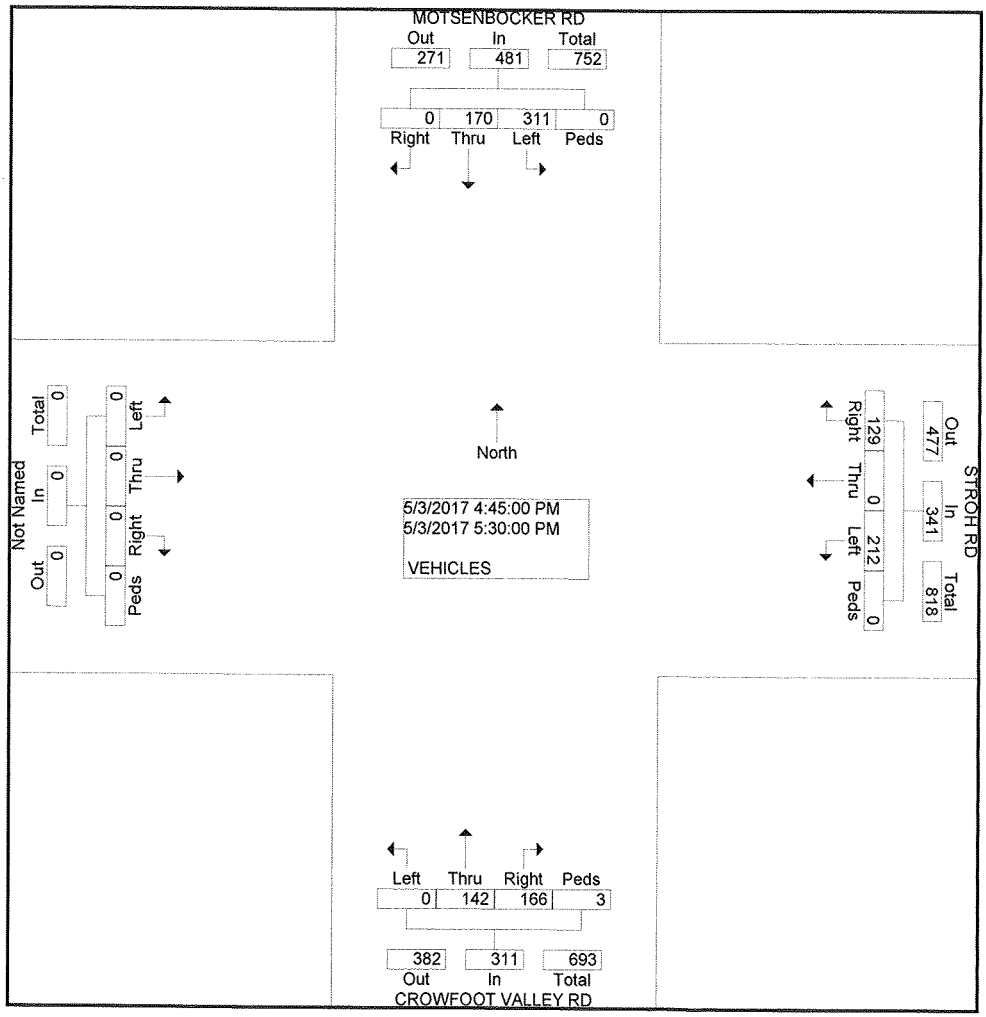


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: MOTSENBOCKER RD/CROWFOOT RD
E/W STREET: STROH RD
CITY: PARKER
COUNTY: DOUGLAS

File Name : CROWSTRO
Site Code : 00000017
Start Date : 5/3/2017
Page No : 2

	MOTSENBOCKER RD Southbound					STROH RD Westbound					CROWFOOT VALLEY RD Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:45 PM to 05:30 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	311	170	0	0	481	212	0	129	0	341	0	142	166	3	311	0	0	0	0	0	1133
Percent	64.7	35.3	0.0	0.0		62.2	0.0	37.8	0.0		0.0	45.7	53.4	1.0		0.0	0.0	0.0	0.0		
04:45 Volume	74	54	0	0	128	56	0	37	0	93	0	39	47	1	87	0	0	0	0	0	308
Peak Factor																					0.920
High Int.	05:00 PM					04:45 PM					04:45 PM										
Volume	97	37	0	0	134	56	0	37	0	93	0	39	47	1	87						
Peak Factor					0.897					0.917					0.894						



COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CROWFOOT VALLEY RD
E/W STREET: PRADERA PKWY
CITY: PARKER
COUNTY: DOUGLAS

File Name : CROWPRAD
Site Code : 00000005
Start Date : 5/2/2017
Page No : 1

Groups Printed- VEHICLES

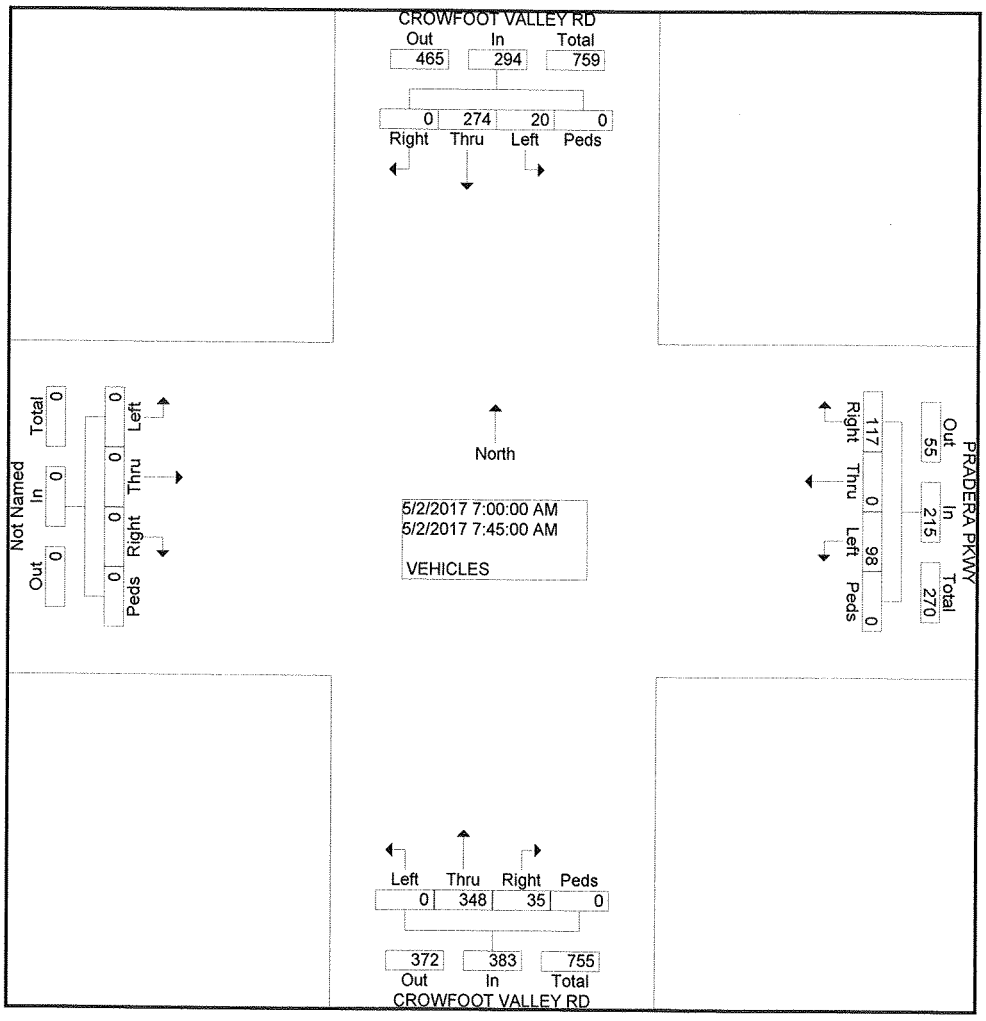
	CROWFOOT VALLEY RD Southbound				PRADERA PKWY Westbound				CROWFOOT VALLEY RD Northbound				Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	2	36	0	0	20	0	11	0	0	43	9	0	0	0	0	0	121
06:45 AM	3	44	0	0	29	0	13	0	0	62	8	0	0	0	0	0	159
Total	5	80	0	0	49	0	24	0	0	105	17	0	0	0	0	0	280
07:00 AM	5	49	0	0	18	0	22	0	0	75	6	0	0	0	0	0	175
07:15 AM	3	69	0	0	25	0	26	0	0	91	4	0	0	0	0	0	218
07:30 AM	3	79	0	0	23	0	36	0	0	101	11	0	0	0	0	0	253
07:45 AM	9	77	0	0	32	0	33	0	0	81	14	0	0	0	0	0	246
Total	20	274	0	0	98	0	117	0	0	348	35	0	0	0	0	0	892
08:00 AM	13	56	0	0	26	0	28	0	0	116	5	0	0	0	0	0	244
08:15 AM	11	83	0	0	18	0	17	0	0	123	10	0	0	0	0	0	262
Total	24	139	0	0	44	0	45	0	0	239	15	0	0	0	0	0	506
04:00 PM	14	66	0	0	23	0	12	0	0	52	30	0	0	0	0	0	197
04:15 PM	25	78	0	0	15	0	10	0	0	74	21	0	0	0	0	0	223
04:30 PM	16	79	0	0	16	0	12	0	0	63	33	0	0	0	0	0	219
04:45 PM	8	73	0	0	12	0	9	0	0	76	19	0	0	0	0	0	197
Total	63	296	0	0	66	0	43	0	0	265	103	0	0	0	0	0	836
05:00 PM	20	65	0	0	15	0	12	0	0	67	22	0	0	0	0	0	201
05:15 PM	14	82	0	0	15	0	13	0	0	77	23	0	0	0	0	0	224
05:30 PM	24	61	0	0	20	0	7	0	0	52	24	0	0	0	0	0	188
05:45 PM	29	60	0	0	13	0	13	0	0	60	37	0	0	0	0	0	212
Total	87	268	0	0	63	0	45	0	0	256	106	0	0	0	0	0	825
Grand Total	199	1057	0	0	320	0	274	0	0	1213	276	0	0	0	0	0	3339
Apprch %	15.8	84.2	0.0	0.0	53.9	0.0	46.1	0.0	0.0	81.5	18.5	0.0	0.0	0.0	0.0	0.0	
Total %	6.0	31.7	0.0	0.0	9.6	0.0	8.2	0.0	0.0	36.3	8.3	0.0	0.0	0.0	0.0	0.0	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CROWFOOT VALLEY RD
E/W STREET: PRADERA PKWY
CITY: PARKER
COUNTY: DOUGLAS

File Name : CROWPRAD
Site Code : 00000005
Start Date : 5/2/2017
Page No : 2

	CROWFOOT VALLEY RD Southbound					PRADERA PKWY Westbound					CROWFOOT VALLEY RD Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 07:45 AM - Peak 1 of 1																					
Intersection	07:00 AM																				
Volume	20	274	0	0	294	98	0	117	0	215	0	348	35	0	383	0	0	0	0	0	892
Percent	6.8	93.2	0.0	0.0		45.6	0.0	54.4	0.0		0.0	90.9	9.1	0.0		0.0	0.0	0.0	0.0		
07:30 Volume	3	79	0	0	82	23	0	36	0	59	0	101	11	0	112	0	0	0	0	0	253
Peak Factor																					0.881
High Int.	07:45 AM					07:45 AM					07:30 AM										
Volume	9	77	0	0	86	32	0	33	0	65	0	101	11	0	112						
Peak Factor					0.855					0.827					0.855						

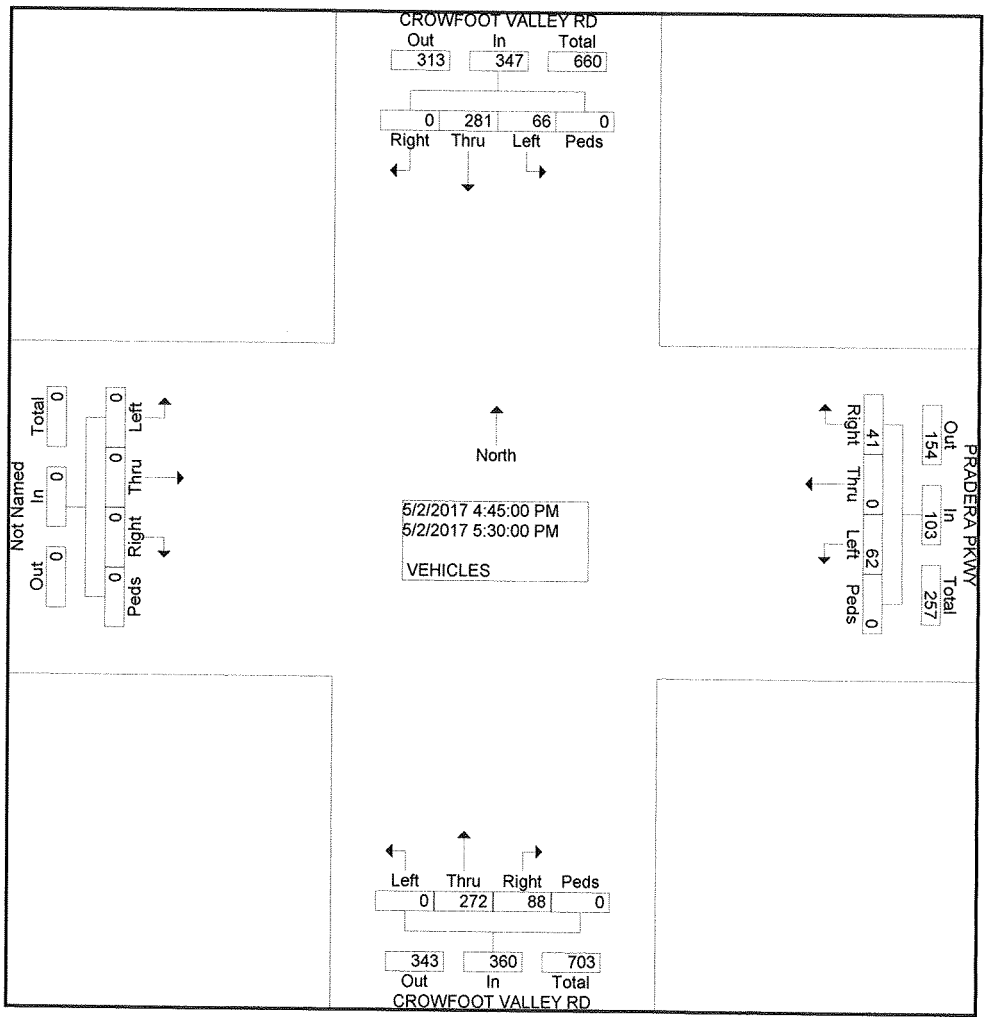


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CROWFOOT VALLEY RD
E/W STREET: PRADERA PKWY
CITY: PARKER
COUNTY: DOUGLAS

File Name : CROWPRAD
Site Code : 00000005
Start Date : 5/2/2017
Page No : 2

	CROWFOOT VALLEY RD Southbound					PRADERA PKWY Westbound					CROWFOOT VALLEY RD Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:45 PM to 05:30 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	66	281	0	0	347	62	0	41	0	103	0	272	88	0	360	0	0	0	0	0	810
Percent	19.0	81.0	0.0	0.0		60.2	0.0	39.8	0.0		0.0	75.6	24.4	0.0		0.0	0.0	0.0	0.0		
05:15 Volume	14	82	0	0	96	15	0	13	0	28	0	77	23	0	100	0	0	0	0	0	224
Peak Factor																					0.904
High Int.	05:15 PM					05:15 PM					05:15 PM										
Volume	14	82	0	0	96	15	0	13	0	28	0	77	23	0	100						
Peak Factor					0.904					0.920					0.900						



COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: PARKER RD
E/W STREET: STROH RD
CITY: PARKER
COUNTY: DOUGLAS

File Name : PARKSTROB
Site Code : 00000011
Start Date : 5/3/2017
Page No : 1

Groups Printed- 1 - VEHICLES

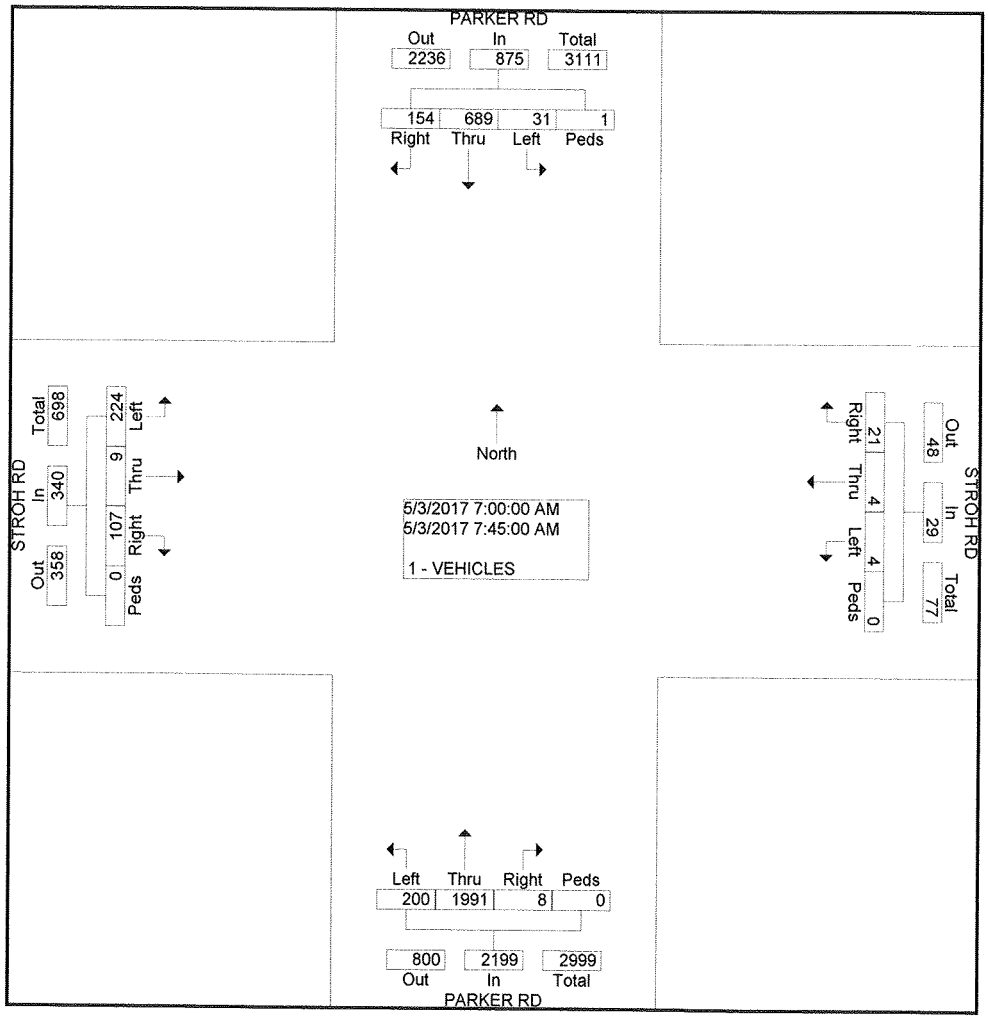
	PARKER RD Southbound				STROH RD Westbound				PARKER RD Northbound				STROH RD Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	6	102	24	0	0	1	6	0	38	348	0	0	35	1	11	0	572
06:45 AM	6	141	15	0	0	2	1	0	33	419	1	0	41	2	15	0	676
Total	12	243	39	0	0	3	7	0	71	767	1	0	76	3	26	0	1248
07:00 AM	11	171	32	0	1	1	6	0	37	444	1	0	56	2	28	0	790
07:15 AM	7	156	37	1	0	2	4	0	51	553	3	0	47	5	28	0	894
07:30 AM	5	180	53	0	1	1	2	0	61	518	2	0	63	2	23	0	911
07:45 AM	8	182	32	0	2	0	9	0	51	476	2	0	58	0	28	0	848
Total	31	689	154	1	4	4	21	0	200	1991	8	0	224	9	107	0	3443
08:00 AM	3	165	28	0	0	1	9	0	44	437	3	0	72	3	21	0	786
08:15 AM	10	183	42	0	1	1	8	0	35	384	0	0	57	2	15	0	738
Total	13	348	70	0	1	2	17	0	79	821	3	0	129	5	36	0	1524
04:00 PM	7	389	45	1	0	0	4	0	57	285	1	0	54	12	57	1	913
04:15 PM	7	398	36	0	0	3	13	0	61	263	0	0	49	9	55	0	894
04:30 PM	7	404	41	0	3	3	2	0	38	225	2	0	64	4	58	0	851
04:45 PM	6	490	47	0	1	1	7	0	62	255	0	0	55	7	45	0	976
Total	27	1681	169	1	4	7	26	0	218	1028	3	0	222	32	215	1	3634
05:00 PM	5	412	37	0	0	1	8	0	38	227	1	1	69	15	64	0	878
05:15 PM	6	477	52	0	2	2	7	0	53	269	3	0	63	7	81	0	1022
05:30 PM	2	491	36	0	2	0	4	0	52	222	0	0	66	5	73	0	953
05:45 PM	5	426	57	0	0	1	4	0	51	255	0	0	42	3	68	0	912
Total	18	1806	182	0	4	4	23	0	194	973	4	1	240	30	286	0	3765
Grand Total	101	4767	614	2	13	20	94	0	762	5580	19	1	891	79	670	1	13614
Apprch %	1.8	86.9	11.2	0.0	10.2	15.7	74.0	0.0	12.0	87.7	0.3	0.0	54.3	4.8	40.8	0.1	
Total %	0.7	35.0	4.5	0.0	0.1	0.1	0.7	0.0	5.6	41.0	0.1	0.0	6.5	0.6	4.9	0.0	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: PARKER RD
E/W STREET: STROH RD
CITY: PARKER
COUNTY: DOUGLAS

File Name : PARKSTROB
Site Code : 00000011
Start Date : 5/3/2017
Page No : 2

	PARKER RD Southbound					STROH RD Westbound					PARKER RD Northbound					STROH RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 08:30 AM - Peak 1 of 1																					
Intersection	07:00 AM																				
Volume	31	689	154	1	875	4	4	21	0	29	200	1991	8	0	2199	224	9	107	0	340	3443
Percent	3.5	78.7	17.6	0.1		13.8	13.8	72.4	0.0		9.1	90.5	0.4	0.0		65.9	2.6	31.5	0.0		
07:30 Volume	5	180	53	0	238	1	1	2	0	4	61	518	2	0	581	63	2	23	0	88	911
Peak Factor																					0.945
High Int.	07:30 AM					07:45 AM					07:15 AM					07:30 AM					
Volume	5	180	53	0	238	2	0	9	0	11	51	553	3	0	607	63	2	23	0	88	
Peak Factor					0.919					0.659					0.906					0.966	

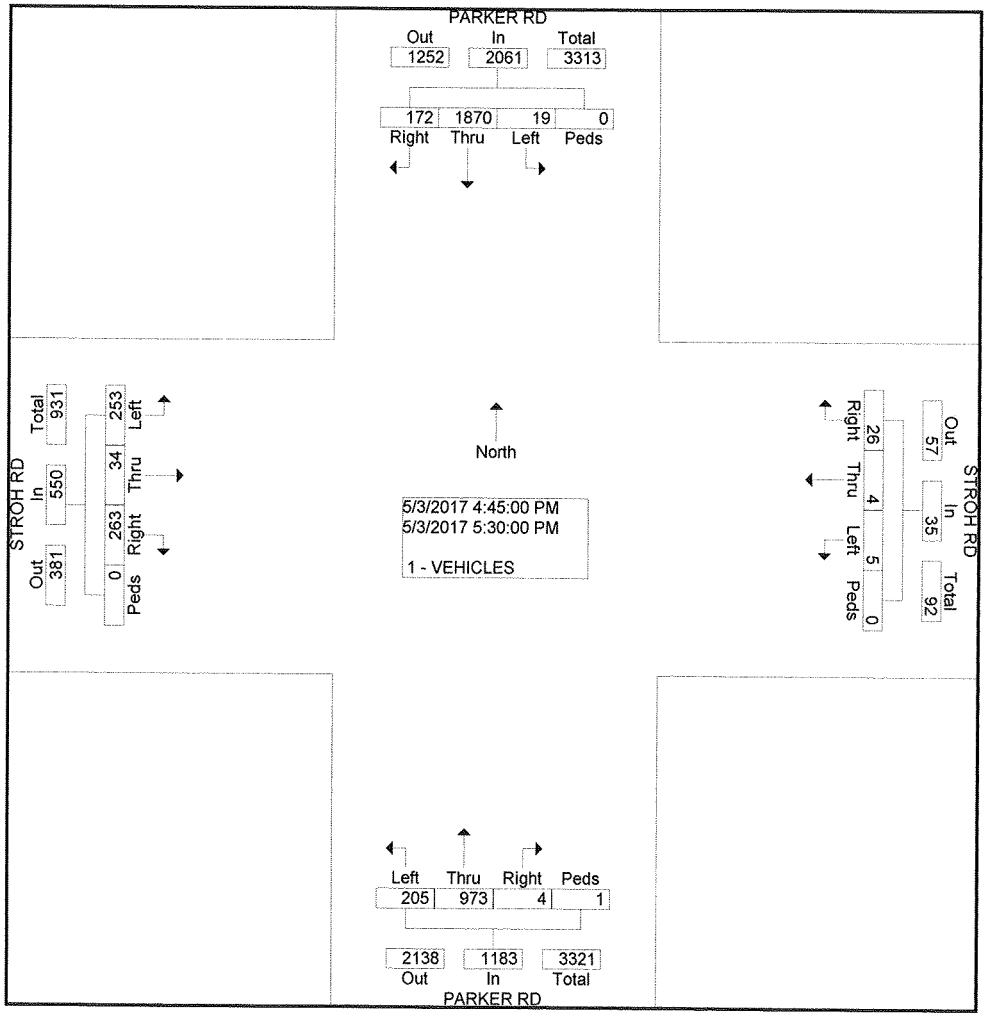


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: PARKER RD
E/W STREET: STROH RD
CITY: PARKER
COUNTY: DOUGLAS

File Name : PARKSTROB
Site Code : 00000011
Start Date : 5/3/2017
Page No : 2

	PARKER RD Southbound					STROH RD Westbound					PARKER RD Northbound					STROH RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	19	1870	172	0	2061	5	4	26	0	35	205	973	4	1	1183	253	34	263	0	550	3829
Percent	0.9	90.7	8.3	0.0		14.3	11.4	74.3	0.0		17.3	82.2	0.3	0.1		46.0	6.2	47.8	0.0		
05:15 Volume	6	477	52	0	535	2	2	7	0	11	53	269	3	0	325	63	7	81	0	151	1022
Peak Factor																					0.937
High Int.	04:45 PM					05:15 PM					05:15 PM					05:15 PM					
Volume	6	490	47	0	543	2	2	7	0	11	53	269	3	0	325	63	7	81	0	151	
Peak Factor					0.949					0.795					0.910					0.911	



COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: PARKER RD
E/W STREET: N PINERY PKWY
CITY: PARKER
COUNTY: DOUGLAS

File Name : PARKNPIN
Site Code : 00000013
Start Date : 5/3/2017
Page No : 1

Groups Printed- VEHICLES

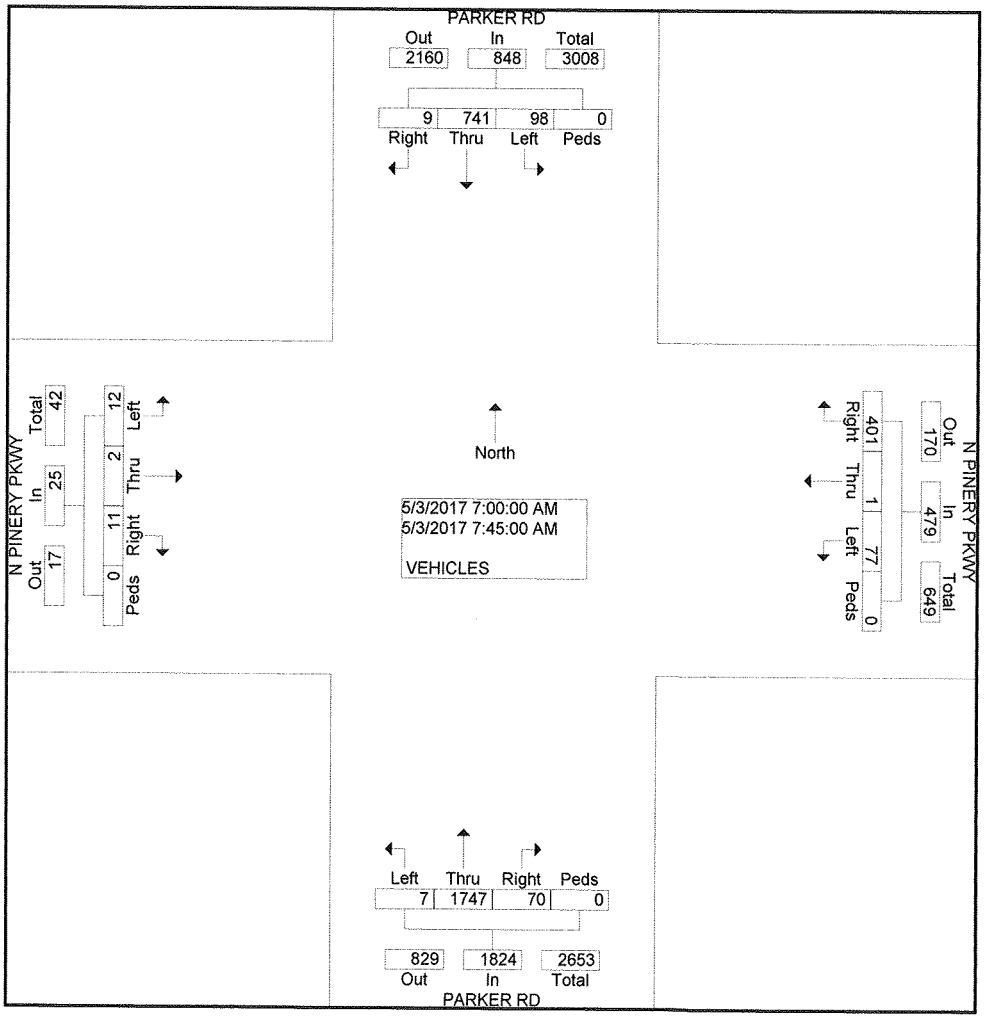
	PARKER RD Southbound				N PINERY PKWY Westbound				PARKER RD Northbound				N PINERY PKWY Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	14	89	5	0	10	0	86	0	1	311	10	0	3	0	2	0	531
06:45 AM	13	131	4	0	10	0	96	0	2	324	8	0	10	1	1	0	600
Total	27	220	9	0	20	0	182	0	3	635	18	0	13	1	3	0	1131
07:00 AM	14	190	4	0	14	0	102	0	1	386	10	0	5	0	5	0	731
07:15 AM	24	179	2	0	16	1	87	0	3	507	13	0	3	1	3	0	839
07:30 AM	21	178	1	0	21	0	109	0	3	461	18	0	2	1	1	0	816
07:45 AM	39	194	2	0	26	0	103	0	0	393	29	0	2	0	2	0	790
Total	98	741	9	0	77	1	401	0	7	1747	70	0	12	2	11	0	3176
08:00 AM	37	143	4	0	23	1	103	0	2	366	14	0	9	0	2	0	704
08:15 AM	46	166	1	0	8	1	65	0	2	334	12	0	5	2	3	0	645
Total	83	309	5	0	31	2	168	0	4	700	26	0	14	2	5	0	1349
04:00 PM	97	375	6	0	55	1	114	0	2	197	11	0	2	0	3	0	863
04:15 PM	100	380	7	0	10	1	63	0	2	222	9	0	7	0	4	0	805
04:30 PM	107	377	11	0	9	0	57	0	0	187	8	0	3	2	2	0	763
04:45 PM	116	399	3	0	9	2	55	0	3	221	7	0	3	0	1	0	819
Total	420	1531	27	0	83	4	289	0	7	827	35	0	15	2	10	0	3250
05:00 PM	115	387	10	0	16	0	58	0	0	200	7	1	4	1	3	0	802
05:15 PM	113	455	4	0	16	0	61	0	0	223	7	0	2	2	0	0	883
05:30 PM	143	418	12	0	8	1	45	1	0	182	13	0	2	2	1	0	828
05:45 PM	138	375	5	0	10	0	46	0	1	230	16	0	0	0	1	0	822
Total	509	1635	31	0	50	1	210	1	1	835	43	1	8	5	5	0	3335
Grand Total	1137	4436	81	0	261	8	1250	1	22	4744	192	1	62	12	34	0	12241
Apprch %	20.1	78.5	1.4	0.0	17.2	0.5	82.2	0.1	0.4	95.7	3.9	0.0	57.4	11.1	31.5	0.0	
Total %	9.3	36.2	0.7	0.0	2.1	0.1	10.2	0.0	0.2	38.8	1.6	0.0	0.5	0.1	0.3	0.0	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER,COLORADO
303-333-7409

N/S STREET: PARKER RD
E/W STREET: N PINERY PKWY
CITY: PARKER
COUNTY: DOUGLAS

File Name : PARKNPIN
Site Code : 00000013
Start Date : 5/3/2017
Page No : 2

	PARKER RD Southbound					N PINERY PKWY Westbound					PARKER RD Northbound					N PINERY PKWY Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 08:30 AM - Peak 1 of 1																					
Intersection	07:00 AM																				
Volume	98	741	9	0	848	77	1	401	0	479	7	1747	70	0	1824	12	2	11	0	25	3176
Percent	11.6	87.4	1.1	0.0		16.1	0.2	83.7	0.0		0.4	95.8	3.8	0.0		48.0	8.0	44.0	0.0		
07:15 Volume	24	179	2	0	205	16	1	87	0	104	3	507	13	0	523	3	1	3	0	7	839
Peak Factor																					0.946
High Int.	07:45 AM					07:30 AM					07:15 AM					07:00 AM					
Volume	39	194	2	0	235	21	0	109	0	130	3	507	13	0	523	5	0	5	0	10	
Peak Factor					0.902					0.921					0.872					0.625	

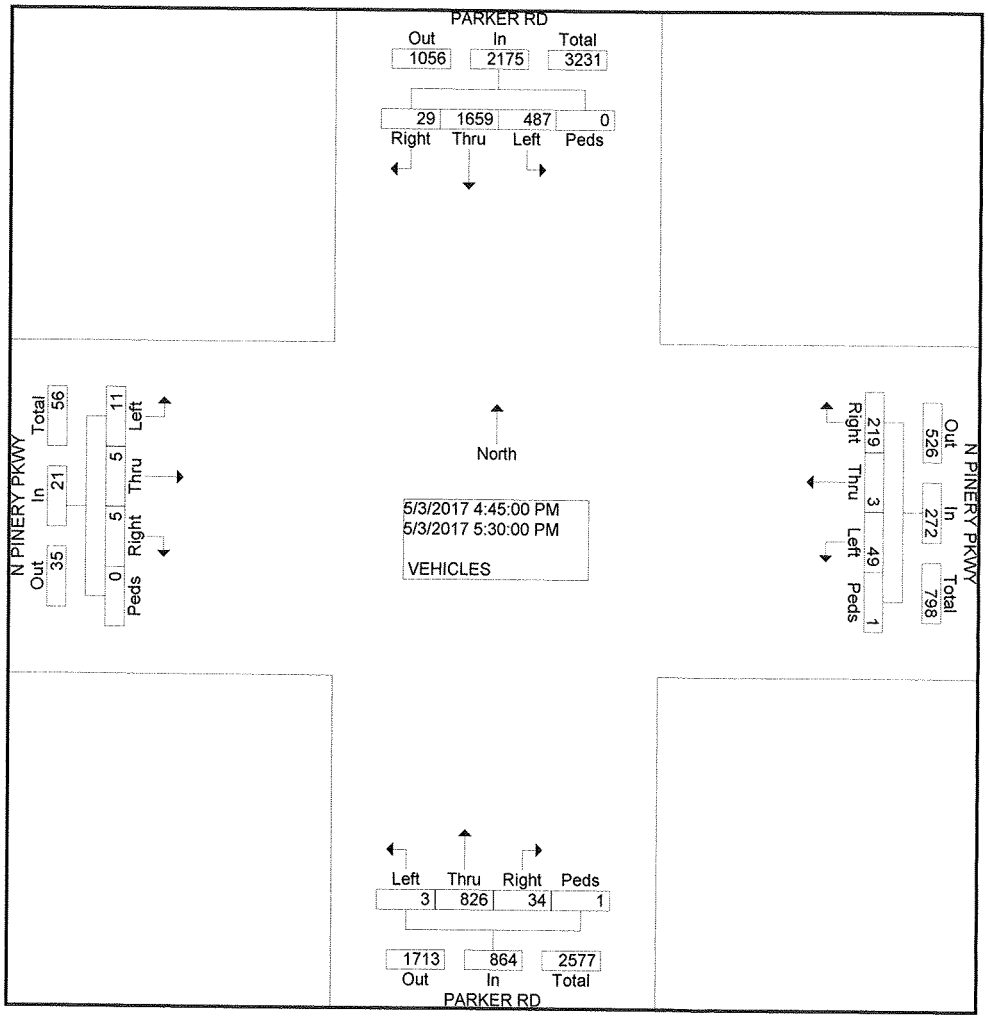


COUNTER MEASURES INC.
1889 YORK STREET
DENVER,COLORADO
303-333-7409

N/S STREET: PARKER RD
E/W STREET: N PINERY PKWY
CITY: PARKER
COUNTY: DOUGLAS

File Name : PARKNPIN
Site Code : 00000013
Start Date : 5/3/2017
Page No : 2

	PARKER RD Southbound					N PINERY PKWY Westbound					PARKER RD Northbound					N PINERY PKWY Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:45 PM to 05:30 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	487	1659	29	0	2175	49	3	219	1	272	3	826	34	1	864	11	5	5	0	21	3332
Percent	22.4	76.3	1.3	0.0		18.0	1.1	80.5	0.4		0.3	95.6	3.9	0.1		52.4	23.8	23.8	0.0		
05:15 Volume	113	455	4	0	572	16	0	61	0	77	0	223	7	0	230	2	2	0	0	4	883
Peak Factor																					0.943
High Int.	05:30 PM					05:15 PM					04:45 PM					05:00 PM					
Volume	143	418	12	0	573	16	0	61	0	77	3	221	7	0	231	4	1	3	0	8	
Peak Factor					0.949					0.883					0.935					0.656	



COUNTER MEASURES INC.

1889 YORK STREET
DENVER,COLORADO 80206
303-333-7409

Location: PRADREA PKWY E/O CROWFOOT VALLEY RD
City: PARKER
County: DOUGLAS
Direction: EASTBOUND-WESTBOUND

Site Code: 050204
Station ID: 050204

Start Time	03-May-1 Wed	EB	WB							Total
12:00 AM		6	2							8
01:00		3	1							4
02:00		2	1							3
03:00		0	2							2
04:00		1	10							11
05:00		4	38							42
06:00		36	116							152
07:00		62	**236**							**298**
08:00		**106**	183							289
09:00		91	112							203
10:00		66	112							178
11:00		78	82							160
12:00 PM		74	104							178
01:00		76	89							165
02:00		101	98							199
03:00		165	**133**							**298**
04:00		178	116							294
05:00		**180**	105							285
06:00		160	86							246
07:00		117	46							163
08:00		82	50							132
09:00		70	30							100
10:00		36	8							44
11:00		9	0							9
Total		1703	1760							3463
Percent		49.2%	50.8%							
AM Peak	-	08:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	106	236	-	-	-	-	-	-	298
PM Peak	-	17:00	15:00	-	-	-	-	-	-	15:00
Vol.	-	180	133	-	-	-	-	-	-	298
Grand Total		1703	1760							3463
Percent		49.2%	50.8%							
ADT		ADT 3,463		AADT 3,463						

COUNTER MEASURES INC.

1889 YORK STREET
DENVER,COLORADO 80206
303-333-7409

Location: CROWFOOT VALLEY RD S/O PRADERA PKWY
City: PARKER
County: DOUGLAS
Direction: SOUTHBOUND-NORTHBOUND

Site Code: 050201
Station ID: 050201

Start Time	03-May-1 Wed	SB	NB							Total
12:00 AM		6	8							14
01:00		5	5							10
02:00		2	0							2
03:00		10	4							14
04:00		18	10							28
05:00		84	49							133
06:00		216	186							402
07:00		**390**	395							785
08:00		390	**474**							**864**
09:00		236	268							504
10:00		225	214							439
11:00		214	196							410
12:00 PM		238	186							424
01:00		232	224							456
02:00		229	260							489
03:00		336	298							634
04:00		**363**	**360**							**723**
05:00		340	360							700
06:00		244	263							507
07:00		159	199							358
08:00		114	130							244
09:00		82	90							172
10:00		48	48							96
11:00		16	18							34
Total		4197	4245							8442
Percent		49.7%	50.3%							
AM Peak	-	07:00	08:00	-	-	-	-	-	-	08:00
Vol.	-	390	474	-	-	-	-	-	-	864
PM Peak	-	16:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	363	360	-	-	-	-	-	-	723
Grand Total		4197	4245							8442
Percent		49.7%	50.3%							
ADT		ADT 8,442		AADT 8,442						

COUNTER MEASURES INC.

1889 YORK STREET
DENVER,COLORADO 80206
303-333-7409

Location: CROWFOOT VALLEY RD S/O STRON RD
City: PARKER
County: DOUGLAS
Direction: SOUTHBOUND-NORTHBOUND

Site Code: 050206
Station ID: 050206

Start Time	03-May-1 Wed	SB	NB							Total
12:00 AM		5	4							9
01:00		5	2							7
02:00		3	2							5
03:00		8	4							12
04:00		16	16							32
05:00		60	52							112
06:00		149	172							321
07:00		309	484							793
08:00		**332**	**528**							**860**
09:00		210	288							498
10:00		172	210							382
11:00		194	188							382
12:00 PM		201	192							393
01:00		200	197							397
02:00		206	214							420
03:00		332	262							594
04:00		362	301							663
05:00		**363**	**304**							**667**
06:00		250	198							448
07:00		169	156							325
08:00		118	101							219
09:00		85	60							145
10:00		52	32							84
11:00		20	14							34
Total		3821	3981							7802
Percent		49.0%	51.0%							
AM Peak	-	08:00	08:00	-	-	-	-	-	-	08:00
Vol.	-	332	528	-	-	-	-	-	-	860
PM Peak	-	17:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	363	304	-	-	-	-	-	-	667
Grand Total		3821	3981							7802
Percent		49.0%	51.0%							
ADT		ADT 7,802		AADT 7,802						

COUNTER MEASURES INC.

1889 YORK STREET
DENVER,COLORADO 80206
303-333-7409

Location: STROH RD E/O CROWFOOT VALLEY RD
City: PARKER
County: DOUGLAS
Direction: WESTBOUND-EASTBOUND

Site Code: 050203
Station ID: 050203

Start Time	03-May-1 Wed	WB	EB							Total
12:00 AM		6	9							15
01:00		5	4							9
02:00		2	3							5
03:00		10	4							14
04:00		14	12							26
05:00		61	32							93
06:00		174	110							284
07:00		**365**	**290**							**655**
08:00		296	290							586
09:00		250	276							526
10:00		179	166							345
11:00		200	213							413
12:00 PM		218	206							424
01:00		188	214							402
02:00		200	232							432
03:00		285	316							601
04:00		278	446							724
05:00		**330**	**456**							**786**
06:00		230	303							533
07:00		150	207							357
08:00		133	135							268
09:00		82	86							168
10:00		33	32							65
11:00		16	12							28
Total		3705	4054							7759
Percent		47.8%	52.2%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	365	290	-	-	-	-	-	-	655
PM Peak	-	17:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	330	456	-	-	-	-	-	-	786
Grand Total		3705	4054							7759
Percent		47.8%	52.2%							
ADT		ADT 7,759		AADT 7,759						

COUNTER MEASURES INC.

1889 YORK STREET
DENVER,COLORADO 80206
303-333-7409

Location: MOTSENBOCKER RD N/O STROH RD
City: PARKER
County: DOUGLAS
Direction: SOUTHBOUND-NORTHBOUND

Site Code: 050209
Station ID: 050209

Start Time	03-May-1 Wed	SB	NB							Total
12:00 AM		8	6							14
01:00		2	1							3
02:00		4	2							6
03:00		2	4							6
04:00		8	9							17
05:00		24	48							72
06:00		90	172							262
07:00		232	**472**							**704**
08:00		**250**	452							702
09:00		183	262							445
10:00		124	182							306
11:00		170	164							334
12:00 PM		161	185							346
01:00		149	170							319
02:00		205	170							375
03:00		362	**257**							619
04:00		**480**	250							**730**
05:00		448	251							699
06:00		306	190							496
07:00		212	152							364
08:00		124	106							230
09:00		76	53							129
10:00		39	28							67
11:00		12	10							22
Total		3671	3596							7267
Percent		50.5%	49.5%							
AM Peak	-	08:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	250	472	-	-	-	-	-	-	704
PM Peak	-	16:00	15:00	-	-	-	-	-	-	16:00
Vol.	-	480	257	-	-	-	-	-	-	730
Grand Total		3671	3596							7267
Percent		50.5%	49.5%							
ADT		ADT 7,267		AADT 7,267						

LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board, 2010

SIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)

LOS	Average Vehicle Delay sec/vehicle	Operational Characteristics
A	<10 seconds	Describes operations with low control delay, up to 10 sec/veh. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	10 to 20 seconds	Describes operations with control delay greater than 10 seconds and up to 20 sec/veh. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20 to 35 seconds	Describes operations with control delay greater than 20 and up to 35 sec/veh. These higher delays may result from only fair progression, longer cycle length, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	35 to 55 seconds	Describes operations with control delay greater than 35 and up to 55 sec/veh. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55 to 80 seconds	Describes operations with control delay greater than 55 and up to 80 sec/veh. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent.
F	>80 seconds	Describes operations with control delay in excess of 80 sec/veh. This level, considered unacceptable to most drivers, often occurs with over-saturation, that is, when arrival flow rates exceed the capacity of lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board, 2010

UNSIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)

Applicable to Two-Way Stop Control, All-Way Stop Control, and Roundabouts

LOS	Average Vehicle Control Delay	Operational Characteristics
A	<10 seconds	Normally, vehicles on the stop-controlled approach only have to wait up to 10 seconds before being able to clear the intersection. Left-turning vehicles on the uncontrolled street do not have to wait to make their turn.
B	10 to 15 seconds	Vehicles on the stop-controlled approach will experience delays before being able to clear the intersection. The delay could be up to 15 seconds. Left-turning vehicles on the uncontrolled street may have to wait to make their turn.
C	15 to 25 seconds	Vehicles on the stop-controlled approach can expect delays in the range of 15 to 25 seconds before clearing the intersection. Motorists may begin to take chances due to the long delays, thereby posing a safety risk to through traffic. Left-turning vehicles on the uncontrolled street will now be required to wait to make their turn causing a queue to be created in the turn lane.
D	25 to 35 seconds	This is the point at which a traffic signal may be warranted for this intersection. The delays for the stop-controlled intersection are not considered to be excessive. The length of the queue may begin to block other public and private access points.
E	35 to 50 seconds	The delays for all critical traffic movements are considered to be unacceptable. The length of the queues for the stop-controlled approaches as well as the left-turn movements are extremely long. There is a high probability that this intersection will meet traffic signal warrants. The ability to install a traffic signal is affected by the location of other existing traffic signals. Consideration may be given to restricting the accesses by eliminating the left-turn movements from and to the stop-controlled approach.
F	>50 seconds	The delay for the critical traffic movements are probably in excess of 100 seconds. The length of the queues are extremely long. Motorists are selecting alternative routes due to the long delays. The only remedy for these long delays is installing a traffic signal or restricting the accesses. The potential for accidents at this intersection are extremely high due to motorist taking more risky chances. If the median permits, motorists begin making two-stage left-turns.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	201	190	250	146	128	132
Future Volume (veh/h)	201	190	250	146	128	132
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	234	221	291	170	149	143
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	316	282	923	784	628	1220
Arrive On Green	0.18	0.18	0.50	0.50	0.08	0.66
Sat Flow, veh/h	1774	1583	1863	1583	1774	1863
Grp Volume(v), veh/h	234	221	291	170	149	143
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	1774	1863
Q Serve(g_s), s	7.5	8.0	5.6	3.6	2.2	1.7
Cycle Q Clear(g_c), s	7.5	8.0	5.6	3.6	2.2	1.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	316	282	923	784	628	1220
V/C Ratio(X)	0.74	0.78	0.32	0.22	0.24	0.12
Avail Cap(c_a), veh/h	444	396	923	784	640	1220
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	23.5	9.1	8.6	5.7	3.9
Incr Delay (d2), s/veh	4.1	6.6	0.9	0.6	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	4.0	3.1	1.7	1.1	0.9
LnGrp Delay(d),s/veh	27.4	30.2	10.0	9.2	5.9	4.1
LnGrp LOS	C	C	A	A	A	A
Approach Vol, veh/h	455		461			292
Approach Delay, s/veh	28.7		9.7			5.0
Approach LOS	C		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.6	34.7				44.3		15.7
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	5.0	25.0				35.0		15.0
Max Q Clear Time (g_c+I1), s	4.2	7.6				3.7		10.0
Green Ext Time (p_c), s	0.0	2.8				3.2		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	15.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	98	117	348	35	20	274
Future Vol, veh/h	98	117	348	35	20	274
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	230	0	-	350	350	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	111	133	395	40	23	311

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	752	395	0	0	395	0
Stage 1	395	-	-	-	-	-
Stage 2	357	-	-	-	-	-
Critical Hdwy	7.12	6.22	-	-	4.12	-
Critical Hdwy Stg 1	6.12	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	327	654	-	-	1164	-
Stage 1	630	-	-	-	-	-
Stage 2	661	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	322	654	-	-	1164	-
Mov Cap-2 Maneuver	438	-	-	-	-	-
Stage 1	630	-	-	-	-	-
Stage 2	648	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.8	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	438	654	1164	-
HCM Lane V/C Ratio	-	-	0.254	0.203	0.02	-
HCM Control Delay (s)	-	-	16	11.9	8.2	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1	0.8	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	2	11	77	1	401	7	1747	70	98	741	9
Future Volume (veh/h)	12	2	11	77	1	401	7	1747	70	98	741	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	13	2	0	81	1	422	7	1839	74	103	780	0
Adj No. of Lanes	2	1	1	1	1	0	1	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	50	475	404	500	1	446	15	2398	96	143	2599	809
Arrive On Green	0.01	0.26	0.00	0.05	0.28	0.28	0.01	0.48	0.48	0.04	0.51	0.00
Sat Flow, veh/h	3442	1863	1583	1774	4	1580	1774	5016	202	3442	5085	1583
Grp Volume(v), veh/h	13	2	0	81	0	423	7	1242	671	103	780	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	0	1584	1774	1695	1827	1721	1695	1583
Q Serve(g_s), s	0.4	0.1	0.0	4.0	0.0	31.4	0.5	36.2	36.3	3.5	10.6	0.0
Cycle Q Clear(g_c), s	0.4	0.1	0.0	4.0	0.0	31.4	0.5	36.2	36.3	3.5	10.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	50	475	404	500	0	447	15	1621	874	143	2599	809
V/C Ratio(X)	0.26	0.00	0.00	0.16	0.00	0.95	0.46	0.77	0.77	0.72	0.30	0.00
Avail Cap(c_a), veh/h	143	543	462	500	0	462	74	1621	874	143	2599	809
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.98	0.98	0.00
Uniform Delay (d), s/veh	58.5	33.3	0.0	30.2	0.0	42.2	59.2	25.8	25.8	56.8	16.9	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.0	0.2	0.0	28.3	19.6	3.5	6.4	15.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	2.0	0.0	17.3	0.3	17.7	19.8	2.0	5.1	0.0
LnGrp Delay(d),s/veh	61.1	33.3	0.0	30.3	0.0	70.5	78.7	29.3	32.2	72.4	17.2	0.0
LnGrp LOS	E	C		C		E	E	C	C	E	B	
Approach Vol, veh/h		15			504			1920			883	
Approach Delay, s/veh		57.4			64.0			30.5			23.7	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	64.4	10.0	35.6	6.0	68.3	6.8	38.9
Change Period (Y+Rc), s	5.0	7.0	4.5	5.0	5.0	7.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	53.0	5.5	35.0	5.0	53.0	5.0	35.0
Max Q Clear Time (g_c+I1), s	5.5	38.3	6.0	2.1	2.5	12.6	2.4	33.4
Green Ext Time (p_c), s	0.0	12.2	0.0	3.5	0.0	26.4	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	33.9
HCM 2010 LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	212	129	142	166	311	170
Future Volume (veh/h)	212	129	142	166	311	170
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	230	140	154	180	338	185
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	296	264	931	792	742	1242
Arrive On Green	0.17	0.17	0.50	0.50	0.08	0.67
Sat Flow, veh/h	1774	1583	1863	1583	1774	1863
Grp Volume(v), veh/h	230	140	154	180	338	185
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	1774	1863
Q Serve(g_s), s	7.4	4.8	2.7	3.8	5.0	2.2
Cycle Q Clear(g_c), s	7.4	4.8	2.7	3.8	5.0	2.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	296	264	931	792	742	1242
V/C Ratio(X)	0.78	0.53	0.17	0.23	0.46	0.15
Avail Cap(c_a), veh/h	444	396	931	792	742	1242
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	22.9	8.2	8.5	5.9	3.7
Incr Delay (d2), s/veh	5.0	1.7	0.4	0.7	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	2.2	1.5	1.8	0.9	1.2
LnGrp Delay(d),s/veh	28.9	24.5	8.6	9.1	6.4	4.0
LnGrp LOS	C	C	A	A	A	A
Approach Vol, veh/h	370		334			523
Approach Delay, s/veh	27.2		8.9			5.5
Approach LOS	C		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.0	35.0				45.0		15.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	5.0	25.0				35.0		15.0
Max Q Clear Time (g_c+I1), s	7.0	5.8				4.2		9.4
Green Ext Time (p_c), s	0.0	2.4				2.6		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	13.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	62	41	272	88	66	281
Future Vol, veh/h	62	41	272	88	66	281
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	230	0	-	350	350	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	69	46	302	98	73	312

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	761	302	0	0	302	0
Stage 1	302	-	-	-	-	-
Stage 2	459	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	373	738	-	-	1259	-
Stage 1	750	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	351	738	-	-	1259	-
Mov Cap-2 Maneuver	460	-	-	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	599	-	-	-	-	-

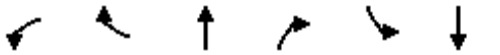
Approach	WB	NB	SB
HCM Control Delay, s	12.6	0	1.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	460	738	1259	-
HCM Lane V/C Ratio	-	-	0.15	0.062	0.058	-
HCM Control Delay (s)	-	-	14.2	10.2	8	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.2	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	5	5	49	3	219	3	826	34	487	1659	29
Future Volume (veh/h)	11	5	5	49	3	219	3	826	34	487	1659	29
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	12	5	0	52	3	233	3	879	36	518	1765	0
Adj No. of Lanes	2	1	1	1	1	0	1	3	0	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	47	225	191	288	3	222	7	2479	101	602	3385	1054
Arrive On Green	0.01	0.12	0.00	0.03	0.14	0.14	0.00	0.49	0.49	0.17	0.67	0.00
Sat Flow, veh/h	3442	1863	1583	1774	20	1566	1774	5012	205	3442	5085	1583
Grp Volume(v), veh/h	12	5	0	52	0	236	3	594	321	518	1765	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	0	1586	1774	1695	1827	1721	1695	1583
Q Serve(g_s), s	0.4	0.3	0.0	3.1	0.0	17.0	0.2	12.9	12.9	17.5	21.3	0.0
Cycle Q Clear(g_c), s	0.4	0.3	0.0	3.1	0.0	17.0	0.2	12.9	12.9	17.5	21.3	0.0
Prop In Lane	1.00		1.00	1.00		0.99	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	47	225	191	288	0	225	7	1677	904	602	3385	1054
V/C Ratio(X)	0.25	0.02	0.00	0.18	0.00	1.05	0.43	0.35	0.36	0.86	0.52	0.00
Avail Cap(c_a), veh/h	158	264	224	308	0	225	81	1677	904	903	3385	1054
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.72	0.72	0.00
Uniform Delay (d), s/veh	58.6	46.5	0.0	44.1	0.0	51.5	59.6	18.6	18.6	48.1	10.3	0.0
Incr Delay (d2), s/veh	2.8	0.0	0.0	0.3	0.0	73.8	36.1	0.6	1.1	4.1	0.4	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	0.2	0.1	0.0	1.5	0.0	12.0	0.2	6.2	6.8	8.7	10.1	0.0
LnGrp Delay(d),s/veh	61.3	46.6	0.0	44.4	0.0	125.3	95.7	19.2	19.7	52.2	10.7	0.0
LnGrp LOS	E	D		D		F	F	B	B	D	B	
Approach Vol, veh/h		17			288			918			2283	
Approach Delay, s/veh		57.0			110.7			19.6			20.1	
Approach LOS		E			F			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.5	66.4	8.7	19.5	5.0	86.9	6.1	22.0
Change Period (Y+Rc), s	4.5	7.0	4.5	5.0	4.5	7.0	4.5	5.0
Max Green Setting (Gmax), s	31.5	45.0	5.5	17.0	5.5	71.0	5.5	17.0
Max Q Clear Time (g_c+I1), s	19.5	14.9	5.1	2.3	2.2	23.3	2.4	19.0
Green Ext Time (p_c), s	1.4	21.6	0.0	1.3	0.0	29.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.6
HCM 2010 LOS	C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	239	214	432	167	144	216
Future Volume (veh/h)	239	214	432	167	144	216
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	278	249	502	194	167	235
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	347	309	887	754	470	1188
Arrive On Green	0.20	0.20	0.48	0.48	0.08	0.64
Sat Flow, veh/h	1774	1583	1863	1583	1774	1863
Grp Volume(v), veh/h	278	249	502	194	167	235
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	1774	1863
Q Serve(g_s), s	9.0	9.0	11.6	4.4	2.6	3.1
Cycle Q Clear(g_c), s	9.0	9.0	11.6	4.4	2.6	3.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	347	309	887	754	470	1188
V/C Ratio(X)	0.80	0.80	0.57	0.26	0.36	0.20
Avail Cap(c_a), veh/h	444	396	887	754	479	1188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	23.0	11.3	9.4	7.6	4.5
Incr Delay (d2), s/veh	8.0	9.1	2.6	0.8	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	4.7	6.5	2.1	1.3	1.7
LnGrp Delay(d),s/veh	31.0	32.1	13.9	10.2	8.1	4.9
LnGrp LOS	C	C	B	B	A	A
Approach Vol, veh/h	527		696			402
Approach Delay, s/veh	31.6		12.8			6.2
Approach LOS	C		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.7	33.6				43.3		16.7
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	5.0	25.0				35.0		15.0
Max Q Clear Time (g_c+I1), s	4.6	13.6				5.1		11.0
Green Ext Time (p_c), s	0.0	4.0				5.7		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	145	521	0	60	350
Future Vol, veh/h	0	145	521	0	60	350
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	300	0	-	0	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	158	566	0	65	380

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1077	-	0	0	566	0
Stage 1	566	-	-	-	-	-
Stage 2	511	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	242	0	-	-	1006	-
Stage 1	568	0	-	-	-	-
Stage 2	602	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	226	-	-	-	1006	-
Mov Cap-2 Maneuver	361	-	-	-	-	-
Stage 1	568	-	-	-	-	-
Stage 2	563	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	1.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	-	1006	-
HCM Lane V/C Ratio	-	-	-	-	0.065	-
HCM Control Delay (s)	-	-	0	0	8.8	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	16	505	7	9	341
Future Vol, veh/h	8	16	505	7	9	341
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	200	0	-	200	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	17	549	8	10	371

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	939	-	0	0	549	0
Stage 1	549	-	-	-	-	-
Stage 2	390	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	293	0	-	-	1021	-
Stage 1	579	0	-	-	-	-
Stage 2	684	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	290	-	-	-	1021	-
Mov Cap-2 Maneuver	290	-	-	-	-	-
Stage 1	579	-	-	-	-	-
Stage 2	677	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.8	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	290	-	1021	-
HCM Lane V/C Ratio	-	-	0.03	-	0.01	-
HCM Control Delay (s)	-	-	17.8	0	8.6	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-	0	-

Intersection	
Int Delay, s/veh	4.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	151	110	402	61	19	330
Future Vol, veh/h	151	110	402	61	19	330
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	230	0	-	350	350	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	172	125	457	69	22	375

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	875	457	0	0	457	0
Stage 1	457	-	-	-	-	-
Stage 2	418	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	320	604	-	-	1104	-
Stage 1	638	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	314	604	-	-	1104	-
Mov Cap-2 Maneuver	437	-	-	-	-	-
Stage 1	638	-	-	-	-	-
Stage 2	651	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	437	604	1104	-
HCM Lane V/C Ratio	-	-	0.393	0.207	0.02	-
HCM Control Delay (s)	-	-	18.5	12.5	8.3	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1.8	0.8	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	19	12	72	49	377	8	2141	66	92	828	21
Future Volume (veh/h)	36	19	12	72	49	377	8	2141	66	92	828	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	38	20	0	76	52	397	8	2254	69	97	872	0
Adj No. of Lanes	2	1	1	1	1	0	1	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	132	381	324	428	40	309	32	2759	84	176	2934	914
Arrive On Green	0.04	0.20	0.00	0.05	0.22	0.22	0.02	0.54	0.54	0.05	0.58	0.00
Sat Flow, veh/h	3442	1863	1583	1774	187	1425	1774	5071	155	3442	5085	1583
Grp Volume(v), veh/h	38	20	0	76	0	449	8	1504	819	97	872	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	0	1611	1774	1695	1835	1721	1695	1583
Q Serve(g_s), s	1.3	1.0	0.0	4.0	0.0	26.0	0.5	43.6	44.1	3.3	10.5	0.0
Cycle Q Clear(g_c), s	1.3	1.0	0.0	4.0	0.0	26.0	0.5	43.6	44.1	3.3	10.5	0.0
Prop In Lane	1.00		1.00	1.00		0.88	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	132	381	324	428	0	349	32	1844	999	176	2934	914
V/C Ratio(X)	0.29	0.05	0.00	0.18	0.00	1.29	0.25	0.82	0.82	0.55	0.30	0.00
Avail Cap(c_a), veh/h	315	404	343	502	0	349	118	1844	999	229	2934	914
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.97	0.97	0.00
Uniform Delay (d), s/veh	56.1	38.4	0.0	34.4	0.0	47.0	58.1	22.4	22.6	55.6	13.0	0.0
Incr Delay (d2), s/veh	1.2	0.1	0.0	0.2	0.0	148.8	4.0	4.1	7.5	2.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.5	0.0	2.0	0.0	26.0	0.3	21.3	24.4	1.6	5.0	0.0
LnGrp Delay(d),s/veh	57.3	38.4	0.0	34.6	0.0	195.8	62.1	26.5	30.1	58.2	13.2	0.0
LnGrp LOS	E	D		C		F	E	C	C	E	B	
Approach Vol, veh/h		58			525			2331			969	
Approach Delay, s/veh		50.8			172.5			27.9			17.7	
Approach LOS		D			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	71.3	10.1	28.5	6.2	75.2	8.6	30.0
Change Period (Y+Rc), s	5.0	7.0	4.5	5.0	5.0	7.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	56.0	10.5	25.0	7.0	56.0	10.0	25.0
Max Q Clear Time (g_c+I1), s	5.3	46.1	6.0	3.0	2.5	12.5	3.3	28.0
Green Ext Time (p_c), s	0.0	9.2	0.1	3.5	0.0	33.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.2
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	16	5	5	24	40	10	105	10	10	50	0
Future Vol, veh/h	0	16	5	5	24	40	10	105	10	10	50	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	0	150	-	0	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	17	5	5	26	43	11	114	11	11	54	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	225	212	54	221	212	114	54	0	0	114	0	0
Stage 1	76	76	-	136	136	-	-	-	-	-	-	-
Stage 2	149	136	-	85	76	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	730	685	1013	735	685	939	1551	-	-	1475	-	-
Stage 1	933	832	-	867	784	-	-	-	-	-	-	-
Stage 2	854	784	-	923	832	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	668	675	1013	709	675	939	1551	-	-	1475	-	-
Mov Cap-2 Maneuver	668	675	-	709	675	-	-	-	-	-	-	-
Stage 1	926	826	-	861	778	-	-	-	-	-	-	-
Stage 2	782	778	-	892	826	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	9.6	0.6	1.2
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1551	-	-	-	675	1013	709	675	939	1475	-	-
HCM Lane V/C Ratio	0.007	-	-	-	0.026	0.005	0.008	0.039	0.046	0.007	-	-
HCM Control Delay (s)	7.3	-	-	0	10.5	8.6	10.1	10.5	9	7.5	-	-
HCM Lane LOS	A	-	-	A	B	A	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	0	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	5.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	59	77	48	23	40	20
Future Vol, veh/h	59	77	48	23	40	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	0	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	64	84	52	25	43	22

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	161	52	0	0	52	0
Stage 1	52	-	-	-	-	-
Stage 2	109	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	830	1016	-	-	1554	-
Stage 1	970	-	-	-	-	-
Stage 2	916	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	807	1016	-	-	1554	-
Mov Cap-2 Maneuver	807	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	891	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	4.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	807	1016	1554	-
HCM Lane V/C Ratio	-	-	0.079	0.082	0.028	-
HCM Control Delay (s)	-	-	9.8	8.9	7.4	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.3	0.1	-

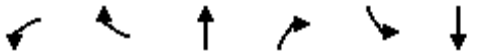
Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	27	9	6	53	16	12
Future Vol, veh/h	27	9	6	53	16	12
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	10	7	58	17	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	39	0	105	34
Stage 1	-	-	-	-	34	-
Stage 2	-	-	-	-	71	-
Critical Hdwy	-	-	4.12	-	7.12	6.22
Critical Hdwy Stg 1	-	-	-	-	6.12	-
Critical Hdwy Stg 2	-	-	-	-	6.12	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1571	-	875	1039
Stage 1	-	-	-	-	982	-
Stage 2	-	-	-	-	939	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1571	-	872	1039
Mov Cap-2 Maneuver	-	-	-	-	872	-
Stage 1	-	-	-	-	982	-
Stage 2	-	-	-	-	935	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	937	-	-	1571	-
HCM Lane V/C Ratio	0.032	-	-	0.004	-
HCM Control Delay (s)	9	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	246	145	248	199	350	346
Future Volume (veh/h)	246	145	248	199	350	346
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	267	158	270	216	380	376
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	332	296	894	760	623	1204
Arrive On Green	0.19	0.19	0.48	0.48	0.08	0.65
Sat Flow, veh/h	1774	1583	1863	1583	1774	1863
Grp Volume(v), veh/h	267	158	270	216	380	376
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	1774	1863
Q Serve(g_s), s	8.6	5.4	5.3	4.9	5.0	5.4
Cycle Q Clear(g_c), s	8.6	5.4	5.3	4.9	5.0	5.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	332	296	894	760	623	1204
V/C Ratio(X)	0.81	0.53	0.30	0.28	0.61	0.31
Avail Cap(c_a), veh/h	444	396	894	760	623	1204
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	22.0	9.5	9.4	8.3	4.7
Incr Delay (d2), s/veh	7.8	1.5	0.9	0.9	1.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	2.5	2.9	2.4	2.6	2.9
LnGrp Delay(d),s/veh	31.1	23.5	10.4	10.3	10.1	5.4
LnGrp LOS	C	C	B	B	B	A
Approach Vol, veh/h	425		486			756
Approach Delay, s/veh	28.3		10.4			7.7
Approach LOS	C		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.0	33.8				43.8		16.2
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	5.0	25.0				35.0		15.0
Max Q Clear Time (g_c+I1), s	7.0	7.3				7.4		10.6
Green Ext Time (p_c), s	0.0	4.3				4.9		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	13.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	82	367	0	146	402
Future Vol, veh/h	0	82	367	0	146	402
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	300	0	-	0	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	89	399	0	159	437

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1153	-	0	0	399	0
Stage 1	399	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	218	0	-	-	1160	-
Stage 1	678	0	-	-	-	-
Stage 2	465	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	188	-	-	-	1160	-
Mov Cap-2 Maneuver	307	-	-	-	-	-
Stage 1	678	-	-	-	-	-
Stage 2	401	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	2.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	-	1160	-
HCM Lane V/C Ratio	-	-	-	-	0.137	-
HCM Control Delay (s)	-	-	0	0	8.6	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0.5	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	10	357	3	16	386
Future Vol, veh/h	5	10	357	3	16	386
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	200	0	-	200	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	11	388	3	17	420

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	842	-	0	0	388	0
Stage 1	388	-	-	-	-	-
Stage 2	454	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	334	0	-	-	1170	-
Stage 1	686	0	-	-	-	-
Stage 2	640	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	329	-	-	-	1170	-
Mov Cap-2 Maneuver	329	-	-	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	631	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.1	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	329	-	1170	-
HCM Lane V/C Ratio	-	-	0.017	-	0.015	-
HCM Control Delay (s)	-	-	16.1	0	8.1	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0	-	0	-

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	94	39	321	139	62	329
Future Vol, veh/h	94	39	321	139	62	329
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	230	0	-	350	350	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	104	43	357	154	69	366

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	860	357	0	0	357	0
Stage 1	357	-	-	-	-	-
Stage 2	503	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	326	687	-	-	1202	-
Stage 1	708	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	307	687	-	-	1202	-
Mov Cap-2 Maneuver	426	-	-	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	572	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.6	0	1.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	426	687	1202	-
HCM Lane V/C Ratio	-	-	0.245	0.063	0.057	-
HCM Control Delay (s)	-	-	16.2	10.6	8.2	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1	0.2	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	57	6	46	30	206	3	1143	32	458	1976	49
Future Volume (veh/h)	29	57	6	46	30	206	3	1143	32	458	1976	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	31	61	0	49	32	219	3	1216	34	487	2102	0
Adj No. of Lanes	2	1	1	1	1	0	1	3	0	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	220	187	238	26	176	7	2580	72	571	3403	1060
Arrive On Green	0.03	0.12	0.00	0.03	0.13	0.13	0.00	0.51	0.51	0.17	0.67	0.00
Sat Flow, veh/h	3442	1863	1583	1774	206	1408	1774	5086	142	3442	5085	1583
Grp Volume(v), veh/h	31	61	0	49	0	251	3	811	439	487	2102	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	0	1614	1774	1695	1838	1721	1695	1583
Q Serve(g_s), s	1.1	3.6	0.0	2.9	0.0	15.0	0.2	18.6	18.6	16.5	28.0	0.0
Cycle Q Clear(g_c), s	1.1	3.6	0.0	2.9	0.0	15.0	0.2	18.6	18.6	16.5	28.0	0.0
Prop In Lane	1.00		1.00	1.00		0.87	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	92	220	187	238	0	202	7	1720	932	571	3403	1060
V/C Ratio(X)	0.34	0.28	0.00	0.21	0.00	1.24	0.43	0.47	0.47	0.85	0.62	0.00
Avail Cap(c_a), veh/h	158	233	198	259	0	202	111	1720	932	903	3403	1060
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.54	0.54	0.00
Uniform Delay (d), s/veh	57.3	48.2	0.0	44.4	0.0	52.5	59.6	19.1	19.1	48.6	11.2	0.0
Incr Delay (d2), s/veh	2.1	0.7	0.0	0.4	0.0	144.4	36.1	0.9	1.7	2.6	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.9	0.0	1.4	0.0	14.8	0.2	8.9	9.8	8.1	13.0	0.0
LnGrp Delay(d),s/veh	59.5	48.9	0.0	44.9	0.0	196.9	95.7	20.1	20.8	51.3	11.7	0.0
LnGrp LOS	E	D		D		F	F	C	C	D	B	
Approach Vol, veh/h		92			300			1253			2589	
Approach Delay, s/veh		52.5			172.0			20.5			19.1	
Approach LOS		D			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.4	67.9	8.5	19.2	5.0	87.3	7.7	20.0
Change Period (Y+Rc), s	4.5	7.0	4.5	5.0	4.5	7.0	4.5	5.0
Max Green Setting (Gmax), s	31.5	47.0	5.5	15.0	7.5	71.0	5.5	15.0
Max Q Clear Time (g_c+I1), s	18.5	20.6	4.9	5.6	2.2	30.0	3.1	17.0
Green Ext Time (p_c), s	1.4	23.1	0.0	1.3	0.0	33.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	19	10	5	15	22	5	60	10	49	97	0
Future Vol, veh/h	0	19	10	5	15	22	5	60	10	49	97	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	0	150	-	0	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	21	11	5	16	24	5	65	11	53	105	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	296	288	105	298	288	65	105	0	0	65	0	0
Stage 1	212	212	-	76	76	-	-	-	-	-	-	-
Stage 2	84	76	-	222	212	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	656	622	949	654	622	999	1486	-	-	1537	-	-
Stage 1	790	727	-	933	832	-	-	-	-	-	-	-
Stage 2	924	832	-	780	727	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	609	599	949	611	599	999	1486	-	-	1537	-	-
Mov Cap-2 Maneuver	609	599	-	611	599	-	-	-	-	-	-	-
Stage 1	787	702	-	930	829	-	-	-	-	-	-	-
Stage 2	881	829	-	723	702	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	9.9	0.5	2.5
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1486	-	-	-	599	949	611	599	999	1537	-	-
HCM Lane V/C Ratio	0.004	-	-	-	0.034	0.011	0.009	0.027	0.024	0.035	-	-
HCM Control Delay (s)	7.4	-	-	0	11.2	8.8	10.9	11.2	8.7	7.4	-	-
HCM Lane LOS	A	-	-	A	B	A	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	0	0.1	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	46	29	43	74	38
Future Vol, veh/h	35	46	29	43	74	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	0	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	50	32	47	80	41

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	234	32	0	0	32	0
Stage 1	32	-	-	-	-	-
Stage 2	202	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	754	1042	-	-	1580	-
Stage 1	991	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	716	1042	-	-	1580	-
Mov Cap-2 Maneuver	716	-	-	-	-	-
Stage 1	991	-	-	-	-	-
Stage 2	790	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	4.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	716	1042	1580	-
HCM Lane V/C Ratio	-	-	0.053	0.048	0.051	-
HCM Control Delay (s)	-	-	10.3	8.6	7.4	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.2	0.2	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	62	16	11	32	10	7
Future Vol, veh/h	62	16	11	32	10	7
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	67	17	12	35	11	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	85	0	135	76
Stage 1	-	-	-	-	76	-
Stage 2	-	-	-	-	59	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1512	-	859	985
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	964	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1512	-	852	985
Mov Cap-2 Maneuver	-	-	-	-	852	-
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	956	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	902	-	-	1512	-
HCM Lane V/C Ratio	0.02	-	-	0.008	-
HCM Control Delay (s)	9.1	-	-	7.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	239	214	709	167	144	320
Future Volume (veh/h)	239	214	709	167	144	320
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	278	249	824	194	167	348
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	347	309	887	754	292	1188
Arrive On Green	0.20	0.20	0.48	0.48	0.08	0.64
Sat Flow, veh/h	1774	1583	1863	1583	1774	1863
Grp Volume(v), veh/h	278	249	824	194	167	348
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	1774	1863
Q Serve(g_s), s	9.0	9.0	24.9	4.4	2.6	5.0
Cycle Q Clear(g_c), s	9.0	9.0	24.9	4.4	2.6	5.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	347	309	887	754	292	1188
V/C Ratio(X)	0.80	0.80	0.93	0.26	0.57	0.29
Avail Cap(c_a), veh/h	444	396	887	754	302	1188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	23.0	14.7	9.4	13.0	4.8
Incr Delay (d2), s/veh	8.0	9.1	17.2	0.8	2.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	4.7	16.8	2.1	1.6	2.7
LnGrp Delay(d),s/veh	31.0	32.1	31.9	10.2	15.5	5.5
LnGrp LOS	C	C	C	B	B	A
Approach Vol, veh/h	527		1018			515
Approach Delay, s/veh	31.6		27.8			8.7
Approach LOS	C		C			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.7	33.6				43.3		16.7
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	5.0	25.0				35.0		15.0
Max Q Clear Time (g_c+I1), s	4.6	26.9				7.0		11.0
Green Ext Time (p_c), s	0.0	0.0				10.3		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	319	624	5	144	370
Future Vol, veh/h	7	319	624	5	144	370
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	300	0	-	0	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	347	678	5	157	402

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1393	-	0	0	678	0
Stage 1	678	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	156	0	-	-	914	-
Stage 1	504	0	-	-	-	-
Stage 2	485	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	129	-	-	-	914	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	504	-	-	-	-	-
Stage 2	402	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.2	0	2.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	262	-	914	-
HCM Lane V/C Ratio	-	-	0.029	-	0.171	-
HCM Control Delay (s)	-	-	19.2	0	9.8	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-	0.6	-

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	69	119	510	27	29	348
Future Vol, veh/h	69	119	510	27	29	348
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	200	0	-	200	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	75	129	554	29	32	378

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	995	-	0	0	554	0
Stage 1	554	-	-	-	-	-
Stage 2	441	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	271	0	-	-	1016	-
Stage 1	575	0	-	-	-	-
Stage 2	648	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	262	-	-	-	1016	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	575	-	-	-	-	-
Stage 2	628	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.2	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	262	-	1016	-
HCM Lane V/C Ratio	-	-	0.286	-	0.031	-
HCM Control Delay (s)	-	-	24.2	0	8.7	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	1.1	-	0.1	-

Intersection	
Int Delay, s/veh	4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	151	110	427	61	19	398
Future Vol, veh/h	151	110	427	61	19	398
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	230	0	-	350	350	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	172	125	485	69	22	452

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	980	485	0	0	485	0
Stage 1	485	-	-	-	-	-
Stage 2	495	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	277	582	-	-	1078	-
Stage 1	619	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	271	582	-	-	1078	-
Mov Cap-2 Maneuver	402	-	-	-	-	-
Stage 1	619	-	-	-	-	-
Stage 2	600	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.3	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	402	582	1078	-
HCM Lane V/C Ratio	-	-	0.427	0.215	0.02	-
HCM Control Delay (s)	-	-	20.5	12.9	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	2.1	0.8	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	19	21	72	49	377	12	2141	66	92	828	53
Future Volume (veh/h)	130	19	21	72	49	377	12	2141	66	92	828	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	137	20	0	76	52	397	13	2254	69	97	872	0
Adj No. of Lanes	2	1	1	1	1	0	1	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	221	430	366	456	42	321	41	2627	80	176	2778	865
Arrive On Green	0.06	0.23	0.00	0.05	0.23	0.22	0.02	0.52	0.51	0.05	0.55	0.00
Sat Flow, veh/h	3442	1863	1583	1774	187	1425	1774	5071	155	3442	5085	1583
Grp Volume(v), veh/h	137	20	0	76	0	449	13	1504	819	97	872	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	0	1611	1774	1695	1835	1721	1695	1583
Q Serve(g_s), s	4.7	1.0	0.0	3.9	0.0	27.0	0.9	46.1	46.6	3.3	11.3	0.0
Cycle Q Clear(g_c), s	4.7	1.0	0.0	3.9	0.0	27.0	0.9	46.1	46.6	3.3	11.3	0.0
Prop In Lane	1.00		1.00	1.00		0.88	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	221	430	366	456	0	363	41	1757	951	176	2778	865
V/C Ratio(X)	0.62	0.05	0.00	0.17	0.00	1.24	0.32	0.86	0.86	0.55	0.31	0.00
Avail Cap(c_a), veh/h	315	430	366	530	0	363	118	1757	951	229	2778	865
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.97	0.97	0.00
Uniform Delay (d), s/veh	54.7	35.9	0.0	33.3	0.0	46.9	57.7	25.0	25.2	55.6	14.9	0.0
Incr Delay (d2), s/veh	2.8	0.0	0.0	0.2	0.0	128.8	4.4	5.6	10.1	2.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.5	0.0	1.9	0.0	25.0	0.5	22.9	26.1	1.6	5.3	0.0
LnGrp Delay(d),s/veh	57.6	35.9	0.0	33.5	0.0	175.7	62.1	30.7	35.3	58.2	15.2	0.0
LnGrp LOS	E	D		C		F	E	C	D	E	B	
Approach Vol, veh/h		157			525			2336			969	
Approach Delay, s/veh		54.8			155.1			32.5			19.5	
Approach LOS		D			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	68.2	10.0	31.7	6.8	71.5	11.7	30.0
Change Period (Y+Rc), s	5.0	7.0	4.5	5.0	5.0	7.0	5.0	5.0
Max Green Setting (Gmax), s	7.6	56.0	10.5	25.0	7.0	56.0	10.0	25.0
Max Q Clear Time (g_c+I1), s	15.3	48.6	5.9	3.0	2.9	13.3	6.7	29.0
Green Ext Time (p_c), s	0.0	7.0	0.1	3.5	0.0	33.4	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.3
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	72	59	7	8	45	56	11	105	10	26	66	38
Future Vol, veh/h	72	59	7	8	45	56	11	105	10	26	66	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	0	150	-	0	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	78	64	8	9	49	61	12	114	11	28	72	41

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	233	266	36	262	266	57	72	0	0	114	0	0
Stage 1	128	128	-	138	138	-	-	-	-	-	-	-
Stage 2	105	138	-	124	128	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	702	638	1029	670	638	997	1526	-	-	1473	-	-
Stage 1	862	789	-	851	781	-	-	-	-	-	-	-
Stage 2	889	781	-	867	789	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	607	621	1029	600	621	997	1526	-	-	1473	-	-
Mov Cap-2 Maneuver	607	621	-	600	621	-	-	-	-	-	-	-
Stage 1	855	774	-	844	775	-	-	-	-	-	-	-
Stage 2	776	775	-	774	774	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	10	0.6	1.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1526	-	-	607	621	1029	600	621	997	1473	-	-
HCM Lane V/C Ratio	0.008	-	-	0.129	0.103	0.007	0.014	0.079	0.061	0.019	-	-
HCM Control Delay (s)	7.4	-	-	11.8	11.5	8.5	11.1	11.3	8.8	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.3	0	0	0.3	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	0	76	82	19
Future Vol, veh/h	0	3	0	76	82	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	0	83	89	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	55	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	1000	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	1000	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	1000	-	-
HCM Lane V/C Ratio	-	0.003	-	-
HCM Control Delay (s)	-	8.6	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	41	11	5	116	3	49	0	10	6	0	23
Future Vol, veh/h	5	41	11	5	116	3	49	0	10	6	0	23
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	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	45	12	5	126	3	53	0	11	7	0	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	129	0	0	57	0	0	212	201	51	206	206	128
Stage 1	-	-	-	-	-	-	61	61	-	139	139	-
Stage 2	-	-	-	-	-	-	151	140	-	67	67	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1457	-	-	1547	-	-	745	695	1017	752	691	922
Stage 1	-	-	-	-	-	-	950	844	-	864	782	-
Stage 2	-	-	-	-	-	-	851	781	-	943	839	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1457	-	-	1547	-	-	721	690	1017	740	686	922
Mov Cap-2 Maneuver	-	-	-	-	-	-	721	690	-	740	686	-
Stage 1	-	-	-	-	-	-	947	841	-	861	779	-
Stage 2	-	-	-	-	-	-	825	778	-	930	836	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.3	10.2	9.3
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	758	1457	-	-	1547	-	-	877
HCM Lane V/C Ratio	0.085	0.004	-	-	0.004	-	-	0.036
HCM Control Delay (s)	10.2	7.5	-	-	7.3	-	-	9.3
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	46	7	16	65	4	39	0	76	11	0	21
Future Vol, veh/h	4	46	7	16	65	4	39	0	76	11	0	21
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	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	50	8	17	71	4	42	0	83	12	0	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	75	0	0	58	0	0	182	173	54	212	174	73
Stage 1	-	-	-	-	-	-	63	63	-	108	108	-
Stage 2	-	-	-	-	-	-	119	110	-	104	66	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1524	-	-	1546	-	-	779	720	1013	745	719	989
Stage 1	-	-	-	-	-	-	948	842	-	897	806	-
Stage 2	-	-	-	-	-	-	885	804	-	902	840	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1524	-	-	1546	-	-	753	710	1013	677	709	989
Mov Cap-2 Maneuver	-	-	-	-	-	-	753	710	-	677	709	-
Stage 1	-	-	-	-	-	-	946	840	-	895	797	-
Stage 2	-	-	-	-	-	-	855	795	-	826	838	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.4	9.6	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	907	1524	-	-	1546	-	-	854
HCM Lane V/C Ratio	0.138	0.003	-	-	0.011	-	-	0.041
HCM Control Delay (s)	9.6	7.4	-	-	7.4	-	-	9.4
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	89	6	0	107	0	0	0	6	0	0	3
Future Vol, veh/h	0	89	6	0	107	0	0	0	6	0	0	3
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	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	97	7	0	116	0	0	0	7	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	97	-	-	116
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	959	0	0	936
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	959	-	-	936
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	8.8	8.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	959	-	-	-	-	936
HCM Lane V/C Ratio	0.007	-	-	-	-	0.003
HCM Control Delay (s)	8.8	-	-	-	-	8.9
HCM Lane LOS	A	-	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	83	9	8	63	24	36	8	18	40	4	8
Future Vol, veh/h	2	83	9	8	63	24	36	8	18	40	4	8
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	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	90	10	9	68	26	39	9	20	43	4	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	95	0	0	100	0	0	204	211	95	213	203	82
Stage 1	-	-	-	-	-	-	99	99	-	99	99	-
Stage 2	-	-	-	-	-	-	105	112	-	114	104	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1499	-	-	1493	-	-	754	686	962	744	693	978
Stage 1	-	-	-	-	-	-	907	813	-	907	813	-
Stage 2	-	-	-	-	-	-	901	803	-	891	809	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1499	-	-	1493	-	-	740	681	962	718	688	978
Mov Cap-2 Maneuver	-	-	-	-	-	-	740	681	-	718	688	-
Stage 1	-	-	-	-	-	-	906	812	-	906	808	-
Stage 2	-	-	-	-	-	-	883	798	-	862	808	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.6	10	10.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	784	1499	-	-	1493	-	-	746
HCM Lane V/C Ratio	0.086	0.001	-	-	0.006	-	-	0.076
HCM Control Delay (s)	10	7.4	-	-	7.4	-	-	10.2
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	20	12	52	17	110	2	180	52	75	67	7
Future Vol, veh/h	36	20	12	52	17	110	2	180	52	75	67	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	22	13	57	18	120	2	196	57	82	73	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	347	436	36	410	436	98	73	0	0	196	0	0
Stage 1	236	236	-	200	200	-	-	-	-	-	-	-
Stage 2	111	200	-	210	236	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	583	512	1029	526	512	939	1525	-	-	1374	-	-
Stage 1	746	708	-	783	735	-	-	-	-	-	-	-
Stage 2	882	735	-	773	708	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	471	481	1029	478	481	939	1525	-	-	1374	-	-
Mov Cap-2 Maneuver	471	481	-	478	481	-	-	-	-	-	-	-
Stage 1	745	666	-	782	734	-	-	-	-	-	-	-
Stage 2	749	734	-	694	666	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.4	11.2	0.1	3.9
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1525	-	-	471	601	478	833	1374	-	-
HCM Lane V/C Ratio	0.001	-	-	0.083	0.058	0.118	0.166	0.059	-	-
HCM Control Delay (s)	7.4	-	-	13.3	11.4	13.5	10.2	7.8	-	-
HCM Lane LOS	A	-	-	B	B	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0.4	0.6	0.2	-	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	246	145	430	199	350	657
Future Volume (veh/h)	246	145	430	199	350	657
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	267	158	467	216	380	714
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	332	296	894	760	499	1204
Arrive On Green	0.19	0.19	0.48	0.48	0.08	0.65
Sat Flow, veh/h	1774	1583	1863	1583	1774	1863
Grp Volume(v), veh/h	267	158	467	216	380	714
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	1774	1863
Q Serve(g_s), s	8.6	5.4	10.4	4.9	5.0	13.2
Cycle Q Clear(g_c), s	8.6	5.4	10.4	4.9	5.0	13.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	332	296	894	760	499	1204
V/C Ratio(X)	0.81	0.53	0.52	0.28	0.76	0.59
Avail Cap(c_a), veh/h	444	396	894	760	499	1204
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	22.0	10.8	9.4	11.5	6.1
Incr Delay (d2), s/veh	7.8	1.5	2.2	0.9	6.8	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	2.5	5.9	2.4	4.7	7.3
LnGrp Delay(d),s/veh	31.1	23.5	13.0	10.3	18.3	8.2
LnGrp LOS	C	C	B	B	B	A
Approach Vol, veh/h	425		683			1094
Approach Delay, s/veh	28.3		12.2			11.7
Approach LOS	C		B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.0	33.8				43.8		16.2
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	5.0	25.0				35.0		15.0
Max Q Clear Time (g_c+I1), s	7.0	12.4				15.2		10.6
Green Ext Time (p_c), s	0.0	6.7				8.7		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	15.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	190	441	9	325	533
Future Vol, veh/h	4	190	441	9	325	533
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	300	0	-	0	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	207	479	10	353	579

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1765	-	0	0	479	0
Stage 1	479	-	-	-	-	-
Stage 2	1286	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	92	0	-	-	1083	-
Stage 1	623	0	-	-	-	-
Stage 2	259	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	62	-	-	-	1083	-
Mov Cap-2 Maneuver	142	-	-	-	-	-
Stage 1	623	-	-	-	-	-
Stage 2	175	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	31.2	0	3.8
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	142	-	1083	-
HCM Lane V/C Ratio	-	-	0.031	-	0.326	-
HCM Control Delay (s)	-	-	31.2	0	9.9	-
HCM Lane LOS	-	-	D	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-	1.4	-

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	84	366	70	147	390
Future Vol, veh/h	45	84	366	70	147	390
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	200	0	-	200	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	91	398	76	160	424

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1141	-	0	0	398	0
Stage 1	398	-	-	-	-	-
Stage 2	743	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	222	0	-	-	1161	-
Stage 1	678	0	-	-	-	-
Stage 2	470	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	191	-	-	-	1161	-
Mov Cap-2 Maneuver	191	-	-	-	-	-
Stage 1	678	-	-	-	-	-
Stage 2	405	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30.2	0	2.4
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	191	-	1161	-
HCM Lane V/C Ratio	-	-	0.256	-	0.138	-
HCM Control Delay (s)	-	-	30.2	0	8.6	-
HCM Lane LOS	-	-	D	A	A	-
HCM 95th %tile Q(veh)	-	-	1	-	0.5	-

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	94	39	398	139	62	374
Future Vol, veh/h	94	39	398	139	62	374
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	230	0	-	350	350	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	104	43	442	154	69	416

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	995	442	0	0	442	0
Stage 1	442	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	271	615	-	-	1118	-
Stage 1	648	-	-	-	-	-
Stage 2	576	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	254	615	-	-	1118	-
Mov Cap-2 Maneuver	383	-	-	-	-	-
Stage 1	648	-	-	-	-	-
Stage 2	540	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16	0	1.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	383	615	1118	-
HCM Lane V/C Ratio	-	-	0.273	0.07	0.062	-
HCM Control Delay (s)	-	-	17.9	11.3	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1.1	0.2	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	57	11	46	30	206	12	1143	32	458	1976	158
Future Volume (veh/h)	92	57	11	46	30	206	12	1143	32	458	1976	158
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	98	61	0	49	32	219	13	1216	34	487	2102	0
Adj No. of Lanes	2	1	1	1	1	0	1	3	0	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	251	213	260	26	176	26	2498	70	571	3266	1017
Arrive On Green	0.04	0.13	0.00	0.03	0.13	0.13	0.01	0.49	0.49	0.17	0.64	0.00
Sat Flow, veh/h	3442	1863	1583	1774	206	1408	1774	5086	142	3442	5085	1583
Grp Volume(v), veh/h	98	61	0	49	0	251	13	811	439	487	2102	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	0	1614	1774	1695	1838	1721	1695	1583
Q Serve(g_s), s	3.4	3.5	0.0	2.9	0.0	15.0	0.9	19.2	19.2	16.5	30.2	0.0
Cycle Q Clear(g_c), s	3.4	3.5	0.0	2.9	0.0	15.0	0.9	19.2	19.2	16.5	30.2	0.0
Prop In Lane	1.00		1.00	1.00		0.87	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	148	251	213	260	0	202	26	1665	903	571	3266	1017
V/C Ratio(X)	0.66	0.24	0.00	0.19	0.00	1.24	0.50	0.49	0.49	0.85	0.64	0.00
Avail Cap(c_a), veh/h	158	251	213	282	0	202	111	1665	903	903	3266	1017
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.47	0.47	0.00
Uniform Delay (d), s/veh	56.6	46.5	0.0	43.7	0.0	52.5	58.7	20.4	20.4	48.6	13.1	0.0
Incr Delay (d2), s/veh	9.1	0.5	0.0	0.3	0.0	144.4	14.1	1.0	1.9	2.3	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.8	0.0	1.4	0.0	14.8	0.5	9.1	10.1	8.0	14.2	0.0
LnGrp Delay(d),s/veh	65.7	47.0	0.0	44.1	0.0	196.9	72.8	21.4	22.3	51.0	13.6	0.0
LnGrp LOS	E	D		D		F	E	C	C	D	B	
Approach Vol, veh/h		159			300			1263			2589	
Approach Delay, s/veh		58.5			171.9			22.3			20.6	
Approach LOS		E			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	65.9	8.5	21.1	6.3	84.1	9.7	20.0
Change Period (Y+Rc), s	4.5	7.0	4.5	5.0	4.5	7.0	4.5	5.0
Max Green Setting (Gmax), s	9.5	47.0	5.5	15.0	7.5	71.0	5.5	15.0
Max Q Clear Time (g_c+I1), s	19.5	21.2	4.9	5.5	2.9	32.2	5.4	17.0
Green Ext Time (p_c), s	1.4	22.6	0.0	1.3	0.0	32.1	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay	33.0	
HCM 2010 LOS	C	

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	64	14	21	61	44	8	60	10	77	128	18
Future Vol, veh/h	42	64	14	21	61	44	8	60	10	77	128	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	0	150	-	0	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	70	15	23	66	48	9	65	11	84	139	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	390	390	70	355	390	33	139	0	0	65	0	0
Stage 1	307	307	-	83	83	-	-	-	-	-	-	-
Stage 2	83	83	-	272	307	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	543	544	978	576	544	1033	1442	-	-	1535	-	-
Stage 1	678	660	-	916	825	-	-	-	-	-	-	-
Stage 2	916	825	-	711	660	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	445	511	978	485	511	1033	1442	-	-	1535	-	-
Mov Cap-2 Maneuver	445	511	-	485	511	-	-	-	-	-	-	-
Stage 1	674	624	-	910	820	-	-	-	-	-	-	-
Stage 2	798	820	-	588	624	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13	11.5	0.8	2.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1442	-	-	445	511	978	485	511	1033	1535	-	-
HCM Lane V/C Ratio	0.006	-	-	0.103	0.136	0.016	0.047	0.13	0.046	0.055	-	-
HCM Control Delay (s)	7.5	-	-	14	13.2	8.7	12.8	13.1	8.7	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.5	0	0.1	0.4	0.1	0.2	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	0	76	77	50
Future Vol, veh/h	0	2	0	76	77	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2	0	83	84	54

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	69	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	980	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	980	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	980	-	-
HCM Lane V/C Ratio	-	0.002	-	-
HCM Control Delay (s)	-	8.7	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	123	64	8	76	6	36	0	5	4	0	17
Future Vol, veh/h	30	123	64	8	76	6	36	0	5	4	0	17
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	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	134	70	9	83	7	39	0	5	4	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	89	0	0	203	0	0	347	341	168	339	371	86
Stage 1	-	-	-	-	-	-	234	234	-	103	103	-
Stage 2	-	-	-	-	-	-	113	107	-	236	268	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1506	-	-	1369	-	-	607	581	876	615	559	973
Stage 1	-	-	-	-	-	-	769	711	-	903	810	-
Stage 2	-	-	-	-	-	-	892	807	-	767	687	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1506	-	-	1369	-	-	583	565	876	598	543	973
Mov Cap-2 Maneuver	-	-	-	-	-	-	583	565	-	598	543	-
Stage 1	-	-	-	-	-	-	752	695	-	883	805	-
Stage 2	-	-	-	-	-	-	869	802	-	746	672	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.7	11.4	9.3
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	608	1506	-	-	1369	-	-	869
HCM Lane V/C Ratio	0.073	0.022	-	-	0.006	-	-	0.026
HCM Control Delay (s)	11.4	7.4	-	-	7.6	-	-	9.3
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	60	46	25	46	11	30	0	43	6	0	14
Future Vol, veh/h	26	60	46	25	46	11	30	0	43	6	0	14
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	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	65	50	27	50	12	33	0	47	7	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	62	0	0	115	0	0	265	263	90	280	282	56
Stage 1	-	-	-	-	-	-	147	147	-	110	110	-
Stage 2	-	-	-	-	-	-	118	116	-	170	172	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1541	-	-	1474	-	-	688	642	968	672	627	1011
Stage 1	-	-	-	-	-	-	856	775	-	895	804	-
Stage 2	-	-	-	-	-	-	887	800	-	832	756	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1541	-	-	1474	-	-	659	619	968	622	604	1011
Mov Cap-2 Maneuver	-	-	-	-	-	-	659	619	-	622	604	-
Stage 1	-	-	-	-	-	-	840	761	-	879	789	-
Stage 2	-	-	-	-	-	-	858	785	-	777	742	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	2.3	9.9	9.3
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	812	1541	-	-	1474	-	-	851
HCM Lane V/C Ratio	0.098	0.018	-	-	0.018	-	-	0.026
HCM Control Delay (s)	9.9	7.4	-	-	7.5	-	-	9.3
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	130	21	0	124	4	0	0	3	0	0	1
Future Vol, veh/h	0	130	21	0	124	4	0	0	3	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	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	141	23	0	135	4	0	0	3	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	141	-	-	137
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	907	0	0	911
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	907	-	-	911
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	9	9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	907	-	-	-	-	911
HCM Lane V/C Ratio	0.004	-	-	-	-	0.001
HCM Control Delay (s)	9	-	-	-	-	9
HCM Lane LOS	A	-	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	101	21	25	99	36	23	3	12	24	2	6
Future Vol, veh/h	11	101	21	25	99	36	23	3	12	24	2	6
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	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	110	23	27	108	39	25	3	13	26	2	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	147	0	0	133	0	0	331	346	121	335	339	127
Stage 1	-	-	-	-	-	-	145	145	-	182	182	-
Stage 2	-	-	-	-	-	-	186	201	-	153	157	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1435	-	-	1452	-	-	622	577	930	619	582	923
Stage 1	-	-	-	-	-	-	858	777	-	820	749	-
Stage 2	-	-	-	-	-	-	816	735	-	849	768	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1435	-	-	1452	-	-	603	562	930	595	566	923
Mov Cap-2 Maneuver	-	-	-	-	-	-	603	562	-	595	566	-
Stage 1	-	-	-	-	-	-	851	771	-	813	735	-
Stage 2	-	-	-	-	-	-	793	721	-	827	762	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.2	10.7	11
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	674	1435	-	-	1452	-	-	635
HCM Lane V/C Ratio	0.061	0.008	-	-	0.019	-	-	0.055
HCM Control Delay (s)	10.7	7.5	-	-	7.5	-	-	11
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.2

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	6	9	23	6	61	13	107	26	94	191	49
Future Vol, veh/h	26	6	9	23	6	61	13	107	26	94	191	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	7	10	25	7	66	14	116	28	102	208	53

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	502	557	104	456	557	58	208	0	0	116	0	0
Stage 1	412	412	-	145	145	-	-	-	-	-	-	-
Stage 2	90	145	-	311	412	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	452	437	931	488	437	996	1360	-	-	1470	-	-
Stage 1	588	593	-	843	776	-	-	-	-	-	-	-
Stage 2	907	776	-	674	593	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	392	402	931	448	402	996	1360	-	-	1470	-	-
Mov Cap-2 Maneuver	392	402	-	448	402	-	-	-	-	-	-	-
Stage 1	582	552	-	834	768	-	-	-	-	-	-	-
Stage 2	831	768	-	613	552	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.5	10.5	0.7	2.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1360	-	-	392	610	448	880	1470	-	-
HCM Lane V/C Ratio	0.01	-	-	0.072	0.027	0.056	0.083	0.07	-	-
HCM Control Delay (s)	7.7	-	-	14.9	11.1	13.5	9.5	7.6	-	-
HCM Lane LOS	A	-	-	B	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0.2	0.3	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	380	125	600	215	250	75	255	815	100	160	25
Future Volume (veh/h)	60	380	125	600	215	250	75	255	815	100	160	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	63	400	132	632	226	263	79	268	858	105	168	26
Adj No. of Lanes	1	2	1	2	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	601	343	736	1186	531	162	1511	1014	349	1544	691
Arrive On Green	0.05	0.17	0.17	0.21	0.34	0.34	0.05	0.43	0.43	0.06	0.44	0.44
Sat Flow, veh/h	1774	3539	1583	3442	3539	1583	3442	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	63	400	132	632	226	263	79	268	858	105	168	26
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1583	1721	1770	1583	1774	1770	1583
Q Serve(g_s), s	3.5	12.7	8.5	21.2	5.4	15.9	2.7	5.6	51.0	3.9	3.4	1.1
Cycle Q Clear(g_c), s	3.5	12.7	8.5	21.2	5.4	15.9	2.7	5.6	51.0	3.9	3.4	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	299	601	343	736	1186	531	162	1511	1014	349	1544	691
V/C Ratio(X)	0.21	0.67	0.38	0.86	0.19	0.50	0.49	0.18	0.85	0.30	0.11	0.04
Avail Cap(c_a), veh/h	332	914	483	889	1593	712	229	1511	1014	368	1544	691
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	38.0	46.6	40.2	45.4	28.3	31.8	55.8	21.3	16.9	17.2	20.0	19.4
Incr Delay (d2), s/veh	0.3	1.3	0.7	7.3	0.1	0.7	2.3	0.3	8.7	0.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	6.3	3.8	10.8	2.7	7.0	1.3	2.8	24.4	1.9	1.7	0.5
LnGrp Delay(d),s/veh	38.4	47.9	40.9	52.8	28.4	32.5	58.0	21.6	25.6	17.7	20.2	19.5
LnGrp LOS	D	D	D	D	C	C	E	C	C	B	C	B
Approach Vol, veh/h		595			1121			1205			299	
Approach Delay, s/veh		45.3			43.1			26.8			19.2	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	55.2	29.6	24.4	9.6	56.3	9.8	44.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	33.0	30.0	30.0	7.0	33.0	7.0	53.0
Max Q Clear Time (g_c+I1), s	5.4	53.0	23.2	14.7	4.7	5.4	5.5	17.9
Green Ext Time (p_c), s	0.0	0.0	1.4	4.7	0.0	7.6	0.0	5.8

Intersection Summary	
HCM 2010 Ctrl Delay	35.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	665	782	93	805	360	935	765	80	320	455	60
Future Volume (veh/h)	110	665	782	93	805	360	935	765	80	320	455	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	116	700	823	98	847	0	984	805	84	337	479	63
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	1062	949	186	1049	662	1030	1382	618	420	755	338
Arrive On Green	0.06	0.30	0.30	0.02	0.10	0.00	0.50	0.65	0.65	0.12	0.21	0.21
Sat Flow, veh/h	3442	3539	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	116	700	823	98	847	0	984	805	84	337	479	63
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	3.9	20.7	36.0	3.4	28.1	0.0	32.8	15.3	2.4	11.4	14.8	3.9
Cycle Q Clear(g_c), s	3.9	20.7	36.0	3.4	28.1	0.0	32.8	15.3	2.4	11.4	14.8	3.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	1062	949	186	1049	662	1030	1382	618	420	755	338
V/C Ratio(X)	0.58	0.66	0.87	0.53	0.81	0.00	0.96	0.58	0.14	0.80	0.63	0.19
Avail Cap(c_a), veh/h	315	1062	949	315	1062	668	1032	1382	618	459	755	338
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	0.72	0.72	0.72	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	36.6	20.1	57.4	50.8	0.0	29.2	15.4	13.1	51.3	42.9	38.7
Incr Delay (d2), s/veh	2.7	1.5	8.6	2.3	4.7	0.0	14.4	1.3	0.3	9.2	4.0	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	2.0	10.3	24.7	1.7	14.5	0.0	17.5	7.5	1.1	6.0	7.7	1.8
LnGrp Delay(d),s/veh	57.9	38.2	28.6	59.7	55.4	0.0	43.7	16.7	13.5	60.5	47.0	39.9
LnGrp LOS	E	D	C	E	E		D	B	B	E	D	D
Approach Vol, veh/h		1639			945			1873			879	
Approach Delay, s/veh		34.8			55.9			30.7			51.7	
Approach LOS		C			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	50.9	10.5	40.0	39.9	29.6	10.9	39.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.6	40.0	10.0	35.0	35.0	20.0	10.0	35.0
Max Q Clear Time (g_c+I1), s	13.4	17.3	5.4	38.0	34.8	16.8	5.9	31.1
Green Ext Time (p_c), s	0.2	10.3	0.1	0.0	0.1	2.4	0.1	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	39.9
HCM 2010 LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	64	16	1805	90	11	1423
Future Volume (veh/h)	64	16	1805	90	11	1423
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	67	0	1900	95	12	1498
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	87	78	2875	1286	212	3071
Arrive On Green	0.05	0.00	0.81	0.81	0.03	1.00
Sat Flow, veh/h	1774	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	67	0	1900	95	12	1498
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1583	1774	1770
Q Serve(g_s), s	4.5	0.0	26.1	1.4	0.1	0.0
Cycle Q Clear(g_c), s	4.5	0.0	26.1	1.4	0.1	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	87	78	2875	1286	212	3071
V/C Ratio(X)	0.77	0.00	0.66	0.07	0.06	0.49
Avail Cap(c_a), veh/h	370	330	2875	1286	292	3071
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.59	0.59
Uniform Delay (d), s/veh	56.4	0.0	4.6	2.3	4.9	0.0
Incr Delay (d2), s/veh	13.2	0.0	1.2	0.1	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	12.9	0.6	0.1	0.1
LnGrp Delay(d),s/veh	69.6	0.0	5.8	2.4	5.0	0.3
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	67		1995			1510
Approach Delay, s/veh	69.6		5.6			0.4
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.6	102.5				109.1		10.9
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	7.6	73.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	2.1	28.1				2.0		6.5
Green Ext Time (p_c), s	0.0	41.0				70.8		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	4.6
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	157	117	1700	64	20	1432
Future Volume (veh/h)	157	117	1700	64	20	1432
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	165	123	1789	67	21	1507
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	201	179	2622	1173	215	2844
Arrive On Green	0.11	0.11	0.74	0.74	0.02	0.80
Sat Flow, veh/h	1774	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	165	123	1789	67	21	1507
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1583	1774	1770
Q Serve(g_s), s	10.9	9.0	31.8	1.4	0.3	17.5
Cycle Q Clear(g_c), s	10.9	9.0	31.8	1.4	0.3	17.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	201	179	2622	1173	215	2844
V/C Ratio(X)	0.82	0.69	0.68	0.06	0.10	0.53
Avail Cap(c_a), veh/h	370	330	2622	1173	281	2844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	51.2	8.1	4.2	8.2	4.0
Incr Delay (d2), s/veh	8.1	4.6	1.5	0.1	0.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	4.1	15.7	0.6	0.2	8.7
LnGrp Delay(d),s/veh	60.2	55.8	9.6	4.3	8.4	4.7
LnGrp LOS	E	E	A	A	A	A
Approach Vol, veh/h	288		1856			1528
Approach Delay, s/veh	58.3		9.4			4.8
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.5	93.9				101.4		18.6
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	7.6	73.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	12.3	33.8				19.5		12.9
Green Ext Time (p_c), s	0.0	33.8				51.6		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	11.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	30	116	75	125	325	146	2180	70	90	800	25
Future Volume (veh/h)	40	30	116	75	125	325	146	2180	70	90	800	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	42	32	0	79	132	342	154	2295	74	95	842	0
Adj No. of Lanes	2	1	1	1	1	0	1	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	381	324	421	104	268	195	2750	88	173	2460	766
Arrive On Green	0.04	0.20	0.00	0.06	0.22	0.22	0.11	0.54	0.53	0.05	0.48	0.00
Sat Flow, veh/h	3442	1863	1583	1774	460	1192	1774	5062	163	3442	5085	1583
Grp Volume(v), veh/h	42	32	0	79	0	474	154	1534	835	95	842	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	0	1652	1774	1695	1834	1721	1695	1583
Q Serve(g_s), s	1.4	1.7	0.0	4.1	0.0	27.0	10.2	45.3	45.8	3.2	12.3	0.0
Cycle Q Clear(g_c), s	1.4	1.7	0.0	4.1	0.0	27.0	10.2	45.3	45.8	3.2	12.3	0.0
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	137	381	324	421	0	372	195	1842	996	173	2460	766
V/C Ratio(X)	0.31	0.08	0.00	0.19	0.00	1.27	0.79	0.83	0.84	0.55	0.34	0.00
Avail Cap(c_a), veh/h	315	404	343	491	0	372	237	1842	996	229	2460	766
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.97	0.97	0.00
Uniform Delay (d), s/veh	56.0	38.6	0.0	34.3	0.0	46.9	52.1	22.9	23.0	55.6	19.2	0.0
Incr Delay (d2), s/veh	1.3	0.1	0.0	0.2	0.0	143.1	13.8	4.6	8.4	2.6	0.4	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	0.7	0.9	0.0	2.0	0.0	27.1	5.7	22.3	25.3	1.6	5.9	0.0
LnGrp Delay(d),s/veh	57.3	38.7	0.0	34.6	0.0	190.0	65.9	27.5	31.4	58.2	19.5	0.0
LnGrp LOS	E	D		C		F	E	C	C	E	B	
Approach Vol, veh/h		74			553			2523			937	
Approach Delay, s/veh		49.3			167.8			31.1			23.5	
Approach LOS		D			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	71.2	10.2	28.5	17.2	64.1	8.8	30.0
Change Period (Y+Rc), s	5.0	7.0	4.5	5.0	5.0	7.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	56.0	10.5	25.0	15.0	48.0	10.0	25.0
Max Q Clear Time (g_c+I1), s	5.2	47.8	6.1	3.7	12.2	14.3	3.4	29.0
Green Ext Time (p_c), s	0.0	7.7	0.1	3.7	0.1	27.8	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay	48.2	
HCM 2010 LOS	D	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	20	13	7	33	363	23	870	22	314	703	26
Future Volume (veh/h)	67	20	13	7	33	363	23	870	22	314	703	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	71	21	14	7	35	382	24	916	23	331	740	27
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	364	503	428	415	442	574	370	1606	719	432	1940	868
Arrive On Green	0.05	0.27	0.27	0.02	0.24	0.24	0.03	0.45	0.45	0.04	0.18	0.18
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	71	21	14	7	35	382	24	916	23	331	740	27
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	3.5	1.0	0.8	0.4	1.8	24.3	0.8	22.9	1.0	11.4	22.1	1.7
Cycle Q Clear(g_c), s	3.5	1.0	0.8	0.4	1.8	24.3	0.8	22.9	1.0	11.4	22.1	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	364	503	428	415	442	574	370	1606	719	432	1940	868
V/C Ratio(X)	0.20	0.04	0.03	0.02	0.08	0.67	0.06	0.57	0.03	0.77	0.38	0.03
Avail Cap(c_a), veh/h	437	559	475	547	559	674	477	1606	719	602	1940	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
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	30.4	32.3	32.2	33.5	35.6	32.1	16.6	24.2	18.2	55.8	31.2	22.9
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.1	2.0	0.1	1.5	0.1	3.8	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.5	0.3	0.2	0.9	10.9	0.4	11.5	0.4	5.7	11.0	0.8
LnGrp Delay(d),s/veh	30.6	32.4	32.3	33.5	35.7	34.1	16.7	25.6	18.2	59.6	31.8	23.0
LnGrp LOS	C	C	C	C	D	C	B	C	B	E	C	C
Approach Vol, veh/h		106			424			963			1098	
Approach Delay, s/veh		31.2			34.2			25.2			40.0	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	58.5	6.0	36.4	7.8	69.8	10.0	32.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	20.0	35.0	10.0	35.0	10.0	45.0	10.0	35.0
Max Q Clear Time (g_c+I1), s	11.4	24.9	2.4	3.0	2.8	24.1	5.5	26.3
Green Ext Time (p_c), s	0.7	7.3	0.0	1.7	0.0	12.3	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	33.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	59	77	840	23	40	683
Future Vol, veh/h	59	77	840	23	40	683
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	0	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	81	884	24	42	719

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1328	442	0	0	884	0
Stage 1	884	-	-	-	-	-
Stage 2	444	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	146	563	-	-	761	-
Stage 1	364	-	-	-	-	-
Stage 2	614	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	138	563	-	-	761	-
Mov Cap-2 Maneuver	138	-	-	-	-	-
Stage 1	364	-	-	-	-	-
Stage 2	580	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.2	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	138	563	761	-
HCM Lane V/C Ratio	-	-	0.45	0.144	0.055	-
HCM Control Delay (s)	-	-	50.9	12.5	10	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	2	0.5	0.2	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	350	9	6	365	17	12
Future Vol, veh/h	350	9	6	365	17	12
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	368	9	6	384	18	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	378	0	770	373
Stage 1	-	-	-	-	373	-
Stage 2	-	-	-	-	397	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1180	-	369	673
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	679	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1180	-	367	673
Mov Cap-2 Maneuver	-	-	-	-	367	-
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	676	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	452	-	-	1180	-
HCM Lane V/C Ratio	0.068	-	-	0.005	-
HCM Control Delay (s)	13.5	-	-	8.1	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	490	95	955	465	250	290	215	825	270	160	225
Future Volume (veh/h)	145	490	95	955	465	250	290	215	825	270	160	225
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	153	516	100	1005	489	263	305	226	868	284	168	237
Adj No. of Lanes	1	2	1	2	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	352	646	289	1032	1354	606	391	1153	978	321	987	442
Arrive On Green	0.09	0.18	0.18	0.30	0.38	0.38	0.11	0.33	0.33	0.07	0.28	0.28
Sat Flow, veh/h	1774	3539	1583	3442	3539	1583	3442	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	153	516	100	1005	489	263	305	226	868	284	168	237
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1583	1721	1770	1583	1774	1770	1583
Q Serve(g_s), s	8.2	16.7	6.6	34.6	11.9	14.8	10.3	5.5	39.1	8.0	4.3	15.2
Cycle Q Clear(g_c), s	8.2	16.7	6.6	34.6	11.9	14.8	10.3	5.5	39.1	8.0	4.3	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	352	646	289	1032	1354	606	391	1153	978	321	987	442
V/C Ratio(X)	0.43	0.80	0.35	0.97	0.36	0.43	0.78	0.20	0.89	0.88	0.17	0.54
Avail Cap(c_a), veh/h	352	678	303	1032	1386	620	459	1153	978	321	987	442
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	34.6	46.9	42.8	41.5	26.5	27.4	51.7	29.1	19.4	36.0	32.7	36.7
Incr Delay (d2), s/veh	0.8	6.5	0.7	21.7	0.2	0.5	7.2	0.4	11.8	23.8	0.4	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	8.7	2.9	19.6	5.8	6.5	5.3	2.8	27.3	7.6	2.2	7.3
LnGrp Delay(d),s/veh	35.4	53.4	43.5	63.2	26.7	27.9	59.0	29.5	31.2	59.8	33.1	41.3
LnGrp LOS	D	D	D	E	C	C	E	C	C	E	C	D
Approach Vol, veh/h		769			1757			1399			689	
Approach Delay, s/veh		48.5			47.8			37.0			46.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	43.1	39.0	25.9	17.6	37.5	15.0	49.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	37.0	34.0	22.0	15.0	29.0	10.0	46.0
Max Q Clear Time (g_c+I1), s	10.0	41.1	36.6	18.7	12.3	17.2	10.2	16.8
Green Ext Time (p_c), s	0.0	0.0	0.0	2.2	0.3	5.7	0.0	8.9

Intersection Summary	
HCM 2010 Ctrl Delay	44.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	875	1080	21	955	420	925	735	15	515	770	120
Future Volume (veh/h)	205	875	1080	21	955	420	925	735	15	515	770	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	216	921	1080	22	1005	0	925	774	16	542	811	126
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	1091	963	172	1032	753	946	1147	513	634	855	383
Arrive On Green	0.08	0.31	0.32	0.02	0.10	0.00	0.46	0.54	0.54	0.18	0.24	0.24
Sat Flow, veh/h	3442	3539	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	216	921	1080	22	1005	0	925	774	16	542	811	126
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	7.4	29.2	39.0	0.8	34.0	0.0	31.6	19.0	0.6	18.3	27.1	7.9
Cycle Q Clear(g_c), s	7.4	29.2	39.0	0.8	34.0	0.0	31.6	19.0	0.6	18.3	27.1	7.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	1091	963	172	1032	753	946	1147	513	634	855	383
V/C Ratio(X)	0.84	0.84	1.12	0.13	0.97	0.00	0.98	0.67	0.03	0.86	0.95	0.33
Avail Cap(c_a), veh/h	258	1091	963	229	1032	753	946	1147	513	717	855	383
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	0.67	0.67	0.67	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	38.8	23.5	56.4	53.8	0.0	32.1	22.9	18.7	47.4	44.8	37.5
Incr Delay (d2), s/veh	20.7	6.2	68.4	0.3	21.8	0.0	18.7	2.1	0.1	9.1	20.5	2.3
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	4.3	15.1	49.9	0.4	19.8	0.0	17.2	9.5	0.3	9.5	15.6	3.7
LnGrp Delay(d),s/veh	75.5	45.0	91.9	56.8	75.5	0.0	50.8	25.1	18.8	56.5	65.3	39.8
LnGrp LOS	E	D	F	E	E		D	C	B	E	E	D
Approach Vol, veh/h		2217			1027			1715			1479	
Approach Delay, s/veh		70.8			75.1			38.9			59.9	
Approach LOS		E			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	42.9	10.0	41.0	36.0	33.0	12.0	39.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	35.0	7.0	34.0	31.0	28.0	7.0	34.0
Max Q Clear Time (g_c+I1), s	10.3	21.0	2.8	41.0	33.6	29.1	9.4	36.0
Green Ext Time (p_c), s	0.8	9.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	60.5
HCM 2010 LOS	E

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	185	7	1676	158	13	1871
Future Volume (veh/h)	185	7	1676	158	13	1871
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	195	0	1764	166	14	1969
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	227	202	2589	1158	194	2792
Arrive On Green	0.13	0.00	0.73	0.73	0.03	1.00
Sat Flow, veh/h	1774	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	195	0	1764	166	14	1969
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1583	1774	1770
Q Serve(g_s), s	12.9	0.0	32.0	3.8	0.2	0.0
Cycle Q Clear(g_c), s	12.9	0.0	32.0	3.8	0.2	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	227	202	2589	1158	194	2792
V/C Ratio(X)	0.86	0.00	0.68	0.14	0.07	0.71
Avail Cap(c_a), veh/h	444	396	2589	1158	315	2792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.17	0.17
Uniform Delay (d), s/veh	51.3	0.0	8.6	4.8	8.4	0.0
Incr Delay (d2), s/veh	9.2	0.0	1.5	0.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	0.0	16.0	1.7	0.1	0.1
LnGrp Delay(d),s/veh	60.5	0.0	10.1	5.1	8.4	0.3
LnGrp LOS	E		B	A	A	A
Approach Vol, veh/h	195		1930			1983
Approach Delay, s/veh	60.5		9.7			0.3
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.9	92.8				99.7		20.3
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	10.0	65.0				80.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	34.0				2.0		14.9
Green Ext Time (p_c), s	0.0	29.9				71.8		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	7.6
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	98	41	1665	144	66	1835
Future Volume (veh/h)	98	41	1665	144	66	1835
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	103	43	1753	152	69	1932
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	134	120	2696	1206	251	2976
Arrive On Green	0.08	0.08	0.76	0.76	0.04	0.84
Sat Flow, veh/h	1774	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	103	43	1753	152	69	1932
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1583	1774	1770
Q Serve(g_s), s	6.8	3.1	28.1	3.0	0.9	22.9
Cycle Q Clear(g_c), s	6.8	3.1	28.1	3.0	0.9	22.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	134	120	2696	1206	251	2976
V/C Ratio(X)	0.77	0.36	0.65	0.13	0.28	0.65
Avail Cap(c_a), veh/h	370	330	2696	1206	332	2976
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	52.7	6.7	3.8	7.4	3.3
Incr Delay (d2), s/veh	8.8	1.8	1.2	0.2	0.6	1.1
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	1.4	13.9	1.4	0.8	11.2
LnGrp Delay(d),s/veh	63.2	54.5	8.0	4.0	8.0	4.5
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	146		1905			2001
Approach Delay, s/veh	60.6		7.7			4.6
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.5	96.4				105.9		14.1
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	10.0	70.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	2.9	30.1				24.9		8.8
Green Ext Time (p_c), s	0.1	36.8				53.3		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	8.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	125	170	50	50	200	66	1175	35	420	1975	55
Future Volume (veh/h)	30	125	170	50	50	200	66	1175	35	420	1975	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	32	132	0	53	53	211	69	1237	37	442	2079	0
Adj No. of Lanes	2	1	1	1	1	0	1	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	339	288	286	62	247	103	2432	73	473	2842	885
Arrive On Green	0.04	0.18	0.00	0.04	0.19	0.19	0.06	0.48	0.47	0.14	0.56	0.00
Sat Flow, veh/h	3442	1863	1583	1774	328	1305	1774	5074	152	3442	5085	1583
Grp Volume(v), veh/h	32	132	0	53	0	264	69	826	448	442	2079	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	0	1632	1774	1695	1836	1721	1695	1583
Q Serve(g_s), s	1.1	7.5	0.0	2.9	0.0	18.8	4.6	20.1	20.2	15.3	36.6	0.0
Cycle Q Clear(g_c), s	1.1	7.5	0.0	2.9	0.0	18.8	4.6	20.1	20.2	15.3	36.6	0.0
Prop In Lane	1.00		1.00	1.00		0.80	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	123	339	288	286	0	309	103	1625	880	473	2842	885
V/C Ratio(X)	0.26	0.39	0.00	0.19	0.00	0.85	0.67	0.51	0.51	0.93	0.73	0.00
Avail Cap(c_a), veh/h	301	404	343	365	0	354	155	1625	880	473	2842	885
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.51	0.51	0.00
Uniform Delay (d), s/veh	56.3	43.2	0.0	37.4	0.0	47.0	55.4	21.5	21.6	51.2	19.8	0.0
Incr Delay (d2), s/veh	1.1	0.7	0.0	0.3	0.0	16.4	7.4	1.1	2.1	16.1	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.9	0.0	1.4	0.0	9.8	2.5	9.7	10.7	8.3	17.2	0.0
LnGrp Delay(d),s/veh	57.4	43.9	0.0	37.7	0.0	63.5	62.8	22.7	23.7	67.3	20.6	0.0
LnGrp LOS	E	D		D		E	E	C	C	E	C	
Approach Vol, veh/h		164			317			1343			2521	
Approach Delay, s/veh		46.6			59.2			25.1			28.8	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	63.5	9.6	25.9	11.4	73.1	8.8	26.7
Change Period (Y+Rc), s	5.5	7.0	5.5	5.0	5.5	7.0	5.5	5.0
Max Green Setting (Gmax), s	5.5	47.0	9.5	25.0	9.5	53.0	9.5	25.0
Max Q Clear Time (g_c+I1), s	10.3	22.2	4.9	9.5	6.6	38.6	3.1	20.8
Green Ext Time (p_c), s	0.0	21.8	0.0	2.2	0.0	13.3	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	32	21	9	16	78	16	1040	11	412	807	173
Future Volume (veh/h)	130	32	21	9	16	78	16	1040	11	412	807	173
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	137	34	22	9	17	82	17	1095	12	434	849	182
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	304	253	215	164	118	338	346	1929	850	545	2396	1059
Arrive On Green	0.09	0.14	0.14	0.01	0.06	0.06	0.02	0.55	0.54	0.05	0.22	0.22
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	137	34	22	9	17	82	17	1095	12	434	849	182
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	8.2	1.9	1.5	0.6	1.0	5.2	0.5	24.5	0.4	15.0	24.3	11.2
Cycle Q Clear(g_c), s	8.2	1.9	1.5	0.6	1.0	5.2	0.5	24.5	0.4	15.0	24.3	11.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	304	253	215	164	118	338	346	1929	850	545	2396	1059
V/C Ratio(X)	0.45	0.13	0.10	0.05	0.14	0.24	0.05	0.57	0.01	0.80	0.35	0.17
Avail Cap(c_a), veh/h	304	388	330	293	388	567	462	1929	850	746	2396	1059
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
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	43.8	45.6	45.4	51.7	53.1	39.2	12.3	18.0	13.0	55.0	24.5	19.8
Incr Delay (d2), s/veh	1.0	0.2	0.2	0.1	0.6	0.4	0.1	1.2	0.0	4.3	0.4	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	4.1	1.0	0.7	0.3	0.6	2.3	0.3	12.2	0.2	7.5	12.1	5.0
LnGrp Delay(d),s/veh	44.8	45.9	45.7	51.8	53.7	39.5	12.4	19.2	13.0	59.2	24.9	20.2
LnGrp LOS	D	D	D	D	D	D	B	B	B	E	C	C
Approach Vol, veh/h		193			108			1124			1465	
Approach Delay, s/veh		45.1			42.8			19.0			34.5	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	69.4	6.3	21.3	7.2	85.2	15.0	12.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	25.0	40.0	10.0	25.0	10.0	55.0	10.0	25.0
Max Q Clear Time (g_c+I1), s	17.0	26.5	2.6	3.9	2.5	26.3	10.2	7.2
Green Ext Time (p_c), s	1.0	10.5	0.0	0.5	0.0	18.5	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	29.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	46	1017	43	74	763
Future Vol, veh/h	35	46	1017	43	74	763
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	0	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	48	1071	45	78	803

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1628	535	0	0	1071	0
Stage 1	1071	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	93	490	-	-	647	-
Stage 1	290	-	-	-	-	-
Stage 2	537	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	82	490	-	-	647	-
Mov Cap-2 Maneuver	82	-	-	-	-	-
Stage 1	290	-	-	-	-	-
Stage 2	472	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	42.4	0	1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	82	490	647	-
HCM Lane V/C Ratio	-	-	0.449	0.099	0.12	-
HCM Control Delay (s)	-	-	80.7	13.2	11.3	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	1.8	0.3	0.4	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	440	15	11	100	10	7
Future Vol, veh/h	440	15	11	100	10	7
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	463	16	12	105	11	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	479	0	599	471
Stage 1	-	-	-	-	471	-
Stage 2	-	-	-	-	128	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1083	-	465	593
Stage 1	-	-	-	-	628	-
Stage 2	-	-	-	-	898	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1083	-	460	593
Mov Cap-2 Maneuver	-	-	-	-	460	-
Stage 1	-	-	-	-	628	-
Stage 2	-	-	-	-	888	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	12.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	507	-	-	1083	-
HCM Lane V/C Ratio	0.035	-	-	0.011	-
HCM Control Delay (s)	12.4	-	-	8.4	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	380	125	600	215	250	75	395	815	100	215	25
Future Volume (veh/h)	60	380	125	600	215	250	75	395	815	100	215	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	63	400	132	632	226	263	79	416	858	105	226	26
Adj No. of Lanes	1	2	1	2	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	601	343	736	1186	531	162	1511	1014	311	1544	691
Arrive On Green	0.05	0.17	0.17	0.21	0.34	0.34	0.05	0.43	0.43	0.06	0.44	0.44
Sat Flow, veh/h	1774	3539	1583	3442	3539	1583	3442	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	63	400	132	632	226	263	79	416	858	105	226	26
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1583	1721	1770	1583	1774	1770	1583
Q Serve(g_s), s	3.5	12.7	8.5	21.2	5.4	15.9	2.7	9.2	51.0	3.9	4.6	1.1
Cycle Q Clear(g_c), s	3.5	12.7	8.5	21.2	5.4	15.9	2.7	9.2	51.0	3.9	4.6	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	299	601	343	736	1186	531	162	1511	1014	311	1544	691
V/C Ratio(X)	0.21	0.67	0.38	0.86	0.19	0.50	0.49	0.28	0.85	0.34	0.15	0.04
Avail Cap(c_a), veh/h	332	914	483	889	1593	712	229	1511	1014	330	1544	691
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	38.0	46.6	40.2	45.4	28.3	31.8	55.8	22.3	16.9	17.5	20.4	19.4
Incr Delay (d2), s/veh	0.3	1.3	0.7	7.3	0.1	0.7	2.3	0.5	8.7	0.6	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	6.3	3.8	10.8	2.7	7.0	1.3	4.5	24.4	2.0	2.3	0.5
LnGrp Delay(d),s/veh	38.4	47.9	40.9	52.8	28.4	32.5	58.0	22.8	25.6	18.1	20.6	19.5
LnGrp LOS	D	D	D	D	C	C	E	C	C	B	C	B
Approach Vol, veh/h		595			1121			1353			357	
Approach Delay, s/veh		45.3			43.1			26.6			19.8	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	55.2	29.6	24.4	9.6	56.3	9.8	44.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	33.0	30.0	30.0	7.0	33.0	7.0	53.0
Max Q Clear Time (g_c+I1), s	5.7	53.0	23.2	14.7	4.7	6.6	5.5	17.9
Green Ext Time (p_c), s	0.0	0.0	1.4	4.7	0.0	9.3	0.0	5.8

Intersection Summary	
HCM 2010 Ctrl Delay	34.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	705	790	100	900	445	975	820	85	365	465	60
Future Volume (veh/h)	110	705	790	100	900	445	975	820	85	365	465	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	116	742	832	105	947	0	1026	863	89	384	489	63
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	1063	964	193	1057	710	1032	1334	597	459	774	346
Arrive On Green	0.06	0.30	0.31	0.02	0.10	0.00	0.50	0.63	0.63	0.13	0.22	0.22
Sat Flow, veh/h	3442	3539	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	116	742	832	105	947	0	1026	863	89	384	489	63
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	3.9	22.3	37.0	3.6	31.7	0.0	35.5	18.3	2.8	13.1	15.0	3.9
Cycle Q Clear(g_c), s	3.9	22.3	37.0	3.6	31.7	0.0	35.5	18.3	2.8	13.1	15.0	3.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	1063	964	193	1057	710	1032	1334	597	459	774	346
V/C Ratio(X)	0.58	0.70	0.86	0.54	0.90	0.00	0.99	0.65	0.15	0.84	0.63	0.18
Avail Cap(c_a), veh/h	315	1063	964	315	1062	712	1032	1334	597	459	774	346
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	0.64	0.64	0.64	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	37.2	19.4	57.4	52.2	0.0	29.8	17.2	14.4	50.7	42.5	38.2
Incr Delay (d2), s/veh	2.7	2.0	8.2	2.4	10.0	0.0	20.8	1.6	0.3	12.8	3.9	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	2.0	11.2	24.6	1.8	17.0	0.0	19.6	9.1	1.2	7.0	7.8	1.8
LnGrp Delay(d),s/veh	57.9	39.2	27.5	59.8	62.2	0.0	50.7	18.8	14.7	63.5	46.4	39.3
LnGrp LOS	E	D	C	E	E		D	B	B	E	D	D
Approach Vol, veh/h		1690			1052			1978			936	
Approach Delay, s/veh		34.7			62.0			35.2			52.9	
Approach LOS		C			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	49.2	10.7	40.0	39.0	30.2	10.9	39.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	40.0	10.0	35.0	34.0	21.0	10.0	35.0
Max Q Clear Time (g_c+I1), s	15.1	20.3	5.6	39.0	37.5	17.0	5.9	33.7
Green Ext Time (p_c), s	0.0	10.1	0.1	0.0	0.0	3.0	0.1	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	43.0
HCM 2010 LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	125	110	1810	110	30	1430
Future Volume (veh/h)	125	110	1810	110	30	1430
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	132	0	1905	116	32	1505
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	161	144	2679	1198	208	2923
Arrive On Green	0.09	0.00	0.76	0.76	0.05	1.00
Sat Flow, veh/h	1774	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	132	0	1905	116	32	1505
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1583	1774	1770
Q Serve(g_s), s	8.8	0.0	34.0	2.3	0.4	0.0
Cycle Q Clear(g_c), s	8.8	0.0	34.0	2.3	0.4	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	161	144	2679	1198	208	2923
V/C Ratio(X)	0.82	0.00	0.71	0.10	0.15	0.51
Avail Cap(c_a), veh/h	370	330	2679	1198	263	2923
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.58	0.58
Uniform Delay (d), s/veh	53.6	0.0	7.7	3.8	8.5	0.0
Incr Delay (d2), s/veh	9.8	0.0	1.6	0.2	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	17.0	1.1	0.4	0.2
LnGrp Delay(d),s/veh	63.4	0.0	9.3	4.0	8.7	0.4
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	132		2021			1537
Approach Delay, s/veh	63.4		9.0			0.6
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.3	95.8				104.1		15.9
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	7.0	73.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	2.4	36.0				2.0		10.8
Green Ext Time (p_c), s	0.0	34.4				71.2		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	7.4
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	157	117	1725	64	20	1500
Future Volume (veh/h)	157	117	1725	64	20	1500
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	165	123	1816	67	21	1579
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	201	179	2622	1173	210	2844
Arrive On Green	0.11	0.11	0.74	0.74	0.02	0.80
Sat Flow, veh/h	1774	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	165	123	1816	67	21	1579
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1583	1774	1770
Q Serve(g_s), s	10.9	9.0	32.8	1.4	0.3	19.0
Cycle Q Clear(g_c), s	10.9	9.0	32.8	1.4	0.3	19.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	201	179	2622	1173	210	2844
V/C Ratio(X)	0.82	0.69	0.69	0.06	0.10	0.56
Avail Cap(c_a), veh/h	370	330	2622	1173	276	2844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	51.2	8.3	4.2	8.5	4.2
Incr Delay (d2), s/veh	8.1	4.6	1.5	0.1	0.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	4.1	16.2	0.6	0.2	9.3
LnGrp Delay(d),s/veh	60.2	55.8	9.8	4.3	8.7	5.0
LnGrp LOS	E	E	A	A	A	A
Approach Vol, veh/h	288		1883			1600
Approach Delay, s/veh	58.3		9.6			5.0
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.5	93.9				101.4		18.6
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	7.6	73.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	12.3	34.8				21.0		12.9
Green Ext Time (p_c), s	0.0	33.6				52.2		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	11.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	30	125	75	125	325	150	2180	70	90	800	55
Future Volume (veh/h)	135	30	125	75	125	325	150	2180	70	90	800	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	142	32	0	79	132	342	158	2295	74	95	842	0
Adj No. of Lanes	2	1	1	1	1	0	1	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	430	365	456	104	268	199	2618	84	173	2317	721
Arrive On Green	0.07	0.23	0.00	0.06	0.23	0.22	0.11	0.52	0.52	0.05	0.46	0.00
Sat Flow, veh/h	3442	1863	1583	1774	460	1192	1774	5062	163	3442	5085	1583
Grp Volume(v), veh/h	142	32	0	79	0	474	158	1534	835	95	842	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	0	1652	1774	1695	1834	1721	1695	1583
Q Serve(g_s), s	4.8	1.6	0.0	4.1	0.0	27.0	10.4	47.9	48.4	3.2	13.0	0.0
Cycle Q Clear(g_c), s	4.8	1.6	0.0	4.1	0.0	27.0	10.4	47.9	48.4	3.2	13.0	0.0
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	226	430	365	456	0	372	199	1754	949	173	2317	721
V/C Ratio(X)	0.63	0.07	0.00	0.17	0.00	1.27	0.80	0.87	0.88	0.55	0.36	0.00
Avail Cap(c_a), veh/h	315	430	365	527	0	372	237	1754	949	229	2317	721
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.96	0.96	0.00
Uniform Delay (d), s/veh	54.6	36.1	0.0	33.2	0.0	46.9	51.9	25.5	25.7	55.6	21.3	0.0
Incr Delay (d2), s/veh	2.9	0.1	0.0	0.2	0.0	143.1	14.6	6.4	11.5	2.6	0.4	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	2.4	0.8	0.0	2.0	0.0	27.1	5.9	23.9	27.4	1.6	6.2	0.0
LnGrp Delay(d),s/veh	57.5	36.2	0.0	33.4	0.0	190.0	66.5	32.0	37.1	58.2	21.7	0.0
LnGrp LOS	E	D		C		F	E	C	D	E	C	
Approach Vol, veh/h		174			553			2527			937	
Approach Delay, s/veh		53.6			167.6			35.8			25.4	
Approach LOS		D			F			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	68.1	10.2	31.7	17.4	60.7	11.9	30.0
Change Period (Y+Rc), s	5.0	7.0	4.5	5.0	5.0	7.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	56.0	10.5	25.0	15.0	48.0	10.0	25.0
Max Q Clear Time (g_c+I1), s	15.2	50.4	6.1	3.6	12.4	15.0	6.8	29.0
Green Ext Time (p_c), s	0.0	5.3	0.1	3.7	0.1	27.3	0.1	0.0

Intersection Summary		
HCM 2010 Ctrl Delay	51.6	
HCM 2010 LOS	D	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	63	15	10	50	380	24	870	22	330	720	65
Future Volume (veh/h)	145	63	15	10	50	380	24	870	22	330	720	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	153	66	16	11	53	400	25	916	23	347	758	68
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	422	579	492	419	457	595	322	1432	641	448	1780	796
Arrive On Green	0.09	0.31	0.31	0.02	0.25	0.25	0.03	0.40	0.40	0.04	0.17	0.17
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	153	66	16	11	53	400	25	916	23	347	758	68
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	7.4	3.0	0.8	0.5	2.7	25.3	1.0	24.9	1.1	12.0	23.1	4.4
Cycle Q Clear(g_c), s	7.4	3.0	0.8	0.5	2.7	25.3	1.0	24.9	1.1	12.0	23.1	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	422	579	492	419	457	595	322	1432	641	448	1780	796
V/C Ratio(X)	0.36	0.11	0.03	0.03	0.12	0.67	0.08	0.64	0.04	0.77	0.43	0.09
Avail Cap(c_a), veh/h	431	579	492	545	559	681	428	1432	641	602	1780	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
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	28.0	29.6	28.8	32.5	35.2	31.3	19.9	28.7	21.6	55.7	34.5	26.7
Incr Delay (d2), s/veh	0.5	0.1	0.0	0.0	0.1	2.2	0.1	2.2	0.1	4.4	0.7	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	3.6	1.6	0.4	0.3	1.4	11.3	0.5	12.7	0.5	6.0	11.5	2.0
LnGrp Delay(d),s/veh	28.5	29.6	28.8	32.5	35.3	33.4	20.0	30.9	21.7	60.1	35.2	26.9
LnGrp LOS	C	C	C	C	D	C	B	C	C	E	D	C
Approach Vol, veh/h		235			464			964			1173	
Approach Delay, s/veh		28.9			33.6			30.4			42.1	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	52.6	6.5	41.3	7.8	64.4	14.3	33.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	20.6	35.0	10.0	35.0	10.0	45.0	10.0	35.0
Max Q Clear Time (g_c+I1), s	14.0	26.9	2.5	5.0	3.0	25.1	9.4	27.3
Green Ext Time (p_c), s	0.7	6.1	0.0	2.1	0.0	12.2	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	35.6
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	0	866	742	19
Future Vol, veh/h	0	3	0	866	742	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	96	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	0	902	781	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	401	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	599	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	599	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	599	-	-
HCM Lane V/C Ratio	-	0.005	-	-
HCM Control Delay (s)	-	11	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	125	10	5	165	3	47	0	10	6	0	23
Future Vol, veh/h	5	125	10	5	165	3	47	0	10	6	0	23
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	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	132	11	5	174	3	49	0	11	6	0	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	177	0	0	142	0	0	345	334	137	339	339	175
Stage 1	-	-	-	-	-	-	147	147	-	186	186	-
Stage 2	-	-	-	-	-	-	198	187	-	153	153	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1399	-	-	1441	-	-	609	586	911	615	582	868
Stage 1	-	-	-	-	-	-	856	775	-	816	746	-
Stage 2	-	-	-	-	-	-	804	745	-	849	771	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1399	-	-	1441	-	-	589	582	911	605	578	868
Mov Cap-2 Maneuver	-	-	-	-	-	-	589	582	-	605	578	-
Stage 1	-	-	-	-	-	-	853	772	-	813	743	-
Stage 2	-	-	-	-	-	-	779	742	-	836	768	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.2	11.3	9.7
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	628	1399	-	-	1441	-	-	796
HCM Lane V/C Ratio	0.096	0.004	-	-	0.004	-	-	0.038
HCM Control Delay (s)	11.3	7.6	-	-	7.5	-	-	9.7
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	130	6	16	118	4	35	0	82	11	0	20
Future Vol, veh/h	4	130	6	16	118	4	35	0	82	11	0	20
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	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	137	6	17	124	4	37	0	86	12	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	128	0	0	143	0	0	319	310	140	352	312	126
Stage 1	-	-	-	-	-	-	148	148	-	160	160	-
Stage 2	-	-	-	-	-	-	171	162	-	192	152	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1458	-	-	1440	-	-	634	605	908	603	603	924
Stage 1	-	-	-	-	-	-	855	775	-	842	766	-
Stage 2	-	-	-	-	-	-	831	764	-	810	772	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1458	-	-	1440	-	-	613	596	908	540	594	924
Mov Cap-2 Maneuver	-	-	-	-	-	-	613	596	-	540	594	-
Stage 1	-	-	-	-	-	-	853	773	-	840	757	-
Stage 2	-	-	-	-	-	-	802	755	-	731	770	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.9	10.4	10.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	794	1458	-	-	1440	-	-	738
HCM Lane V/C Ratio	0.155	0.003	-	-	0.012	-	-	0.044
HCM Control Delay (s)	10.4	7.5	-	-	7.5	-	-	10.1
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	410	6	0	435	0	0	0	6	0	0	2
Future Vol, veh/h	0	410	6	0	435	0	0	0	6	0	0	2
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	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	432	6	0	458	0	0	0	6	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	432	-	-	458
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	624	0	0	603
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	624	-	-	603
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.8	11
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	624	-	-	-	-	603
HCM Lane V/C Ratio	0.01	-	-	-	-	0.003
HCM Control Delay (s)	10.8	-	-	-	-	11
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	405	10	8	390	24	36	8	18	40	4	6
Future Vol, veh/h	1	405	10	8	390	24	36	8	18	40	4	6
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	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	426	11	8	411	25	38	8	19	42	4	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	436	0	0	437	0	0	879	887	432	887	879	423
Stage 1	-	-	-	-	-	-	434	434	-	440	440	-
Stage 2	-	-	-	-	-	-	445	453	-	447	439	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1124	-	-	1123	-	-	268	283	624	265	286	631
Stage 1	-	-	-	-	-	-	600	581	-	596	578	-
Stage 2	-	-	-	-	-	-	592	570	-	591	578	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1124	-	-	1123	-	-	261	281	624	250	284	631
Mov Cap-2 Maneuver	-	-	-	-	-	-	261	281	-	250	284	-
Stage 1	-	-	-	-	-	-	599	580	-	595	574	-
Stage 2	-	-	-	-	-	-	578	566	-	564	577	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	19.2	21.4
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	318	1124	-	-	1123	-	-	272
HCM Lane V/C Ratio	0.205	0.001	-	-	0.007	-	-	0.193
HCM Control Delay (s)	19.2	8.2	-	-	8.2	-	-	21.4
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0.7

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	20	12	52	17	112	2	1295	52	75	1150	7
Future Vol, veh/h	37	20	12	52	17	112	2	1295	52	75	1150	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	21	13	55	18	118	2	1363	55	79	1211	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2063	2735	605	2141	2735	682	1211	0	0	1363	0	0
Stage 1	1368	1368	-	1367	1367	-	-	-	-	-	-	-
Stage 2	695	1367	-	774	1368	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 32	~ 20	441	~ 28	20	392	572	-	-	500	-	-
Stage 1	155	213	-	155	213	-	-	-	-	-	-	-
Stage 2	399	213	-	357	213	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 17	441	-	~ 17	392	572	-	-	500	-	-
Mov Cap-2 Maneuver	-	~ 17	-	-	~ 17	-	-	-	-	-	-	-
Stage 1	154	179	-	154	212	-	-	-	-	-	-	-
Stage 2	255	212	-	258	179	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0	0.8
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	572	-	-	-	27	-	100	500	-	-
HCM Lane V/C Ratio	0.004	-	-	-	1.248	-	1.358	0.158	-	-
HCM Control Delay (s)	11.3	-	-	-	$ 473.2	-	290.3	13.5	-	-
HCM Lane LOS	B	-	-	-	F	-	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	-	4	-	9.7	0.6	-	-

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	490	95	955	465	250	290	305	825	270	500	225
Future Volume (veh/h)	145	490	95	955	465	250	290	305	825	270	500	225
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	153	516	100	1005	489	263	305	321	868	284	526	237
Adj No. of Lanes	1	2	1	2	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	352	646	289	1032	1354	606	391	1153	978	300	987	442
Arrive On Green	0.09	0.18	0.18	0.30	0.38	0.38	0.11	0.33	0.33	0.07	0.28	0.28
Sat Flow, veh/h	1774	3539	1583	3442	3539	1583	3442	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	153	516	100	1005	489	263	305	321	868	284	526	237
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1583	1721	1770	1583	1774	1770	1583
Q Serve(g_s), s	8.2	16.7	6.6	34.6	11.9	14.8	10.3	8.1	39.1	8.0	15.1	15.2
Cycle Q Clear(g_c), s	8.2	16.7	6.6	34.6	11.9	14.8	10.3	8.1	39.1	8.0	15.1	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	352	646	289	1032	1354	606	391	1153	978	300	987	442
V/C Ratio(X)	0.43	0.80	0.35	0.97	0.36	0.43	0.78	0.28	0.89	0.95	0.53	0.54
Avail Cap(c_a), veh/h	352	678	303	1032	1386	620	459	1153	978	300	987	442
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	34.6	46.9	42.8	41.5	26.5	27.4	51.7	30.0	19.4	37.8	36.6	36.7
Incr Delay (d2), s/veh	0.8	6.5	0.7	21.7	0.2	0.5	7.2	0.6	11.8	38.2	2.1	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	8.7	2.9	19.6	5.8	6.5	5.3	4.0	27.3	8.7	7.7	7.3
LnGrp Delay(d),s/veh	35.4	53.4	43.5	63.2	26.7	27.9	59.0	30.6	31.2	75.9	38.7	41.3
LnGrp LOS	D	D	D	E	C	C	E	C	C	E	D	D
Approach Vol, veh/h		769			1757			1494			1047	
Approach Delay, s/veh		48.5			47.8			36.7			49.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	43.1	39.0	25.9	17.6	37.5	15.0	49.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	37.0	34.0	22.0	15.0	29.0	10.0	46.0
Max Q Clear Time (g_c+I1), s	10.0	41.1	36.6	18.7	12.3	17.2	10.2	16.8
Green Ext Time (p_c), s	0.0	0.0	0.0	2.2	0.3	7.6	0.0	8.9

Intersection Summary	
HCM 2010 Ctrl Delay	45.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	975	1130	25	1015	475	955	775	25	605	840	120
Future Volume (veh/h)	205	975	1130	25	1015	475	955	775	25	605	840	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	216	1026	1130	26	1068	0	955	816	26	637	884	126
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	1121	963	201	1091	813	975	1103	493	735	885	396
Arrive On Green	0.08	0.32	0.32	0.02	0.10	0.00	0.47	0.52	0.52	0.21	0.25	0.25
Sat Flow, veh/h	3442	3539	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	216	1026	1130	26	1068	0	955	816	26	637	884	126
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	7.4	33.5	39.0	0.9	36.1	0.0	32.7	21.6	1.0	21.4	30.0	7.8
Cycle Q Clear(g_c), s	7.4	33.5	39.0	0.9	36.1	0.0	32.7	21.6	1.0	21.4	30.0	7.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	1121	963	201	1091	813	975	1103	493	735	885	396
V/C Ratio(X)	0.84	0.92	1.17	0.13	0.98	0.00	0.98	0.74	0.05	0.87	1.00	0.32
Avail Cap(c_a), veh/h	258	1121	963	258	1091	813	975	1103	493	746	885	396
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	0.52	0.52	0.52	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	39.5	23.5	55.8	53.5	0.0	31.3	25.0	20.0	45.5	45.0	36.7
Incr Delay (d2), s/veh	20.7	11.6	89.0	0.3	22.1	0.0	16.0	2.4	0.1	10.5	30.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	18.2	55.4	0.4	21.1	0.0	17.4	10.7	0.4	11.2	18.3	3.6
LnGrp Delay(d),s/veh	75.5	51.0	112.5	56.1	75.6	0.0	47.3	27.3	20.2	56.0	75.0	38.8
LnGrp LOS	E	D	F	E	E		D	C	C	E	E	D
Approach Vol, veh/h		2372			1094			1797			1647	
Approach Delay, s/veh		82.5			75.2			37.9			64.9	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.6	40.4	10.0	41.0	36.0	33.0	12.0	39.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	35.0	7.0	34.0	31.0	28.0	7.0	34.0
Max Q Clear Time (g_c+I1), s	23.4	23.6	2.9	41.0	34.7	32.0	9.4	38.1
Green Ext Time (p_c), s	0.2	8.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	65.6
HCM 2010 LOS	E

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	225	75	1685	225	135	1875
Future Volume (veh/h)	225	75	1685	225	135	1875
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	237	0	1774	237	142	1974
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	269	240	2414	1080	210	2707
Arrive On Green	0.15	0.00	0.68	0.68	0.08	1.00
Sat Flow, veh/h	1774	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	237	0	1774	237	142	1974
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1583	1774	1770
Q Serve(g_s), s	15.7	0.0	38.3	6.7	2.8	0.0
Cycle Q Clear(g_c), s	15.7	0.0	38.3	6.7	2.8	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	269	240	2414	1080	210	2707
V/C Ratio(X)	0.88	0.00	0.73	0.22	0.68	0.73
Avail Cap(c_a), veh/h	444	396	2414	1080	285	2707
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.09	0.09
Uniform Delay (d), s/veh	49.8	0.0	12.2	7.1	20.5	0.0
Incr Delay (d2), s/veh	11.1	0.0	2.0	0.5	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	0.0	19.2	3.0	3.2	0.1
LnGrp Delay(d),s/veh	60.9	0.0	14.2	7.6	20.8	0.2
LnGrp LOS	E		B	A	C	A
Approach Vol, veh/h	237		2011			2116
Approach Delay, s/veh	60.9		13.4			1.5
Approach LOS	E		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.0	86.8				96.8		23.2
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	10.0	65.0				80.0		30.0
Max Q Clear Time (g_c+I1), s	4.8	40.3				2.0		17.7
Green Ext Time (p_c), s	0.1	24.0				72.3		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	10.2
HCM 2010 LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	98	41	1740	144	66	1880
Future Volume (veh/h)	98	41	1740	144	66	1880
Number	3	18	2	12	1	6
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	103	43	1832	152	69	1979
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	134	120	2696	1206	237	2976
Arrive On Green	0.08	0.08	0.76	0.76	0.04	0.84
Sat Flow, veh/h	1774	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	103	43	1832	152	69	1979
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1583	1774	1770
Q Serve(g_s), s	6.8	3.1	30.7	3.0	0.9	24.2
Cycle Q Clear(g_c), s	6.8	3.1	30.7	3.0	0.9	24.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	134	120	2696	1206	237	2976
V/C Ratio(X)	0.77	0.36	0.68	0.13	0.29	0.66
Avail Cap(c_a), veh/h	370	330	2696	1206	318	2976
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	52.7	7.1	3.8	8.6	3.4
Incr Delay (d2), s/veh	8.8	1.8	1.4	0.2	0.7	1.2
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	1.4	15.3	1.4	0.9	12.0
LnGrp Delay(d),s/veh	63.2	54.5	8.5	4.0	9.3	4.6
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	146		1984			2048
Approach Delay, s/veh	60.6		8.1			4.8
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.5	96.4				105.9		14.1
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	10.0	70.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	2.9	32.7				26.2		8.8
Green Ext Time (p_c), s	0.1	35.0				53.4		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	8.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	125	175	50	50	200	75	1175	35	420	1975	160
Future Volume (veh/h)	95	125	175	50	50	200	75	1175	35	420	1975	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	100	132	0	53	53	211	79	1237	37	442	2079	0
Adj No. of Lanes	2	1	1	1	1	0	1	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	370	315	309	62	247	114	2389	71	445	2723	848
Arrive On Green	0.05	0.20	0.00	0.04	0.19	0.19	0.06	0.47	0.47	0.13	0.54	0.00
Sat Flow, veh/h	3442	1863	1583	1774	328	1305	1774	5074	152	3442	5085	1583
Grp Volume(v), veh/h	100	132	0	53	0	264	79	826	448	442	2079	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	0	1632	1774	1695	1836	1721	1695	1583
Q Serve(g_s), s	3.4	7.3	0.0	2.8	0.0	18.8	5.2	20.5	20.5	15.4	38.6	0.0
Cycle Q Clear(g_c), s	3.4	7.3	0.0	2.8	0.0	18.8	5.2	20.5	20.5	15.4	38.6	0.0
Prop In Lane	1.00		1.00	1.00		0.80	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	180	370	315	309	0	309	114	1596	864	445	2723	848
V/C Ratio(X)	0.55	0.36	0.00	0.17	0.00	0.85	0.69	0.52	0.52	0.99	0.76	0.00
Avail Cap(c_a), veh/h	301	404	343	388	0	354	155	1596	864	445	2723	848
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.45	0.45	0.00
Uniform Delay (d), s/veh	55.5	41.4	0.0	36.6	0.0	47.0	55.0	22.2	22.2	52.2	21.9	0.0
Incr Delay (d2), s/veh	2.6	0.6	0.0	0.3	0.0	16.4	7.7	1.2	2.2	27.1	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.8	0.0	1.4	0.0	9.8	2.8	9.8	10.9	9.0	18.1	0.0
LnGrp Delay(d),s/veh	58.1	42.0	0.0	36.9	0.0	63.5	62.6	23.4	24.4	79.3	22.8	0.0
LnGrp LOS	E	D		D		E	E	C	C	E	C	
Approach Vol, veh/h		232			317			1353			2521	
Approach Delay, s/veh		49.0			59.0			26.1			32.7	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	62.5	9.6	27.9	12.2	70.3	10.8	26.7
Change Period (Y+Rc), s	5.5	7.0	5.5	5.0	5.5	7.0	5.5	5.0
Max Green Setting (Gmax), s	14.5	48.0	9.5	25.0	9.5	53.0	9.5	25.0
Max Q Clear Time (g_c+I1), s	10.4	22.5	4.8	9.3	7.2	40.6	5.4	20.8
Green Ext Time (p_c), s	0.0	22.4	0.0	2.2	0.0	11.6	0.1	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	33.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	74	25	25	60	100	19	1040	11	440	840	195
Future Volume (veh/h)	175	74	25	25	60	100	19	1040	11	440	840	195
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	184	78	26	26	63	105	20	1095	12	463	884	205
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	264	257	219	204	147	375	344	1788	813	542	2303	1030
Arrive On Green	0.08	0.14	0.14	0.02	0.08	0.08	0.02	0.51	0.51	0.11	0.44	0.44
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	184	78	26	26	63	105	20	1095	12	463	884	205
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	10.0	4.5	1.7	1.6	3.9	6.5	0.6	26.6	0.4	15.9	20.3	9.6
Cycle Q Clear(g_c), s	10.0	4.5	1.7	1.6	3.9	6.5	0.6	26.6	0.4	15.9	20.3	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	264	257	219	204	147	375	344	1788	813	542	2303	1030
V/C Ratio(X)	0.70	0.30	0.12	0.13	0.43	0.28	0.06	0.61	0.01	0.85	0.38	0.20
Avail Cap(c_a), veh/h	264	388	330	309	388	579	456	1788	813	717	2303	1030
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
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	46.0	46.5	45.3	49.0	52.7	37.5	13.3	21.3	14.3	52.3	17.5	14.5
Incr Delay (d2), s/veh	7.7	0.7	0.2	0.3	2.0	0.4	0.1	1.6	0.0	7.7	0.5	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	1.6	2.4	0.8	0.8	2.1	2.9	0.3	13.3	0.2	8.1	10.1	4.3
LnGrp Delay(d),s/veh	53.7	47.2	45.6	49.3	54.6	37.9	13.3	22.9	14.3	60.0	18.0	15.0
LnGrp LOS	D	D	D	D	D	D	B	C	B	E	B	B
Approach Vol, veh/h		288			194			1127			1552	
Approach Delay, s/veh		51.2			44.8			22.6			30.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.9	66.6	7.9	21.6	7.4	83.1	15.0	14.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	25.0	40.0	10.0	25.0	10.0	55.0	10.0	25.0
Max Q Clear Time (g_c+I1), s	17.9	28.6	3.6	6.5	2.6	22.3	12.0	8.5
Green Ext Time (p_c), s	1.0	9.2	0.0	1.0	0.0	20.6	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.3
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	0	1056	802	51
Future Vol, veh/h	0	2	0	1056	802	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2	0	1112	844	54

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	449	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	557	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	557	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	557	-	-
HCM Lane V/C Ratio	-	0.004	-	-
HCM Control Delay (s)	-	11.5	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	275	62	8	260	6	35	0	5	4	0	17
Future Vol, veh/h	30	275	62	8	260	6	35	0	5	4	0	17
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	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	289	65	8	274	6	37	0	5	4	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	280	0	0	355	0	0	688	682	322	682	712	277
Stage 1	-	-	-	-	-	-	385	385	-	294	294	-
Stage 2	-	-	-	-	-	-	303	297	-	388	418	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1283	-	-	1204	-	-	360	372	719	364	358	762
Stage 1	-	-	-	-	-	-	638	611	-	714	670	-
Stage 2	-	-	-	-	-	-	706	668	-	636	591	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1283	-	-	1204	-	-	343	360	719	353	347	762
Mov Cap-2 Maneuver	-	-	-	-	-	-	343	360	-	353	347	-
Stage 1	-	-	-	-	-	-	622	596	-	696	666	-
Stage 2	-	-	-	-	-	-	685	664	-	616	576	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	16.1	11
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	367	1283	-	-	1204	-	-	624
HCM Lane V/C Ratio	0.115	0.025	-	-	0.007	-	-	0.035
HCM Control Delay (s)	16.1	7.9	-	-	8	-	-	11
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	220	42	29	231	11	28	0	47	6	0	14
Future Vol, veh/h	25	220	42	29	231	11	28	0	47	6	0	14
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	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	232	44	31	243	12	29	0	49	6	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	255	0	0	276	0	0	623	622	254	641	638	249
Stage 1	-	-	-	-	-	-	306	306	-	310	310	-
Stage 2	-	-	-	-	-	-	317	316	-	331	328	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1310	-	-	1287	-	-	398	403	785	388	394	790
Stage 1	-	-	-	-	-	-	704	662	-	700	659	-
Stage 2	-	-	-	-	-	-	694	655	-	682	647	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1310	-	-	1287	-	-	378	385	785	351	377	790
Mov Cap-2 Maneuver	-	-	-	-	-	-	378	385	-	351	377	-
Stage 1	-	-	-	-	-	-	690	649	-	686	643	-
Stage 2	-	-	-	-	-	-	665	639	-	626	634	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.8	12.5	11.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	560	1310	-	-	1287	-	-	574
HCM Lane V/C Ratio	0.141	0.02	-	-	0.024	-	-	0.037
HCM Control Delay (s)	12.5	7.8	-	-	7.9	-	-	11.5
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	505	21	0	185	4	0	0	3	0	0	1
Future Vol, veh/h	0	505	21	0	185	4	0	0	3	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	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	532	22	0	195	4	0	0	3	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	532	-	-	197
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	547	0	0	844
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	547	-	-	844
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	11.6	9.3
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	547	-	-	-	-	844
HCM Lane V/C Ratio	0.006	-	-	-	-	0.001
HCM Control Delay (s)	11.6	-	-	-	-	9.3
HCM Lane LOS	B	-	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	480	21	25	165	36	23	3	12	24	2	4
Future Vol, veh/h	8	480	21	25	165	36	23	3	12	24	2	4
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	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	505	22	26	174	38	24	3	13	25	2	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	212	0	0	527	0	0	781	797	516	786	789	193
Stage 1	-	-	-	-	-	-	533	533	-	245	245	-
Stage 2	-	-	-	-	-	-	248	264	-	541	544	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1358	-	-	1040	-	-	312	319	559	310	323	849
Stage 1	-	-	-	-	-	-	531	525	-	759	703	-
Stage 2	-	-	-	-	-	-	756	690	-	525	519	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1358	-	-	1040	-	-	302	309	559	294	313	849
Mov Cap-2 Maneuver	-	-	-	-	-	-	302	309	-	294	313	-
Stage 1	-	-	-	-	-	-	528	522	-	755	685	-
Stage 2	-	-	-	-	-	-	731	673	-	507	516	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.9	16.5	17.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	354	1358	-	-	1040	-	-	324
HCM Lane V/C Ratio	0.113	0.006	-	-	0.025	-	-	0.097
HCM Control Delay (s)	16.5	7.7	-	-	8.6	-	-	17.3
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.3

Intersection	
Int Delay, s/veh	120.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	6	9	23	6	63	13	1425	26	97	1450	49
Future Vol, veh/h	26	6	9	23	6	63	13	1425	26	97	1450	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	6	9	24	6	66	14	1500	27	102	1526	52

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2512	3258	763	2498	3258	750	1526	0	0	1500	0	0
Stage 1	1731	1731	-	1527	1527	-	-	-	-	-	-	-
Stage 2	781	1527	-	971	1731	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 14	9	347	~ 15	9	354	433	-	-	443	-	-
Stage 1	91	141	-	123	178	-	-	-	-	-	-	-
Stage 2	354	178	-	271	141	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 2	7	347	~ 3	7	354	433	-	-	443	-	-
Mov Cap-2 Maneuver	~ 2	7	-	~ 3	7	-	-	-	-	-	-	-
Stage 1	88	109	-	119	172	-	-	-	-	-	-	-
Stage 2	268	172	-	191	109	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 5917.7	$ 1535.6	0.1	0.9
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	433	-	-	2	17	3	67	443	-	-
HCM Lane V/C Ratio	0.032	-	-	13.684	0.929	8.07	1.084	0.23	-	-
HCM Control Delay (s)	13.6	-	-	$ 9044.1	$ 498.3	$ 5420.4	240.6	15.5	-	-
HCM Lane LOS	B	-	-	F	F	F	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-	5.2	2.4	4.6	5.6	0.9	-	-

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