

# **Appendix I**

## Traffic Impact Study Report



## MEMORANDUM

Date: April 16, 2017  
To: Hedy Koczwara, Aspen Environmental Group  
From: Jason D. Pack, PE  
Andrew Scher  
**Subject: Athos Renewable Energy Transportation Impact Assessment**

*OC17-0531*

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This memorandum summarizes the results of the transportation impact analysis that Fehr & Peers completed for the proposed Athos Renewable Energy site located near Desert Center, California. Our assessment consists of the following:

- Review of intersection sightlines near the proposed Project driveways
- Evaluation of potential construction traffic routes
- Level of Service assessment under Existing, Ambient No Project, and Ambient Plus Project conditions

The remainder of this memorandum is divided into the following key topic areas:

- Introduction
- Existing Conditions
- Project Characteristics
- Ambient No Project Conditions
- Ambient Plus Project Conditions
- Mitigations

Construction of the proposed Project would cause significant impacts, including working with adjacent developments to stagger arrival/departure times or the potential installation of temporary traffic control signals during the duration of the project.



## Introduction

Figure 1 displays the project location and the surrounding roadway network. Fehr & Peers evaluated roadway and intersection operations for the following scenarios:

- **Existing Conditions** – Existing roadway volumes obtained from counts taken on March 22, 2018
- **Ambient No Project Conditions** – Existing roadway volumes plus traffic expected from approved and pending development in the area near the Project
- **Ambient Plus Project Conditions** – Ambient No Project Conditions plus traffic expected from construction related activity for the Project

## Existing Conditions

### Analysis Methodologies

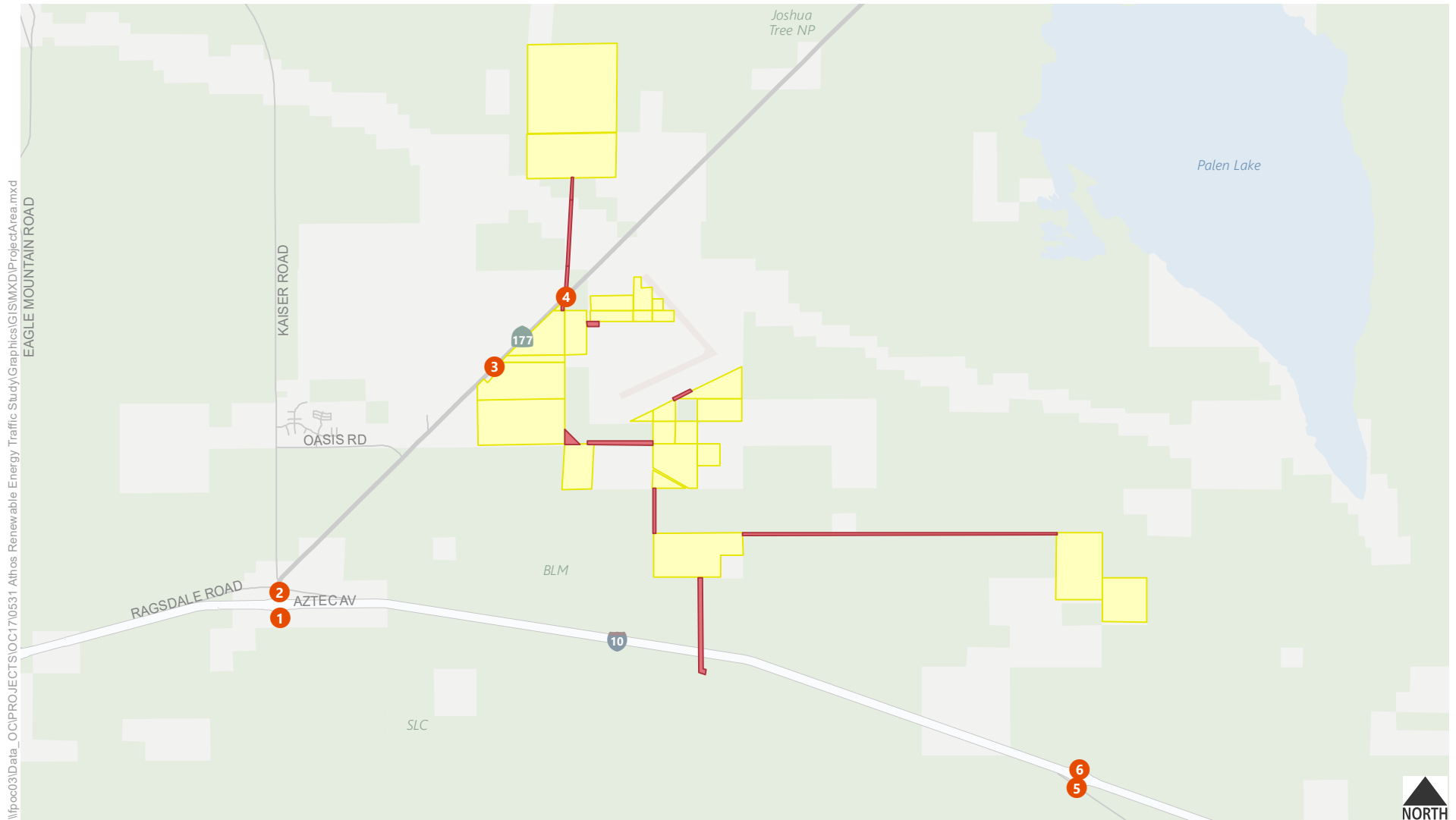
Fehr & Peers calculated the Level of Service (LOS) at the study intersections using Transportation Research Board (TRB) Highway Capacity Manual (HCM) 6th Edition methodologies, 2016. All study intersections are Caltrans facilities, and Caltrans considers LOS C as the lowest acceptable LOS for its facilities. Table 1 shows the HCM LOS criteria.

### Roadways

**Interstate 10 (I-10):** I-10 is a major east/west interstate freeway spanning the United States from Santa Monica, CA to Jacksonville, FL. It connects Southern California to Phoenix, AZ and destinations further east. I-10 is a four-lane freeway with interchanges near the Project site at SR-177 and Corn Springs Road. The posted speed limit on I-10 is 70 mph. In the study area, I-10 carries roughly 26,000 average daily trips (ADT).

**State Route 177 (SR-177):** SR-177 is a north/south highway running between Desert Center/I-10 and State Route 62 (approximately 25 miles northeast of Desert Center). SR-177 is a two-lane road, and the posted speed limit is 65 mph. It carries approximately 2,800 ADT.

**Corn Springs Road:** Corn Springs Road is a rural road with little connectivity. Its interchange with I-10 is nine miles east of the I-10/SR-177 interchange. It connects to rural roads which provide access to a nearby substation and is a proposed access site for solar projects in the area, including Athos.



Solar Facility
  Easements
 # Study Intersection



Figure 1  
Study Area



**TABLE 1 – INTERSECTION LEVEL OF SERVICE CRITERIA**

<b>Level of Service</b>	<b>Description</b>	<b>Signalized Delay (Seconds)</b>	<b>Unsignalized Delay (Seconds)</b>
A	Progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	≤ 10.0	≤ 10.0
B	Progression is good, cycle lengths are short, or both. More vehicles stop than with LOS A, causing higher levels of average delay.	> 10.0 to 20.0	> 10.0 to 15.0
C	Higher congestion may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level, though many still pass through the intersection without stopping.	> 20.0 to 35.0	> 15.0 to 25.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	> 35.0 to 55.0	> 25.0 to 35.0
E	This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	> 55.0 to 80.0	> 35.0 to 50.0
F	This level is considered unacceptable with oversaturation, which is when arrival flow rates exceed the capacity of the intersection. This level may also occur at high V/C ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to such delay levels.	> 80.0	> 50.0

Source: Highway Capacity Manual (Transportation Research Board, 2016).

## **Intersections**

Field observations were completed on March 1, 2018. Figure 2 shows the locations of the study intersections. While specific access points have not yet been chosen for the site, field observations along SR-177 north of Oasis Drive indicate that most locations along the road are suitable for driveways, and that no sightlines are obstructed. The study locations of the North Access Driveway and South Access Driveway (Intersections 3 and 4) both meet these criteria, as shown on Figures 3 and 4.



## Existing Traffic Volumes

Existing traffic volumes and intersection configurations are shown on Figure 5. Field work photos at key access locations are presented on Figure 3.

LOS results for existing conditions are shown in Table 1. The results indicate that all of the intersections operate acceptably at LOS A during both peak hours.

**TABLE 1: EXISTING (2018) CONDITIONS LOS**

Intersection Name	Control	Peak Period	Delay	LOS
I-10 EB Ramps & SR-177	SSSC	AM	9.2	A
	SSSC	PM	9.0	A
I-10 WB Ramps & SR-177	SSSC	AM	8.8	A
	SSSC	PM	8.8	A
SR-177 & South Access Driveway	SSSC	AM	N/A	N/A
	SSSC	PM	N/A	N/A
SR-177 & North Access Driveway	SSSC	AM	N/A	N/A
	SSSC	PM	N/A	N/A
I-10 EB Ramps & Corn Springs Road	SSSC	AM	8.4	A
	SSSC	PM	8.4	A
I-10 WB Ramps & Corn Springs Road	SSSC	AM	8.5	A

**Notes:**

Calculated using methodologies consistent with HCM 6<sup>th</sup> Edition

N/A – Not Applicable as driveways only exist with the project

SSSC = Side Street Stop Control

Source: *Fehr & Peers, 2018*



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# Study Intersection



Figure 2

## Study Intersections



Figure 3

Study Intersection 3 Site Photos





Figure 4

Study Intersection 4 Site Photos



1. SR-177/I-10 EB Ramps		2. SR-177/I-10 WB Ramps		3. SR-177/South Access Driveway		4. SR-177/North Access Driveway	
SR-177 I-10 EB Ramps 0 (3) 15 (12) 49 (65) 2 (3) 0 (4)	SR-177 I-10 EB Ramps 1 (5) 1 (2)	SR-177 I-10 WB Ramps 37 (63) 13 (14) 17 (24) 3 (5) 2 (1)	SR-177 I-10 WB Ramps 2 (2) 48 (68)	SR-177 South Access Driveway 20 (41) 0 (0)	SR-177 South Access Driveway 0 (0) 0 (0) 0 (0)	SR-177 North Access Driveway 0 (0) 20 (41)	SR-177 North Access Driveway 0 (0) 0 (0) 0 (0)
5. Corn Springs Road/I-10 EB Ramps		6. Corn Springs Road/I-10 WB Ramps					
Corn Springs Road I-10 EB Ramps 2 (1) 0 (0)	Corn Springs Road I-10 EB Ramps 2 (2) 1 (3) 5 (5)	Corn Springs Road I-10 WB Ramps 3 (3) 0 (0)	Corn Springs Road I-10 WB Ramps 3 (2) 3 (5) 2 (1)				

Figure 3  
 Peak Hour Traffic Volumes  
 Existing (2018) Volumes





## Project Conditions

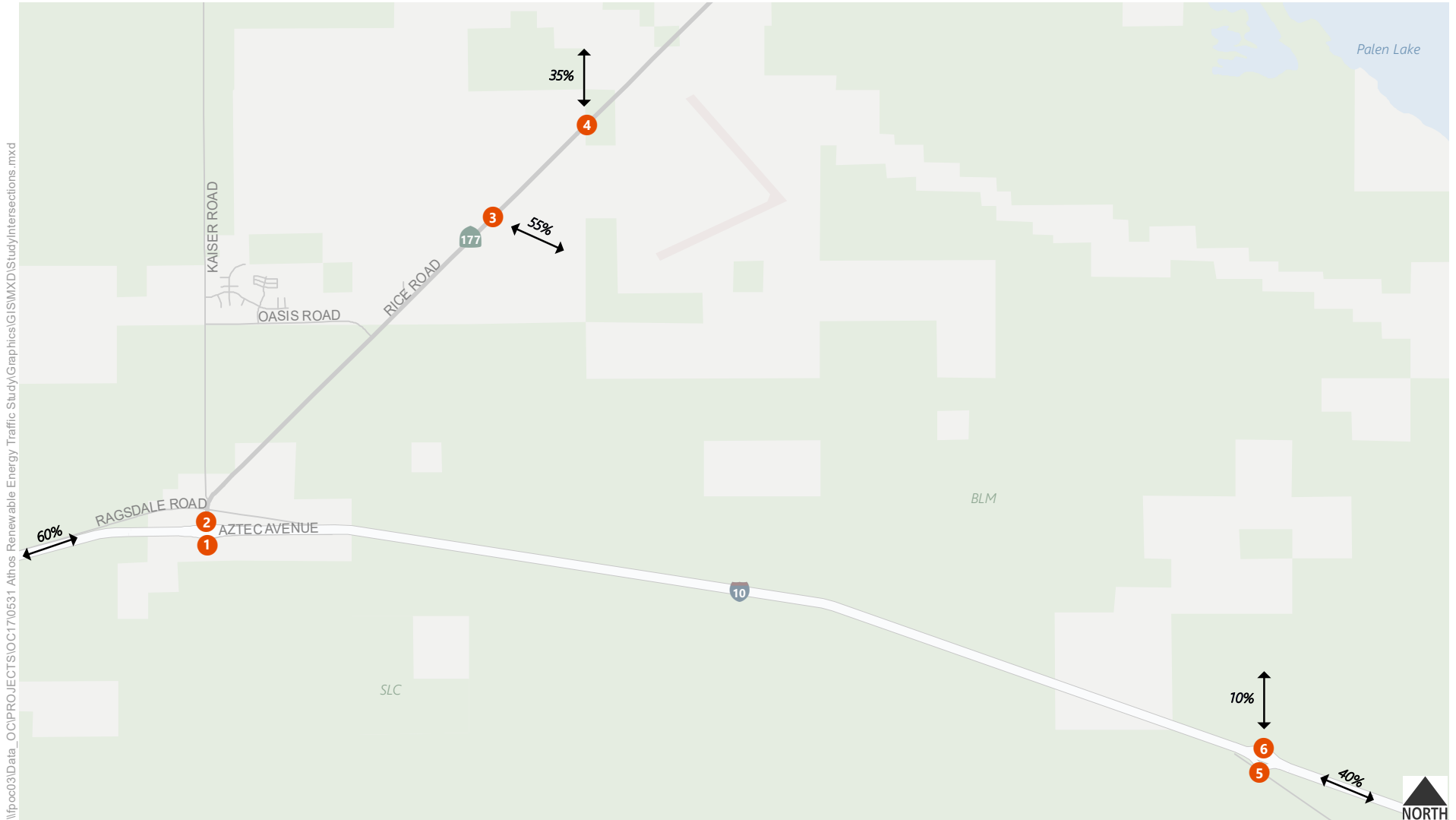
### Trip Generation

Trip generation for the proposed Athos Renewable Energy Project was developed for the construction phase of the project using information provided by the applicant. Peak hour trips generated for the construction period of the project are shown in Table 2. Please note that delivery trucks for the proposed project represent just over 1% of the total trips generated by the project. The technical assessment has assumed that the heavy vehicle percentage is 2% of the total trips through the intersection. As such, the presence of the project's heavy vehicles are accounted for in the capacity adjustments at the study intersections through the heavy vehicle percentage.

**TABLE 2: CONGESTION TRIP GENERATION**

Description	Quantity	ADT	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Workers	530	1060	530	0	530	0	530	530
Delivery Trucks	40	80	3	3	6	3	3	6
Total		1140	533	3	536	3	533	536

Trip distribution for the project is shown on Figure 6. Project added trips at the study intersections are shown on Figure 7. It should be noted that the site will generate minimal trips during operation phase so it does not warrant analysis.



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# Study Intersection     $\longleftrightarrow$  xx%    Regional Trip Distribution     $\longleftrightarrow$  xx%    Site Access Distribution



Figure X

## Trip Distribution



1. SR-177/I-10 EB Ramps	2. SR-177/I-10 WB Ramps	3. SR-177/South Access Driveway	4. SR-177/North Access Driveway
<p style="text-align: center;">SR-177</p> <p style="text-align: center;">0 (0) 0 (191)</p> <p>I-10 EB Ramps</p> <hr/> <p style="text-align: center;">288 (2) 0 (0) 0 (0)</p> <p style="text-align: center;">0 (0) 0 (0)</p>	<p style="text-align: center;">SR-177</p> <p style="text-align: center;">2 (288) 0 (191)</p> <p>I-10 WB Ramps</p> <hr/> <p style="text-align: center;">191 (0) 0 (0) 0 (0)</p> <p style="text-align: center;">0 (0) 288 (2)</p>	<p style="text-align: center;">SR-177</p> <p style="text-align: center;">1 (186) 0 (0)</p> <p>South Access Driveway</p> <hr/> <p style="text-align: center;">0 (0) 0 (0) 1 (293)</p> <p style="text-align: center;">186 (1) 293 (1)</p>	<p style="text-align: center;">SR-177</p> <p style="text-align: center;">0 (0) 0 (0)</p> <p>North Access Driveway</p> <hr/> <p style="text-align: center;">0 (0) 0 (0) 1 (186)</p> <p style="text-align: center;">186 (1) 0 (0)</p>
5. Corn Springs Road/I-10 EB Ramps	6. Corn Springs Road/I-10 WB Ramps		
<p style="text-align: center;">Corn Springs Road</p> <p style="text-align: center;">0 (0) 1 (22)</p> <p>I-10 EB Ramps</p> <hr/> <p style="text-align: center;">32 (0) 0 (0) 0 (0)</p> <p style="text-align: center;">0 (0) 0 (0)</p>	<p style="text-align: center;">Corn Springs Road</p> <p style="text-align: center;">0 (32) 1 (22)</p> <p>I-10 WB Ramps</p> <hr/> <p style="text-align: center;">22 (0) 0 (0) 0 (0)</p> <p style="text-align: center;">0 (0) 32 (0)</p>		

Figure 4  
Peak Hour Traffic Volumes  
Project Volumes





## Ambient Conditions

### Concurrently Constructed Projects

Table 3 shows the approved and pending projects near the study area. Projects were included in the Ambient Conditions analysis if they were determined to likely overlap with the late 2019 to late 2021 construction schedule for the Athos Renewable Energy Project.

**TABLE 3: APPROVED AND PENDING PROJECTS**

Nearby Projects	Included in Ambient Conditions?	Reason
SunPower Project(s)	Included	Potentially Overlapping Construction Schedule
Palen Solar Project	Included	Potentially Overlapping Construction Schedule
EDF's 150 MW Desert Harvest Project	Included	Potentially Overlapping Construction Schedule
CUP3788	Included	Potentially Overlapping Construction Schedule
Desert Southwest 500 kV Transmission Line	Included	Potentially Overlapping Construction Schedule
Plot Plan No. 23577, Revised Permit No 2.	Not Included	Non-Overlapping Construction Schedule
California Jupiter LLC, Jupiter Project (CACA 56577)	Not Included	Non-Overlapping Construction Schedule
IO Solar Project (CACA 56782)	Not Included	Non-Overlapping Construction Schedule
DC 50 Solar	Not Included	Non-Overlapping Construction Schedule

The peak hour trips generated for each of the included projects are shown in Table 4:



**TABLE 4: TRIP GENERATION FOR PROJECTS INCLUDED IN AMBIENT CONDITIONS**

Nearby Projects	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
SunPower Project(s)	426	2	428	2	426	428
Palen Solar Project	1,148	3	1,151	3	1,148	1,151
EDF's 150 MW Desert Harvest Project	143	20	163	0	125	125
CUP3788	213	1	214	1	213	214
Desert Southwest 500 kV Transmission Line	144	0	144	0	144	144

Trip generation and distribution was taken from available EIR documents. When not available, trips generated was estimated per MW based on the Athos Renewable Energy Project trip generation rate, and trip distribution was based on Athos' trip distribution. Figure 8 shows the Ambient Volumes for the study intersections.

Table 5 shows the LOS results at the study intersections for Ambient Conditions.



**TABLE 5: AMBIENT CONDITIONS LOS**

Intersection Name	Control	Peak Period	Existing		Ambient	
			Delay	LOS	Delay	LOS
I-10 EB Ramps & SR-177	SSSC	AM	9.2	A	11.7	B
	SSSC	PM	9.0	A	12.9	B
I-10 WB Ramps & SR-177	SSSC	AM	8.8	A	13.3	B
	SSSC	PM	8.8	A	8.9	A
SR-177 & South Access Driveway	SSSC	AM	N/A	N/A	N/A	N/A
	SSSC	PM	N/A	N/A	N/A	N/A
SR-177 & North Access Driveway	SSSC	AM	N/A	N/A	N/A	N/A
	SSSC	PM	N/A	N/A	N/A	N/A
I-10 EB Ramps & Corn Springs Road	SSSC	AM	8.4	A	30.5	<b>D</b>
	SSSC	PM	8.4	A	44.1	<b>E</b>
I-10 WB Ramps & Corn Springs Road	SSSC	AM	8.5	A	> 180.0	<b>F</b>
	SSSC	PM	8.4	A	11.1	B

Notes:

Calculated using methodologies consistent with HCM 6<sup>th</sup> Edition

N/A – Not Applicable as driveways only exist with the project

SSSC = Side Street Stop Control

Source: *Fehr & Peers, 2018*

The following intersections are projected to operate unacceptably in the Ambient Condition:

- I-10 EB Ramps & Corn Springs Road – LOS D (AM Peak Hour), LOS E (PM Peak Hour)
- I-10 WB Ramps & Corn Springs Road – LOS F (AM Peak Hour)





1. SR-177/I-10 EB Ramps	2. SR-177/I-10 WB Ramps	3. SR-177/South Access Driveway	4. SR-177/North Access Driveway
<p>SR-177</p> <p>I-10 EB Ramps</p> <p>0 (3) 32 (188)</p> <p>347 (66) 2 (3) 0 (4)</p> <p>1 (5) 1 (2)</p>	<p>SR-177</p> <p>I-10 WB Ramps</p> <p>41 (351) 30 (190)</p> <p>211 (24) 3 (5) 2 (1)</p> <p>2 (2) 346 (69)</p>	<p>SR-177</p> <p>South Access Driveway</p> <p>24 (41) 0 (0)</p> <p>0 (0) 0 (0) 0 (0)</p> <p>57 (76) 0 (0)</p>	<p>SR-177</p> <p>North Access Driveway</p> <p>0 (0) 24 (41)</p> <p>0 (0) 0 (0) 0 (0)</p> <p>0 (0) 57 (76)</p>
5. Corn Springs Road/I-10 EB Ramps	6. Corn Springs Road/I-10 WB Ramps		
<p>Corn Springs Road</p> <p>I-10 EB Ramps</p> <p>2 (1) 2 (745)</p> <p>831 (5) 1 (3) 5 (5)</p> <p>0 (0) 5 (5)</p>	<p>Corn Springs Road</p> <p>I-10 WB Ramps</p> <p>6 (832) 2 (745)</p> <p>748 (5) 3 (5) 2 (1)</p> <p>0 (1) 831 (4)</p>		

Figure 4  
Peak Hour Traffic Volumes  
Ambient Volumes





## Ambient Plus Project Conditions

Figure 9 shows the Ambient Plus Project Volumes for the study intersections.

Table 6 shows the LOS results at the study intersections for Ambient Plus Project Conditions.

**TABLE 6: AMBIENT PLUS PROJECT CONDITIONS LOS**

Intersection Name	Control	Peak Period	Ambient		Ambient+Project	
			Delay	LOS	Delay	LOS
I-10 EB Ramps & SR-177	SSSC	AM	11.7	B	20.3	C
	SSSC	PM	12.9	B	24.7	C
I-10 WB Ramps & SR-177	SSSC	AM	13.3	B	71.3	<b>F</b>
	SSSC	PM	8.9	A	9.1	A
SR-177 & South Access Driveway	SSSC	AM	N/A	N/A	11.4	B
	SSSC	PM	N/A	N/A	15.3	C
SR-177 & North Access Driveway	SSSC	AM	N/A	N/A	8.4	A
	SSSC	PM	N/A	N/A	9.4	A
I-10 EB Ramps & Corn Springs Road	SSSC	AM	30.5	<b>D</b>	36.1	<b>E</b>
	SSSC	PM	44.1	<b>E</b>	48.3	<b>E</b>
I-10 WB Ramps & Corn Springs Road	SSSC	AM	> 180.0	<b>F</b>	> 180.0	<b>F</b>
	SSSC	PM	11.1	B	11.4	B

Notes:

Calculated using methodologies consistent with HCM 6<sup>th</sup> Edition

N/A – Not Applicable as driveways only exist with the project

SSSC = Side Street Stop Control

Source: *Fehr & Peers, 2018*

The following intersections are projected to operate unacceptably in the Ambient Plus Project Condition:

- I-10 EB Ramps & Corn Springs Road – LOS E (AM Peak Hour), LOS E (PM Peak Hour)
- I-10 WB Ramps & Corn Springs Road – LOS F (AM Peak Hour)



1. SR-177/I-10 EB Ramps	2. SR-177/I-10 WB Ramps	3. SR-177/South Access Driveway	4. SR-177/North Access Driveway																																
<table border="1"> <tr> <td>SR-177</td> <td></td> </tr> <tr> <td>0 (3) 32 (379)</td> <td></td> </tr> <tr> <td>I-10 EB Ramps</td> <td></td> </tr> <tr> <td>635 (68) 2 (3) 0 (4)</td> <td>1 (5) 1 (2)</td> </tr> </table>	SR-177		0 (3) 32 (379)		I-10 EB Ramps		635 (68) 2 (3) 0 (4)	1 (5) 1 (2)	<table border="1"> <tr> <td>SR-177</td> <td></td> </tr> <tr> <td>43 (639) 30 (381)</td> <td>402 (24) 3 (5) 2 (1)</td> </tr> <tr> <td>I-10 WB Ramps</td> <td></td> </tr> <tr> <td></td> <td>2 (2) 634 (71)</td> </tr> </table>	SR-177		43 (639) 30 (381)	402 (24) 3 (5) 2 (1)	I-10 WB Ramps			2 (2) 634 (71)	<table border="1"> <tr> <td>SR-177</td> <td></td> </tr> <tr> <td>25 (227) 0 (0)</td> <td>0 (0) 0 (0) 1 (293)</td> </tr> <tr> <td>South Access Driveway</td> <td></td> </tr> <tr> <td></td> <td>243 (77) 293 (1)</td> </tr> </table>	SR-177		25 (227) 0 (0)	0 (0) 0 (0) 1 (293)	South Access Driveway			243 (77) 293 (1)	<table border="1"> <tr> <td>SR-177</td> <td></td> </tr> <tr> <td>0 (0) 24 (41)</td> <td></td> </tr> <tr> <td>North Access Driveway</td> <td></td> </tr> <tr> <td>0 (0) 0 (0) 1 (186)</td> <td>186 (1) 57 (76)</td> </tr> </table>	SR-177		0 (0) 24 (41)		North Access Driveway		0 (0) 0 (0) 1 (186)	186 (1) 57 (76)
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Figure 4  
Peak Hour Traffic Volumes  
Ambient+Project Volumes





## Mitigations

The addition of Project Traffic to the Ambient Conditions causes potential impacts under Caltrans TIA guidelines. Fehr & Peers evaluated several measures to mitigate project impacts. These measures include coordination with adjacent development projects to spread work shifts into multiple hours (instead of peak hour) or the installation of temporary traffic signals or manual traffic control officers during peak hours to mitigate the temporary impacts. Under Ambient Plus Project Conditions, the worst performing intersection fails at 78% of total volumes in the AM and 50% of total volumes in the PM. As previously noted, the project sponsor should coordinate with the projects concurrently being constructed such that enough trips are spread outside the peak hour to reduce the intersection impacts. Our analysis conservatively assumes that all commute trips are already taking place during the peak hour. Commute trips often are spread out over two or more hours. Table 7 shows the LOS results of reducing traffic volumes.

**Table 7: Ambient Plus Project Mitigation Measure (Reduced Traffic) Conditions**

Intersection Name	Control	Peak Period	Ambient+Project		Ambient+Project Mitigation-Traffic Sensitivity Test		Delta Delay
			Delay	LOS	Delay	LOS	
I-10 EB Ramps & SR-177	SSSC	AM	20.3	C	10.8	B	-9.5
	SSSC	PM	24.7	C	17.1	C	-7.6
I-10 WB Ramps & SR-177	SSSC	AM	71.3	<b>F</b>	12.5	B	-58.8
	SSSC	PM	9.1	A	8.9	A	-0.2
SR-177 & South Access Driveway	SSSC	AM	11.4	B	9.7	A	-1.7
	SSSC	PM	15.3	C	12.4	B	-2.9
SR-177 & North Access Driveway	SSSC	AM	8.4	A	8.4	A	0
	SSSC	PM	9.4	A	9.1	A	-0.3
I-10 EB Ramps & Corn Springs Road	SSSC	AM	36.1	<b>E</b>	11.6	B	-24.5
	SSSC	PM	48.3	<b>E</b>	24.8	C	-23.5
I-10 WB Ramps & Corn Springs Road	SSSC	AM	764.8	<b>F</b>	24.5	C	-740.3
	SSSC	PM	11.4	B	10.2	B	-1.2

Notes:  
 Calculated using methodologies consistent with HCM 6th Edition  
 SSSC = Side Street Stop Control  
 Source: Fehr & Peers, 2018



Intersection impacts can also be mitigated by the installation of a temporary signal or use of manual intersection control during the construction period. I-10 WB Ramps & SR-177 (Intersection 6) required geometry changes in addition to signalization. A 50-foot westbound right turn pocket was added, as well as a southbound 50-foot right turn pocket. If manual intersection control is used in the AM peak hour, no manual intersection control is needed in the PM peak hour, and the southbound right turn pocket isn't needed. Table 8 shows the LOS results of using a traffic signal at the impacted intersections.

**Table 8: Ambient Plus Project Mitigation Measure (Signalized) Conditions**

Intersection Name	Control	Peak Period	Ambient+Project		Ambient+Project Mitigation-Signalized		Delta Delay
			Delay	LOS	Delay	LOS	
I-10 WB Ramps & SR-177	Signalized	AM	71.3	F	14.5	B	-56.8
	Signalized	PM	9.1	A	6.6	A	-2.5
I-10 EB Ramps & Corn Springs Road	Signalized	AM	36.1	E	6.8	A	-29.3
	Signalized	PM	48.3	E	4.4	A	-43.9
I-10 WB Ramps & Corn Springs Road	Signalized	AM	<180.0	F	25.4	C	-154.6
	Signalized	PM	11.4	B	3.9	A	-10.5

Notes:  
 Calculated using methodologies consistent with HCM 6th Edition  
 SSSC = Side Street Stop Control  
 Source: Fehr & Peers, 2018

With implementation of the proposed mitigation measures, operations are improved to acceptable levels and the impacts are reduced to a less-than-significant level.

As the project moves into an operations and maintenance phase, project trips are dramatically reduced and the project would not have the potential to impact study facilities during that phase of the project.



## Appendix A: HCM 6<sup>th</sup> Addition Results

Intersection												
Int Delay, s/veh	8.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↖			↖	
Traffic Vol, veh/h	49	2	0	0	0	0	0	1	1	15	0	0
Future Vol, veh/h	49	2	0	0	0	0	0	1	1	15	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	20	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	62	62	62	62	62	62	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	79	3	0	0	0	0	0	2	2	24	0	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	51	52	0	-	0	0	4	0	0
Stage 1	48	48	-	-	-	-	-	-	-
Stage 2	3	4	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	958	839	-	0	-	-	1618	-	0
Stage 1	974	855	-	0	-	-	-	-	0
Stage 2	1020	892	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	944	0	-	-	-	-	1618	-	-
Mov Cap-2 Maneuver	944	0	-	-	-	-	-	-	-
Stage 1	959	0	-	-	-	-	-	-	-
Stage 2	1020	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	7.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	944	-	1618	-
HCM Lane V/C Ratio	-	-	0.087	-	0.015	-
HCM Control Delay (s)	-	-	9.2	0	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	-	0	-

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	2	3	17	2	48	0	0	13	37
Future Vol, veh/h	0	0	0	2	3	17	2	48	0	0	13	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	3	4	23	3	64	0	0	17	49

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	112	136	64	66	0	-	-
Stage 1	70	70	-	-	-	-	-
Stage 2	42	66	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	885	755	1000	1536	-	0	0
Stage 1	953	837	-	-	-	0	0
Stage 2	980	840	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	883	0	1000	1536	-	-	-
Mov Cap-2 Maneuver	883	0	-	-	-	-	-
Stage 1	951	0	-	-	-	-	-
Stage 2	980	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	1536	-	986	-
HCM Lane V/C Ratio	0.002	-	0.03	-
HCM Control Delay (s)	7.3	0	8.8	-
HCM Lane LOS	A	A	A	-
HCM 95th %tile Q(veh)	0	-	0.1	-



Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	57	0	0	20
Future Vol, veh/h	0	0	57	0	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	88	0	0	31

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	119	88	0	0	88
Stage 1	88	-	-	-	-
Stage 2	31	-	-	-	-
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	877	970	-	-	1508
Stage 1	935	-	-	-	-
Stage 2	992	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	877	970	-	-	1508
Mov Cap-2 Maneuver	877	-	-	-	-
Stage 1	935	-	-	-	-
Stage 2	992	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1508	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	TT			TT	TT	
Traffic Vol, veh/h	0	0	0	57	20	0
Future Vol, veh/h	0	0	0	57	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	88	31	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	119	31	31	0	0
Stage 1	31	-	-	-	-
Stage 2	88	-	-	-	-
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	877	1043	1582	-	-
Stage 1	992	-	-	-	-
Stage 2	935	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	877	1043	1582	-	-
Mov Cap-2 Maneuver	877	-	-	-	-
Stage 1	992	-	-	-	-
Stage 2	935	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1582	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	2	1	5	0	0	0	0	0	5	0	2	0
Future Vol, veh/h	2	1	5	0	0	0	0	0	5	0	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1	7	0	0	0	0	0	7	0	3	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	7	10	3	-	0	0	7	0	0
Stage 1	3	3	-	-	-	-	-	-	-
Stage 2	4	7	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	1014	885	1081	0	-	-	1614	-	0
Stage 1	1020	893	-	0	-	-	-	-	0
Stage 2	1019	890	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	1014	0	1081	-	-	-	1614	-	-
Mov Cap-2 Maneuver	1014	0	-	-	-	-	-	-	-
Stage 1	1020	0	-	-	-	-	-	-	-
Stage 2	1019	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	1061	1614	-
HCM Lane V/C Ratio	-	-	0.011	-	-
HCM Control Delay (s)	-	-	8.4	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	2	3	3	0	2	0	0	0	3
Future Vol, veh/h	0	0	0	2	3	3	0	2	0	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	3	5	5	0	3	0	0	0	5

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	6	8	3	5	0	-	-
Stage 1	3	3	-	-	-	-	-
Stage 2	3	5	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1015	887	1081	1616	-	0	0
Stage 1	1020	893	-	-	-	0	0
Stage 2	1020	892	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	1015	0	1081	1616	-	-	-
Mov Cap-2 Maneuver	1015	0	-	-	-	-	-
Stage 1	1020	0	-	-	-	-	-
Stage 2	1020	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	1616	- 1054	-	-
HCM Lane V/C Ratio	-	- 0.012	-	-
HCM Control Delay (s)	0	- 8.5	-	-
HCM Lane LOS	A	- A	-	-
HCM 95th %tile Q(veh)	0	- 0	-	-

Intersection												
Int Delay, s/veh	8.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↖			↖	
Traffic Vol, veh/h	49	2	0	0	0	0	0	1	1	15	0	0
Future Vol, veh/h	49	2	0	0	0	0	0	1	1	15	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	20	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	62	62	62	62	62	62	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	79	3	0	0	0	0	0	2	2	24	0	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	51	52	0	-	0	0	4	0	0
Stage 1	48	48	-	-	-	-	-	-	-
Stage 2	3	4	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	958	839	-	-	-	-	1618	-	0
Stage 1	974	855	-	-	-	-	-	-	0
Stage 2	1020	892	-	-	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	944	0	-	-	-	-	1618	-	-
Mov Cap-2 Maneuver	944	0	-	-	-	-	-	-	-
Stage 1	959	0	-	-	-	-	-	-	-
Stage 2	1020	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	7.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	944	-	1618	-
HCM Lane V/C Ratio	-	-	0.087	-	0.015	-
HCM Control Delay (s)	-	-	9.2	0	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	-	0	-

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	2	3	17	2	48	0	0	13	37
Future Vol, veh/h	0	0	0	2	3	17	2	48	0	0	13	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	3	4	23	3	64	0	0	17	49

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	112	136	64	66	0	-	-
Stage 1	70	70	-	-	-	-	-
Stage 2	42	66	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	885	755	1000	1536	-	0	0
Stage 1	953	837	-	-	-	0	0
Stage 2	980	840	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	883	0	1000	1536	-	-	-
Mov Cap-2 Maneuver	883	0	-	-	-	-	-
Stage 1	951	0	-	-	-	-	-
Stage 2	980	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	1536	-	986	-
HCM Lane V/C Ratio	0.002	-	0.03	-
HCM Control Delay (s)	7.3	0	8.8	-
HCM Lane LOS	A	A	A	-
HCM 95th %tile Q(veh)	0	-	0.1	-

Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	2	1	5	0	0	0	0	0	5	0	2	0
Future Vol, veh/h	2	1	5	0	0	0	0	0	5	0	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1	7	0	0	0	0	0	7	0	3	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	7	10	3	-	0	0	7	0	0
Stage 1	3	3	-	-	-	-	-	-	-
Stage 2	4	7	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	1014	885	1081	0	-	-	1614	-	0
Stage 1	1020	893	-	0	-	-	-	-	0
Stage 2	1019	890	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	1014	0	1081	-	-	-	1614	-	-
Mov Cap-2 Maneuver	1014	0	-	-	-	-	-	-	-
Stage 1	1020	0	-	-	-	-	-	-	-
Stage 2	1019	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	1061	1614	-
HCM Lane V/C Ratio	-	-	0.011	-	-
HCM Control Delay (s)	-	-	8.4	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	2	3	3	0	2	0	0	0	3
Future Vol, veh/h	0	0	0	2	3	3	0	2	0	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	3	5	5	0	3	0	0	0	5

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	6	8	3	5	0	-	-
Stage 1	3	3	-	-	-	-	-
Stage 2	3	5	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1015	887	1081	1616	-	0	0
Stage 1	1020	893	-	-	-	0	0
Stage 2	1020	892	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	1015	0	1081	1616	-	-	-
Mov Cap-2 Maneuver	1015	0	-	-	-	-	-
Stage 1	1020	0	-	-	-	-	-
Stage 2	1020	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	1616	- 1054	-	-
HCM Lane V/C Ratio	-	- 0.012	-	-
HCM Control Delay (s)	0	- 8.5	-	-
HCM Lane LOS	A	- A	-	-
HCM 95th %tile Q(veh)	0	- 0	-	-



Intersection												
Int Delay, s/veh	7.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↖			↖	
Traffic Vol, veh/h	65	3	4	0	0	0	0	5	2	12	3	0
Future Vol, veh/h	65	3	4	0	0	0	0	5	2	12	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	20	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	66	3	4	0	0	0	0	5	2	12	3	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	33	34	3	-	0	0	7	0	0
Stage 1	27	27	-	-	-	-	-	-	-
Stage 2	6	7	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	980	859	1081	0	-	-	1614	-	0
Stage 1	996	873	-	0	-	-	-	-	0
Stage 2	1017	890	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	973	0	1081	-	-	-	1614	-	-
Mov Cap-2 Maneuver	973	0	-	-	-	-	-	-	-
Stage 1	989	0	-	-	-	-	-	-	-
Stage 2	1017	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0	5.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	973	1081	1614	-
HCM Lane V/C Ratio	-	-	0.071	0.004	0.008	-
HCM Control Delay (s)	-	-	9	8.3	7.2	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	0	-

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	1	5	24	2	68	0	0	14	53
Future Vol, veh/h	0	0	0	1	5	24	2	68	0	0	14	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	1	5	26	2	73	0	0	15	57

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	121	149	73	72	0	-	-
Stage 1	77	77	-	-	-	-	-
Stage 2	44	72	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	874	743	989	1528	-	0	0
Stage 1	946	831	-	-	-	0	0
Stage 2	978	835	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	873	0	989	1528	-	-	-
Mov Cap-2 Maneuver	873	0	-	-	-	-	-
Stage 1	945	0	-	-	-	-	-
Stage 2	978	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	1528	-	984	-
HCM Lane V/C Ratio	0.001	-	0.033	-
HCM Control Delay (s)	7.4	0	8.8	-
HCM Lane LOS	A	A	A	-
HCM 95th %tile Q(veh)	0	-	0.1	-

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	72	0	0	41
Future Vol, veh/h	0	0	72	0	0	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	96	0	0	55

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	151	96	0	0	96
Stage 1	96	-	-	-	-
Stage 2	55	-	-	-	-
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	841	960	-	-	1498
Stage 1	928	-	-	-	-
Stage 2	968	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	841	960	-	-	1498
Mov Cap-2 Maneuver	841	-	-	-	-
Stage 1	928	-	-	-	-
Stage 2	968	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1498	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			L T		
Traffic Vol, veh/h	0	0	0	72	41	0
Future Vol, veh/h	0	0	0	72	41	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	96	55	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	151	55	55	0	-	0
Stage 1	55	-	-	-	-	-
Stage 2	96	-	-	-	-	-
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	841	1012	1550	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	928	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	841	1012	1550	-	-	-
Mov Cap-2 Maneuver	841	-	-	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	928	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1550	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection												
Int Delay, s/veh	5.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	2	3	5	0	0	0	0	0	5	0	1	0
Future Vol, veh/h	2	3	5	0	0	0	0	0	5	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	4	7	0	0	0	0	0	7	0	1	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	5	8	1	-	0	0	7	0	0
Stage 1	1	1	-	-	-	-	-	-	-
Stage 2	4	7	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	1017	887	1084	0	-	-	1614	-	0
Stage 1	1022	895	-	0	-	-	-	-	0
Stage 2	1019	890	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	1017	0	1084	-	-	-	1614	-	-
Mov Cap-2 Maneuver	1017	0	-	-	-	-	-	-	-
Stage 1	1022	0	-	-	-	-	-	-	-
Stage 2	1019	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	1064	1614	-
HCM Lane V/C Ratio	-	-	0.014	-	-
HCM Control Delay (s)	-	-	8.4	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection												
Int Delay, s/veh	5.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	1	5	2	1	1	0	0	0	3
Future Vol, veh/h	0	0	0	1	5	2	1	1	0	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	1	6	2	1	1	0	0	0	4

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	5	7	1	4	0	-	-
Stage 1	3	3	-	-	-	-	-
Stage 2	2	4	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1017	888	1084	1618	-	0	0
Stage 1	1020	893	-	-	-	0	0
Stage 2	1021	892	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	1016	0	1084	1618	-	-	-
Mov Cap-2 Maneuver	1016	0	-	-	-	-	-
Stage 1	1019	0	-	-	-	-	-
Stage 2	1021	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.4	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	1618	- 1060	-	-
HCM Lane V/C Ratio	0.001	- 0.009	-	-
HCM Control Delay (s)	7.2	0 8.4	-	-
HCM Lane LOS	A	A A	-	-
HCM 95th %tile Q(veh)	0	- 0	-	-

Intersection												
Int Delay, s/veh	11.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↖			↖	
Traffic Vol, veh/h	347	2	0	0	0	0	0	1	1	32	0	0
Future Vol, veh/h	347	2	0	0	0	0	0	1	1	32	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	20	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	377	2	0	0	0	0	0	1	1	35	0	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	72	72	0	-	0	0	2	0	0
Stage 1	70	70	-	-	-	-	-	-	-
Stage 2	2	2	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	932	818	-	0	-	-	1620	-	0
Stage 1	953	837	-	0	-	-	-	-	0
Stage 2	1021	894	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	911	0	-	-	-	-	1620	-	-
Mov Cap-2 Maneuver	911	0	-	-	-	-	-	-	-
Stage 1	932	0	-	-	-	-	-	-	-
Stage 2	1021	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0	7.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	911	-	1620	-
HCM Lane V/C Ratio	-	-	0.416	-	0.021	-
HCM Control Delay (s)	-	-	11.7	0	7.3	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	2.1	-	0.1	-

Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	2	3	211	2	346	0	0	30	41
Future Vol, veh/h	0	0	0	2	3	211	2	346	0	0	30	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	2	3	229	2	376	0	0	33	45

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	436	458	376	78	0	-	-
Stage 1	380	380	-	-	-	-	-
Stage 2	56	78	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	578	499	670	1520	-	0	0
Stage 1	691	614	-	-	-	0	0
Stage 2	967	830	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	577	0	670	1520	-	-	-
Mov Cap-2 Maneuver	577	0	-	-	-	-	-
Stage 1	690	0	-	-	-	-	-
Stage 2	967	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	1520	-	669	-
HCM Lane V/C Ratio	0.001	-	0.351	-
HCM Control Delay (s)	7.4	0	13.3	-
HCM Lane LOS	A	A	B	-
HCM 95th %tile Q(veh)	0	-	1.6	-



Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	57	0	0	24
Future Vol, veh/h	0	0	57	0	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	62	0	0	26

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	88	62	0	0	62
Stage 1	62	-	-	-	-
Stage 2	26	-	-	-	-
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	913	1003	-	-	1541
Stage 1	961	-	-	-	-
Stage 2	997	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	913	1003	-	-	1541
Mov Cap-2 Maneuver	913	-	-	-	-
Stage 1	961	-	-	-	-
Stage 2	997	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1541
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	0	0	0	57	24	0
Future Vol, veh/h	0	0	0	57	24	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	62	26	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	88	26	26	0	0
Stage 1	26	-	-	-	-
Stage 2	62	-	-	-	-
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	913	1050	1588	-	-
Stage 1	997	-	-	-	-
Stage 2	961	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	913	1050	1588	-	-
Mov Cap-2 Maneuver	913	-	-	-	-
Stage 1	997	-	-	-	-
Stage 2	961	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1588	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection												
Int Delay, s/veh	30											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	831	1	5	0	0	0	0	0	5	2	2	0
Future Vol, veh/h	831	1	5	0	0	0	0	0	5	2	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	903	1	5	0	0	0	0	0	5	2	2	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	9	11	2	-	0	0	5	0	0
Stage 1	6	6	-	-	-	-	-	-	-
Stage 2	3	5	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	1011	884	1082	0	-	-	1616	-	0
Stage 1	1017	891	-	0	-	-	-	-	0
Stage 2	1020	892	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	1010	0	1082	-	-	-	1616	-	-
Mov Cap-2 Maneuver	1010	0	-	-	-	-	-	-	-
Stage 1	1016	0	-	-	-	-	-	-	-
Stage 2	1020	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.3	0	3.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	1010	1616	-
HCM Lane V/C Ratio	-	-	0.901	0.001	-
HCM Control Delay (s)	-	-	30.3	7.2	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	13.2	0	-

**Intersection**

Int Delay, s/veh 321.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	2	3	748	0	831	0	0	2	6
Future Vol, veh/h	0	0	0	2	3	748	0	831	0	0	2	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	2	3	813	0	903	0	0	2	7

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	909	912	903
Stage 1	903	903	-
Stage 2	6	9	-
Critical Hdwy	6.42	6.52	6.22
Critical Hdwy Stg 1	5.42	5.52	-
Critical Hdwy Stg 2	5.42	5.52	-
Follow-up Hdwy	3.518	4.018	3.318
Pot Cap-1 Maneuver	305	274	~ 336
Stage 1	396	356	-
Stage 2	1017	888	-
Platoon blocked, %			
Mov Cap-1 Maneuver	305	0	~ 336
Mov Cap-2 Maneuver	305	0	-
Stage 1	396	0	-
Stage 2	1017	0	-

Approach	WB	NB	SB
HCM Control Delay, s	\$ 679.6	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	1611	-	336	-
HCM Lane V/C Ratio	-	-	2.436	-
HCM Control Delay (s)	0	-	\$ 679.6	-
HCM Lane LOS	A	-	F	-
HCM 95th %tile Q(veh)	0	-	65	-

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

Intersection												
Int Delay, s/veh	8.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↖			↖	
Traffic Vol, veh/h	66	3	4	0	0	0	0	5	2	188	3	0
Future Vol, veh/h	66	3	4	0	0	0	0	5	2	188	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	20	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	72	3	4	0	0	0	0	5	2	204	3	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	417	418	3	-	0	0	7	0	0
Stage 1	411	411	-	-	-	-	-	-	-
Stage 2	6	7	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	592	526	1081	0	-	-	1614	-	0
Stage 1	669	595	-	0	-	-	-	-	0
Stage 2	1017	890	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	517	0	1081	-	-	-	1614	-	-
Mov Cap-2 Maneuver	517	0	-	-	-	-	-	-	-
Stage 1	584	0	-	-	-	-	-	-	-
Stage 2	1017	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	0	7.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	517	1081	1614	-
HCM Lane V/C Ratio	-	-	0.145	0.004	0.127	-
HCM Control Delay (s)	-	-	13.1	8.3	7.6	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	0.4	-

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	1	5	24	2	69	0	0	190	351
Future Vol, veh/h	0	0	0	1	5	24	2	69	0	0	190	351
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	1	5	26	2	75	0	0	207	382

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	477	668	75	589	0	-	-
Stage 1	79	79	-	-	-	-	-
Stage 2	398	589	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	547	379	986	986	-	0	0
Stage 1	944	829	-	-	-	0	0
Stage 2	678	495	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	546	0	986	986	-	-	-
Mov Cap-2 Maneuver	546	0	-	-	-	-	-
Stage 1	942	0	-	-	-	-	-
Stage 2	678	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	986	-	955	-
HCM Lane V/C Ratio	0.002	-	0.034	-
HCM Control Delay (s)	8.7	0	8.9	-
HCM Lane LOS	A	A	A	-
HCM 95th %tile Q(veh)	0	-	0.1	-

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	76	0	0	41
Future Vol, veh/h	0	0	76	0	0	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	83	0	0	45

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	128	83	0	0	83	0
Stage 1	83	-	-	-	-	-
Stage 2	45	-	-	-	-	-
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	866	976	-	-	1514	-
Stage 1	940	-	-	-	-	-
Stage 2	977	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	866	976	-	-	1514	-
Mov Cap-2 Maneuver	866	-	-	-	-	-
Stage 1	940	-	-	-	-	-
Stage 2	977	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1514	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	76	41	0
Future Vol, veh/h	0	0	0	76	41	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	83	45	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	128	45	45	0	-	0
Stage 1	45	-	-	-	-	-
Stage 2	83	-	-	-	-	-
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	866	1025	1563	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	940	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	866	1025	1563	-	-	-
Mov Cap-2 Maneuver	866	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	940	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1563	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Intersection												
Int Delay, s/veh	9.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	5	3	5	0	0	0	0	0	5	745	1	0
Future Vol, veh/h	5	3	5	0	0	0	0	0	5	745	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	3	5	0	0	0	0	0	5	810	1	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1624	1626	1	-	0	0	5	0	0
Stage 1	1621	1621	-	-	-	-	-	-	-
Stage 2	3	5	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	113	102	1084	0	-	-	1616	-	0
Stage 1	178	161	-	0	-	-	-	-	0
Stage 2	1020	892	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	56	0	1084	-	-	-	1616	-	-
Mov Cap-2 Maneuver	56	0	-	-	-	-	-	-	-
Stage 1	89	0	-	-	-	-	-	-	-
Stage 2	1020	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	44.1	0	9.4
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	106	1616	-
HCM Lane V/C Ratio	-	-	0.133	0.501	-
HCM Control Delay (s)	-	-	44.1	9.4	0
HCM Lane LOS	-	-	E	A	A
HCM 95th %tile Q(veh)	-	-	0.4	2.9	-

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	1	5	5	1	4	0	0	745	832
Future Vol, veh/h	0	0	0	1	5	5	1	4	0	0	745	832
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	1	5	5	1	4	0	0	810	904

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	1268	1720	4	1714	0	-	-
Stage 1	6	6	-	-	-	-	-
Stage 2	1262	1714	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	186	89	1080	370	-	0	0
Stage 1	1017	891	-	-	-	0	0
Stage 2	266	145	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	185	0	1080	370	-	-	-
Mov Cap-2 Maneuver	185	0	-	-	-	-	-
Stage 1	1014	0	-	-	-	-	-
Stage 2	266	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	370	-	598	-
HCM Lane V/C Ratio	0.003	-	0.02	-
HCM Control Delay (s)	14.8	0	11.1	-
HCM Lane LOS	B	A	B	-
HCM 95th %tile Q(veh)	0	-	0.1	-

HCM 6th Signalized Intersection Summary  
 1: I-10 EB Ramps & SR-177

Ambient+Project MIT 1 AM  
 04/15/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↕			↖	
Traffic Volume (veh/h)	635	2	0	0	0	0	0	1	1	32	0	0
Future Volume (veh/h)	635	2	0	0	0	0	0	1	1	32	0	0
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	690	2	0				0	1	1	35	0	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	948	3	846				0	143	143	474	0	0
Arrive On Green	0.53	0.53	0.00				0.00	0.17	0.17	0.17	0.00	0.00
Sat Flow, veh/h	1776	5	1585				0	858	858	1407	0	0
Grp Volume(v), veh/h	692	0	0				0	0	2	35	0	0
Grp Sat Flow(s),veh/h/ln	1782	0	1585				0	0	1716	1407	0	0
Q Serve(g_s), s	8.9	0.0	0.0				0.0	0.0	0.0	0.6	0.0	0.0
Cycle Q Clear(g_c), s	8.9	0.0	0.0				0.0	0.0	0.0	0.7	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.50	1.00		0.00
Lane Grp Cap(c), veh/h	951	0	846				0	0	286	474	0	0
V/C Ratio(X)	0.73	0.00	0.00				0.00	0.00	0.01	0.07	0.00	0.00
Avail Cap(c_a), veh/h	1928	0	1716				0	0	1057	1110	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.3	0.0	0.0				0.0	0.0	10.4	10.7	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.0				0.0	0.0	0.0	0.1	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
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0				0.0	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.4	0.0	0.0				0.0	0.0	10.5	10.8	0.0	0.0
LnGrp LOS	A	A	A				A	A	B	B	A	A
Approach Vol, veh/h		692						2			35	
Approach Delay, s/veh		6.4						10.5			10.8	
Approach LOS		A						B			B	
Timer - Assigned Phs		2		4				6				
Phs Duration (G+Y+Rc), s		9.5		20.5				9.5				
Change Period (Y+Rc), s		4.5		4.5				4.5				
Max Green Setting (Gmax), s		18.5		32.5				18.5				
Max Q Clear Time (g_c+l1), s		2.0		10.9				2.7				
Green Ext Time (p_c), s		0.0		5.2				0.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			6.6									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary  
2: SR-177 & I-10 WB Ramps

Ambient+Project MIT 1 AM  
04/15/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Volume (veh/h)	0	0	0	2	3	402	2	634	0	0	30	43
Future Volume (veh/h)	0	0	0	2	3	402	2	634	0	0	30	43
Initial Q (Qb), veh				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
Parking Bus, Adj				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		No
Adj Sat Flow, veh/h/ln				1900	1870	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				2	3	437	2	689	0	0	33	47
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				2	4	522	83	865	0	0	323	460
Arrive On Green				0.33	0.33	0.33	0.46	0.46	0.00	0.00	0.46	0.46
Sat Flow, veh/h				7	11	1570	1	1869	0	0	698	994
Grp Volume(v), veh/h				442	0	0	691	0	0	0	0	80
Grp Sat Flow(s),veh/h/ln				1587	0	0	1870	0	0	0	0	1691
Q Serve(g_s), s				11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Cycle Q Clear(g_c), s				11.3	0.0	0.0	13.8	0.0	0.0	0.0	0.0	1.2
Prop In Lane				0.00		0.99	0.00		0.00	0.00		0.59
Lane Grp Cap(c), veh/h				528	0	0	947	0	0	0	0	783
V/C Ratio(X)				0.84	0.00	0.00	0.73	0.00	0.00	0.00	0.00	0.10
Avail Cap(c_a), veh/h				668	0	0	1464	0	0	0	0	1251
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)				1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				13.6	0.0	0.0	10.1	0.0	0.0	0.0	0.0	6.7
Incr Delay (d2), s/veh				7.5	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.3	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				21.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	6.7
LnGrp LOS				C	A	A	B	A	A	A	A	A
Approach Vol, veh/h					442			691				80
Approach Delay, s/veh					21.0			11.2				6.7
Approach LOS					C			B				A
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		24.8				24.8		19.1				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		32.5				32.5		18.5				
Max Q Clear Time (g_c+I1), s		15.8				3.2		13.3				
Green Ext Time (p_c), s		4.5				0.4		1.4				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					14.5							
HCM 6th LOS					B							

HCM 6th Signalized Intersection Summary  
5: I-10 EB Ramps & Corn Springs Road

Ambient+Project MIT 1 AM  
04/15/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔						↔			↔	
Traffic Volume (veh/h)	863	1	5	0	0	0	0	0	5	3	2	0
Future Volume (veh/h)	863	1	5	0	0	0	0	0	5	3	2	0
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1900	1870	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	938	1	5				0	0	5	3	2	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	0				0	2	2	2	2	0
Cap, veh/h	1156	1	6				0	0	196	231	114	0
Arrive On Green	0.65	0.65	0.65				0.00	0.00	0.12	0.12	0.12	0.00
Sat Flow, veh/h	1769	2	9				0	0	1585	714	924	0
Grp Volume(v), veh/h	944	0	0				0	0	5	5	0	0
Grp Sat Flow(s),veh/h/ln	1780	0	0				0	0	1585	1638	0	0
Q Serve(g_s), s	15.8	0.0	0.0				0.0	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	15.8	0.0	0.0				0.0	0.0	0.1	0.1	0.0	0.0
Prop In Lane	0.99		0.01				0.00		1.00	0.60		0.00
Lane Grp Cap(c), veh/h	1163	0	0				0	0	196	345	0	0
V/C Ratio(X)	0.81	0.00	0.00				0.00	0.00	0.03	0.01	0.00	0.00
Avail Cap(c_a), veh/h	1830	0	0				0	0	765	907	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.2	0.0	0.0				0.0	0.0	15.5	15.5	0.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0				0.0	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.7	0.0	0.0				0.0	0.0	15.6	15.6	0.0	0.0
LnGrp LOS	A	A	A				A	A	B	B	A	A
Approach Vol, veh/h		944						5			5	
Approach Delay, s/veh		6.7						15.6			15.6	
Approach LOS		A						B			B	
Timer - Assigned Phs		2		4				6				
Phs Duration (G+Y+Rc), s		9.5		30.9				9.5				
Change Period (Y+Rc), s		4.5		4.5				4.5				
Max Green Setting (Gmax), s		19.5		41.5				19.5				
Max Q Clear Time (g_c+l1), s		2.1		17.8				2.1				
Green Ext Time (p_c), s		0.0		8.6				0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			6.8									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary  
6: Corn Springs Road & I-10 WB Ramps

Ambient+Project MIT 1 AM  
04/15/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↗		↖			↕	↗
Traffic Volume (veh/h)	0	0	0	2	3	770	0	863	0	0	3	6
Future Volume (veh/h)	0	0	0	2	3	770	0	863	0	0	3	6
Initial Q (Qb), veh				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
Parking Bus, Adj				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	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				0	0	841	0	938	0	0	3	7
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				0	554	938	0	1050	0	0	1050	890
Arrive On Green				0.00	0.00	0.30	0.00	0.56	0.00	0.00	0.56	0.56
Sat Flow, veh/h				0	1870	3170	0	1870	0	0	1870	1585
Grp Volume(v), veh/h				0	0	841	0	938	0	0	3	7
Grp Sat Flow(s),veh/h/ln				0	1870	1585	0	1870	0	0	1870	1585
Q Serve(g_s), s				0.0	0.0	16.0	0.0	27.8	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s				0.0	0.0	16.0	0.0	27.8	0.0	0.0	0.0	0.1
Prop In Lane				0.00		1.00	0.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				0	554	938	0	1050	0	0	1050	890
V/C Ratio(X)				0.00	0.00	0.90	0.00	0.89	0.00	0.00	0.00	0.01
Avail Cap(c_a), veh/h				0	578	980	0	1231	0	0	1231	1043
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)				0.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				0.0	0.0	21.3	0.0	12.2	0.0	0.0	6.1	6.1
Incr Delay (d2), s/veh				0.0	0.0	10.5	0.0	7.8	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.0	0.0	6.8	0.0	11.3	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				0.0	0.0	31.8	0.0	19.9	0.0	0.0	6.1	6.1
LnGrp LOS				A	A	C	A	B	A	A	A	A
Approach Vol, veh/h					841			938			10	
Approach Delay, s/veh					31.8			19.9			6.1	
Approach LOS					C			B			A	
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		39.9				39.9		23.2				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		41.5				41.5		19.5				
Max Q Clear Time (g_c+I1), s		29.8				2.1		18.0				
Green Ext Time (p_c), s		5.6				0.0		0.6				

Intersection Summary

HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary  
 1: I-10 EB Ramps & SR-177

Ambient+Project MIT-1 PM  
 04/15/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↖			↖	
Traffic Volume (veh/h)	68	3	4	0	0	0	0	5	2	379	3	0
Future Volume (veh/h)	68	3	4	0	0	0	0	5	2	379	3	0
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	74	3	4				0	5	2	412	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	156	6	144				0	581	232	998	6	0
Arrive On Green	0.09	0.09	0.09				0.00	0.46	0.46	0.46	0.46	0.00
Sat Flow, veh/h	1715	70	1585				0	1271	508	1394	13	0
Grp Volume(v), veh/h	77	0	4				0	0	7	415	0	0
Grp Sat Flow(s),veh/h/ln	1785	0	1585				0	0	1779	1407	0	0
Q Serve(g_s), s	0.8	0.0	0.0				0.0	0.0	0.0	4.5	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0				0.0	0.0	0.0	4.5	0.0	0.0
Prop In Lane	0.96		1.00				0.00		0.29	0.99		0.00
Lane Grp Cap(c), veh/h	162	0	144				0	0	813	1004	0	0
V/C Ratio(X)	0.48	0.00	0.03				0.00	0.00	0.01	0.41	0.00	0.00
Avail Cap(c_a), veh/h	1622	0	1441				0	0	2493	2336	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.6	0.0	8.3				0.0	0.0	2.9	4.2	0.0	0.0
Incr Delay (d2), s/veh	2.2	0.0	0.1				0.0	0.0	0.0	0.3	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
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0				0.0	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.8	0.0	8.3				0.0	0.0	2.9	4.4	0.0	0.0
LnGrp LOS	B	A	A				A	A	A	A	A	A
Approach Vol, veh/h		81						7			415	
Approach Delay, s/veh		10.6						2.9			4.4	
Approach LOS		B						A			A	
Timer - Assigned Phs		2		4				6				
Phs Duration (G+Y+Rc), s		13.6		6.3				13.6				
Change Period (Y+Rc), s		4.5		4.5				4.5				
Max Green Setting (Gmax), s		27.9		18.1				27.9				
Max Q Clear Time (g_c+l1), s		2.0		2.8				6.5				
Green Ext Time (p_c), s		0.0		0.3				2.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			5.4									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary  
 2: SR-177 & I-10 WB Ramps

Ambient+Project MIT-1 PM  
 04/15/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↕			↕	
Traffic Volume (veh/h)	0	0	0	1	5	24	2	71	0	0	381	639
Future Volume (veh/h)	0	0	0	1	5	24	2	71	0	0	381	639
Initial Q (Qb), veh				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
Parking Bus, Adj				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		
Adj Sat Flow, veh/h/ln				1900	1870	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				1	5	26	2	77	0	0	414	695
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				2	9	48	86	1415	0	0	484	812
Arrive On Green				0.04	0.04	0.04	0.77	0.77	0.00	0.00	0.77	0.77
Sat Flow, veh/h				51	255	1324	9	1836	0	0	627	1053
Grp Volume(v), veh/h				32	0	0	79	0	0	0	0	1109
Grp Sat Flow(s),veh/h/ln				1630	0	0	1846	0	0	0	0	1681
Q Serve(g_s), s				0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.7
Cycle Q Clear(g_c), s				0.9	0.0	0.0	0.5	0.0	0.0	0.0	0.0	20.7
Prop In Lane				0.03		0.81	0.03		0.00	0.00		0.63
Lane Grp Cap(c), veh/h				59	0	0	1502	0	0	0	0	1295
V/C Ratio(X)				0.54	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.86
Avail Cap(c_a), veh/h				632	0	0	2137	0	0	0	0	1905
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				22.1	0.0	0.0	1.3	0.0	0.0	0.0	0.0	3.6
Incr Delay (d2), s/veh				7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				29.5	0.0	0.0	1.3	0.0	0.0	0.0	0.0	6.3
LnGrp LOS				C	A	A	A	A	A	A	A	A
Approach Vol, veh/h					32			79				1109
Approach Delay, s/veh					29.5			1.3				6.3
Approach LOS					C			A				A
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		40.5				40.5		6.2				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		52.9				52.9		18.1				
Max Q Clear Time (g_c+I1), s		2.5				22.7		2.9				
Green Ext Time (p_c), s		0.5				13.2		0.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					6.6							
HCM 6th LOS					A							



HCM 6th Signalized Intersection Summary  
5: I-10 EB Ramps & Corn Springs Road

Ambient+Project MIT-1 PM  
04/15/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Volume (veh/h)	5	3	5	0	0	0	0	0	5	767	1	0
Future Volume (veh/h)	5	3	5	0	0	0	0	0	5	767	1	0
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1900	1870	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	5	3	5				0	0	5	834	1	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	0				0	2	2	2	2	0
Cap, veh/h	11	7	11				0	0	1132	1220	1	0
Arrive On Green	0.02	0.02	0.02				0.00	0.00	0.71	0.71	0.71	0.00
Sat Flow, veh/h	661	397	661				0	0	1585	1408	2	0
Grp Volume(v), veh/h	13	0	0				0	0	5	835	0	0
Grp Sat Flow(s),veh/h/ln	1718	0	0				0	0	1585	1409	0	0
Q Serve(g_s), s	0.3	0.0	0.0				0.0	0.0	0.0	13.9	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.0				0.0	0.0	0.0	14.0	0.0	0.0
Prop In Lane	0.38		0.38				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	29	0	0				0	0	1133	1222	0	0
V/C Ratio(X)	0.45	0.00	0.00				0.00	0.00	0.00	0.68	0.00	0.00
Avail Cap(c_a), veh/h	923	0	0				0	0	2979	2866	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.3	0.0	0.0				0.0	0.0	1.4	3.4	0.0	0.0
Incr Delay (d2), s/veh	10.3	0.0	0.0				0.0	0.0	0.0	0.7	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
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0				0.0	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.6	0.0	0.0				0.0	0.0	1.4	4.1	0.0	0.0
LnGrp LOS	C	A	A				A	A	A	A	A	A
Approach Vol, veh/h		13						5			835	
Approach Delay, s/veh		26.6						1.4			4.1	
Approach LOS		C						A			A	
Timer - Assigned Phs		2		4				6				
Phs Duration (G+Y+Rc), s		28.5		5.1				28.5				
Change Period (Y+Rc), s		4.5		4.5				4.5				
Max Green Setting (Gmax), s		63.0		18.0				63.0				
Max Q Clear Time (g_c+l1), s		2.0		2.3				16.0				
Green Ext Time (p_c), s		0.0		0.0				8.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			4.4									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary  
6: Corn Springs Road & I-10 WB Ramps

Ambient+Project MIT-1 PM  
04/15/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↗		↖			↕	↗
Traffic Volume (veh/h)	0	0	0	1	5	6	1	4	0	0	767	864
Future Volume (veh/h)	0	0	0	1	5	6	1	4	0	0	767	864
Initial Q (Qb), veh				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
Parking Bus, Adj				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		
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				1	6	6	1	4	0	0	834	925
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				4	27	27	208	751	0	0	1383	1172
Arrive On Green				0.02	0.02	0.02	0.74	0.74	0.00	0.00	0.74	0.74
Sat Flow, veh/h				265	1592	1585	123	1015	0	0	1870	1585
Grp Volume(v), veh/h				7	0	6	5	0	0	0	834	925
Grp Sat Flow(s),veh/h/ln				1857	0	1585	1138	0	0	0	1870	1585
Q Serve(g_s), s				0.1	0.0	0.1	0.0	0.0	0.0	0.0	7.7	13.5
Cycle Q Clear(g_c), s				0.1	0.0	0.1	7.7	0.0	0.0	0.0	7.7	13.5
Prop In Lane				0.14		1.00	0.20		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				31	0	27	959	0	0	0	1383	1172
V/C Ratio(X)				0.22	0.00	0.22	0.01	0.00	0.00	0.00	0.60	0.79
Avail Cap(c_a), veh/h				904	0	772	1207	0	0	0	1923	1630
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.9	0.0	17.9	1.3	0.0	0.0	0.0	2.3	3.0
Incr Delay (d2), s/veh				3.5	0.0	4.1	0.0	0.0	0.0	0.0	0.4	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				21.4	0.0	22.1	1.3	0.0	0.0	0.0	2.7	4.8
LnGrp LOS				C	A	C	A	A	A	A	A	A
Approach Vol, veh/h					13			5			1759	
Approach Delay, s/veh					21.7			1.3			3.8	
Approach LOS					C			A			A	
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		31.8				31.8		5.1				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		38.0				38.0		18.0				
Max Q Clear Time (g_c+I1), s		9.7				15.5		2.1				
Green Ext Time (p_c), s		0.0				11.8		0.0				

Intersection Summary

HCM 6th Ctrl Delay	3.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	10.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↖			↖	
Traffic Vol, veh/h	318	1	0	0	0	0	0	1	1	16	0	0
Future Vol, veh/h	318	1	0	0	0	0	0	1	1	16	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	20	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	346	1	0	0	0	0	0	1	1	17	0	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	36	36	0	-	0	0	2	0	0
Stage 1	34	34	-	-	-	-	-	-	-
Stage 2	2	2	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	977	856	-	0	-	-	1620	-	0
Stage 1	988	867	-	0	-	-	-	-	0
Stage 2	1021	894	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	967	0	-	-	-	-	1620	-	-
Mov Cap-2 Maneuver	967	0	-	-	-	-	-	-	-
Stage 1	978	0	-	-	-	-	-	-	-
Stage 2	1021	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	0	7.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	967	-	1620	-
HCM Lane V/C Ratio	-	-	0.359	-	0.011	-
HCM Control Delay (s)	-	-	10.8	0	7.2	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	1.6	-	0	-

Intersection												
Int Delay, s/veh	4.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	1	2	201	1	317	0	0	15	22
Future Vol, veh/h	0	0	0	1	2	201	1	317	0	0	15	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	1	2	218	1	345	0	0	16	24

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	375	387	345
Stage 1	347	347	-
Stage 2	28	40	-
Critical Hdwy	6.42	6.52	6.22
Critical Hdwy Stg 1	5.42	5.52	-
Critical Hdwy Stg 2	5.42	5.52	-
Follow-up Hdwy	3.518	4.018	3.318
Pot Cap-1 Maneuver	626	547	698
Stage 1	716	635	-
Stage 2	995	862	-
Platoon blocked, %			
Mov Cap-1 Maneuver	625	0	698
Mov Cap-2 Maneuver	625	0	-
Stage 1	715	0	-
Stage 2	995	0	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	1570	-	698	-
HCM Lane V/C Ratio	0.001	-	0.318	-
HCM Control Delay (s)	7.3	0	12.5	-
HCM Lane LOS	A	A	B	-
HCM 95th %tile Q(veh)	0	-	1.4	-

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	1	0	122	147	0	13
Future Vol, veh/h	1	0	122	147	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	133	160	0	14

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	227	213	0	0	293
Stage 1	213	-	-	-	-
Stage 2	14	-	-	-	-
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	761	827	-	-	1269
Stage 1	823	-	-	-	-
Stage 2	1009	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	761	827	-	-	1269
Mov Cap-2 Maneuver	761	-	-	-	-
Stage 1	823	-	-	-	-
Stage 2	1009	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	761	1269
HCM Lane V/C Ratio	-	-	0.001	-
HCM Control Delay (s)	-	-	9.7	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection						
Int Delay, s/veh	5.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	93	29	12	0
Future Vol, veh/h	0	1	93	29	12	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	101	32	13	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	247	13	13	0	0
Stage 1	13	-	-	-	-
Stage 2	234	-	-	-	-
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	741	1067	1606	-	-
Stage 1	1010	-	-	-	-
Stage 2	805	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	694	1067	1606	-	-
Mov Cap-2 Maneuver	694	-	-	-	-
Stage 1	945	-	-	-	-
Stage 2	805	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	5.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1606	-	1067	-	-
HCM Lane V/C Ratio	0.063	-	0.001	-	-
HCM Control Delay (s)	7.4	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0	-	-

Intersection												
Int Delay, s/veh	11.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	432	1	3	0	0	0	0	0	3	2	1	0
Future Vol, veh/h	432	1	3	0	0	0	0	0	3	2	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	470	1	3	0	0	0	0	0	3	2	1	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	7	8	1	-	0	0	3	0	0
Stage 1	5	5	-	-	-	-	-	-	-
Stage 2	2	3	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	1014	887	1084	0	-	-	1619	-	0
Stage 1	1018	892	-	0	-	-	-	-	0
Stage 2	1021	893	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	1013	0	1084	-	-	-	1619	-	-
Mov Cap-2 Maneuver	1013	0	-	-	-	-	-	-	-
Stage 1	1017	0	-	-	-	-	-	-	-
Stage 2	1021	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0	4.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	1013	1619	-
HCM Lane V/C Ratio	-	-	0.468	0.001	-
HCM Control Delay (s)	-	-	11.6	7.2	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	2.5	0	-

Intersection												
Int Delay, s/veh	11.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	1	2	385	0	432	0	0	2	3
Future Vol, veh/h	0	0	0	1	2	385	0	432	0	0	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	1	2	418	0	470	0	0	2	3

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	474	475	470
Stage 1	470	470	-
Stage 2	4	5	-
Critical Hdwy	6.42	6.52	6.22
Critical Hdwy Stg 1	5.42	5.52	-
Critical Hdwy Stg 2	5.42	5.52	-
Follow-up Hdwy	3.518	4.018	3.318
Pot Cap-1 Maneuver	549	488	594
Stage 1	629	560	-
Stage 2	1019	892	-
Platoon blocked, %			
Mov Cap-1 Maneuver	549	0	594
Mov Cap-2 Maneuver	549	0	-
Stage 1	629	0	-
Stage 2	1019	0	-

Approach	WB	NB	SB
HCM Control Delay, s	24.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	1616	-	594	-
HCM Lane V/C Ratio	-	-	0.71	-
HCM Control Delay (s)	0	-	24.5	-
HCM Lane LOS	A	-	C	-
HCM 95th %tile Q(veh)	0	-	5.8	-



Intersection												
Int Delay, s/veh	9.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗					↖			↕	
Traffic Vol, veh/h	53	2	3	0	0	0	0	4	2	296	2	0
Future Vol, veh/h	53	2	3	0	0	0	0	4	2	296	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	20	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	2	3	0	0	0	0	4	2	322	2	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	651	652	2	-	0	0	6	0	0
Stage 1	646	646	-	-	-	-	-	-	-
Stage 2	5	6	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	433	387	1082	0	-	-	1615	-	0
Stage 1	522	467	-	0	-	-	-	-	0
Stage 2	1018	891	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	346	0	1082	-	-	-	1615	-	-
Mov Cap-2 Maneuver	346	0	-	-	-	-	-	-	-
Stage 1	418	0	-	-	-	-	-	-	-
Stage 2	1018	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.1	0	7.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	346	1082	1615	-
HCM Lane V/C Ratio	-	-	0.173	0.003	0.199	-
HCM Control Delay (s)	-	-	17.6	8.3	7.8	0
HCM Lane LOS	-	-	C	A	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0	0.7	-

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	1	4	19	2	55	0	0	297	498
Future Vol, veh/h	0	0	0	1	4	19	2	55	0	0	297	498
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	1	4	21	2	60	0	0	323	541

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	658	928	60	864	0	-	-
Stage 1	64	64	-	-	-	-	-
Stage 2	594	864	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	429	268	1005	779	-	0	0
Stage 1	959	842	-	-	-	0	0
Stage 2	552	371	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	428	0	1005	779	-	-	-
Mov Cap-2 Maneuver	428	0	-	-	-	-	-
Stage 1	956	0	-	-	-	-	-
Stage 2	552	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	779	-	942	-
HCM Lane V/C Ratio	0.003	-	0.028	-
HCM Control Delay (s)	9.6	0	8.9	-
HCM Lane LOS	A	A	A	-
HCM 95th %tile Q(veh)	0	-	0.1	-

Intersection						
Int Delay, s/veh	6.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	229	0	60	1	0	177
Future Vol, veh/h	229	0	60	1	0	177
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	249	0	65	1	0	192

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	258	66	0	0	66
Stage 1	66	-	-	-	-
Stage 2	192	-	-	-	-
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	731	998	-	-	1536
Stage 1	957	-	-	-	-
Stage 2	841	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	731	998	-	-	1536
Mov Cap-2 Maneuver	731	-	-	-	-
Stage 1	957	-	-	-	-
Stage 2	841	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	731	1536
HCM Lane V/C Ratio	-	-	0.341	-
HCM Control Delay (s)	-	-	12.4	0
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1.5	0

Intersection						
Int Delay, s/veh	5.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	0	145	1	59	32	0
Future Vol, veh/h	0	145	1	59	32	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	158	1	64	35	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	101	35	35	0	-	0
Stage 1	35	-	-	-	-	-
Stage 2	66	-	-	-	-	-
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	898	1038	1576	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	957	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	897	1038	1576	-	-	-
Mov Cap-2 Maneuver	897	-	-	-	-	-
Stage 1	986	-	-	-	-	-
Stage 2	957	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1576	-	1038	-	-
HCM Lane V/C Ratio	0.001	-	0.152	-	-
HCM Control Delay (s)	7.3	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Intersection												
Int Delay, s/veh	8.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	4	2	4	0	0	0	0	0	4	598	1	0
Future Vol, veh/h	4	2	4	0	0	0	0	0	4	598	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	2	4	0	0	0	0	0	4	650	1	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1303	1305	1	-	0	0	4	0	0
Stage 1	1301	1301	-	-	-	-	-	-	-
Stage 2	2	4	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	177	160	1084	0	-	-	1618	-	0
Stage 1	255	231	-	0	-	-	-	-	0
Stage 2	1021	892	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	106	0	1084	-	-	-	1618	-	-
Mov Cap-2 Maneuver	106	0	-	-	-	-	-	-	-
Stage 1	152	0	-	-	-	-	-	-	-
Stage 2	1021	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.8	0	8.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	193	1618	-
HCM Lane V/C Ratio	-	-	0.056	0.402	-
HCM Control Delay (s)	-	-	24.8	8.7	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.2	2	-

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	1	4	5	1	3	0	0	598	674
Future Vol, veh/h	0	0	0	1	4	5	1	3	0	0	598	674
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	1	4	5	1	3	0	0	650	733

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	1022	1388	3	1383	0	-	-
Stage 1	5	5	-	-	-	-	-
Stage 2	1017	1383	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	261	143	1081	495	-	0	0
Stage 1	1018	892	-	-	-	0	0
Stage 2	349	211	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	260	0	1081	495	-	-	-
Mov Cap-2 Maneuver	260	0	-	-	-	-	-
Stage 1	1016	0	-	-	-	-	-
Stage 2	349	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	3.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	495	-	708	-
HCM Lane V/C Ratio	0.002	-	0.015	-
HCM Control Delay (s)	12.3	0	10.2	-
HCM Lane LOS	B	A	B	-
HCM 95th %tile Q(veh)	0	-	0	-



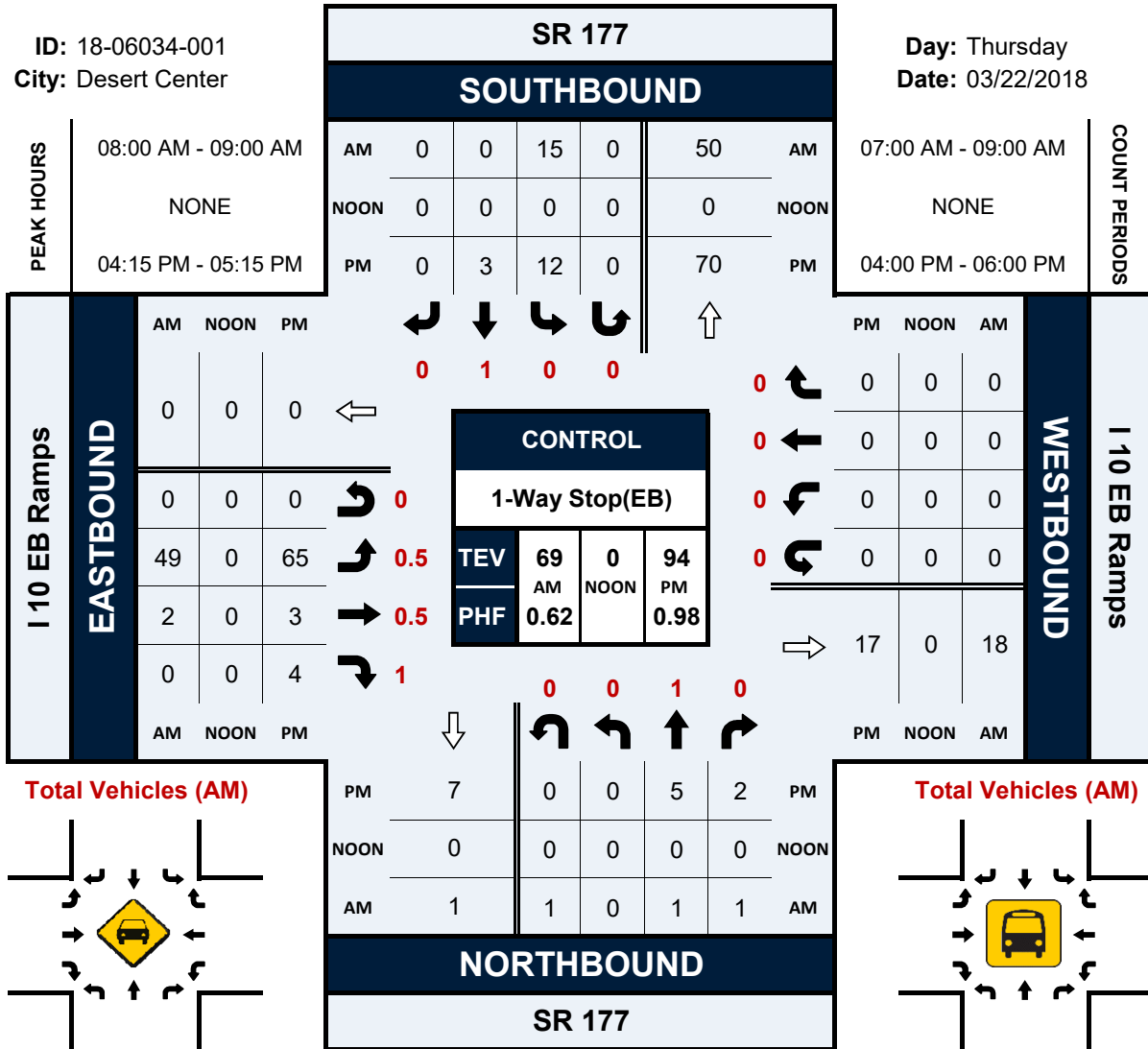
## Appendix B: Counts

# SR 177 & I 10 EB Ramps

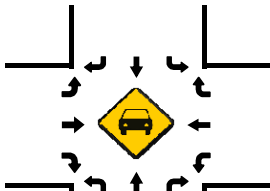
## Peak Hour Turning Movement Count

ID: 18-06034-001  
City: Desert Center

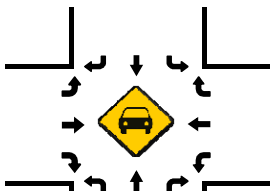
Day: Thursday  
Date: 03/22/2018



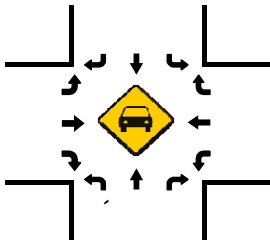
Total Vehicles (AM)



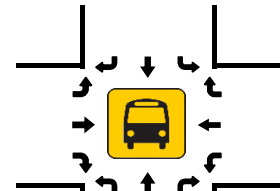
Total Vehicles (NOON)



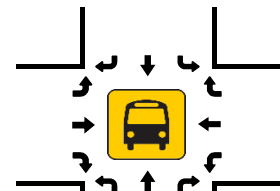
Total Vehicles (PM)



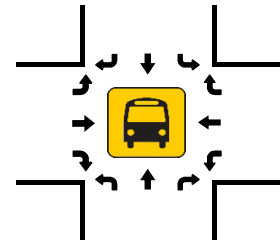
Total Vehicles (AM)



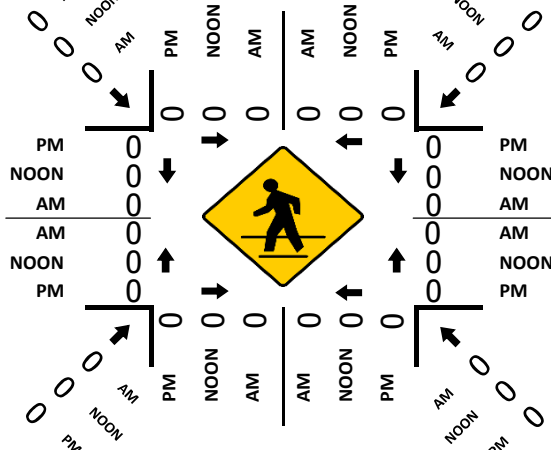
Total Vehicles (NOON)



Total Vehicles (PM)



Pedestrians (Crosswalks)





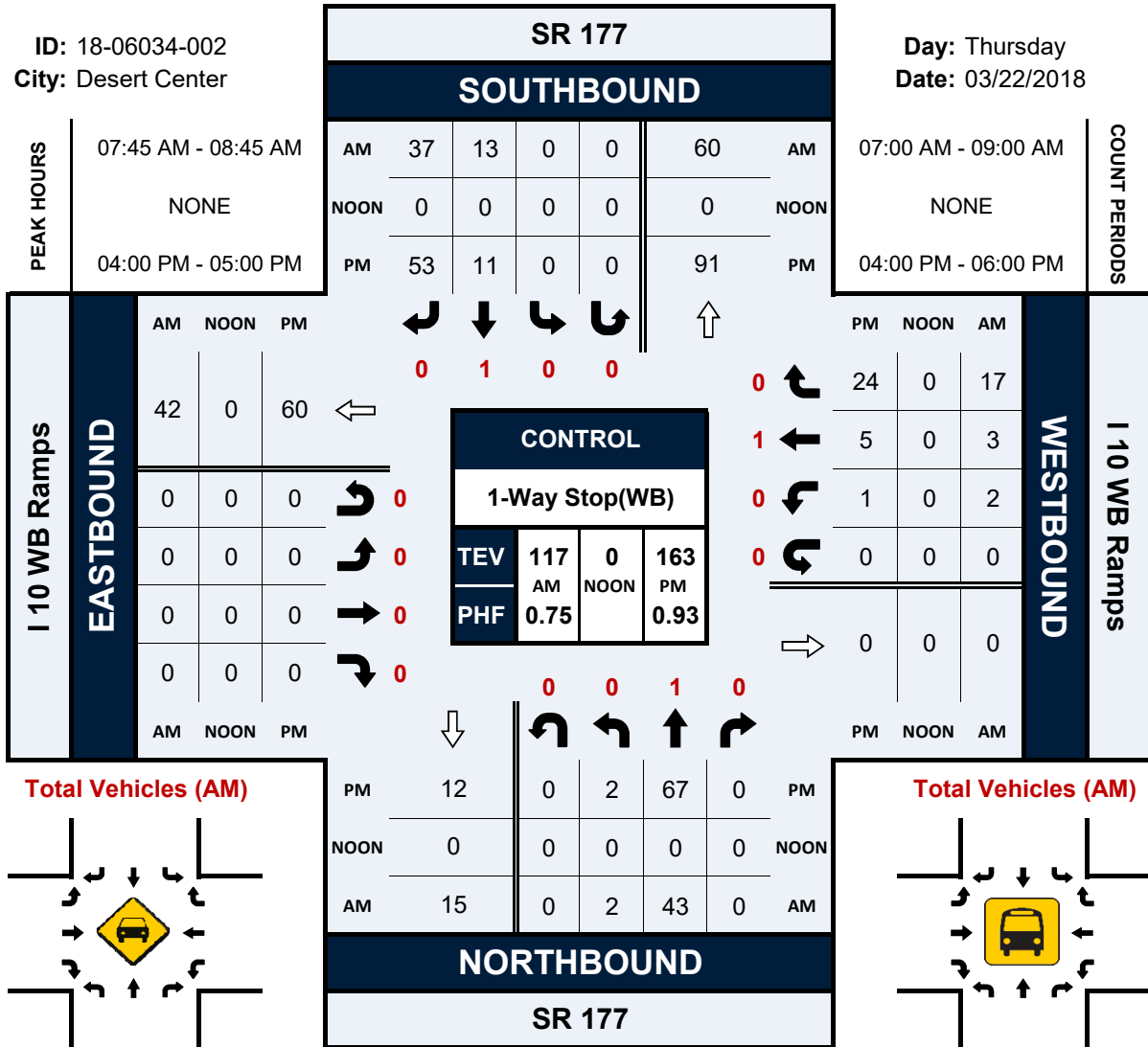


# SR 177 & I 10 WB Ramps

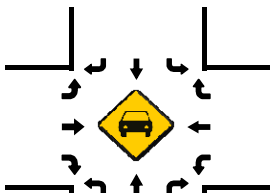
## Peak Hour Turning Movement Count

ID: 18-06034-002  
City: Desert Center

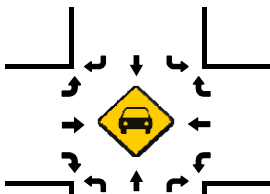
Day: Thursday  
Date: 03/22/2018



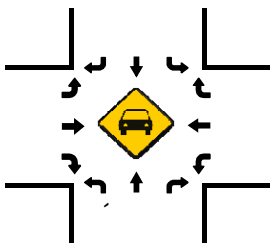
Total Vehicles (AM)



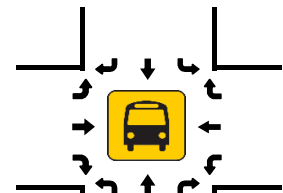
Total Vehicles (NOON)



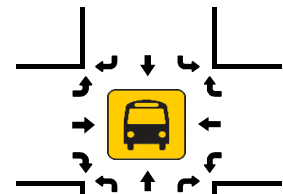
Total Vehicles (PM)



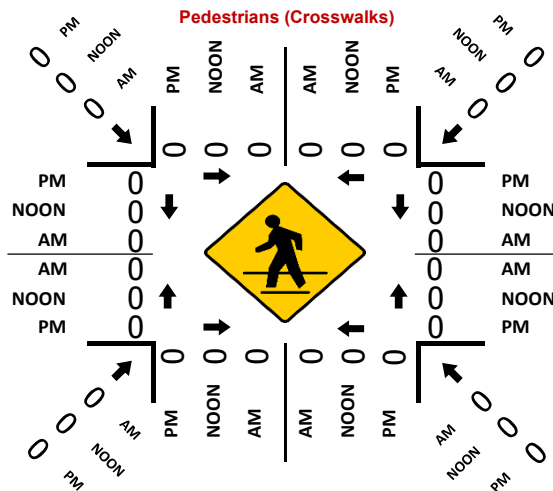
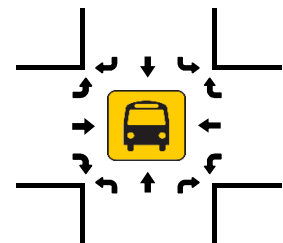
Total Vehicles (AM)



Total Vehicles (NOON)



Total Vehicles (PM)

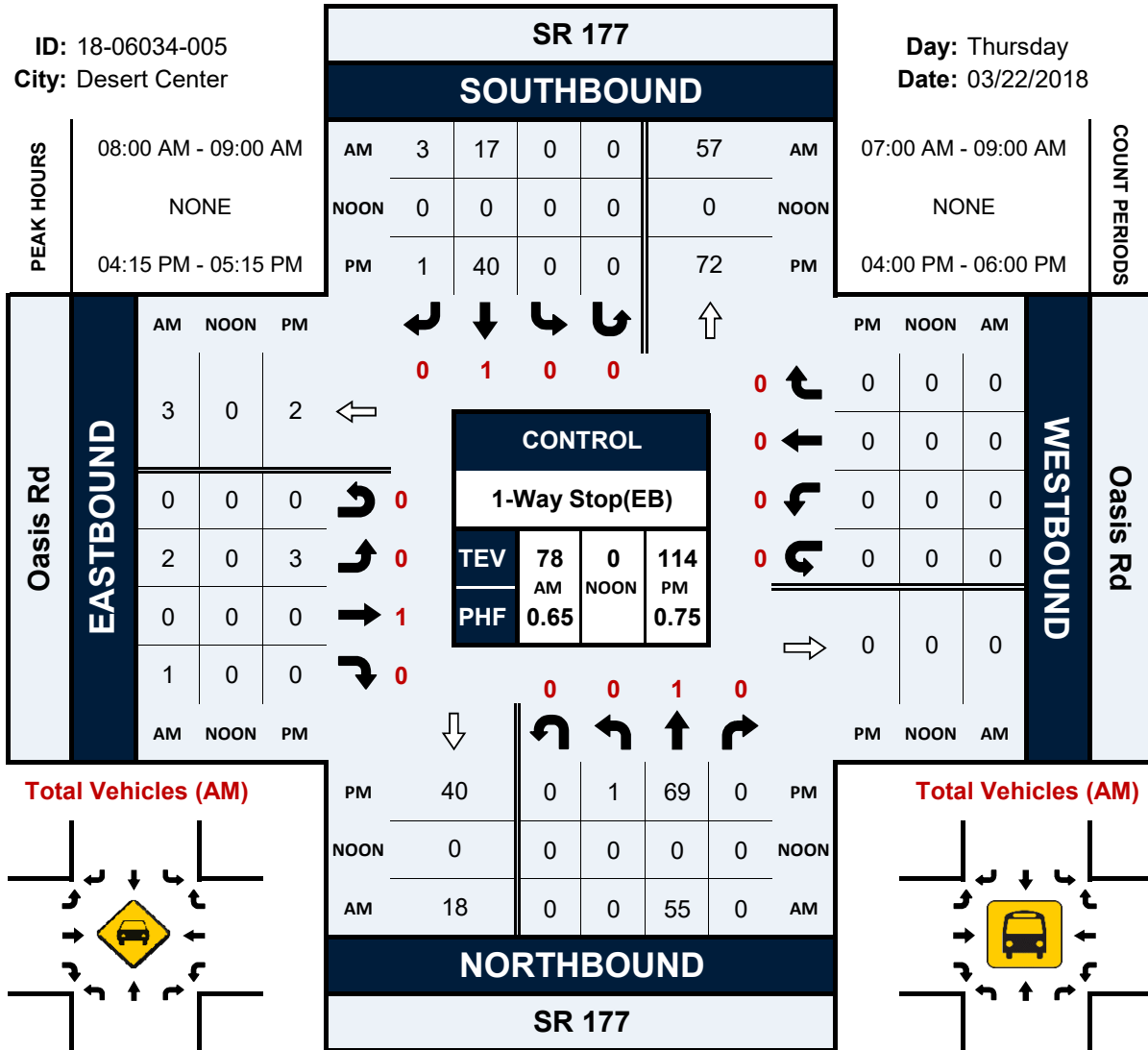


# SR 177 & Oasis Rd

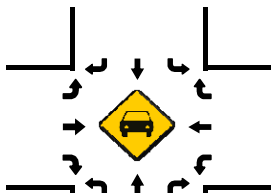
## Peak Hour Turning Movement Count

ID: 18-06034-005  
City: Desert Center

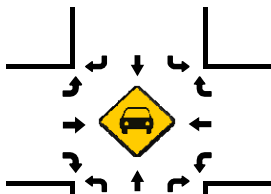
Day: Thursday  
Date: 03/22/2018



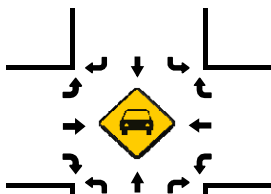
Total Vehicles (AM)



Total Vehicles (NOON)

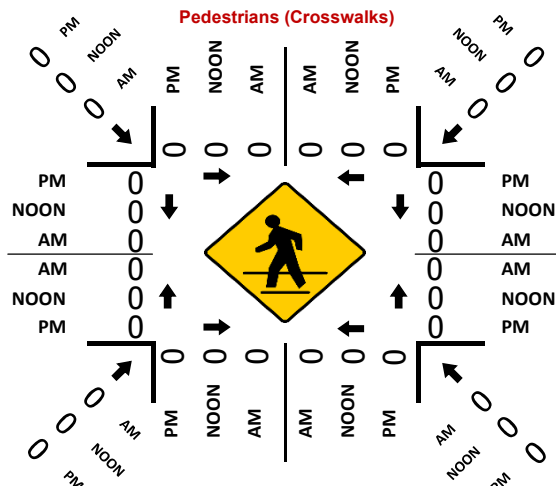


Total Vehicles (PM)

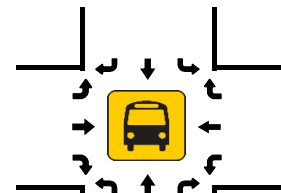


PM	40	0	1	69	0	PM
NOON	0	0	0	0	0	NOON
AM	18	0	0	55	0	AM

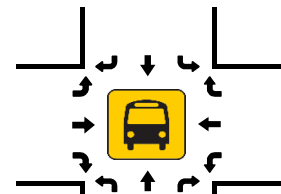
**SR 177 NORTHBOUND**



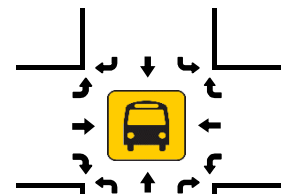
Total Vehicles (AM)



Total Vehicles (NOON)



Total Vehicles (PM)

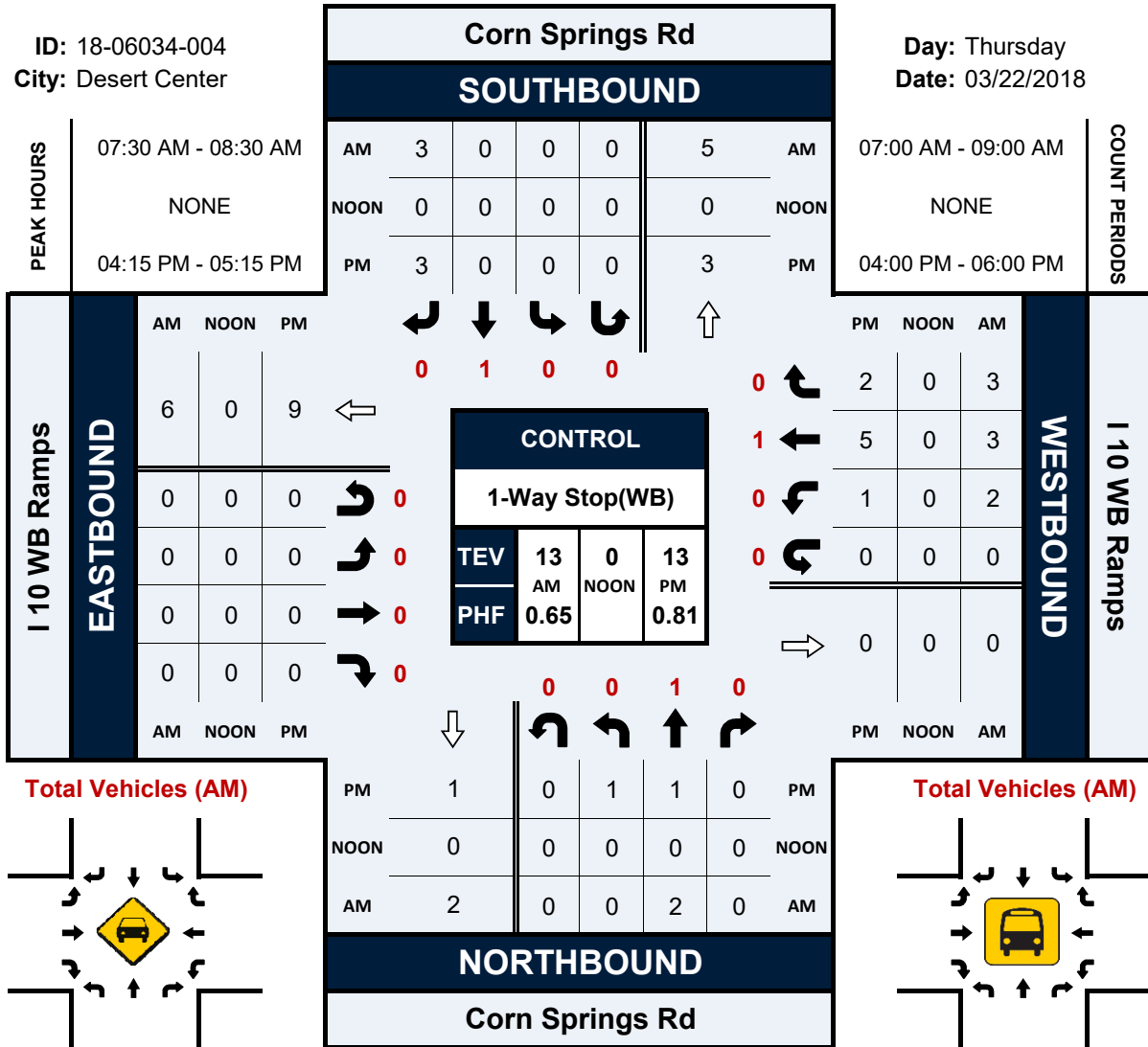


# Corn Springs Rd & I 10 WB Ramps

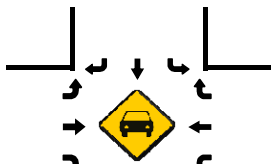
## Peak Hour Turning Movement Count

ID: 18-06034-004  
City: Desert Center

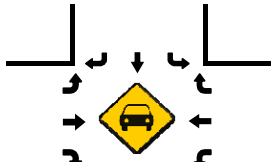
Day: Thursday  
Date: 03/22/2018



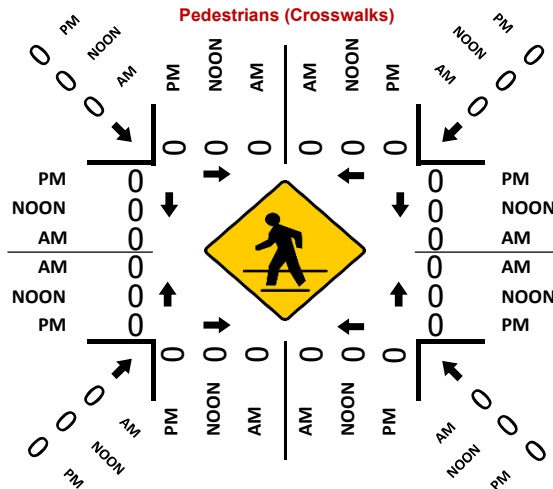
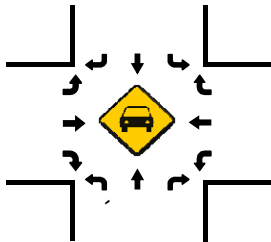
Total Vehicles (AM)



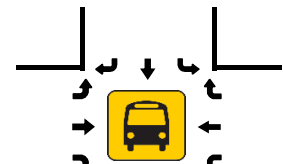
Total Vehicles (NOON)



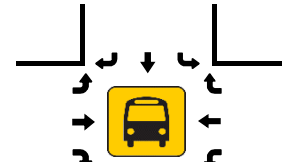
Total Vehicles (PM)



Total Vehicles (AM)



Total Vehicles (NOON)



Total Vehicles (PM)

