LSC TRANSPORTATION CONSULTANTS, INC.

1889 York Street
Denver, CO 80206
(303) 333-1105
FAX (303) 333-1107
E-mail: lsc@lscdenver.com

August 27, 2024

Mr. Mike Cooper
Boulder Creek Neighborhoods
712 Main Street
Louisville, CO 80027

Re: Kestrel Subdivision
Brighton, CO
LSC #240040

Dear Mr. Cooper:

In response to your request, LSC Transportation Consultants, Inc. has prepared this updated traffic impact analysis for the proposed Kestrel Subdivision development to address City comments. As shown on Figure 1, the site is located north of E. 120th Avenue and east of Peoria Street in Brighton, 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 typical weekday site-generated traffic volume projections for the site; the assignment of the projected traffic volumes to the area roadways; the projected background and resulting total traffic volumes on the area roadways; the site's projected traffic impacts; and any recommended roadway improvements to mitigate growth in background traffic or from the impact of the site.

LAND USE AND ACCESS

The site is proposed to include about 174 single-family detached dwelling units. Access is proposed from E. 120th Avenue and Peoria Street as shown in the conceptual site plan in Figure 2.

An emergency vehicle access (EVA) is proposed to the north. The property to the north only has access to E. 124th Avenue so a public cross access to this property would likely become their main access with a large cut-through traffic volume passing through the site. An EVA is provided to avoid cut-through traffic concerns. A non-motorized pedestrian/bicycle connection would be appropriate in this location.

ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

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

- **E. 120th Avenue** is an east-west, two-lane major arterial roadway south of the site. The intersection with Peoria Street is signalized with auxiliary lanes and the intersection with Revere Street is stop-sign controlled. The posted speed limit in the vicinity of the site is 45 mph. It is assumed to be a full four-lane section by 2044 and potentially a six-lane section for buildout conditions.

- **Peoria Street** is a north-south, two-lane collector roadway west of the site. The intersections with E. 120th Avenue is signalized with auxiliary lanes. The posted speed limit in the vicinity of the site is 45 mph.

- **Revere Street** is a north-south, two-lane roadway east of the site that serves Orchard Church and Prairie View High School. The intersection with E. 120th Avenue is stop-sign controlled.

Existing Traffic Conditions

Figure 3 shows the existing traffic volumes, existing traffic control, and lane geometry 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 January, 2024.

2028 and 2044 Background Traffic

Figure 4 shows the estimated 2028 background traffic and Figure 5 shows the estimated 2044 background traffic. An annual growth rate of 2.9 percent was assumed for E. 120th Avenue and Peoria Street based on the DRCOG 2020 daily traffic volume of 11,000 vpd and the RTD 2050 projection of 26,000 vpd.

Existing, 2028, and 2044 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 the study area were analyzed as appropriate to determine the existing, 2028, and 2044 background levels of service using Synchro. Table 1 shows the level of service analysis results. The level of service reports are attached.

1. **Peoria Street/Thunderhawk Place:** All movements at this unsignalized intersection currently operate at LOS "B" during both morning and afternoon peak-hours and are expected to do so through 2028. All movements are expected to operate at LOS "C" during both morning and afternoon peak-hours through 2044.

2. **Thunderhawk Place/Site Access:** This intersection was analyzed only in the total traffic scenarios.

3. **E. 120th Avenue/Peoria Street:** This signalized intersection currently operates at LOS "C" during both morning and afternoon peak-hours and is expected to operate at LOS "D" or better through 2044. The northbound approach will likely operate at LOS "F" until the approach is widened by others or additional green time is provided to the approach over time as appropriate. The existing traffic signal will need to be modified over time to accommodate roadway widening.

4. **E. 120th Avenue/Site Access:** All movements at this stop-sign controlled three-quarter movement intersection are expected to operate at LOS "C" or better during both morning and afternoon peak-hours through 2044.

5. **E. 120th Avenue/Revere Street:** All movements at this stop-sign controlled intersection currently operate at LOS "C" or better during both morning and afternoon peak-hours and are expected to do so through 2044 with the following exception: The southbound left-turn movement operates at LOS "F" and will continue to do so through 2044.

TRIP GENERATION

Table 1 shows the estimated average weekday, morning peak-hour, and afternoon peak-hour trip generation for the proposed site for three separate scenarios based on the rates from *Trip Generation, 11th Edition, 2021* by the Institute of Transportation Engineers (ITE).

The site is projected to generate about 1,641 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 32 vehicles would enter and about 90 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 103 vehicles would enter and about 61 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

Figure 7 shows the site-generated traffic volumes which are the directional distribution percentages (from Figure 6) applied to the trip generation estimate (from Table 2).

2028 AND 2044 TOTAL TRAFFIC

Figure 8 shows the 2028 total traffic which is the sum of the 2028 background traffic volumes (from Figure 4) and the site-generated traffic volumes (from Figure 7). Figure 8 also shows the 2028 total traffic lane geometry and traffic control.

Figure 9 shows the 2044 total traffic which is the sum of the 2044 background traffic volumes (from Figure 5) and the site-generated traffic volumes (from Figure 7). Figure 9 also shows the 2044 total traffic lane geometry and traffic control.

PROJECTED LEVELS OF SERVICE

The intersections in the study area were analyzed to determine the 2028 and 2044 total levels of service. Table 1 shows the level of service analysis results for each movement or lane group. The level of service reports are attached.

1. **Peoria Street/Thunderhawk Place:** All movements at this unsignalized intersection are expected to operate at LOS "D" or better during both morning and afternoon peak-hours through 2044. Drivers making the westbound to southbound left-turn movement to eventually head west on E. 120th Avenue will have the option to use the proposed three-quarter access directly to E. 120th Avenue.

2. **Thunderhawk Place/Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2044.

3. **E. 120th Avenue/Peoria Street:** This signalized intersection is expected to operate at LOS "D" or better during both morning and afternoon peak-hours through 2044. The site-generated traffic is expected to comprise 5.2 percent of 2044 side road traffic - this would be an appropriate contribution from the applicant for future traffic signal modification.

4. **E. 120th Avenue/Site Access:** All movements at this stop-sign controlled three-quarter movement intersection are expected to operate at LOS "C" or better during both morning and afternoon peak-hours through 2044.

5. **E. 120th Avenue/Revere Street:** All movements at this stop-sign controlled intersection are expected to operate at LOS "C" or better during both morning and afternoon peak-hours through 2044 with the following exception: The southbound left-turn movement operates at LOS "F" and will continue to do so through 2044.

TRAFFIC SIGNAL WARRANT ANALYSIS

Figures 10 and 11 show the intersection of Peoria Street/Thunderhawk Place is not expected to meet a peak-hour or four-hour traffic signal warrant through 2044.

CONCLUSIONS AND RECOMMENDATIONS

Land Use and Access

1. The site is proposed to include about 174 single-family detached dwelling units. Access is proposed from E. 120th Avenue and Peoria Street as shown in the conceptual site plan in Figure 2.

2. An emergency vehicle access (EVA) is proposed to the north. The property to the north only has access to E. 124th Avenue so a public cross access to this property would likely become their main access with a large cut-through traffic volume passing through the site. An EVA is provided to avoid cut-through traffic concerns. A non-motorized pedestrian/ bicycle connection would be appropriate in this location.

Trip Generation

3. The site is projected to generate about 1,641 vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, about 32 vehicles would enter and about 90 vehicles would exit the site. During the afternoon peak-hour, about 103 vehicles would enter and about 61 vehicles would exit.

Projected Levels of Service

4. The signalized E. 120th Avenue/Peoria Street intersection is expected to operate at an overall LOS "D" or better through 2044 with the recommended improvements. The site-generated traffic is expected to comprise 5.2 percent of 2044 side road traffic - this would be an appropriate contribution from the applicant for future traffic signal modification.

5. All movements at the unsignalized intersections analyzed are expected to operate at acceptable levels of service during both morning and afternoon peak-hours through 2044 with the following exception: The southbound left-turn movement at the E. 120th Avenue/ Revere Street intersection operates at LOS "F" and will continue to do so through 2044.

Conclusions

6. The impact of the Kestrel Subdivision development can be accommodated by the existing and planned roadway network with the following recommendations.

Recommendations

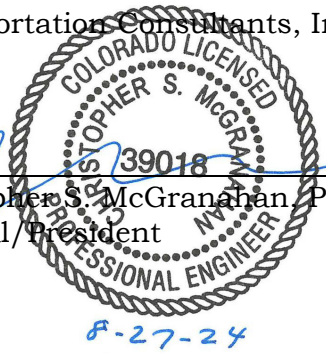
7. The recommended improvements are shown in Figures 8 and 9. Details on recommended turn lane lengths and traffic signal contribution percentages are provided in Figure 8.

* * * * *

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

Respectfully submitted,

LSC Transportation Consultants, Inc.



By: _____
Christopher S. McGranahan, P.E.
Principal/President

CSM/wc

Enclosures: Tables 1 and 2
Figures 1 - 11
Traffic Count Reports
Level of Service Definitions
Level of Service Reports

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Table 1
Intersection Levels of Service Analysis
Kestrel Subdivision
Brighton, CO
LSC #240040; August, 2024

Intersection # and Location	Traffic Control	Existing Traffic Level of Service AM	Existing Traffic Level of Service PM	2028 Background Traffic Level of Service AM	2028 Background Traffic Level of Service PM	2028 Total Traffic Level of Service AM	2028 Total Traffic Level of Service PM	2028 Total Traffic Mitigated Level of Service AM	2044 Background Traffic Level of Service AM	2044 Background Traffic Level of Service PM	2044 Total Traffic Level of Service AM	2044 Total Traffic Level of Service PM
1) Peoria Street/Thunderhawk Place	TWSC											
WB Approach		B	B	B	B	--	--		C	C	--	--
WB Left		--	--	--	--	C	B		--	--	D	C
WB Right		--	--	--	--	A	B		--	--	B	B
SB Left/Through		A	A	A	A	A	A		A	A	A	A
Critical Movement Delay (sec./veh.)		13.5	12.2	13.9	12.8	20.8	14.3		20.3	19.9	32.0	24.2
2) Thunderhawk Place/Site Access	TWSC											
NB Approach		--	--	--	--	B	B		--	--	B	B
WB Left/Through		--	--	--	--	A	A		--	--	A	A
Critical Movement Delay (sec./veh.)		--	--	--	--	11.5	10.0		--	--	11.6	10.1
3) E. 120th Avenue/Peoria Street	Signalized											
EB Left		B	B	B	B	B	B	B	B	B	B	B
EB Through/Right or Through		C	B	C	C	C	C	D	C	B	C	B
EB Right		--	--	--	--	--	--	--	B	B	B	B
WB Left		B	B	C	B	C	C	C	C	B	C	B
WB Through		B	B	B	B	C	C	C	B	B	B	B
WB Right		B	B	B	B	B	B	B	B	B	B	B
NB Approach		E	D	F	D	F	D	D	--	--	--	--
NB Left		--	--	--	--	--	--	--	C	C	C	C
NB Through		--	--	--	--	--	--	--	D	D	D	D
NB Right		--	--	--	--	--	--	--	D	D	D	D
SB Approach		C	C	C	C	--	--	--	--	--	--	--
SB Left		--	--	--	--	C	C	C	C	D	C	C
SB Through/Right or Through		--	--	--	--	C	C	C	D	D	D	D
SB Right		--	--	--	--	--	--	--	C	D	C	D
Entire Intersection Delay (sec /veh)		30.4	22.2	35.8	25.1	35.9	28.7	33.9	25.9	21.4	26.8	22.3
Entire Intersection LOS		C	C	D	C	D	C	C	C	C	C	C
4) E. 120th Avenue/Site Access	TWSC											
EB Left	Three-	--	--	A	B	A	B		B	B	B	B
SB Right	Quarter	--	--	C	C	C	C		B	C	C	C
Critical Movement Delay (sec./veh.)		--	--	15.0	17.6	16.4	19.1		14.0	16.1	15.1	17.3
5) E. 120th Avenue/Revere Street	TWSC											
EB Left		B	A	B	B	B	B		C	B	C	B
SB Left		F	F	F	F	F	F		F	F	F	F
SB Right		C	C	C	C	C	C		C	C	C	C
Critical Movement Delay (sec./veh.)		115.3	67.9	>240	>240	>240	>240		>240	>240	>240	>240

(1) The proposed mitigation is minor adjustments to signal timings when appropriate.

Table 2
ESTIMATED TRAFFIC GENERATION
Kestrel Subdivision
Brighton, CO
LSC #240040; August, 2024

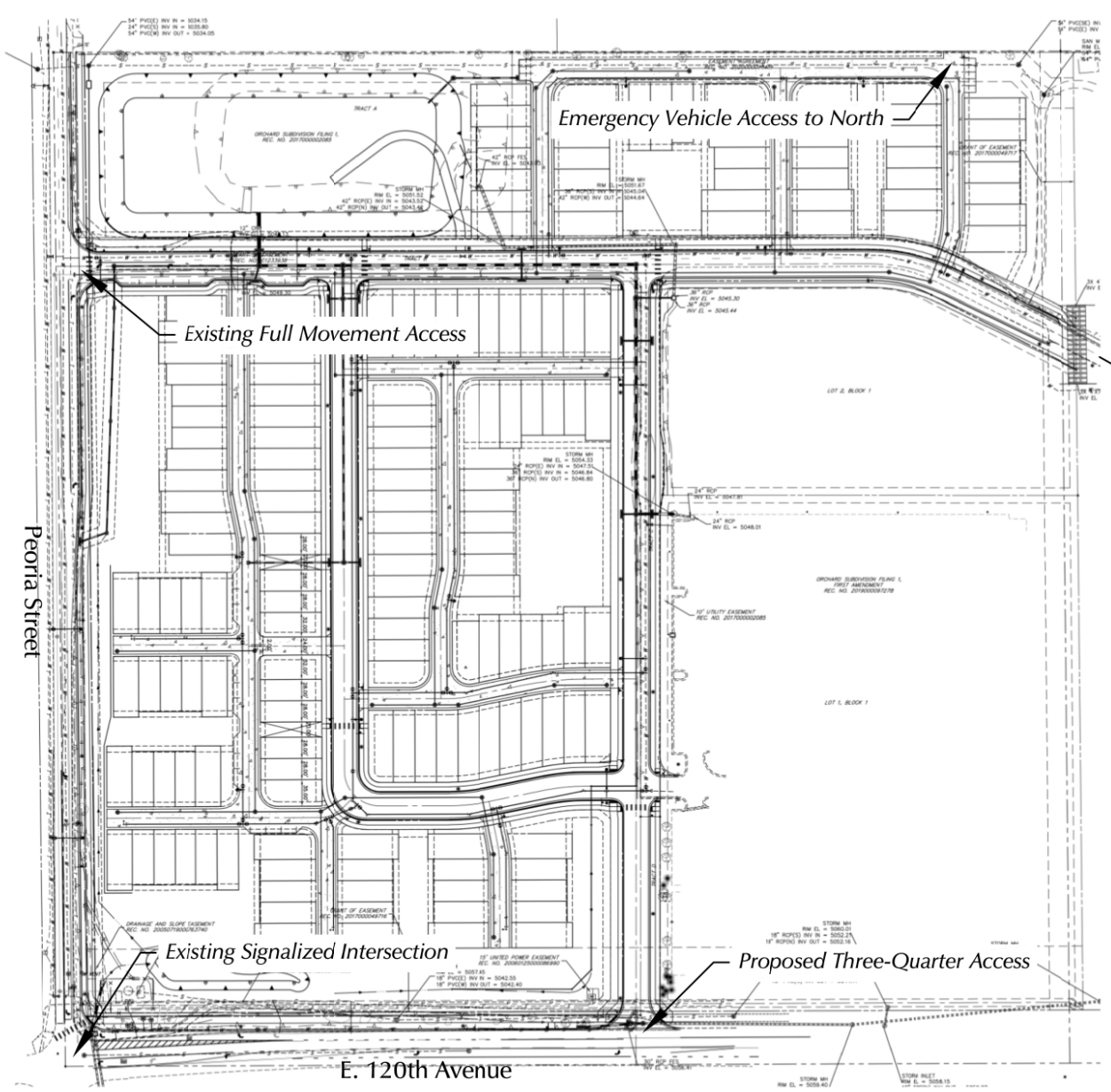
		Trip Generation Rates [1]					Total Trips Generated				
		Average	AM Peak-Hour		PM Peak-Hour		Average	AM Peak-Hour		PM Peak-Hour	
Trip Generating Category	Quantity	Weekday	In	Out	In	Out	Weekday	In	Out	In	Out
CURRENTLY PROPOSED LAND USE											
Single-Family Detached Housing [2]	174 DU [3]	9.43	0.182	0.518	0.592	0.348	1,641	32	90	103	61

Notes:
(1) Source: *Trip Generation*, Institute of Transportation Engineers, 11th Edition, 2021
(2) ITE Land Use No. 210 - Single-Family Detached Housing
(3) DU - Dwelling Units

Figure 1

Vicinity Map

Kestrel Subdivision (LSC #240040)

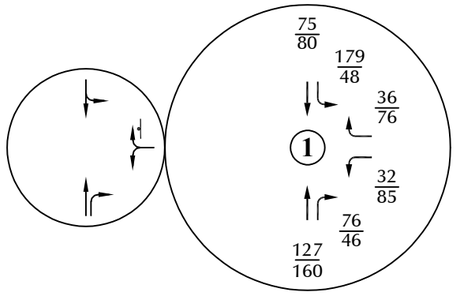


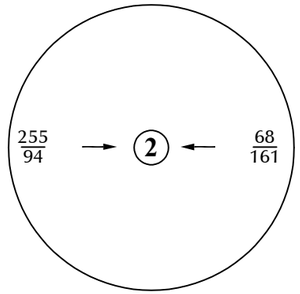
Approximate Scale
Scale: NTS

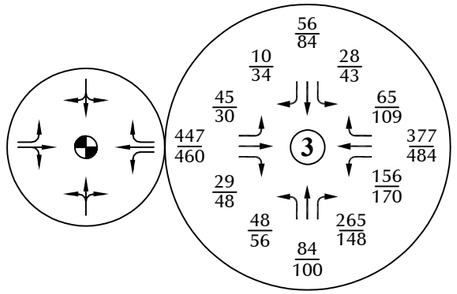
Figure 2

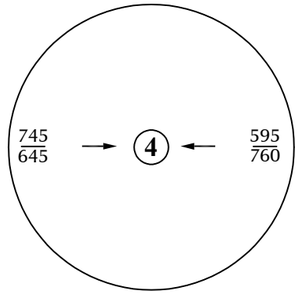
Site Plan

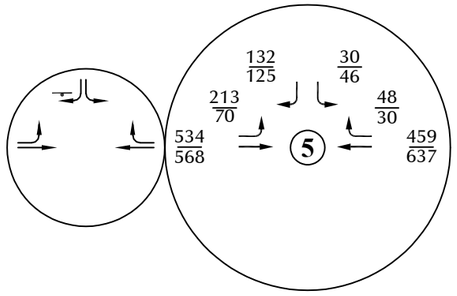
Kestrel Subdivision (LSC #240040)











LEGEND:

= Stop Sign

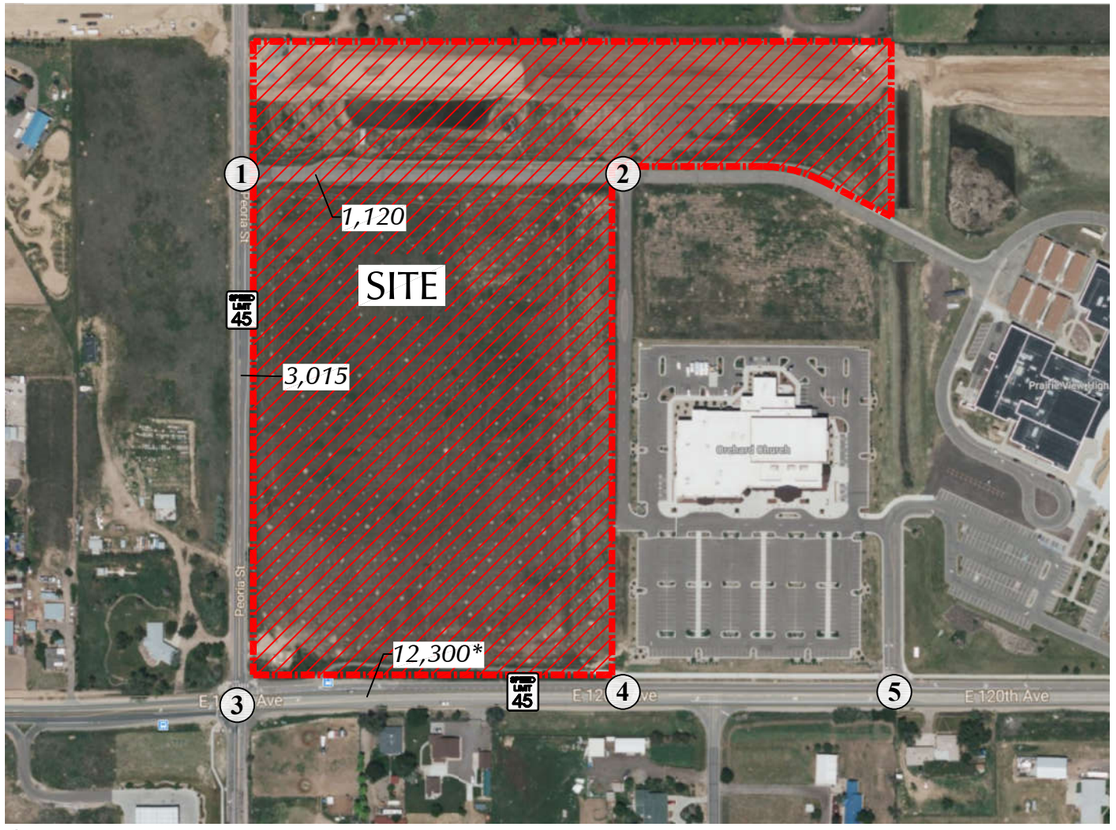
= Traffic Signal

= Speed Limit

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

1,000 = Average Daily Traffic

Approximate Scale
Scale: 1"=300'



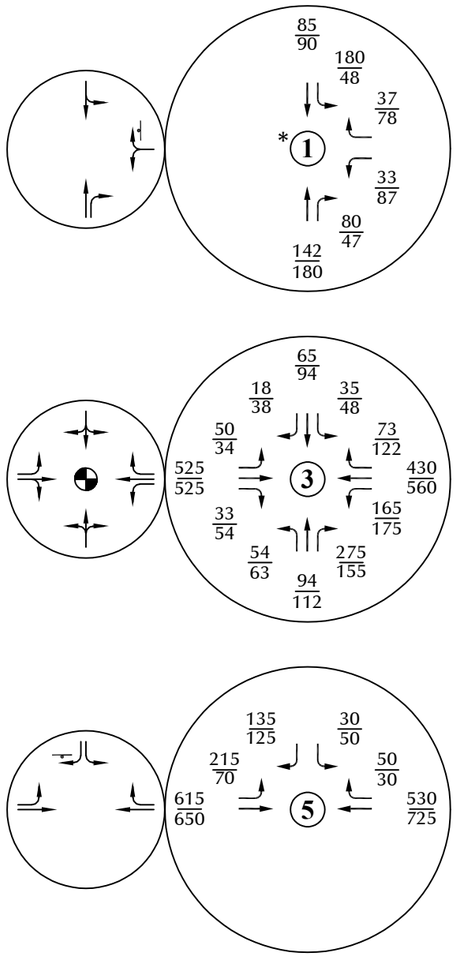
* Based on factoring between the DRCOG daily volumes of 11,000vpd in 2020 and 26,000vpd projected by 2050.

Figure 3

Existing Traffic, Lane Geometry and Traffic Control

Kestrel Subdivision (LSC #240040)

LSC TRANSPORTATION CONSULTANTS, INC.



Note: An annual growth rate of 2.9 percent was assumed for E. 120th Avenue and Peoria Street based on the DRCOG 2020 daily traffic volume of 11,000vpd and the RTD 2050 projection of 26,000vpd.

LEGEND:

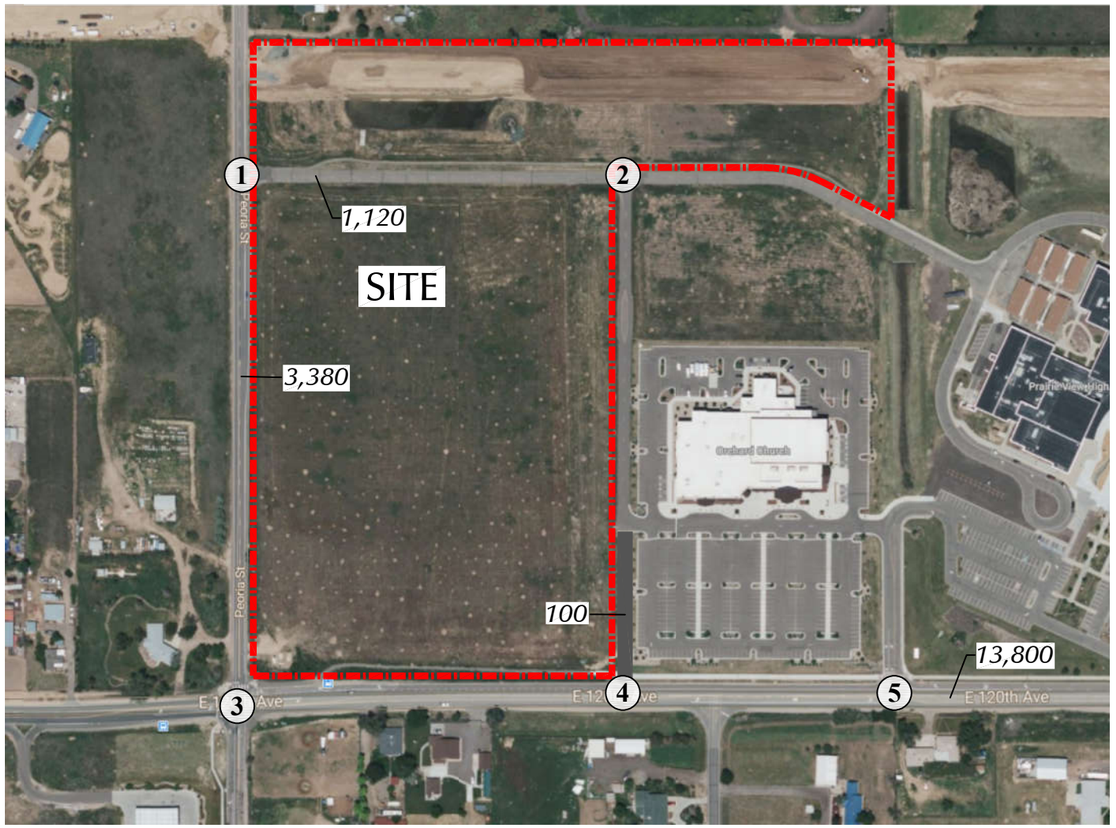
= Stop Sign

= Traffic Signal

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

1,000 = Average Daily Traffic

Approximate Scale
Scale: 1"=300'



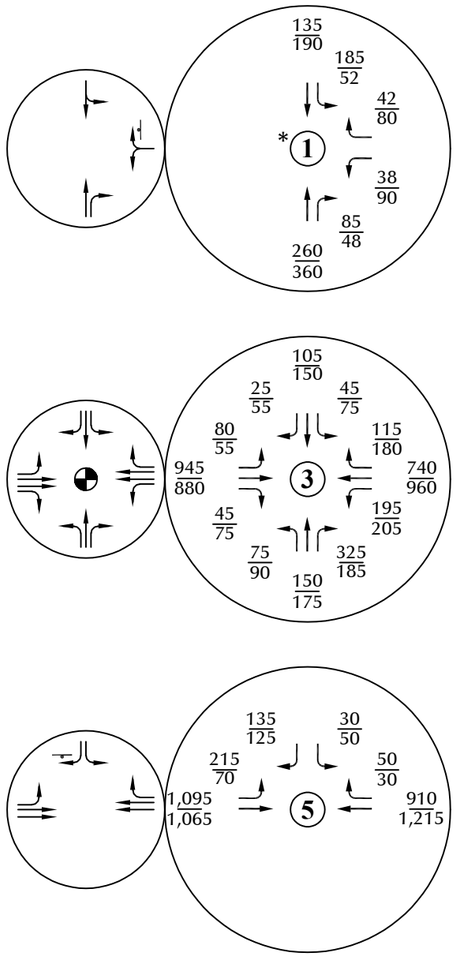
* The eastern leg of Intersection #1 traffic volumes were grown at an annual rate of only one percent because the movement is heavily impacted by the existing school campuses to the east.

Figure 4

Year 2028 Background Traffic, Lane Geometry and Traffic Control

Kestrel Subdivision (LSC #240040)

LSC TRANSPORTATION CONSULTANTS, INC.



Note: An annual growth rate of 2.9 percent was assumed for E. 120th Avenue and Peoria Street based on the DRCOG 2020 daily traffic volume of 11,000vpd and the RTD 2050 projection of 26,000vpd.

LEGEND:

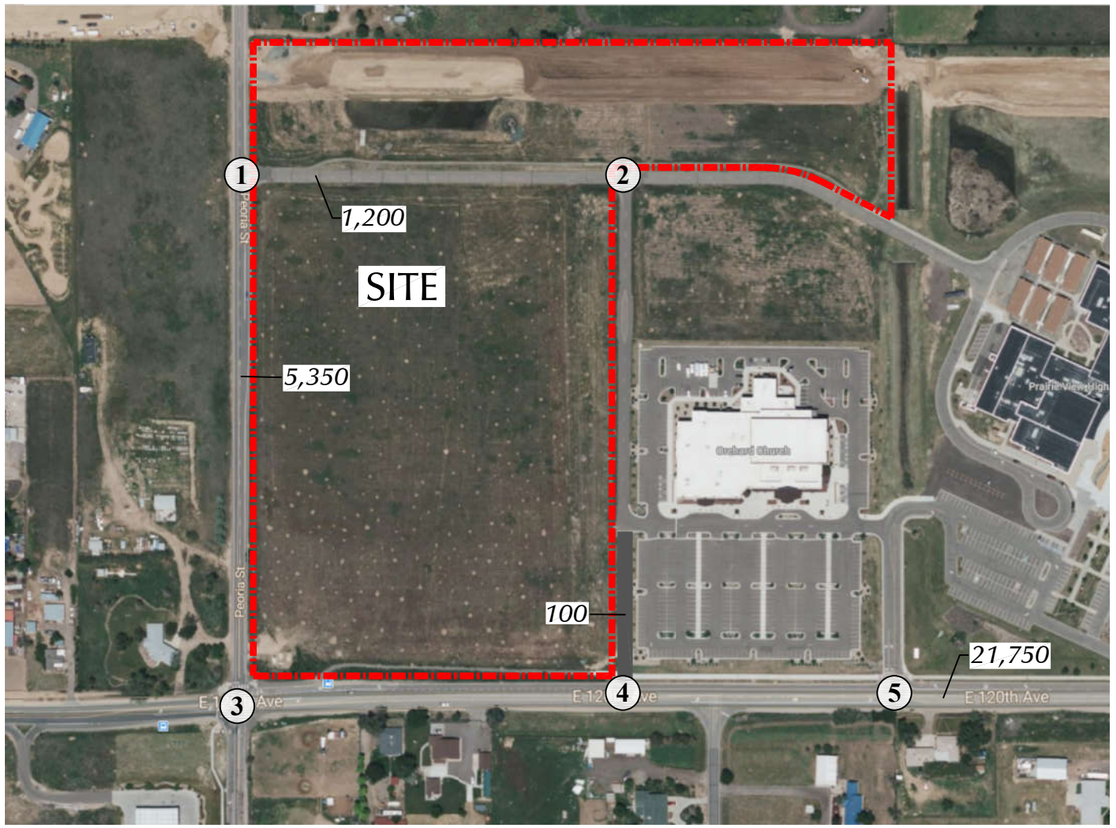
= Stop Sign

= Traffic Signal

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

1,000 = Average Daily Traffic

Approximate Scale
Scale: 1"=300'



* The eastern leg of Intersection #1 traffic volumes were grown at an annual rate of only one percent because the movement is heavily impacted by the existing school campuses to the east.

Figure 5

Year 2044 Background Traffic, Lane Geometry and Traffic Control

Kestrel Subdivision (LSC #240040)

LSC TRANSPORTATION CONSULTANTS, INC.

Approximate Scale
Scale: 1"=1,000'

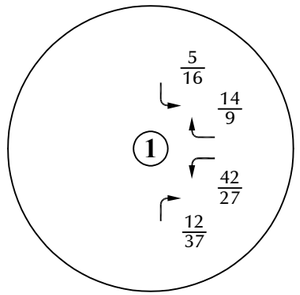
LEGEND:

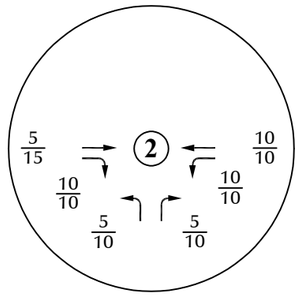
65% = Percent Directional Distribution

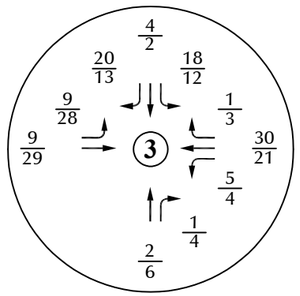
Figure 6

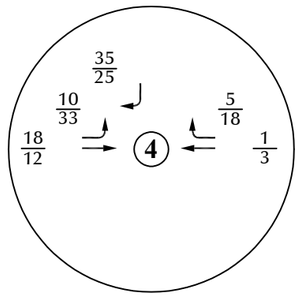
Directional Distribution of Site-Generated Traffic

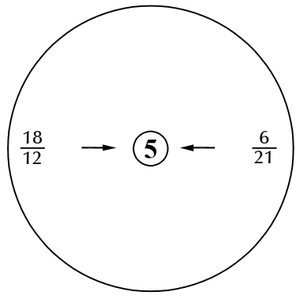
Kestrel Subdivision (LSC #240040)









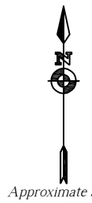


Note: The estimated peak hour volumes of Intersection #3 are expected to comprise about 5.2 percent of the sideroad 2044 total traffic in Figure 9. This would be an appropriate contribution percentage for future traffic signal modification costs.

LEGEND:

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

1,000 = Average Daily Traffic



Approximate Scale
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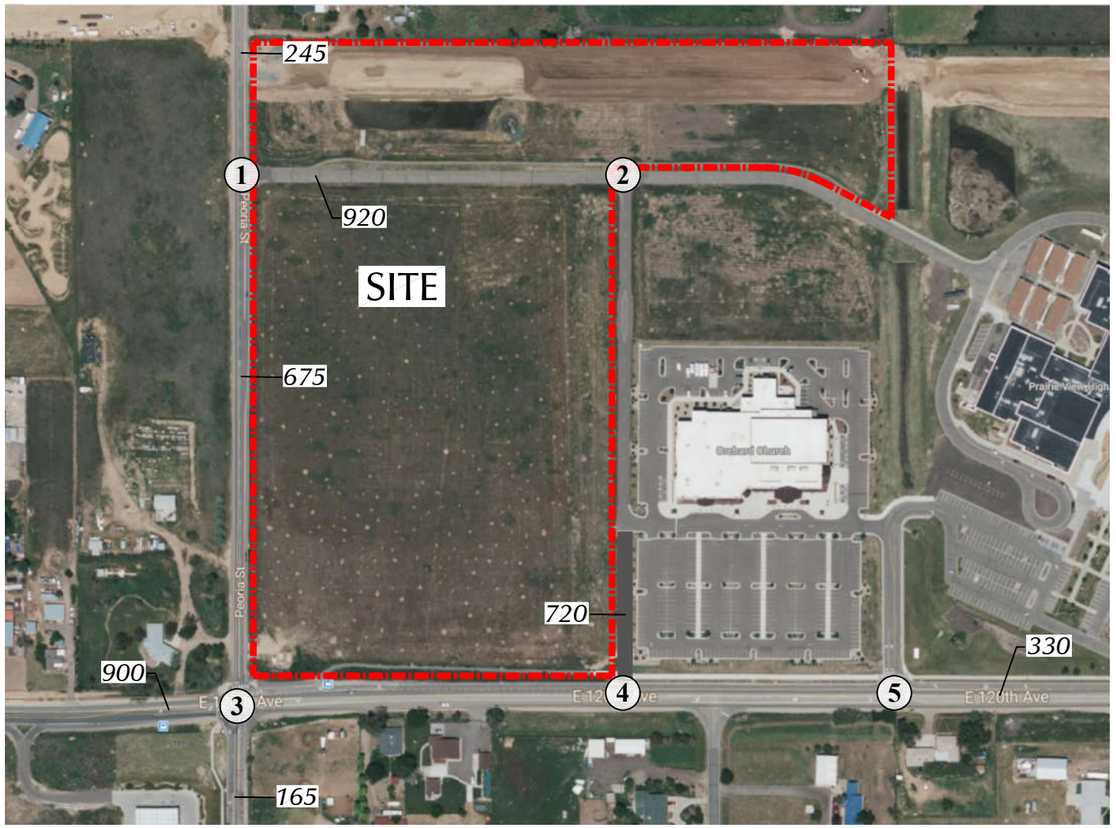
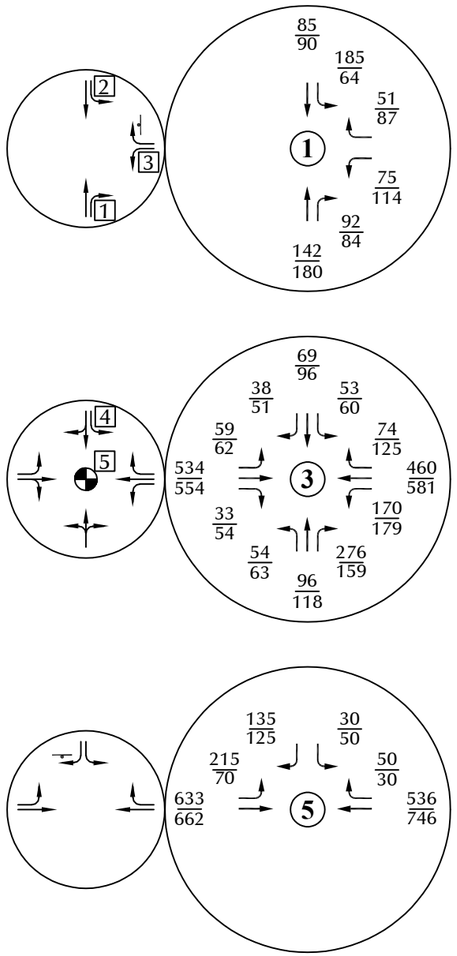


Figure 7

Assignment of Site-Generated Traffic

Kestrel Subdivision (LSC #240040)

LSC TRANSPORTATION CONSULTANTS, INC.



Notes:
1. These volumes are the sum of the volumes in Figures 4 and 7.
2. The estimated peak hour volumes of Intersection #3 are expected to comprise about 5.2 percent of the sideroad 2044 total traffic in Figure 9. This would be an appropriate contribution percentage for future traffic signal modification costs.

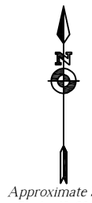
LEGEND:

= Stop Sign

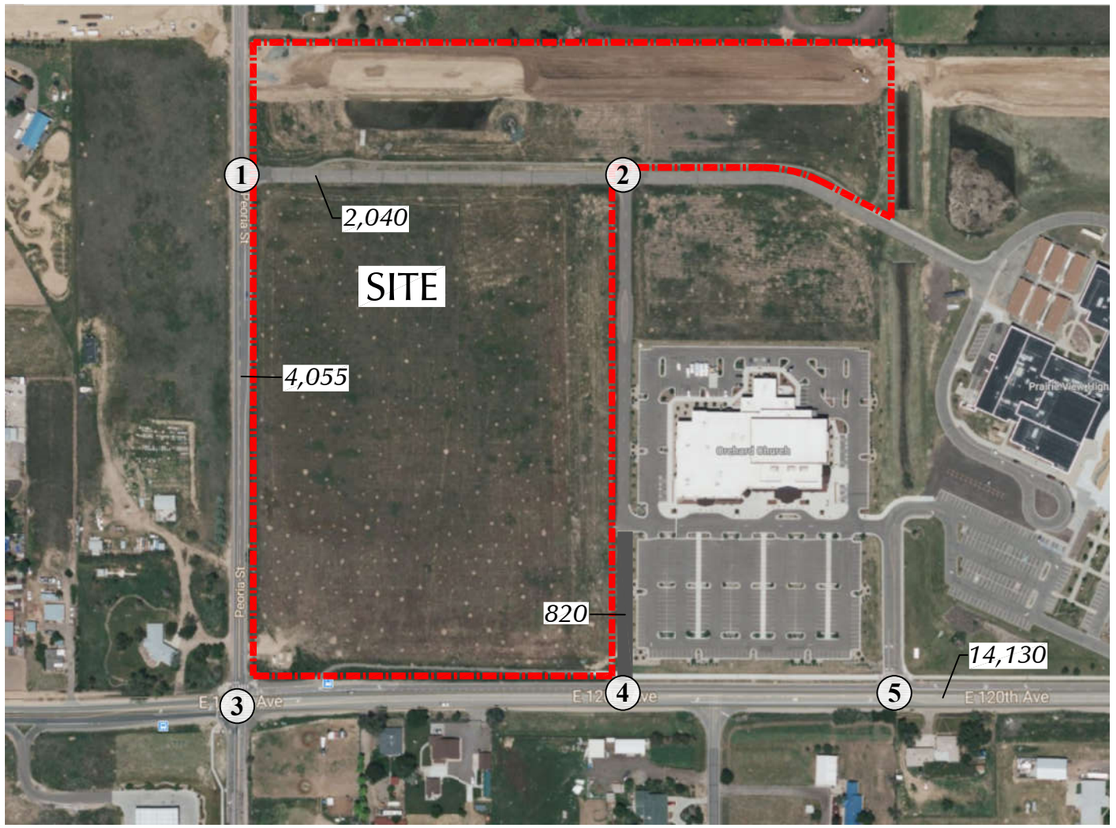
= Traffic Signal

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

1,000 = Average Daily Traffic



Approximate Scale
Scale: 1"=300'



Recommended Improvements:

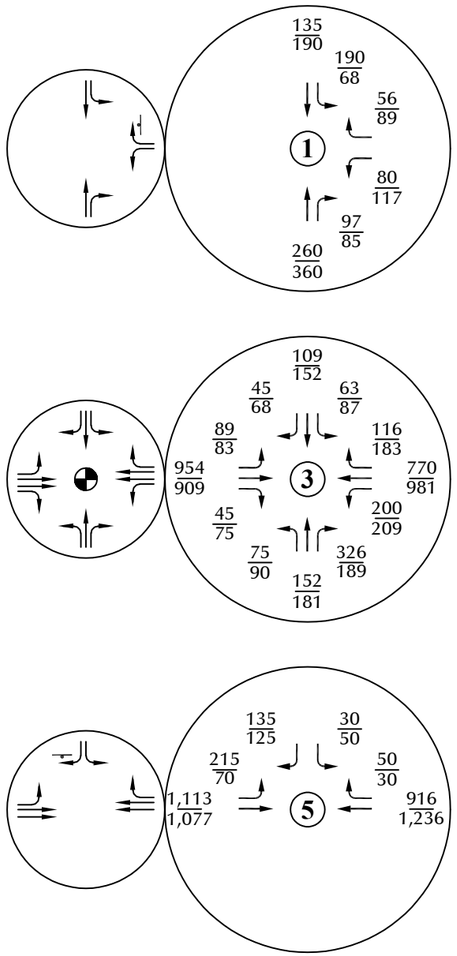
1. NB RT = 275 feet + 160-foot transition taper
2. SB LT = 275 feet + 160-foot transition taper
3. WB LT = 100 feet + 100-foot transition taper
4. SB LT = 325 feet + 160-foot transition taper
5. Traffic Signal Modification - details to be determined during construction plan development
6. EB LT = Restripe to provide 275 feet + 160-foot transition taper
7. WB RT = Existing Continuous Lane

Figure 8

Year 2028 Total Traffic, Lane Geometry and Traffic Control

Kestrel Subdivision (LSC #240040)

LSC TRANSPORTATION CONSULTANTS, INC.



Notes:
1. These volumes are the sum of the volumes in Figures 5 and 7.
2. The estimated peak hour volumes of Intersection #3 are expected to comprise about 5.2 percent of the sideroad 2044 total traffic in Figure 9. This would be an appropriate contribution percentage for future traffic signal modification costs.

LEGEND:

= Stop Sign

= Traffic Signal

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

1,000 = Average Daily Traffic

N

Approximate Scale
Scale: 1"=300'

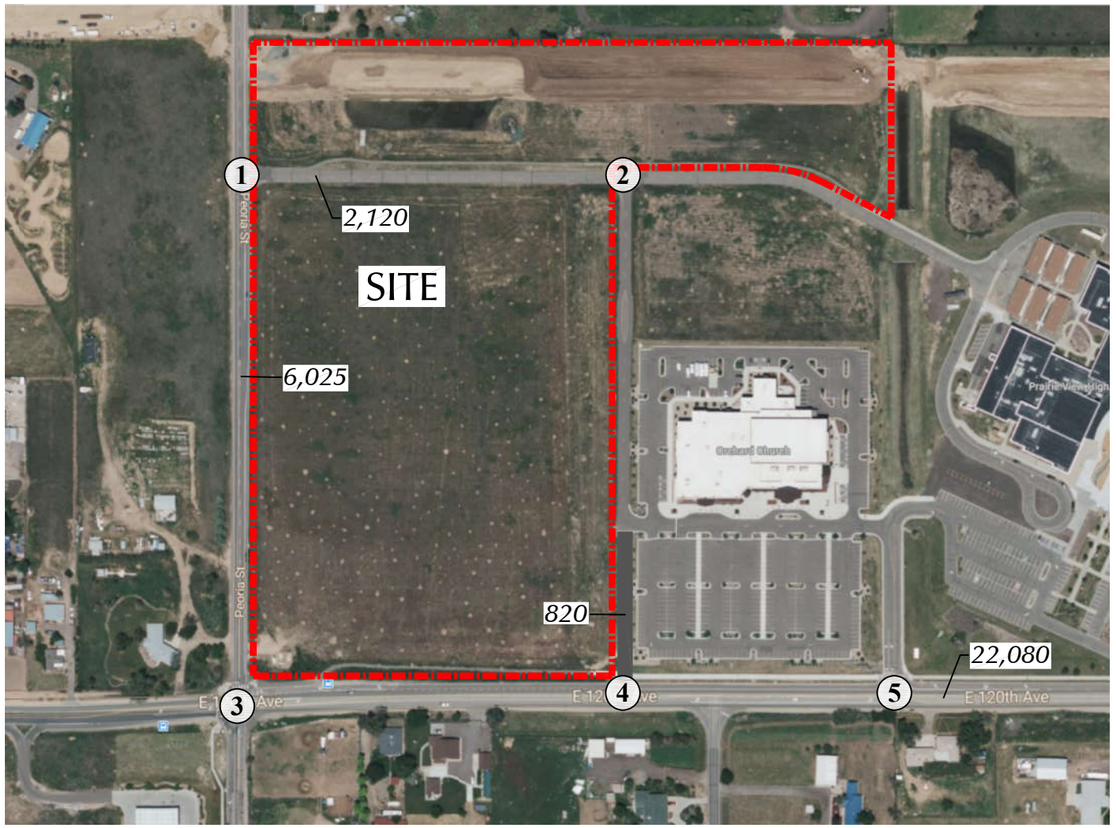


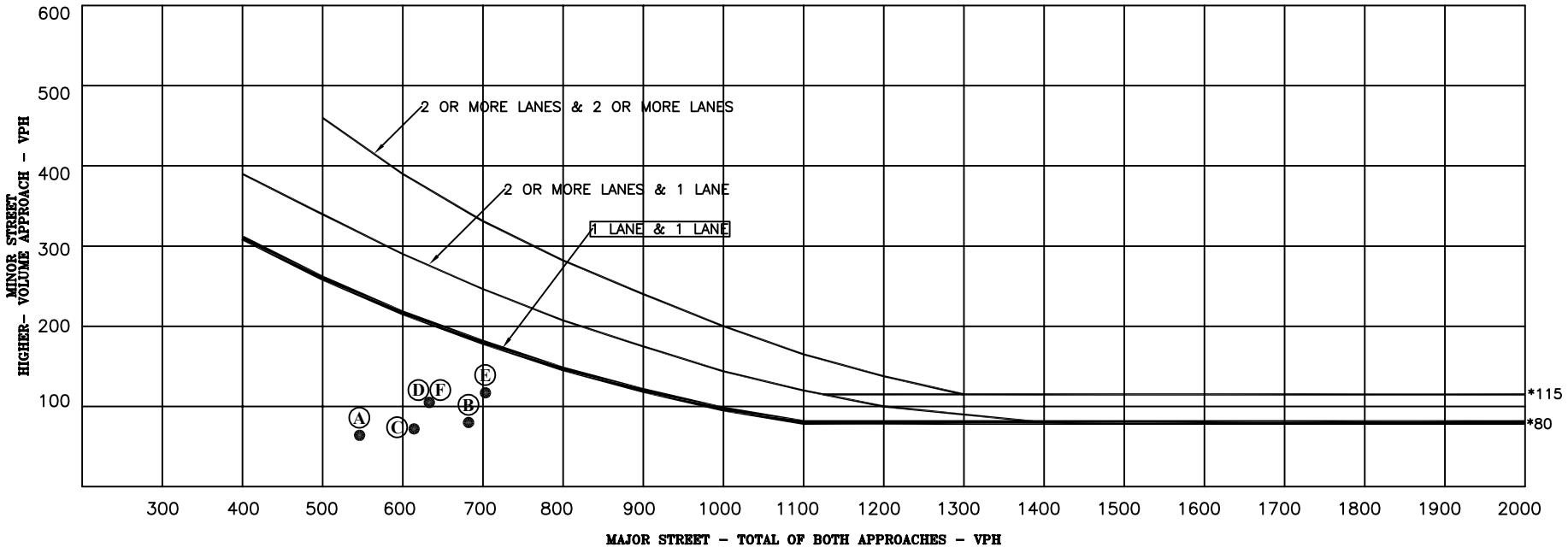
Figure 9

Year 2044 Total Traffic, Lane Geometry and Traffic Control

Kestrel Subdivision (LSC #240040)

LSC TRANSPORTATION CONSULTANTS, INC.

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



* Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

2044 Total Traffic (from Figure 9)

Ⓐ Hour Before AM Peak Hour (0.80%) = (546,64)
Ⓑ AM Peak Hour = (682,80)
Ⓒ Hour After AM Peak Hour (0.90%) = (614,72)
Ⓓ Hour Before PM Peak Hour (90%) = (633,105)
Ⓔ PM Peak Hour = (703,117)
Ⓕ Hour After PM Peak Hour (90%) = (633,105)

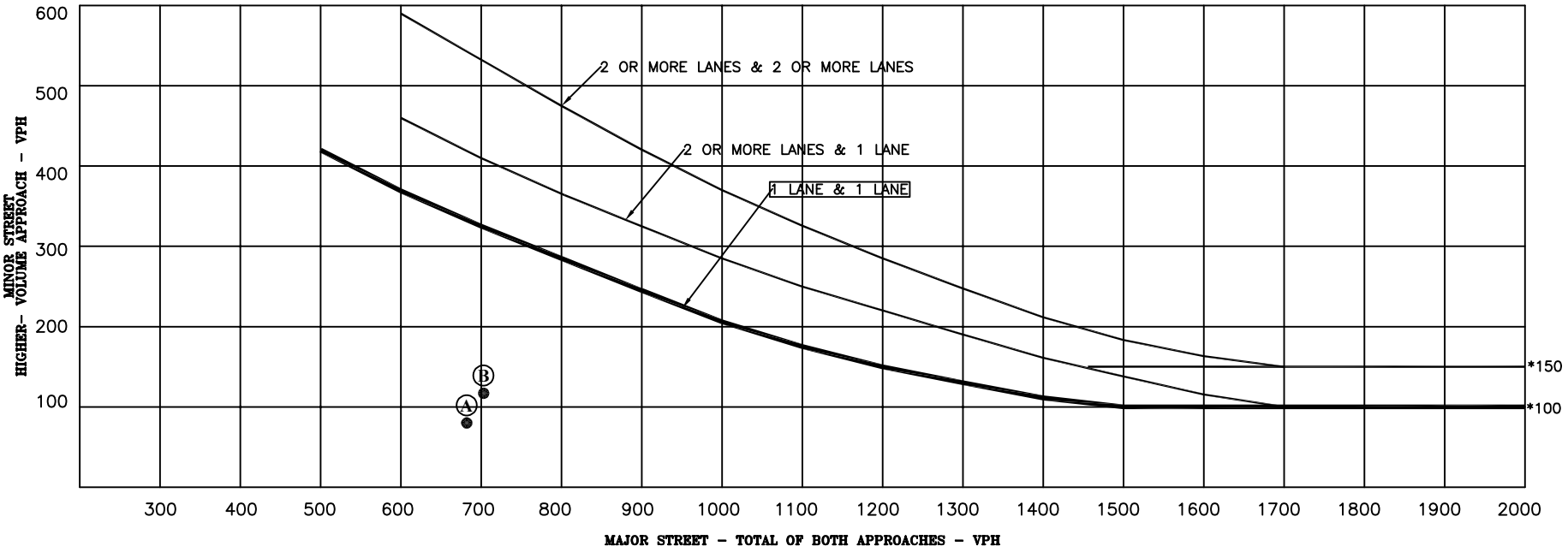
Note: This warrant is not expected to be met.

Figure 10

Warrant 2 - Four Hour Vehicular Volume Peoria Street/Thunderhawk Place

Kestrel Subdivision (LSC #240040)

Figure 4C-3. Warrant 3, Peak Hour



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

2044 Total Traffic (from Figure 9)
Ⓐ AM Peak Hour = (682,80)
Ⓑ PM Peak Hour = (703,117)

Note: This warrant is not expected to be met.

Figure 11

Warrant 3 - Peak Hour Vehicular Volume Peoria Street/Thunderhawk Place

Kestrel Subdivision (LSC #240040)

COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: PEORIA ST
E/W STREET: CHURCH ACCESS
CITY: BRIGHTON
COUNTY: ADAMS

File Name : PEORCHURCH
Site Code : 00000005
Start Date : 1/24/2024
Page No : 1

Groups Printed- VEHICLES

	PEORIA ST Southbound				CHURCH ACCESS Westbound				PEORIA ST Northbound				NO ACCESS 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	1	18	0	0	0	0	2	0	0	17	1	0	0	0	0	0	39
06:45 AM	4	7	0	0	0	0	0	0	0	32	3	0	0	0	0	0	46
Total	5	25	0	0	0	0	2	0	0	49	4	0	0	0	0	0	85
07:00 AM	6	16	0	0	0	0	0	0	0	18	4	0	0	0	0	0	44
07:15 AM	7	14	0	0	2	0	1	0	0	16	16	0	0	0	0	0	56
07:30 AM	12	27	0	0	1	0	0	0	0	36	8	0	0	0	0	0	84
07:45 AM	6	25	0	0	0	0	2	0	0	26	7	0	0	0	0	0	66
Total	31	82	0	0	3	0	3	0	0	96	35	0	0	0	0	0	250
08:00 AM	52	11	0	0	8	0	8	0	0	23	20	0	0	0	0	0	122
08:15 AM	109	12	0	0	23	0	26	0	0	42	41	0	0	0	0	0	253
Total	161	23	0	0	31	0	34	0	0	65	61	0	0	0	0	0	375
04:00 PM	6	22	0	2	6	0	7	0	0	21	13	0	0	0	0	0	77
04:15 PM	22	19	0	0	9	0	4	0	0	23	19	0	0	0	0	0	96
04:30 PM	13	23	0	0	55	1	38	0	0	76	9	0	0	0	0	0	215
04:45 PM	7	16	0	0	15	1	27	0	0	40	5	0	0	0	0	0	111
Total	48	80	0	2	85	2	76	0	0	160	46	0	0	0	0	0	499
05:00 PM	4	23	0	0	14	0	10	0	0	21	3	0	0	0	0	0	75
05:15 PM	4	17	0	0	3	1	6	0	0	10	3	0	0	0	0	0	44
05:30 PM	2	20	0	0	2	0	5	0	0	13	2	0	0	0	0	0	44
05:45 PM	3	11	0	0	3	0	4	0	0	6	8	0	0	0	0	0	35
Total	13	71	0	0	22	1	25	0	0	50	16	0	0	0	0	0	198
Grand Total	258	281	0	2	141	3	140	0	0	420	162	0	0	0	0	0	1407
Apprch %	47.7	51.9	0.0	0.4	49.6	1.1	49.3	0.0	0.0	72.2	27.8	0.0	0.0	0.0	0.0	0.0	
Total %	18.3	20.0	0.0	0.1	10.0	0.2	10.0	0.0	0.0	29.9	11.5	0.0	0.0	0.0	0.0	0.0	

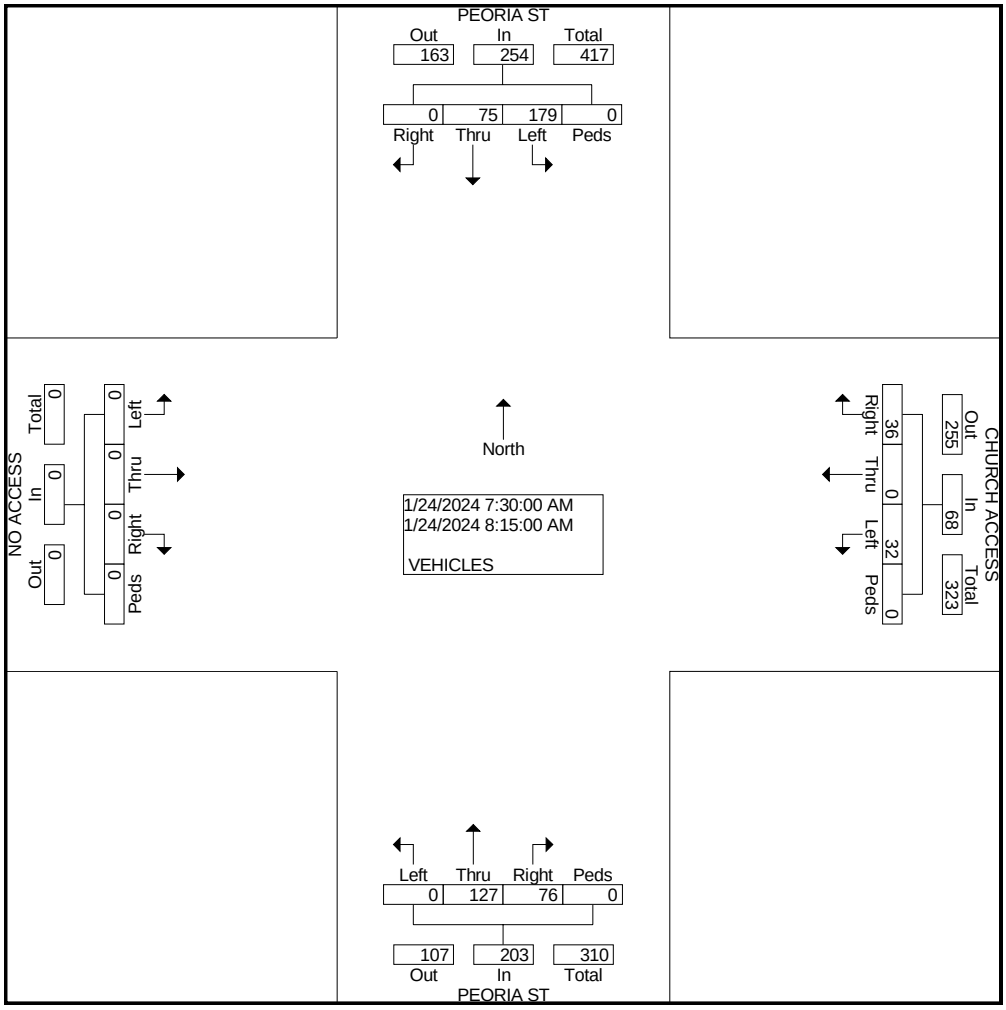
COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: PEORIA ST
E/W STREET: CHURCH ACCESS
CITY: BRIGHTON
COUNTY: ADAMS

File Name : PEORCHURCH
Site Code : 00000005
Start Date : 1/24/2024

	PEORIA ST Southbound					CHURCH ACCESS Westbound					PEORIA ST Northbound					NO ACCESS 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 07:30 AM to 08:15 AM - Peak 1 of 1																					
Intersection	07:30 AM																				
Volume	179	75	0	0	254	32	0	36	0	68	0	127	76	0	203	0	0	0	0	0	525
Percent	70.5	29.5	0.0	0.0		47.1	0.0	52.9	0.0		0.0	62.6	37.4	0.0		0.0	0.0	0.0	0.0		
08:15 Volume	109	12	0	0	121	23	0	26	0	49	0	42	41	0	83	0	0	0	0	0	253
Peak Factor																					0.519
High Int.	08:15 AM					08:15 AM					08:15 AM										
Volume	109	12	0	0	121	23	0	26	0	49	0	42	41	0	83						
Peak Factor					0.525					0.347					0.611						



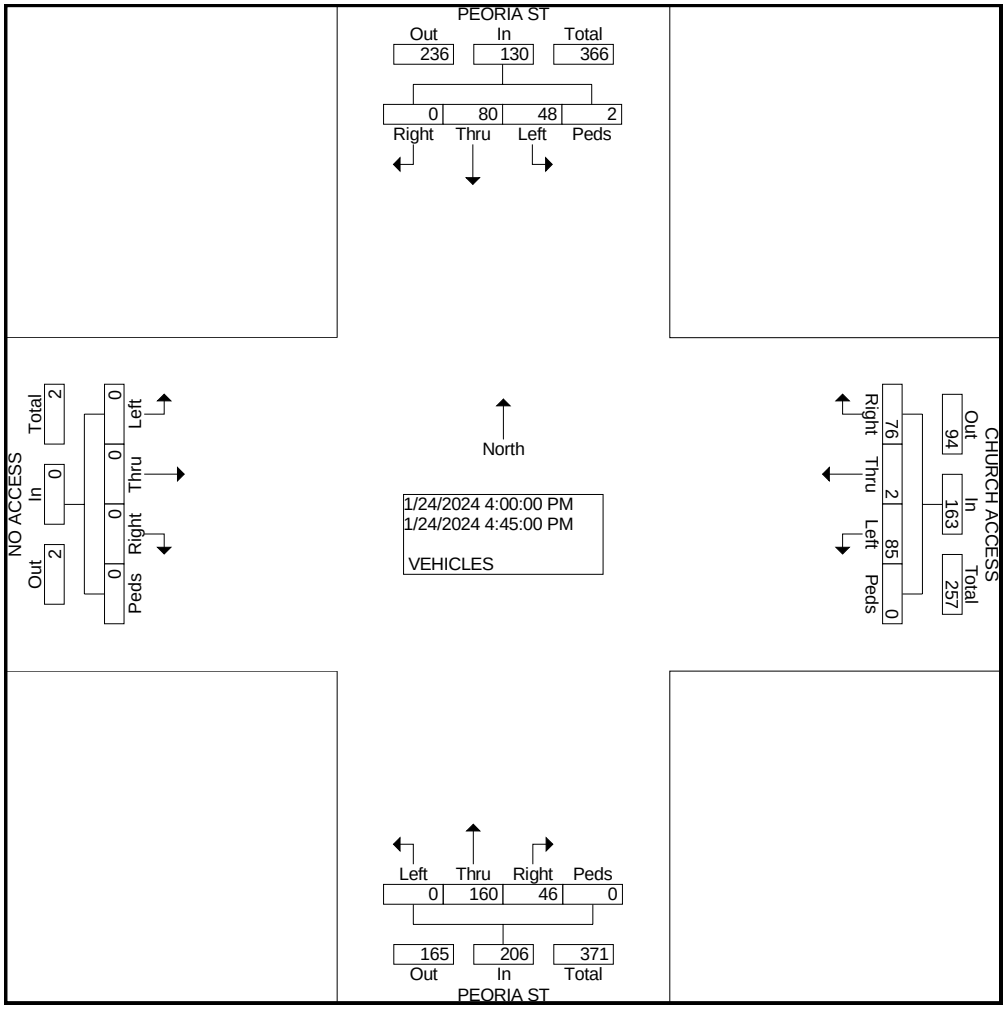
COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: PEORIA ST
E/W STREET: CHURCH ACCESS
CITY: BRIGHTON
COUNTY: ADAMS

File Name : PEORCHURCH
Site Code : 00000005
Start Date : 1/24/2024

	PEORIA ST Southbound					CHURCH ACCESS Westbound					PEORIA ST Northbound					NO ACCESS 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 04:45 PM - Peak 1 of 1																					
Intersection	04:00 PM																				
Volume	48	80	0	2	130	85	2	76	0	163	0	160	46	0	206	0	0	0	0	0	499
Percent	36.9	61.5	0.0	1.5		52.1	1.2	46.6	0.0		0.0	77.7	22.3	0.0		0.0	0.0	0.0	0.0		
04:30 Volume	13	23	0	0	36	55	1	38	0	94	0	76	9	0	85	0	0	0	0	0	215
Peak Factor																					0.580
High Int.	04:15 PM					04:30 PM					04:30 PM										
Volume	22	19	0	0	41	55	1	38	0	94	0	76	9	0	85						
Peak Factor					0.793					0.434					0.606						



COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: PEORIA ST
E/W STREET: E. 120TH AVE
CITY: BRIGHTON
COUNTY: ADAMS

File Name : PEOR120TH
Site Code : 00000016
Start Date : 1/23/2024
Page No : 1

Groups Printed- VEHICLES

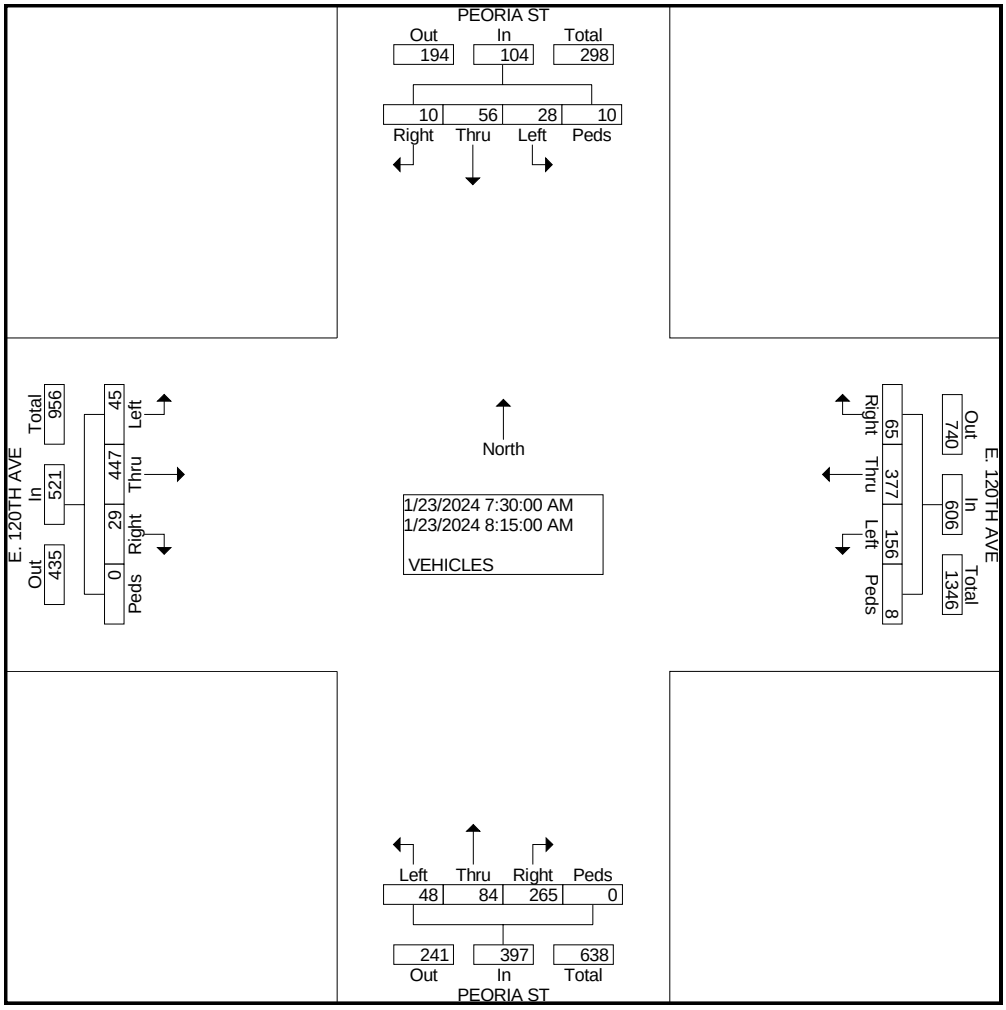
	PEORIA ST Southbound				E. 120TH AVE Westbound				PEORIA ST Northbound				E. 120TH AVE Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	1	4	0	0	9	74	6	0	4	4	4	1	3	69	10	0	189
06:45 AM	1	10	0	2	18	65	3	0	6	16	13	0	5	88	7	0	234
Total	2	14	0	2	27	139	9	0	10	20	17	1	8	157	17	0	423
07:00 AM	0	10	0	0	11	67	5	0	8	18	19	0	2	71	10	0	221
07:15 AM	2	11	0	2	18	77	9	2	6	15	25	0	13	96	21	0	297
07:30 AM	5	16	0	0	28	90	7	0	16	18	30	0	8	114	6	0	338
07:45 AM	2	20	3	1	18	78	2	1	13	25	45	0	11	112	11	0	342
Total	9	57	3	3	75	312	23	3	43	76	119	0	34	393	48	0	1198
08:00 AM	5	8	0	5	32	92	17	3	8	25	93	0	11	101	7	0	407
08:15 AM	16	12	7	4	78	117	39	4	11	16	97	0	15	120	5	0	541
Total	21	20	7	9	110	209	56	7	19	41	190	0	26	221	12	0	948
04:00 PM	7	13	3	3	21	93	9	3	12	23	36	0	11	124	10	0	368
04:15 PM	10	18	8	5	17	115	6	2	17	25	44	0	10	112	8	0	397
04:30 PM	21	31	15	22	73	117	65	21	15	28	43	0	5	118	10	0	584
04:45 PM	5	22	8	6	59	159	29	6	12	24	25	0	4	106	20	0	485
Total	43	84	34	36	170	484	109	32	56	100	148	0	30	460	48	0	1834
05:00 PM	12	20	3	0	19	107	3	0	6	15	18	0	5	115	20	3	346
05:15 PM	3	10	1	1	21	101	3	1	9	11	24	0	2	111	6	0	304
05:30 PM	5	13	0	0	18	91	3	0	11	9	24	0	1	129	4	0	308
05:45 PM	4	16	0	0	20	101	3	0	8	12	12	0	1	118	14	0	309
Total	24	59	4	1	78	400	12	1	34	47	78	0	9	473	44	3	1267
Grand Total	99	234	48	51	460	1544	209	43	162	284	552	1	107	1704	169	3	5670
Apprch %	22.9	54.2	11.1	11.8	20.4	68.4	9.3	1.9	16.2	28.4	55.3	0.1	5.4	85.9	8.5	0.2	
Total %	1.7	4.1	0.8	0.9	8.1	27.2	3.7	0.8	2.9	5.0	9.7	0.0	1.9	30.1	3.0	0.1	

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

N/S STREET: PEORIA ST
E/W STREET: E. 120TH AVE
CITY: BRIGHTON
COUNTY: ADAMS

File Name : PEOR120TH
Site Code : 00000016
Start Date : 1/23/2024

	PEORIA ST Southbound					E. 120TH AVE Westbound					PEORIA ST Northbound					E. 120TH AVE 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 08:15 AM - Peak 1 of 1																					
Intersection	07:30 AM																				
Volume	28	56	10	10	104	156	377	65	8	606	48	84	265	0	397	45	447	29	0	521	1628
Percent	26.9	53.8	9.6	9.6		25.7	62.2	10.7	1.3		12.1	21.2	66.8	0.0		8.6	85.8	5.6	0.0		
08:15 Volume	16	12	7	4	39	78	117	39	4	238	11	16	97	0	124	15	120	5	0	140	541
Peak Factor																					0.752
High Int.	08:15 AM					08:15 AM					08:00 AM					08:15 AM					
Volume	16	12	7	4	39	78	117	39	4	238	8	25	93	0	126	15	120	5	0	140	
Peak Factor					0.667					0.637					0.788					0.930	

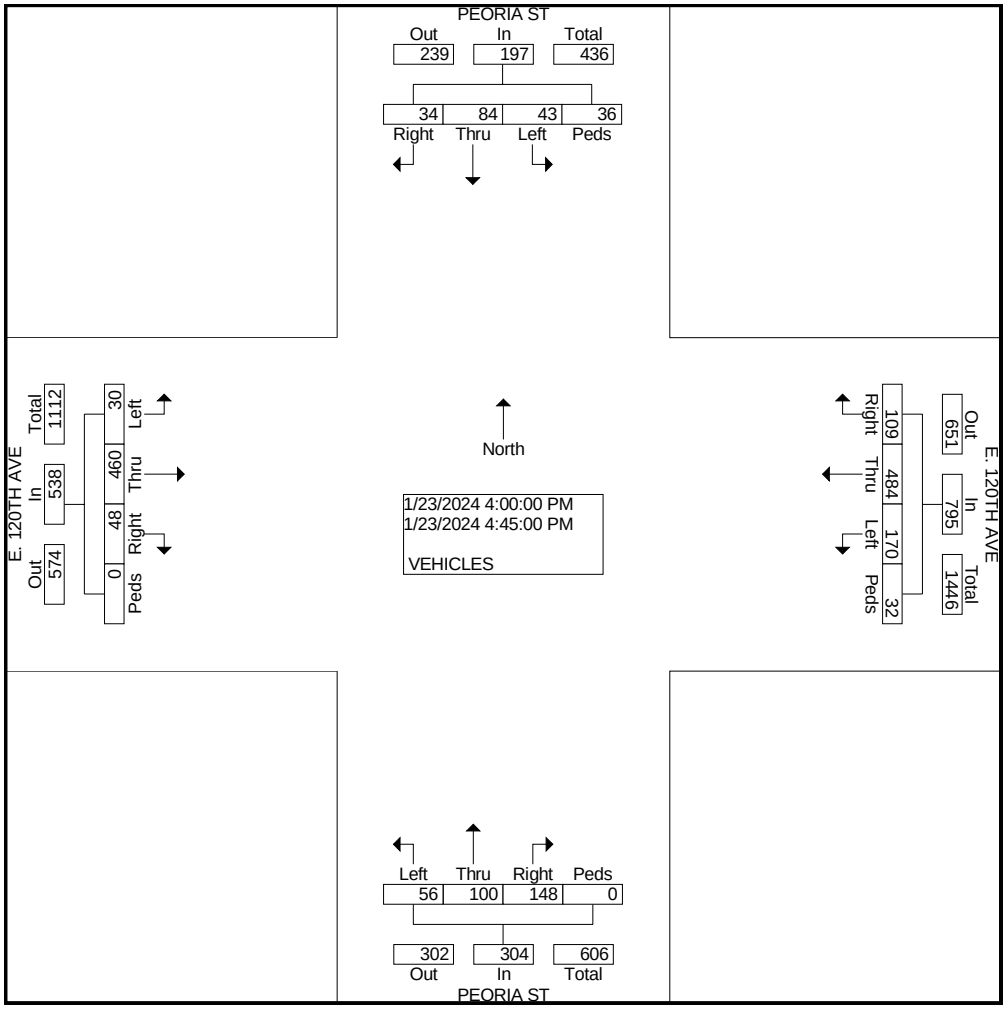


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: PEORIA ST
E/W STREET: E. 120TH AVE
CITY: BRIGHTON
COUNTY: ADAMS

File Name : PEOR120TH
Site Code : 00000016
Start Date : 1/23/2024
Page No : 3

	PEORIA ST Southbound					E. 120TH AVE Westbound					PEORIA ST Northbound					E. 120TH AVE 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	04:00 PM																				
Volume	43	84	34	36	197	170	484	109	32	795	56	100	148	0	304	30	460	48	0	538	1834
Percent	21.8	42.6	17.3	18.3		21.4	60.9	13.7	4.0		18.4	32.9	48.7	0.0		5.6	85.5	8.9	0.0		
04:30 Volume	21	31	15	22	89	73	117	65	21	276	15	28	43	0	86	5	118	10	0	133	584
Peak Factor																					0.785
High Int.	04:30 PM					04:30 PM					04:15 PM					04:00 PM					
Volume	21	31	15	22	89	73	117	65	21	276	17	25	44	0	86	11	124	10	0	145	
Peak Factor					0.553					0.720					0.884					0.928	



COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: REVERE ST
E/W STREET: E. 120TH AVE
CITY: BRIGHTON
COUNTY: ADAMS

File Name : REVE120TH
Site Code : 00000011
Start Date : 1/23/2024
Page No : 1

Groups Printed- VEHICLES

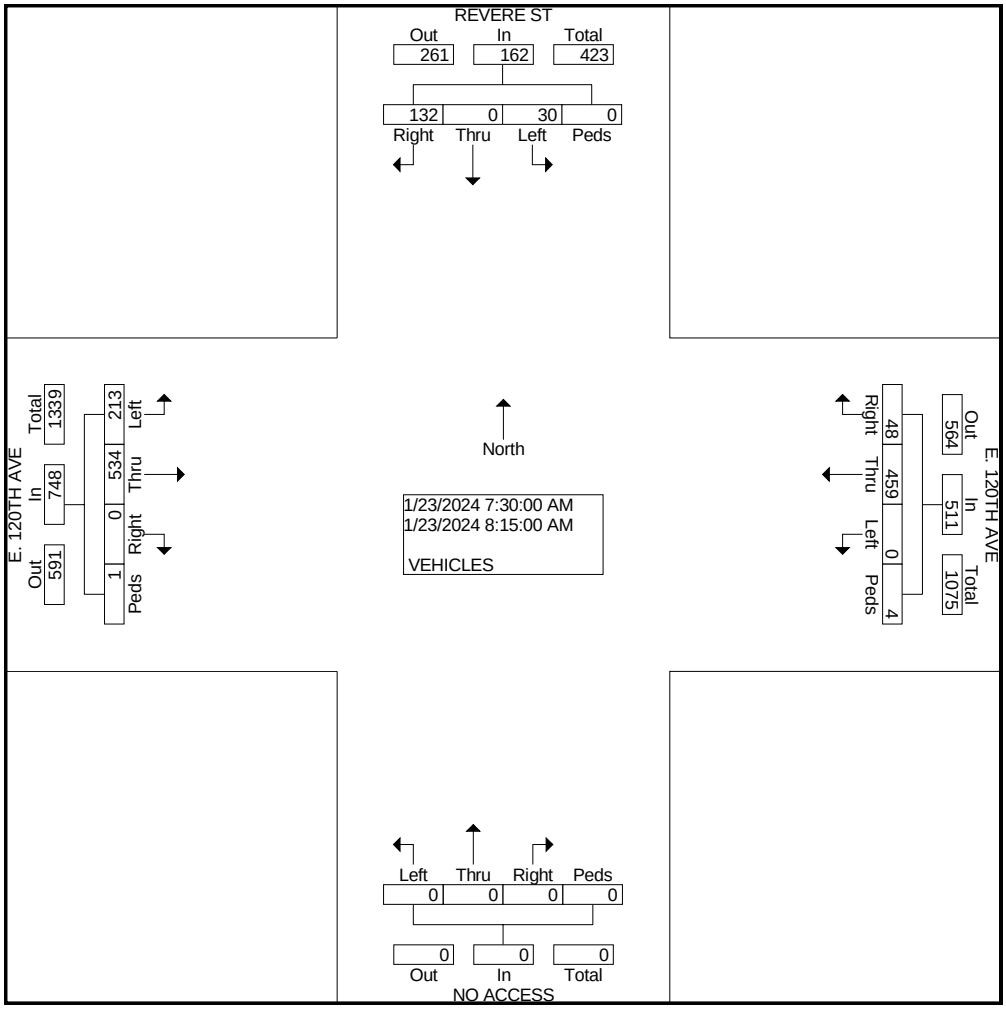
	REVERE ST Southbound				E. 120TH AVE Westbound				NO ACCESS Northbound				E. 120TH AVE Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	0	0	0	0	0	108	0	0	0	0	0	0	0	95	0	0	203
06:45 AM	0	0	0	0	0	94	10	0	0	0	0	0	2	119	0	0	225
Total	0	0	0	0	0	202	10	0	0	0	0	0	2	214	0	0	428
07:00 AM	0	0	1	0	0	109	0	0	0	0	0	0	1	111	0	0	222
07:15 AM	0	0	3	0	0	121	0	1	0	0	0	0	4	135	0	0	264
07:30 AM	2	0	1	0	0	115	0	1	0	0	0	0	5	145	0	0	269
07:45 AM	7	0	4	0	0	101	9	0	0	0	0	0	20	134	0	0	275
Total	9	0	9	0	0	446	9	2	0	0	0	0	30	525	0	0	1030
08:00 AM	9	0	29	0	0	103	22	1	0	0	0	0	60	135	0	1	360
08:15 AM	12	0	98	0	0	140	17	2	0	0	0	0	128	120	0	0	517
Total	21	0	127	0	0	243	39	3	0	0	0	0	188	255	0	1	877
04:00 PM	16	0	13	0	0	114	6	0	0	0	0	0	13	156	0	0	318
04:15 PM	9	0	8	0	0	129	12	1	0	0	0	0	30	134	0	0	323
04:30 PM	16	0	74	0	0	205	6	1	0	0	0	0	19	158	0	0	479
04:45 PM	5	0	30	0	0	189	6	0	0	0	0	0	8	120	0	0	358
Total	46	0	125	0	0	637	30	2	0	0	0	0	70	568	0	0	1478
05:00 PM	11	0	6	0	0	119	0	0	0	0	0	0	6	145	0	0	287
05:15 PM	2	0	5	0	0	120	0	2	0	0	0	0	3	135	0	0	267
05:30 PM	0	0	1	0	0	123	0	0	0	0	0	0	2	159	0	0	285
05:45 PM	2	0	0	0	0	109	0	0	0	0	0	0	14	123	0	0	248
Total	15	0	12	0	0	471	0	2	0	0	0	0	25	562	0	0	1087
Grand Total	91	0	273	0	0	1999	88	9	0	0	0	0	315	2124	0	1	4900
Apprch %	25.0	0.0	75.0	0.0	0.0	95.4	4.2	0.4	0.0	0.0	0.0	0.0	12.9	87.0	0.0	0.0	
Total %	1.9	0.0	5.6	0.0	0.0	40.8	1.8	0.2	0.0	0.0	0.0	0.0	6.4	43.3	0.0	0.0	

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

N/S STREET: REVERE ST
E/W STREET: E. 120TH AVE
CITY: BRIGHTON
COUNTY: ADAMS

File Name : REVE120TH
Site Code : 00000011
Start Date : 1/23/2024
Page No : 2

	REVERE ST Southbound					E. 120TH AVE Westbound					NO ACCESS Northbound					E. 120TH AVE 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 07:30 AM to 08:15 AM - Peak 1 of 1																					
Intersection	07:30 AM																				
Volume	30	0	132	0	162	0	459	48	4	511	0	0	0	0	0	213	534	0	1	748	1421
Percent	18.5	0.0	81.5	0.0		0.0	89.8	9.4	0.8		0.0	0.0	0.0	0.0		28.5	71.4	0.0	0.1		
08:15 Volume	12	0	98	0	110	0	140	17	2	159	0	0	0	0	0	128	120	0	0	248	517
Peak Factor																					0.687
High Int.	08:15 AM					08:15 AM										08:15 AM					
Volume	12	0	98	0	110	0	140	17	2	159	0	0	0	0	0	128	120	0	0	248	
Peak Factor					0.368					0.803										0.754	

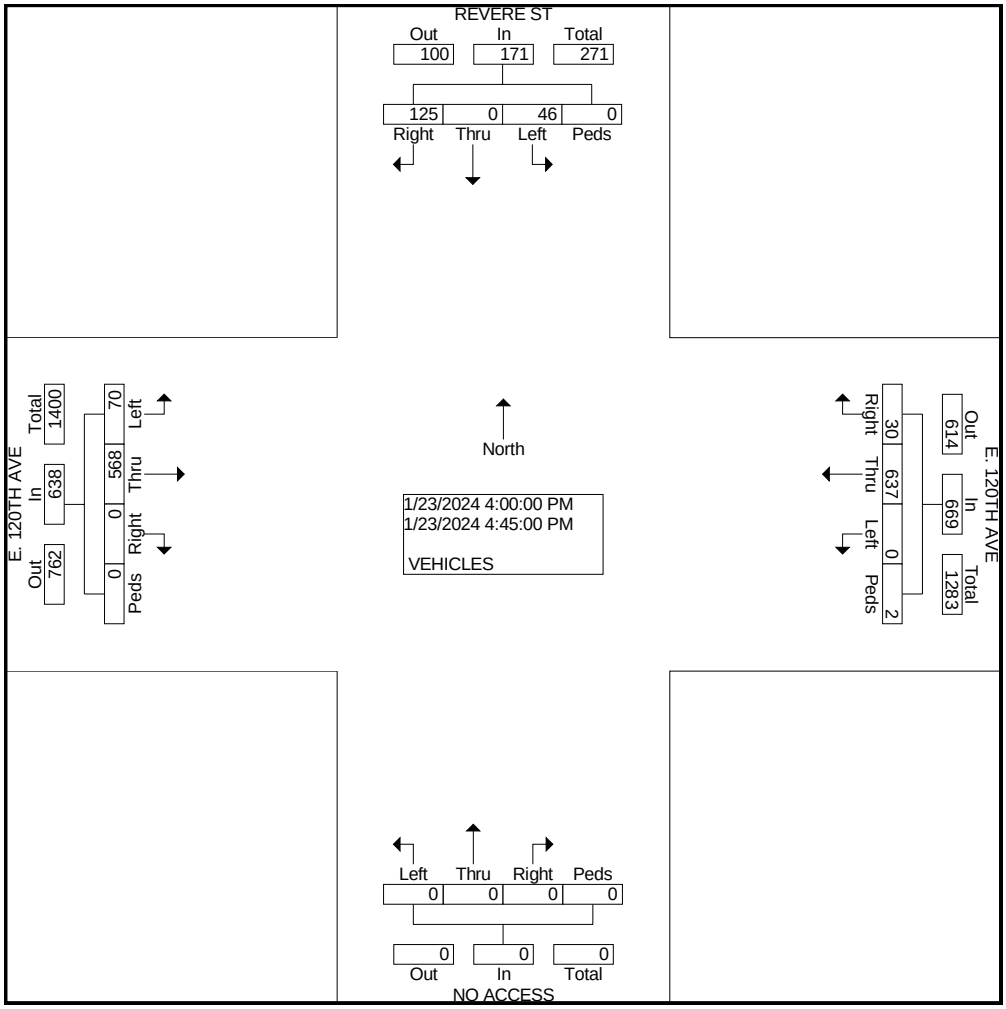


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: REVERE ST
E/W STREET: E. 120TH AVE
CITY: BRIGHTON
COUNTY: ADAMS

File Name : REVE120TH
Site Code : 00000011
Start Date : 1/23/2024
Page No : 3

	REVERE ST Southbound					E. 120TH AVE Westbound					NO ACCESS Northbound					E. 120TH AVE 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 04:45 PM - Peak 1 of 1																					
Intersection	04:00 PM																				
Volume	46	0	125	0	171	0	637	30	2	669	0	0	0	0	0	70	568	0	0	638	1478
Percent	26.9	0.0	73.1	0.0		0.0	95.2	4.5	0.3		0.0	0.0	0.0	0.0		11.0	89.0	0.0	0.0		
04:30 Volume	16	0	74	0	90	0	205	6	1	212	0	0	0	0	0	19	158	0	0	177	479
Peak Factor																					0.771
High Int.	04:30 PM					04:30 PM										04:30 PM					
Volume	16	0	74	0	90	0	205	6	1	212	0	0	0	0	0	19	158	0	0	177	
Peak Factor					0.475					0.789										0.901	



120TH & PEORIA
Location: CHURCH ACCESS RD E-O PEORIA ST
City: BRIGHTON
County: ADAMS
Direction: EAST/WEST

COUNTER MEASURES, INC.
TRAFFIC AND TRANSPORTATION FIELD DATA

Site Code:2422306
Site Code: 2422306
Start Date: 01242024 1/24/2024
End Date: 01252024 1/25/2024
Latitude: 0.000000
Longitude: 0.000000

1/24/2024 Time	EAST	WEST	Total
12:00 AM	*	*	0
1:00	*	*	0
2:00	*	*	0
3:00	*	*	0
4:00	*	*	0
5:00	*	*	0
6:00	*	*	0
7:00	*	*	0
8:00	*	*	0
9:00	104	49	153
10:00	36	21	57
11:00	21	18	39
12:00 PM	18	31	49
1:00	16	24	40
2:00	24	22	46
3:00	31	18	49
4:00	36	74	110
5:00	49	171	220
6:00	13	51	64
7:00	5	30	35
8:00	3	11	14
9:00	1	2	3
10:00	0	1	1
11:00	0	1	1
Total	357	524	881
Percent	40.5%	59.5%	
AM Peak	9:00	9:00	9:00
Volume	104	49	153
PM Peak	5:00	5:00	5:00
Volume	49	171	220

120TH & PEORIA
Location: CHURCH ACCESS RD E-O PEORIA ST
City: BRIGHTON
County: ADAMS
Direction: EAST/WEST

COUNTER MEASURES, INC.
TRAFFIC AND TRANSPORTATION FIELD DATA

Site Code:2422306
Site Code: 2422306
Start Date: 01242024 1/24/2024
End Date: 01252024 1/25/2024
Latitude: 0.000000
Longitude: 0.000000

1/25/2024 Time	EAST	WEST		Total
12:00 AM	0	0		0
1:00	0	0		0
2:00	0	1		1
3:00	1	0		1
4:00	1	0		1
5:00	2	1		3
6:00	4	2		6
7:00	46	4		50
8:00	34	10		44
9:00	184	86		270
10:00	39	24		63
11:00	24	15		39
12:00 PM	21	38		59
1:00	2	6		8
2:00	0	0		0
3:00	0	0		0
4:00	*	*		0
5:00	*	*		0
6:00	*	*		0
7:00	*	*		0
8:00	*	*		0
9:00	*	*		0
10:00	*	*		0
11:00	*	*		0
Total	358	187		545
Percent	65.7%	34.3%		
AM Peak	9:00	9:00		9:00
Volume	184	86		270
PM Peak	12:00 PM	12:00 PM		12:00 PM
Volume	21	38		59
Grand Total	715	711		1426
Percent	50.1%	49.9%		
ADT		ADT: 990	AADT: 990	

120TH & PEORIA
Location: PEORIA ST N-O 120TH AVE
City: BRIGHTON
County: ADAMS
Direction: NORTH/SOUTH

COUNTER MEASURES, INC.
TRAFFIC AND TRANSPORTATION FIELD DATA

Site Code:2422305
Site Code: 2422305
Start Date: 01242024 1/24/2024
End Date: 01252024 1/25/2024
Latitude: 0.000000
Longitude: 0.000000

1/24/2024 Time	NORTH	SOUTH	Total
12:00 AM	*	*	0
1:00	*	*	0
2:00	*	*	0
3:00	*	*	0
4:00	*	*	0
5:00	*	*	0
6:00	*	*	0
7:00	*	*	0
8:00	*	*	0
9:00	269	81	350
10:00	129	65	194
11:00	139	67	206
12:00 PM	92	81	173
1:00	84	50	134
2:00	61	58	119
3:00	109	97	206
4:00	176	160	336
5:00	238	164	402
6:00	73	89	162
7:00	49	32	81
8:00	32	24	56
9:00	26	18	44
10:00	21	11	32
11:00	17	8	25
Total	1515	1005	2520
Percent	60.1%	39.9%	
AM Peak	9:00	9:00	9:00
Volume	269	81	350
PM Peak	5:00	5:00	5:00
Volume	238	164	402

120TH & PEORIA
Location: PEORIA ST N-O 120TH AVE
City: BRIGHTON
County: ADAMS
Direction: NORTH/SOUTH

COUNTER MEASURES, INC.
TRAFFIC AND TRANSPORTATION FIELD DATA

Site Code:2422305
Site Code: 2422305
Start Date: 01242024 1/24/2024
End Date: 01252024 1/25/2024
Latitude: 0.000000
Longitude: 0.000000

1/25/2024 Time	NORTH	SOUTH	Total
12:00 AM	19	4	23
1:00	11	3	14
2:00	10	2	12
3:00	11	4	15
4:00	8	6	14
5:00	14	8	22
6:00	27	12	39
7:00	44	20	64
8:00	153	77	230
9:00	281	89	370
10:00	146	73	219
11:00	150	74	224
12:00 PM	109	0	109
1:00	0	0	0
2:00	*	*	0
3:00	*	*	0
4:00	*	*	0
5:00	*	*	0
6:00	*	*	0
7:00	*	*	0
8:00	*	*	0
9:00	*	*	0
10:00	*	*	0
11:00	*	*	0
Total	983	372	1355
Percent	72.5%	27.5%	
AM Peak	9:00	9:00	9:00
Volume	281	89	370
PM Peak	12:00 PM		12:00 PM
Volume	109		109
Grand Total	2498	1377	3875
Percent	64.5%	35.5%	
ADT		ADT: 2,886	AADT: 2,886

LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board

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

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.

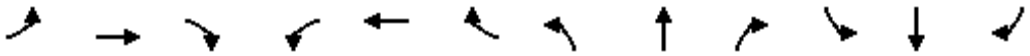
Intersection	
Int Delay, s/veh	4.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	36	127	76	179	75
Future Vol, veh/h	32	36	127	76	179	75
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	-	-	275	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	85	80	80	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	45	149	95	224	88

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	685	149	0	0	244	0
Stage 1	149	-	-	-	-	-
Stage 2	536	-	-	-	-	-
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	414	898	-	-	1322	-
Stage 1	879	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	340	898	-	-	1322	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	879	-	-	-	-	-
Stage 2	483	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.5	0	5.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	507	1322	-
HCM Lane V/C Ratio	-	-	0.168	0.169	-
HCM Control Delay (s)	-	-	13.5	8.3	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.6	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	447	29	156	377	65	48	84	265	28	56	10
Future Volume (veh/h)	45	447	29	156	377	65	48	84	265	28	56	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	559	36	195	471	81	60	105	331	35	70	12
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	438	834	54	389	955	809	84	117	323	112	207	31
Arrive On Green	0.04	0.48	0.48	0.07	0.51	0.51	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	1738	112	1781	1870	1585	147	390	1077	217	691	104
Grp Volume(v), veh/h	56	0	595	195	471	81	496	0	0	117	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1850	1781	1870	1585	1615	0	0	1011	0	0
Q Serve(g_s), s	1.6	0.0	24.6	5.5	16.5	2.6	22.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	24.6	5.5	16.5	2.6	30.0	0.0	0.0	4.9	0.0	0.0
Prop In Lane	1.00		0.06	1.00		1.00	0.12		0.67	0.30		0.10
Lane Grp Cap(c), veh/h	438	0	888	389	955	809	525	0	0	350	0	0
V/C Ratio(X)	0.13	0.00	0.67	0.50	0.49	0.10	0.95	0.00	0.00	0.33	0.00	0.00
Avail Cap(c_a), veh/h	493	0	888	389	955	809	525	0	0	350	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.9	0.0	19.9	15.3	16.0	12.6	35.2	0.0	0.0	26.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	4.0	1.0	1.8	0.2	26.2	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	10.5	2.1	6.8	0.9	15.2	0.0	0.0	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.0	0.0	23.9	16.4	17.8	12.9	61.5	0.0	0.0	26.7	0.0	0.0
LnGrp LOS	B	A	C	B	B	B	E	A	A	C	A	A
Approach Vol, veh/h		651			747			496			117	
Approach Delay, s/veh		23.0			16.9			61.5			26.7	
Approach LOS		C			B			E			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		35.0	12.0	53.0		35.0	8.9	56.1				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		30.0	7.0	48.0		30.0	7.0	48.0				
Max Q Clear Time (g_c+I1), s		32.0	7.5	26.6		6.9	3.6	18.5				
Green Ext Time (p_c), s		0.0	0.0	3.6		0.6	0.0	3.1				

Intersection Summary	
HCM 6th Ctrl Delay	30.4
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	213	534	459	48	30	132
Future Vol, veh/h	213	534	459	48	30	132
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	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	266	668	574	60	38	165

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	634	0	-	0	1774	574
Stage 1	-	-	-	-	574	-
Stage 2	-	-	-	-	1200	-
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	949	-	-	-	91	518
Stage 1	-	-	-	-	563	-
Stage 2	-	-	-	-	285	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	949	-	-	-	66	518
Mov Cap-2 Maneuver	-	-	-	-	66	-
Stage 1	-	-	-	-	405	-
Stage 2	-	-	-	-	285	-

Approach	EB	WB	SB
HCM Control Delay, s	2.9	0	33.7
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	949	-	-	-	66	518
HCM Lane V/C Ratio	0.281	-	-	-	0.568	0.319
HCM Control Delay (s)	10.3	-	-	-	115.3	15.2
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	1.2	-	-	-	2.4	1.4

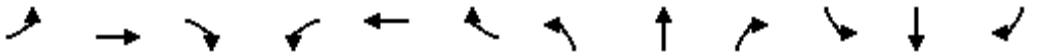
Intersection	
Int Delay, s/veh	4.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	85	76	160	46	48	80
Future Vol, veh/h	85	76	160	46	48	80
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	-	-	275	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	89	188	54	56	94

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	394	188	0	0	242	0
Stage 1	188	-	-	-	-	-
Stage 2	206	-	-	-	-	-
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	611	854	-	-	1324	-
Stage 1	844	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	584	854	-	-	1324	-
Mov Cap-2 Maneuver	584	-	-	-	-	-
Stage 1	844	-	-	-	-	-
Stage 2	792	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	2.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	686	1324	-
HCM Lane V/C Ratio	-	-	0.276	0.043	-
HCM Control Delay (s)	-	-	12.2	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.1	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	460	48	170	484	109	56	100	148	43	84	34
Future Volume (veh/h)	30	460	48	170	484	109	56	100	148	43	84	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	541	56	200	569	128	66	118	174	51	99	40
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	422	899	93	457	1081	916	100	146	192	108	196	69
Arrive On Green	0.03	0.54	0.54	0.07	0.58	0.58	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1781	1667	173	1781	1870	1585	239	604	797	257	814	286
Grp Volume(v), veh/h	35	0	597	200	569	128	358	0	0	190	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1839	1781	1870	1585	1640	0	0	1357	0	0
Q Serve(g_s), s	0.9	0.0	22.1	4.8	18.5	3.7	9.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.0	22.1	4.8	18.5	3.7	21.1	0.0	0.0	11.2	0.0	0.0
Prop In Lane	1.00		0.09	1.00		1.00	0.18		0.49	0.27		0.21
Lane Grp Cap(c), veh/h	422	0	992	457	1081	916	438	0	0	373	0	0
V/C Ratio(X)	0.08	0.00	0.60	0.44	0.53	0.14	0.82	0.00	0.00	0.51	0.00	0.00
Avail Cap(c_a), veh/h	491	0	992	511	1081	916	516	0	0	447	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.5	0.0	15.7	11.7	12.8	9.7	36.6	0.0	0.0	32.6	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	2.7	0.7	1.8	0.3	8.7	0.0	0.0	1.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	8.9	1.7	7.2	1.2	9.1	0.0	0.0	3.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.6	0.0	18.4	12.4	14.6	10.0	45.3	0.0	0.0	33.6	0.0	0.0
LnGrp LOS	B	A	B	B	B	B	D	A	A	C	A	A
Approach Vol, veh/h		632			897			358			190	
Approach Delay, s/veh		18.0			13.5			45.3			33.6	
Approach LOS		B			B			D			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		29.1	12.0	58.9		29.1	8.1	62.8				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		29.0	10.0	46.0		29.0	7.0	49.0				
Max Q Clear Time (g_c+I1), s		23.1	6.8	24.1		13.2	2.9	20.5				
Green Ext Time (p_c), s		1.0	0.2	3.6		0.8	0.0	4.0				

Intersection Summary	
HCM 6th Ctrl Delay	22.2
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	568	637	30	46	125
Future Vol, veh/h	70	568	637	30	46	125
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	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	668	749	35	54	147

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	784	0	-	0	1581	749
Stage 1	-	-	-	-	749	-
Stage 2	-	-	-	-	832	-
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	834	-	-	-	120	412
Stage 1	-	-	-	-	467	-
Stage 2	-	-	-	-	427	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	834	-	-	-	108	412
Mov Cap-2 Maneuver	-	-	-	-	108	-
Stage 1	-	-	-	-	421	-
Stage 2	-	-	-	-	427	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	31.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	834	-	-	-	108	412
HCM Lane V/C Ratio	0.099	-	-	-	0.501	0.357
HCM Control Delay (s)	9.8	-	-	-	67.9	18.5
HCM Lane LOS	A	-	-	-	F	C
HCM 95th %tile Q(veh)	0.3	-	-	-	2.3	1.6

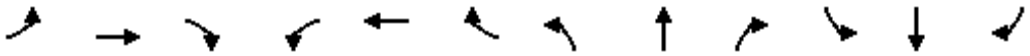
Intersection	
Int Delay, s/veh	4.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	37	142	80	180	85
Future Vol, veh/h	33	37	142	80	180	85
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	-	-	275	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	80	80	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	44	167	100	225	100

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	717	167	0	0	267	0
Stage 1	167	-	-	-	-	-
Stage 2	550	-	-	-	-	-
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	396	877	-	-	1297	-
Stage 1	863	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	323	877	-	-	1297	-
Mov Cap-2 Maneuver	323	-	-	-	-	-
Stage 1	863	-	-	-	-	-
Stage 2	472	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.9	0	5.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	485	1297	-
HCM Lane V/C Ratio	-	-	0.17	0.173	-
HCM Control Delay (s)	-	-	13.9	8.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.6	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	525	33	165	430	73	54	94	275	35	65	18
Future Volume (veh/h)	50	525	33	165	430	73	54	94	275	35	65	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	656	41	206	538	91	68	118	344	44	81	22
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	393	836	52	321	952	807	90	122	317	113	194	46
Arrive On Green	0.04	0.48	0.48	0.07	0.51	0.51	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	1742	109	1781	1870	1585	163	407	1055	220	646	153
Grp Volume(v), veh/h	62	0	697	206	538	91	530	0	0	147	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1851	1781	1870	1585	1626	0	0	1019	0	0
Q Serve(g_s), s	1.7	0.0	31.4	5.9	19.8	3.0	21.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.7	0.0	31.4	5.9	19.8	3.0	30.0	0.0	0.0	8.1	0.0	0.0
Prop In Lane	1.00		0.06	1.00		1.00	0.13		0.65	0.30		0.15
Lane Grp Cap(c), veh/h	393	0	888	321	952	807	528	0	0	352	0	0
V/C Ratio(X)	0.16	0.00	0.78	0.64	0.57	0.11	1.00	0.00	0.00	0.42	0.00	0.00
Avail Cap(c_a), veh/h	444	0	888	321	952	807	528	0	0	352	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.4	0.0	21.7	18.3	16.9	12.8	36.0	0.0	0.0	26.8	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	6.9	4.3	2.4	0.3	39.9	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	13.9	2.4	8.2	1.0	18.3	0.0	0.0	2.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	28.6	22.6	19.4	13.1	75.9	0.0	0.0	27.6	0.0	0.0
LnGrp LOS	B	A	C	C	B	B	F	A	A	C	A	A
Approach Vol, veh/h		759			835			530			147	
Approach Delay, s/veh		27.4			19.5			75.9			27.6	
Approach LOS		C			B			E			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		35.0	12.0	53.0		35.0	9.1	55.9				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		30.0	7.0	48.0		30.0	7.0	48.0				
Max Q Clear Time (g_c+I1), s		32.0	7.9	33.4		10.1	3.7	21.8				
Green Ext Time (p_c), s		0.0	0.0	3.8		0.7	0.0	3.6				

Intersection Summary												
HCM 6th Ctrl Delay			35.8									
HCM 6th LOS			D									

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	830	660	5	0	10
Future Vol, veh/h	5	830	660	5	0	10
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	1038	825	6	0	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	831	0	-	0	-	825
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	801	-	-	-	0	372
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	801	-	-	-	-	372
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	15
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	801	-	-	-	372
HCM Lane V/C Ratio	0.008	-	-	-	0.034
HCM Control Delay (s)	9.5	-	-	-	15
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	25.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	215	615	530	50	30	135
Future Vol, veh/h	215	615	530	50	30	135
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	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	269	769	663	63	38	169

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	726	0	-	0	1970	663
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	1307	-
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	877	-	-	-	~ 21	461
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	165	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	877	-	-	-	~ 15	461
Mov Cap-2 Maneuver	-	-	-	-	~ 15	-
Stage 1	-	-	-	-	355	-
Stage 2	-	-	-	-	165	-

Approach	EB	WB	SB
HCM Control Delay, s	2.8	0	232.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	877	-	-	-	15	461
HCM Lane V/C Ratio	0.306	-	-	-	2.5	0.366
HCM Control Delay (s)	10.9	-	-	-	$ 1202.1	17.2
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	1.3	-	-	-	5.4	1.7

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

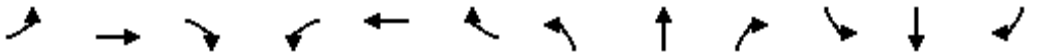
Intersection	
Int Delay, s/veh	4.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	87	78	180	47	48	90
Future Vol, veh/h	87	78	180	47	48	90
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	-	-	275	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	102	92	212	55	56	106

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	430	212	0	0	267	0
Stage 1	212	-	-	-	-	-
Stage 2	218	-	-	-	-	-
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	582	828	-	-	1297	-
Stage 1	823	-	-	-	-	-
Stage 2	818	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	555	828	-	-	1297	-
Mov Cap-2 Maneuver	555	-	-	-	-	-
Stage 1	823	-	-	-	-	-
Stage 2	780	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.8	0	2.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	657	1297	-
HCM Lane V/C Ratio	-	-	0.295	0.044	-
HCM Control Delay (s)	-	-	12.8	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.2	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	525	54	175	560	122	63	112	155	48	94	38
Future Volume (veh/h)	34	525	54	175	560	122	63	112	155	48	94	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	618	64	206	659	144	74	132	182	56	111	45
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	858	89	377	1038	880	108	159	197	111	207	73
Arrive On Green	0.03	0.52	0.52	0.07	0.56	0.56	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1781	1667	173	1781	1870	1585	247	608	756	249	791	280
Grp Volume(v), veh/h	40	0	682	206	659	144	388	0	0	212	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1839	1781	1870	1585	1611	0	0	1320	0	0
Q Serve(g_s), s	1.0	0.0	28.6	5.2	24.2	4.4	10.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	0.0	28.6	5.2	24.2	4.4	23.4	0.0	0.0	13.0	0.0	0.0
Prop In Lane	1.00		0.09	1.00		1.00	0.19		0.47	0.26		0.21
Lane Grp Cap(c), veh/h	344	0	947	377	1038	880	464	0	0	390	0	0
V/C Ratio(X)	0.12	0.00	0.72	0.55	0.63	0.16	0.84	0.00	0.00	0.54	0.00	0.00
Avail Cap(c_a), veh/h	409	0	947	424	1038	880	509	0	0	434	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.6	0.0	18.7	15.1	15.3	10.9	35.7	0.0	0.0	31.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	4.7	1.2	3.0	0.4	10.8	0.0	0.0	1.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	12.0	1.9	9.8	1.5	10.0	0.0	0.0	4.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.7	0.0	23.4	16.3	18.2	11.3	46.6	0.0	0.0	32.6	0.0	0.0
LnGrp LOS	B	A	C	B	B	B	D	A	A	C	A	A
Approach Vol, veh/h		722			1009			388			212	
Approach Delay, s/veh		22.8			16.9			46.6			32.6	
Approach LOS		C			B			D			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		31.1	12.4	56.5		31.1	8.4	60.5				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		29.0	10.0	46.0		29.0	7.0	49.0				
Max Q Clear Time (g_c+I1), s		25.4	7.2	30.6		15.0	3.0	26.2				
Green Ext Time (p_c), s		0.8	0.1	3.8		0.9	0.0	4.6				

Intersection Summary	
HCM 6th Ctrl Delay	25.1
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	720	845	5	0	10
Future Vol, veh/h	5	720	845	5	0	10
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	847	994	6	0	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1000	0	-	0	-	994
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	692	-	-	-	0	297
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	692	-	-	-	-	297
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	17.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	692	-	-	-	297
HCM Lane V/C Ratio	0.009	-	-	-	0.04
HCM Control Delay (s)	10.2	-	-	-	17.6
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	26.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	650	725	30	50	125
Future Vol, veh/h	70	650	725	30	50	125
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	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	765	853	35	59	147

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	888	0	-	0	1782	853
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	929	-
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	763	-	-	-	~ 31	359
Stage 1	-	-	-	-	418	-
Stage 2	-	-	-	-	352	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	763	-	-	-	~ 28	359
Mov Cap-2 Maneuver	-	-	-	-	~ 28	-
Stage 1	-	-	-	-	373	-
Stage 2	-	-	-	-	352	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	246.7
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	763	-	-	-	28	359
HCM Lane V/C Ratio	0.108	-	-	-	2.101	0.41
HCM Control Delay (s)	10.3	-	-	-	$ 808.9	21.8
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.4	-	-	-	7	1.9

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

Intersection	
Int Delay, s/veh	5.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	75	51	142	92	185	85
Future Vol, veh/h	75	51	142	92	185	85
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	275	275	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	85	80	80	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	94	64	167	115	231	100

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	729	167	0	0	282	0
Stage 1	167	-	-	-	-	-
Stage 2	562	-	-	-	-	-
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	390	877	-	-	1280	-
Stage 1	863	-	-	-	-	-
Stage 2	571	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	320	877	-	-	1280	-
Mov Cap-2 Maneuver	320	-	-	-	-	-
Stage 1	863	-	-	-	-	-
Stage 2	468	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.2	0	5.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	320	877	1280	-
HCM Lane V/C Ratio	-	-	0.293	0.073	0.181	-
HCM Control Delay (s)	-	-	20.8	9.4	8.4	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	1.2	0.2	0.7	-

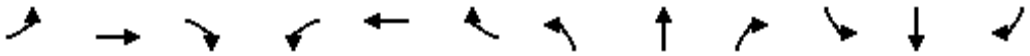
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	265	10	10	80	5	5
Future Vol, veh/h	265	10	10	80	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	379	14	14	114	7	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	393	0	528	386
Stage 1	-	-	-	-	386	-
Stage 2	-	-	-	-	142	-
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	-	-	1166	-	511	662
Stage 1	-	-	-	-	687	-
Stage 2	-	-	-	-	885	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1166	-	504	662
Mov Cap-2 Maneuver	-	-	-	-	504	-
Stage 1	-	-	-	-	687	-
Stage 2	-	-	-	-	873	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	572	-	-	1166	-
HCM Lane V/C Ratio	0.025	-	-	0.012	-
HCM Control Delay (s)	11.5	-	-	8.1	0
HCM Lane LOS	B	-	-	A	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)	59	534	33	170	460	74	54	96	276	53	69	38
Future Volume (veh/h)	59	534	33	170	460	74	54	96	276	53	69	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	668	41	212	575	92	60	120	345	66	86	48
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	371	837	51	313	947	803	82	124	318	173	338	189
Arrive On Green	0.04	0.48	0.48	0.07	0.51	0.51	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	1744	107	1781	1870	1585	139	414	1059	928	1128	629
Grp Volume(v), veh/h	74	0	709	212	575	92	525	0	0	66	0	134
Grp Sat Flow(s),veh/h/ln	1781	0	1851	1781	1870	1585	1612	0	0	928	0	1757
Q Serve(g_s), s	2.1	0.0	32.3	6.1	21.9	3.0	22.8	0.0	0.0	0.0	0.0	5.8
Cycle Q Clear(g_c), s	2.1	0.0	32.3	6.1	21.9	3.0	30.0	0.0	0.0	17.1	0.0	5.8
Prop In Lane	1.00		0.06	1.00		1.00	0.11		0.66	1.00		0.36
Lane Grp Cap(c), veh/h	371	0	889	313	947	803	524	0	0	173	0	527
V/C Ratio(X)	0.20	0.00	0.80	0.68	0.61	0.11	1.00	0.00	0.00	0.38	0.00	0.25
Avail Cap(c_a), veh/h	418	0	889	313	947	803	524	0	0	173	0	527
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	21.9	18.8	17.6	12.9	36.0	0.0	0.0	30.5	0.0	26.5
Incr Delay (d2), s/veh	0.3	0.0	7.4	5.7	2.9	0.3	40.0	0.0	0.0	1.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	14.3	2.6	9.2	1.1	18.1	0.0	0.0	1.4	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.2	0.0	29.3	24.5	20.5	13.2	76.0	0.0	0.0	31.9	0.0	26.8
LnGrp LOS	B	A	C	C	C	B	F	A	A	C	A	C
Approach Vol, veh/h		783			879			525			200	
Approach Delay, s/veh		27.9			20.7			76.0			28.5	
Approach LOS		C			C			E			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		35.0	12.0	53.0		35.0	9.4	55.6				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		30.0	7.0	48.0		30.0	7.0	48.0				
Max Q Clear Time (g_c+I1), s		32.0	8.1	34.3		19.1	4.1	23.9				
Green Ext Time (p_c), s		0.0	0.0	3.8		0.7	0.0	3.8				

Intersection Summary												
HCM 6th Ctrl Delay			35.9									
HCM 6th LOS			D									

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	848	661	10	0	45
Future Vol, veh/h	15	848	661	10	0	45
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	1060	826	13	0	56

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	839	0	-	0	-	826
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	796	-	-	-	0	372
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	796	-	-	-	-	372
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	16.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	796	-	-	-	372
HCM Lane V/C Ratio	0.024	-	-	-	0.151
HCM Control Delay (s)	9.6	-	-	-	16.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	32.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	215	633	536	50	30	135
Future Vol, veh/h	215	633	536	50	30	135
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	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	269	791	670	63	38	169

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	733	0	-	0	1999	670
Stage 1	-	-	-	-	670	-
Stage 2	-	-	-	-	1329	-
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	872	-	-	-	~ 17	457
Stage 1	-	-	-	-	509	-
Stage 2	-	-	-	-	152	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	872	-	-	-	~ 12	457
Mov Cap-2 Maneuver	-	-	-	-	~ 12	-
Stage 1	-	-	-	-	352	-
Stage 2	-	-	-	-	152	-

Approach	EB	WB	SB
HCM Control Delay, s	2.8	0	$ 303.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	872	-	-	-	12	457
HCM Lane V/C Ratio	0.308	-	-	-	3.125	0.369
HCM Control Delay (s)	11	-	-	-	$ 1589.6	17.4
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	1.3	-	-	-	5.7	1.7

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

Intersection	
Int Delay, s/veh	4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	114	87	180	84	64	90
Future Vol, veh/h	114	87	180	84	64	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	275	275	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	134	102	212	99	75	106

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	468	212	0	0	311	0
Stage 1	212	-	-	-	-	-
Stage 2	256	-	-	-	-	-
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	553	828	-	-	1249	-
Stage 1	823	-	-	-	-	-
Stage 2	787	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	520	828	-	-	1249	-
Mov Cap-2 Maneuver	520	-	-	-	-	-
Stage 1	823	-	-	-	-	-
Stage 2	740	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	3.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	520	828	1249	-
HCM Lane V/C Ratio	-	-	0.258	0.124	0.06	-
HCM Control Delay (s)	-	-	14.3	10	8.1	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	1	0.4	0.2	-

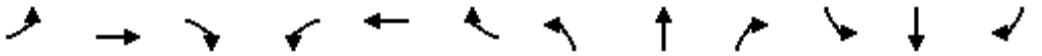
Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	110	10	10	175	10	10
Future Vol, veh/h	110	10	10	175	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	129	12	12	206	12	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	141	0	365	135
Stage 1	-	-	-	-	135	-
Stage 2	-	-	-	-	230	-
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	-	-	1442	-	635	914
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	808	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1442	-	629	914
Mov Cap-2 Maneuver	-	-	-	-	629	-
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	801	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	745	-	-	1442	-
HCM Lane V/C Ratio	0.032	-	-	0.008	-
HCM Control Delay (s)	10	-	-	7.5	0
HCM Lane LOS	B	-	-	A	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)	62	554	54	179	581	125	63	118	159	60	96	51
Future Volume (veh/h)	62	554	54	179	581	125	63	118	159	60	96	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	652	64	211	684	147	74	139	187	71	113	60
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	811	80	327	971	823	104	165	199	212	330	175
Arrive On Green	0.04	0.48	0.48	0.08	0.52	0.52	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1781	1676	165	1781	1870	1585	213	574	691	1054	1150	611
Grp Volume(v), veh/h	73	0	716	211	684	147	400	0	0	71	0	173
Grp Sat Flow(s),veh/h/ln	1781	0	1841	1781	1870	1585	1478	0	0	1054	0	1760
Q Serve(g_s), s	2.0	0.0	32.9	5.8	27.7	4.9	18.9	0.0	0.0	0.0	0.0	7.8
Cycle Q Clear(g_c), s	2.0	0.0	32.9	5.8	27.7	4.9	26.6	0.0	0.0	13.6	0.0	7.8
Prop In Lane	1.00		0.09	1.00		1.00	0.18		0.47	1.00		0.35
Lane Grp Cap(c), veh/h	309	0	890	327	971	823	467	0	0	212	0	506
V/C Ratio(X)	0.24	0.00	0.80	0.65	0.70	0.18	0.86	0.00	0.00	0.33	0.00	0.34
Avail Cap(c_a), veh/h	357	0	890	364	971	823	472	0	0	215	0	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.9	0.0	21.8	18.4	18.2	12.7	35.3	0.0	0.0	30.2	0.0	28.2
Incr Delay (d2), s/veh	0.4	0.0	7.6	3.4	4.3	0.5	14.3	0.0	0.0	0.9	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	14.5	2.3	11.7	1.7	10.8	0.0	0.0	1.4	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.3	0.0	29.5	21.8	22.5	13.2	49.6	0.0	0.0	31.2	0.0	28.6
LnGrp LOS	B	A	C	C	C	B	D	A	A	C	A	C
Approach Vol, veh/h		789			1042			400			244	
Approach Delay, s/veh		28.2			21.0			49.6			29.3	
Approach LOS		C			C			D			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		33.7	12.9	53.4		33.7	9.3	56.9				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		29.0	10.0	46.0		29.0	7.0	49.0				
Max Q Clear Time (g_c+I1), s		28.6	7.8	34.9		15.6	4.0	29.7				
Green Ext Time (p_c), s		0.1	0.1	3.4		0.9	0.0	4.6				

Intersection Summary												
HCM 6th Ctrl Delay			28.7									
HCM 6th LOS			C									

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	38	732	848	23	0	34
Future Vol, veh/h	38	732	848	23	0	34
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	861	998	27	0	40

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1025	0	-	0	-	998
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	677	-	-	-	0	296
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	677	-	-	-	-	296
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	19.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	677	-	-	-	296
HCM Lane V/C Ratio	0.066	-	-	-	0.135
HCM Control Delay (s)	10.7	-	-	-	19.1
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.5

Intersection	
Int Delay, s/veh	30.3

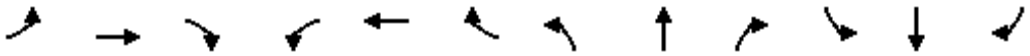
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	662	746	30	50	125
Future Vol, veh/h	70	662	746	30	50	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	779	878	35	59	147

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	913	0	-	0	1821	878
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	943	-
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	746	-	-	-	~ 28	347
Stage 1	-	-	-	-	406	-
Stage 2	-	-	-	-	342	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	746	-	-	-	~ 25	347
Mov Cap-2 Maneuver	-	-	-	-	~ 25	-
Stage 1	-	-	-	-	361	-
Stage 2	-	-	-	-	342	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	287.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	746	-	-	-	25	347
HCM Lane V/C Ratio	0.11	-	-	-	2.353	0.424
HCM Control Delay (s)	10.4	-	-	-	$ 948.5	22.8
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.4	-	-	-	7.3	2

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)	59	534	33	170	460	74	54	96	276	53	69	38
Future Volume (veh/h)	59	534	33	170	460	74	54	96	276	53	69	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	668	41	212	575	92	60	120	345	66	86	48
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	785	48	277	891	755	85	137	350	182	372	208
Arrive On Green	0.04	0.45	0.45	0.07	0.48	0.48	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1781	1744	107	1781	1870	1585	137	415	1060	928	1128	629
Grp Volume(v), veh/h	74	0	709	212	575	92	525	0	0	66	0	134
Grp Sat Flow(s),veh/h/ln	1781	0	1851	1781	1870	1585	1612	0	0	928	0	1757
Q Serve(g_s), s	2.2	0.0	34.1	6.5	23.2	3.2	24.3	0.0	0.0	0.0	0.0	5.5
Cycle Q Clear(g_c), s	2.2	0.0	34.1	6.5	23.2	3.2	32.3	0.0	0.0	17.3	0.0	5.5
Prop In Lane	1.00		0.06	1.00		1.00	0.11		0.66	1.00		0.36
Lane Grp Cap(c), veh/h	337	0	833	277	891	755	572	0	0	182	0	580
V/C Ratio(X)	0.22	0.00	0.85	0.77	0.65	0.12	0.92	0.00	0.00	0.36	0.00	0.23
Avail Cap(c_a), veh/h	384	0	833	277	891	755	572	0	0	182	0	580
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.7	0.0	24.5	21.1	19.8	14.6	33.1	0.0	0.0	28.2	0.0	24.3
Incr Delay (d2), s/veh	0.3	0.0	10.7	12.0	3.6	0.3	19.9	0.0	0.0	1.2	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	15.9	3.3	10.0	1.1	14.9	0.0	0.0	1.3	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	0.0	35.2	33.2	23.4	14.9	53.0	0.0	0.0	29.4	0.0	24.5
LnGrp LOS	B	A	D	C	C	B	D	A	A	C	A	C
Approach Vol, veh/h		783			879			525			200	
Approach Delay, s/veh		33.4			24.9			53.0			26.1	
Approach LOS		C			C			D			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		38.0	12.0	50.0		38.0	9.4	52.6				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		33.0	7.0	45.0		33.0	7.0	45.0				
Max Q Clear Time (g_c+I1), s		34.3	8.5	36.1		19.3	4.2	25.2				
Green Ext Time (p_c), s		0.0	0.0	2.9		0.8	0.0	3.6				

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

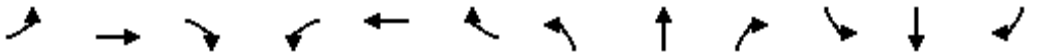
Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	42	260	85	185	135
Future Vol, veh/h	38	42	260	85	185	135
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	-	-	275	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	85	80	80	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	53	306	106	231	225

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	993	306	0	0	412	0
Stage 1	306	-	-	-	-	-
Stage 2	687	-	-	-	-	-
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	272	734	-	-	1147	-
Stage 1	747	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	209	734	-	-	1147	-
Mov Cap-2 Maneuver	209	-	-	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	384	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.3	0	4.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	335	1147	-
HCM Lane V/C Ratio	-	-	0.299	0.202	-
HCM Control Delay (s)	-	-	20.3	8.9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.2	0.8	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	945	45	195	740	115	75	150	325	45	105	25
Future Volume (veh/h)	80	945	45	195	740	115	75	150	325	45	105	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	1181	56	244	925	144	94	188	406	56	131	31
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	336	1670	745	326	1825	814	322	374	461	233	340	288
Arrive On Green	0.05	0.47	0.47	0.09	0.51	0.51	0.06	0.20	0.20	0.04	0.18	0.18
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	100	1181	56	244	925	144	94	188	406	56	131	31
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.9	26.4	1.9	6.8	17.1	4.9	4.2	8.9	20.0	2.5	6.2	1.6
Cycle Q Clear(g_c), s	2.9	26.4	1.9	6.8	17.1	4.9	4.2	8.9	20.0	2.5	6.2	1.6
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	336	1670	745	326	1825	814	322	374	461	233	340	288
V/C Ratio(X)	0.30	0.71	0.08	0.75	0.51	0.18	0.29	0.50	0.88	0.24	0.39	0.11
Avail Cap(c_a), veh/h	377	1670	745	414	1825	814	343	374	461	288	374	317
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	13.4	21.0	14.6	18.3	16.0	13.0	30.7	35.6	33.8	31.6	36.0	34.2
Incr Delay (d2), s/veh	0.5	2.6	0.2	5.6	1.0	0.5	0.5	1.1	17.8	0.5	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	1.1	10.5	0.7	2.8	6.5	1.7	1.8	4.0	11.1	1.1	2.8	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	23.6	14.8	23.8	17.0	13.5	31.2	36.6	51.6	32.1	36.7	34.3
LnGrp LOS	B	C	B	C	B	B	C	D	D	C	D	C
Approach Vol, veh/h		1337			1313			688			218	
Approach Delay, s/veh		22.5			17.9			44.7			35.2	
Approach LOS		C			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	25.0	14.1	52.0	10.8	23.2	9.7	56.4
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	20.0	14.0	39.0	7.0	20.0	7.0	46.0
Max Q Clear Time (g_c+I1), s	4.5	22.0	8.8	28.4	6.2	8.2	4.9	19.1
Green Ext Time (p_c), s	0.0	0.0	0.3	5.6	0.0	0.5	0.0	7.1

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1310	1040	5	0	10
Future Vol, veh/h	5	1310	1040	5	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	275	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	1638	1300	6	0	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1306	0	-	0	-	650
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	526	-	-	-	0	412
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	526	-	-	-	-	412
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	526	-	-	-	412
HCM Lane V/C Ratio	0.012	-	-	-	0.03
HCM Control Delay (s)	11.9	-	-	-	14
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	13.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	215	1095	910	50	30	135
Future Vol, veh/h	215	1095	910	50	30	135
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	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	269	1369	1138	63	38	169

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1201	0	-	0	2361	569
Stage 1	-	-	-	-	1138	-
Stage 2	-	-	-	-	1223	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	577	-	-	-	~ 35	465
Stage 1	-	-	-	-	268	-
Stage 2	-	-	-	-	591	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	577	-	-	-	~ 19	465
Mov Cap-2 Maneuver	-	-	-	-	~ 19	-
Stage 1	-	-	-	-	143	-
Stage 2	-	-	-	-	591	-

Approach	EB	WB	SB
HCM Control Delay, s	2.7	0	173.7
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	577	-	-	-	19	465
HCM Lane V/C Ratio	0.466	-	-	-	1.974	0.363
HCM Control Delay (s)	16.6	-	-	-	$ 878.6	17.1
HCM Lane LOS	C	-	-	-	F	C
HCM 95th %tile Q(veh)	2.5	-	-	-	5.1	1.6

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

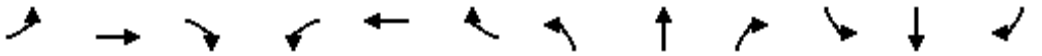
Intersection	
Int Delay, s/veh	4.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	90	80	360	48	52	190
Future Vol, veh/h	90	80	360	48	52	190
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	-	-	275	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	106	94	424	56	61	224

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	770	424	0	0	480	0
Stage 1	424	-	-	-	-	-
Stage 2	346	-	-	-	-	-
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	369	630	-	-	1082	-
Stage 1	660	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	345	630	-	-	1082	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	660	-	-	-	-	-
Stage 2	670	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.9	0	1.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	438	1082	-
HCM Lane V/C Ratio	-	-	0.457	0.057	-
HCM Control Delay (s)	-	-	19.9	8.5	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	2.3	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	880	75	205	960	180	90	175	185	75	150	55
Future Volume (veh/h)	55	880	75	205	960	180	90	175	185	75	150	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	1035	88	241	1129	212	106	206	218	88	176	65
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	291	1870	834	372	1988	887	251	285	360	218	266	225
Arrive On Green	0.04	0.53	0.53	0.08	0.56	0.56	0.07	0.15	0.15	0.06	0.14	0.14
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	65	1035	88	241	1129	212	106	206	218	88	176	65
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.6	19.5	2.8	6.1	20.5	6.8	5.0	10.5	12.3	4.2	8.9	3.7
Cycle Q Clear(g_c), s	1.6	19.5	2.8	6.1	20.5	6.8	5.0	10.5	12.3	4.2	8.9	3.7
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	291	1870	834	372	1988	887	251	285	360	218	266	225
V/C Ratio(X)	0.22	0.55	0.11	0.65	0.57	0.24	0.42	0.72	0.61	0.40	0.66	0.29
Avail Cap(c_a), veh/h	350	1870	834	372	1988	887	266	374	436	251	374	317
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	11.4	15.8	11.9	12.8	14.2	11.2	33.7	40.4	34.6	34.3	40.6	38.4
Incr Delay (d2), s/veh	0.4	1.2	0.3	3.9	1.2	0.6	1.1	4.7	1.6	1.2	2.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	7.3	1.0	2.4	7.5	2.3	2.1	5.0	4.7	1.8	4.1	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.8	17.0	12.1	16.7	15.4	11.8	34.9	45.1	36.3	35.5	43.4	39.1
LnGrp LOS	B	B	B	B	B	B	C	D	D	D	D	D
Approach Vol, veh/h		1188			1582			530			329	
Approach Delay, s/veh		16.4			15.1			39.4			40.4	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	20.2	12.0	57.6	11.1	19.2	8.7	61.0
Change Period (Y+Rc), s	4.5	5.0	4.5	5.0	4.5	5.0	4.5	5.0
Max Green Setting (Gmax), s	7.5	20.0	7.5	46.0	7.5	20.0	7.5	46.0
Max Q Clear Time (g_c+I1), s	6.2	14.3	8.1	21.5	7.0	10.9	3.6	22.5
Green Ext Time (p_c), s	0.0	0.9	0.0	7.7	0.0	0.7	0.0	8.9

Intersection Summary	
HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1135	1335	5	0	10
Future Vol, veh/h	5	1135	1335	5	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	275	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	1335	1571	6	0	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1577	0	-	0	-	786
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	414	-	-	-	0	335
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	414	-	-	-	-	335
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	16.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	414	-	-	-	335
HCM Lane V/C Ratio	0.014	-	-	-	0.035
HCM Control Delay (s)	13.8	-	-	-	16.1
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	10.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	1065	1215	30	50	125
Future Vol, veh/h	70	1065	1215	30	50	125
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	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	1253	1429	35	59	147

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1464	0	-	0	2220	715
Stage 1	-	-	-	-	1429	-
Stage 2	-	-	-	-	791	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	457	-	-	-	*~ 50	373
Stage 1	-	-	-	-	*187	-
Stage 2	-	-	-	-	*612	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	457	-	-	-	*~ 41	373
Mov Cap-2 Maneuver	-	-	-	-	*~ 41	-
Stage 1	-	-	-	-	*154	-
Stage 2	-	-	-	-	*612	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	142.9
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	457	-	-	-	41	373
HCM Lane V/C Ratio	0.18	-	-	-	1.435	0.394
HCM Control Delay (s)	14.6	-	-	-	$ 448	20.8
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.7	-	-	-	5.9	1.8

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

Intersection	
Int Delay, s/veh	6.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	80	56	260	97	190	135
Future Vol, veh/h	80	56	260	97	190	135
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	275	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	85	80	80	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	70	306	121	238	159

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	941	306	0	0	427	0
Stage 1	306	-	-	-	-	-
Stage 2	635	-	-	-	-	-
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	292	734	-	-	1132	-
Stage 1	747	-	-	-	-	-
Stage 2	528	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	231	734	-	-	1132	-
Mov Cap-2 Maneuver	231	-	-	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	417	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.1	0	5.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	231	734	1132	-
HCM Lane V/C Ratio	-	-	0.433	0.095	0.21	-
HCM Control Delay (s)	-	-	32	10.4	9	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	2	0.3	0.8	-

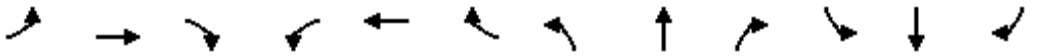
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	275	10	10	90	5	5
Future Vol, veh/h	275	10	10	90	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	393	14	14	129	7	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	407	0	557	400
Stage 1	-	-	-	-	400	-
Stage 2	-	-	-	-	157	-
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	-	-	1152	-	491	650
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	871	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1152	-	485	650
Mov Cap-2 Maneuver	-	-	-	-	485	-
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	860	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	11.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	556	-	-	1152	-
HCM Lane V/C Ratio	0.026	-	-	0.012	-
HCM Control Delay (s)	11.6	-	-	8.2	0
HCM Lane LOS	B	-	-	A	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)	89	954	45	200	770	116	75	152	326	63	109	45
Future Volume (veh/h)	89	954	45	200	770	116	75	152	326	63	109	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	111	1192	56	250	962	145	94	190	408	79	136	56
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	322	1623	724	321	1777	793	327	374	466	250	359	304
Arrive On Green	0.05	0.46	0.46	0.09	0.50	0.50	0.06	0.20	0.20	0.05	0.19	0.19
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	111	1192	56	250	962	145	94	190	408	79	136	56
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.3	27.4	2.0	7.1	18.6	5.0	4.2	9.0	20.0	3.5	6.3	3.0
Cycle Q Clear(g_c), s	3.3	27.4	2.0	7.1	18.6	5.0	4.2	9.0	20.0	3.5	6.3	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	322	1623	724	321	1777	793	327	374	466	250	359	304
V/C Ratio(X)	0.34	0.73	0.08	0.78	0.54	0.18	0.29	0.51	0.88	0.32	0.38	0.18
Avail Cap(c_a), veh/h	357	1623	724	403	1777	793	350	374	466	287	374	317
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	14.2	22.2	15.3	19.1	17.1	13.8	30.0	35.6	33.6	30.5	35.2	33.9
Incr Delay (d2), s/veh	0.6	3.0	0.2	7.5	1.2	0.5	0.5	1.1	16.8	0.7	0.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	11.0	0.7	3.1	7.1	1.8	1.8	4.1	11.0	1.5	2.8	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	25.2	15.5	26.6	18.3	14.3	30.4	36.7	50.3	31.2	35.9	34.1
LnGrp LOS	B	C	B	C	B	B	C	D	D	C	D	C
Approach Vol, veh/h		1359			1357			692			271	
Approach Delay, s/veh		24.0			19.4			43.9			34.2	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	25.0	14.4	50.7	10.7	24.2	10.1	55.0
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	7.0	20.0	14.0	39.0	7.0	20.0	7.0	46.0
Max Q Clear Time (g_c+I1), s	5.5	22.0	9.1	29.4	6.2	8.3	5.3	20.6
Green Ext Time (p_c), s	0.0	0.0	0.3	5.3	0.0	0.6	0.0	7.3

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

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	1328	1041	10	0	45
Future Vol, veh/h	15	1328	1041	10	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	275	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	1660	1301	13	0	56

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1314	0	-	0	-	651
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	522	-	-	-	0	411
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	522	-	-	-	-	411
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	522	-	-	-	411
HCM Lane V/C Ratio	0.036	-	-	-	0.137
HCM Control Delay (s)	12.2	-	-	-	15.1
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	14.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	215	1113	916	50	30	135
Future Vol, veh/h	215	1113	916	50	30	135
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	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	269	1391	1145	63	38	169

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1208	0	-	0	2379	573
Stage 1	-	-	-	-	1145	-
Stage 2	-	-	-	-	1234	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	573	-	-	-	~ 33	463
Stage 1	-	-	-	-	265	-
Stage 2	-	-	-	-	579	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	573	-	-	-	~ 17	463
Mov Cap-2 Maneuver	-	-	-	-	~ 17	-
Stage 1	-	-	-	-	141	-
Stage 2	-	-	-	-	579	-

Approach	EB	WB	SB
HCM Control Delay, s	2.7	0	199.7
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	573	-	-	-	17	463
HCM Lane V/C Ratio	0.469	-	-	-	2.206	0.364
HCM Control Delay (s)	16.7	-	-	-	$ 1020.8	17.2
HCM Lane LOS	C	-	-	-	F	C
HCM 95th %tile Q(veh)	2.5	-	-	-	5.2	1.6

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

Intersection	
Int Delay, s/veh	4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	117	89	360	85	68	190
Future Vol, veh/h	117	89	360	85	68	190
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	275	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	138	105	424	100	80	224

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	808	424	0	0	524	0
Stage 1	424	-	-	-	-	-
Stage 2	384	-	-	-	-	-
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	350	630	-	-	1043	-
Stage 1	660	-	-	-	-	-
Stage 2	688	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	323	630	-	-	1043	-
Mov Cap-2 Maneuver	323	-	-	-	-	-
Stage 1	660	-	-	-	-	-
Stage 2	635	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.9	0	2.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	323	630	1043	-
HCM Lane V/C Ratio	-	-	0.426	0.166	0.077	-
HCM Control Delay (s)	-	-	24.2	11.9	8.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	2	0.6	0.2	-

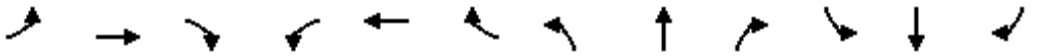
Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	115	10	10	180	10	10
Future Vol, veh/h	115	10	10	180	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	135	12	12	212	12	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	147	0	377	141
Stage 1	-	-	-	-	141	-
Stage 2	-	-	-	-	236	-
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	-	-	1435	-	625	907
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	803	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1435	-	619	907
Mov Cap-2 Maneuver	-	-	-	-	619	-
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	796	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	736	-	-	1435	-
HCM Lane V/C Ratio	0.032	-	-	0.008	-
HCM Control Delay (s)	10.1	-	-	7.5	0
HCM Lane LOS	B	-	-	A	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)	83	909	75	209	981	183	90	181	189	87	152	68
Future Volume (veh/h)	83	909	75	209	981	183	90	181	189	87	152	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	1069	88	246	1154	215	106	213	222	102	179	80
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	285	1836	819	356	1937	864	260	289	364	229	285	241
Arrive On Green	0.05	0.52	0.52	0.08	0.55	0.55	0.07	0.15	0.15	0.06	0.15	0.15
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	98	1069	88	246	1154	215	106	213	222	102	179	80
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.5	20.8	2.8	6.5	21.9	7.1	4.9	10.9	12.5	4.8	9.0	4.5
Cycle Q Clear(g_c), s	2.5	20.8	2.8	6.5	21.9	7.1	4.9	10.9	12.5	4.8	9.0	4.5
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	285	1836	819	356	1937	864	260	289	364	229	285	241
V/C Ratio(X)	0.34	0.58	0.11	0.69	0.60	0.25	0.41	0.74	0.61	0.44	0.63	0.33
Avail Cap(c_a), veh/h	335	1836	819	356	1937	864	276	374	436	249	374	317
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	12.5	16.7	12.4	14.0	15.3	12.0	32.9	40.3	34.5	33.2	39.7	37.8
Incr Delay (d2), s/veh	0.7	1.4	0.3	5.6	1.4	0.7	1.0	5.4	1.8	1.4	2.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	7.9	1.0	2.7	8.1	2.4	2.1	5.2	4.8	2.1	4.1	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.2	18.1	12.6	19.7	16.7	12.7	34.0	45.8	36.3	34.6	42.0	38.6
LnGrp LOS	B	B	B	B	B	B	C	D	D	C	D	D
Approach Vol, veh/h		1255			1615			541			361	
Approach Delay, s/veh		17.3			16.6			39.6			39.2	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	20.5	12.0	56.7	11.1	20.2	9.2	59.5
Change Period (Y+Rc), s	4.5	5.0	4.5	5.0	4.5	5.0	4.5	5.0
Max Green Setting (Gmax), s	7.5	20.0	7.5	46.0	7.5	20.0	7.5	46.0
Max Q Clear Time (g_c+I1), s	6.8	14.5	8.5	22.8	6.9	11.0	4.5	23.9
Green Ext Time (p_c), s	0.0	0.9	0.0	7.8	0.0	0.7	0.0	9.0

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

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	38	1147	1338	23	0	35
Future Vol, veh/h	38	1147	1338	23	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	275	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	1349	1574	27	0	41

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1601	0	-	0	-	787
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	405	-	-	-	0	334
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	405	-	-	-	-	334
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	17.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	405	-	-	-	334
HCM Lane V/C Ratio	0.11	-	-	-	0.123
HCM Control Delay (s)	15	-	-	-	17.3
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	0.4

Intersection	
Int Delay, s/veh	11.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	1077	1236	30	50	125
Future Vol, veh/h	70	1077	1236	30	50	125
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	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	1267	1454	35	59	147

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1489	0	-	0	2252	727
Stage 1	-	-	-	-	1454	-
Stage 2	-	-	-	-	798	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	447	-	-	-	*~ 46	366
Stage 1	-	-	-	-	*181	-
Stage 2	-	-	-	-	*612	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	447	-	-	-	*~ 38	366
Mov Cap-2 Maneuver	-	-	-	-	*~ 38	-
Stage 1	-	-	-	-	*148	-
Stage 2	-	-	-	-	*612	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	160.4
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	447	-	-	-	38	366
HCM Lane V/C Ratio	0.184	-	-	-	1.548	0.402
HCM Control Delay (s)	14.9	-	-	-	$ 508	21.3
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.7	-	-	-	6.2	1.9

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