Vega SES 5 Solar Energy Storage Project

TRAFFIC IMPACT STUDY
IMPERIAL COUNTY, CALIFORNIA

Prepared By:

February 2021/November 2022

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APPENDICES

1.0 Introduction

This traffic impact analysis (TIA) has been prepared to identify the potential traffic impacts associated with developing the Vega SES 5 Solar Energy Storage (Projects) in Imperial County. The study was completed following the guidelines described in the County of Imperial Department of Public Works *Traffic Study and Report Policy* dated March 12, 2007, revised June 29, 2007 and approved by the Board of Supervisors of the County of Imperial on August 7, 2007 ("Traffic Study and Report Policy").

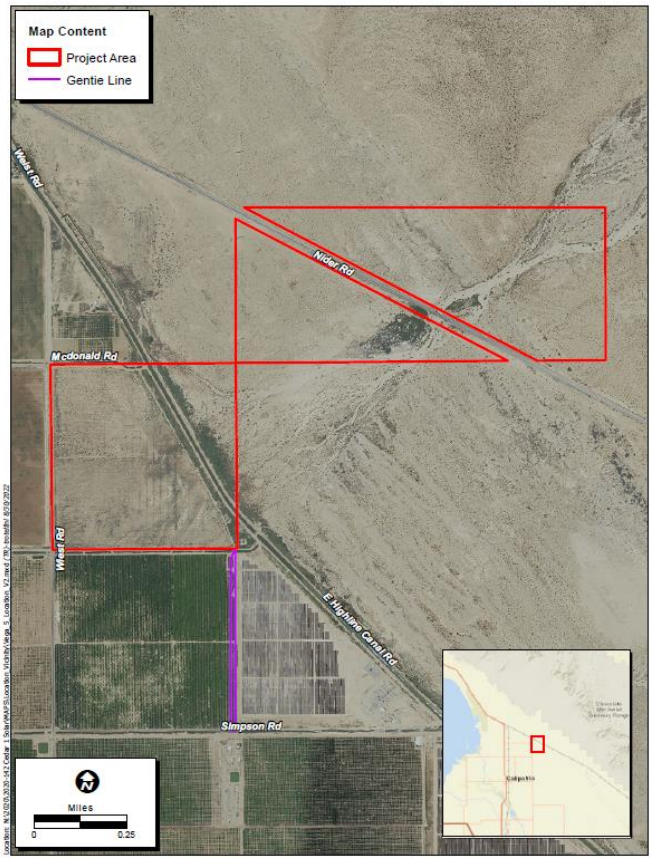
KOA has coordinated with the County's Engineering Department on the scope of the traffic analysis, including the study area and future year analysis assumptions. As necessary, if required, projects will be identified to offset or reduce significant impacts. Based on discussions with City staff, current and future traffic conditions at select intersections in close proximity to the proposed project have been evaluated for the purposes of this TIA.

This report describes the existing roadway network in the vicinity of the project site. It includes a review of the existing and proposed traffic activities for weekday peak AM and PM periods and daily traffic conditions.

Project Location

The project location is adjacent to the Highland Canal at the eastern end of McDonald Road, as shown in Figure 1.1.

Figure 1.1 Study Area

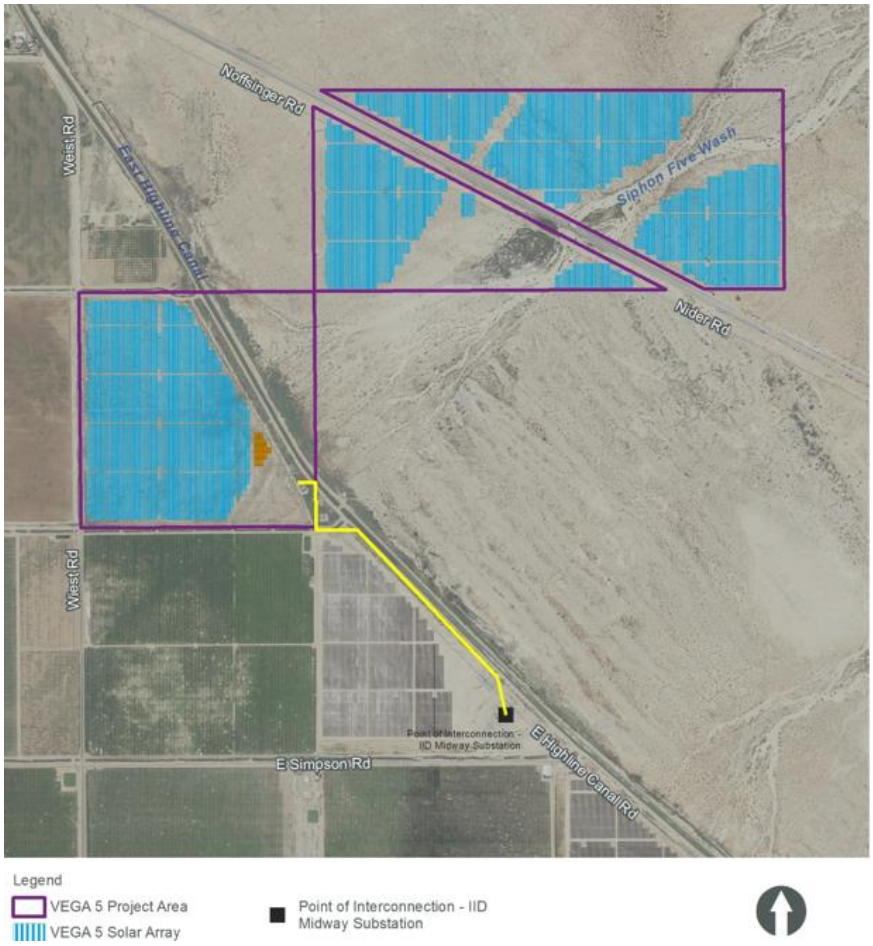


Source: ECORP

Project Description

Vega SES 5, LLC is proposing to develop the **Vega SES 5 site.** This is a fifty (50) megawatt alternating current (MWAC) solar photovoltaic (PV) energy generation project with an integrated 100 MW Battery Energy Storage System (BESS), on approximately 410 acres of land in Imperial County, California. The project site plan is shown in Figure 1.2.

Figure 1.2 Site Plan



Source: First Administrative Draft EIR | VEGA SES 2, 3, & 5 Solar Energy Project

Construction Activities

The projects are estimated to take 12 months and would begin in 2023. The project opening is anticipated to be the end of 2024 or early 2025. . The number of on–site construction workers for the solar project facilities is not expected to exceed 75 workers at any one time. The number of on-site construction workers for the battery storage facility and the substation is not expected to exceed 50 workers at any one time.

Construction of the Projects will include the following activities:

- Site preparation
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Electrical/instrumentation work
- Collector line installation
- Architecture and landscaping

2.0 Capacity Analysis Methodologies

This section presents a brief overview of traffic analysis methodologies and concepts used in this study. Street system operating conditions are typically described in terms of "level of service (LOS)" to compare without project and with project alternatives. LOS is a report-card scale used to indicate the quality of traffic flow on roadway segments and at intersections. The levels of service range from Level A (free flow, little congestion) to Level F (forced flow, higher congestion).

Study Area Criteria

The study area is determined based on the County of Imperial Department of Public Works *Traffic Study and Report Policy* dated March 12, 2007, revised June 29, 2007 and approved by the Board of Supervisors of the County of Imperial on August 7, 2007 ("Traffic Study and Report Policy"). "Any project that has the potential to degrade an existing road section, an existing signalized intersection, or an existing unsignalized intersection to below the existing level of service or to cause it to be lower than a level of service (LOS) "C" during any peak hour, using the HCM Methods of analysis on any individual, existing traffic movement." Traffic Study and Report Policy, 4-5.

The study area for this project includes those locations that likely will be affected by this project where a minimum of 50 peak hour vehicles impact the location. The specific study area consists of the following intersections:

1. McDonald Road and Weist Road
2. McDonald Road and SR-111
3. SR-111 and SR-115
4. SR-111 and north ramps with SR-78
5. SR-111 and south ramps with SR-78

The study area also includes the following study segments:

1. McDonald Road from SR-111 to Weist Road
2. SR-111 from McDonald Road to Niland Ave
3. SR-111 from McDonald Road to SR-115
4. SR-111 from SR-115 to SR-78 north ramps
5. SR-111 from SR-78 north ramps to SR-78 south ramps

Scenario Criteria

The proposed project's traffic impacts were analyzed in three scenarios as listed below. The traffic analysis included intersections and roadway segments within Imperial County and Caltrans District 11 in the following scenarios to determine the potential impacts:

- Existing Year (2020) Conditions
- Construction Year (2023) Baseline Conditions
- Construction Year (2023) + Project Construction Conditions

Peak Hour Intersection Level of Service Standards

Traffic conditions on most roadway facilities are analyzed using the principles of the specific analysis methods contained in the latest version (2010) of the *Highway Capacity Manual* (*HCM*), a publication of the Transportation Research Board, a research agency affiliated with the Federal Government. Chapter 18 of the *HCM 2010* is devoted to analysis of signalized intersections. The methodology in the *HCM 2010* for signalized intersections is based upon measurements or forecasts of control delay for traffic utilizing all approaches to the intersection.

Unsignalized intersections, including two-way and all-way stop controlled intersections were analyzed using the 2010 Highway Capacity Manual unsignalized intersection analysis methodology. The LOS for a two-way stop controlled (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. The analysis of peak hour intersection conditions was conducted using the Synchro 10 software program developed by Trafficware. Results are displayed in terms of control delay (seconds per vehicle) and an equivalent LOS as shown in Table 2.1.

Table 2.1 HCM Level of Service Definitions for Intersections

LOS	Signalized Intersection Delay (Seconds per Vehicle)	Unsignalized Intersection Average Stop Delay (Seconds)
A	<10	<10
B	>10 and <20	>10 and <15
C	>20 and <35	>15 and <25
D	>35 and <55	>25 and <35
E	>55 and <80	>35 and <50
F	>80	>50

Source: Highway Capacity Manual, 2010.

Roadway Segment Level of Service Standards

Roadway segment LOS standards and thresholds provide the basis for analysis of roadway segment performance. The analysis of roadway segment LOS is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecast Average Daily Traffic (ADT) volumes. The County of Imperial level of service analysis was performed by utilizing the *Circulation and Scenic Highways Element, January 2008*. The thresholds for each facility type are presented in Table 2.2.

Table 2.2 County of Imperial ADT Level of Service Volumes by Roadway Type

Road		Level of Service (LOS)				
Class	X-Section	A	B	C	D	E
Expressway	154/210	30,000	42,000	60,000	70,000	80,000
Prime Arterial	106/136	22,200	37,000	44,600	50,000	57,000
Minor Arterial	82/102	14,800	24,700	29,600	33,400	37,000
Major Collector	64/84	13,700	22,800	27,400	30,800	34,200
Minor (Local) Collector	40/70	1,900	4,100	7,100	10,900	16,200

* Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.
Source: *Imperial County Circulation and Scenic Highways Element 2008 and Imperial County Long Range Transportation Plan 2013 Update*

Freeway Segments

Freeway level of service analysis is based upon procedures developed by Caltrans. The procedure for calculating freeway level of service involves calculating a peak hour volume to capacity (V/C) ratio. Peak hour volumes are calculated from Average Daily Traffic (ADT) volumes by applying design hour ("K"), directional ("D") and truck ("T") factors. The base capacities for Interstate 8 freeway lanes determined from the Highway Capacity Manual as assumed to be 2,350 passenger-car per hour per main lane (pc/h/ln).

The resulting V/C ratio is then compared to acceptable ranges of V/C values corresponding to the various levels of service for each facility classification, as shown in Table 2.3. The corresponding level of service represents an approximation of freeway operating conditions in the peak direction of travel during the peak hour. Constant with Caltrans requirements, LOS D or better is used in this study as the threshold for acceptable freeway operations.

Table 2.3 CALTRANS Level of Service Facility Classification

CALTRANS FREEWAY SEGMENT LEVEL OF SERVICE DEFINITIONS

LOS	Maximum V/C	Congestion/Delay	Traffic Description
A	≤ 0.30	None	Free flow.
B	> 0.30 - 0.50	None	Free to stable flow, light to moderate volumes.
C	> 0.50 - 0.71	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
D	> 0.71 - 0.89	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
E	> 0.89 - 1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
F	> 1.00	Considerable	Forced or breakdown flow. Delay measured in average travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.

Source: Caltrans Guide for the Preparation of Traffic Impact Studies, 2002.

Analysis of Significance

Imperial County

The significance criteria for traffic impacts are based on the Imperial County Planning & Development Services Department LOS standard as outlined in the "Circulation Element". "The County's goal for an acceptable traffic service standard on an Average Daily Traffic (ADT) basis and during AM and PM peak periods for all County-Maintained Roads shall be LOS C for all street segment links and intersections."

- Strive to maintain LOS "C" or better on arterial and collector streets, at all intersections, and on principal arterials during the hour of highest volume during the AM hours and also during the PM hours. Imperial County has established LOS "C" as the general threshold for acceptable overall traffic operations for both signalized and un-signalized intersections.

- Accept LOS "D" after finding that there is no practical and feasible way to mitigate to LOS "C;" and the development causing the lower level of service provides a clear, overall public benefit.

- For segments that operate at LOS D or lower, an incremental increase in V/C of greater than 0.02 is considered to be a significant impact. For intersections that operate at LOS D or lower, an incremental increase in vehicle delay of 2.0 seconds or greater is considered to be a significant impact.

Caltrans

- For segments that operate at LOS D or lower, an incremental increase in V/C of greater than 0.02 is considered to be a significant impact. For intersections that operate at LOS D or lower, an incremental increase in vehicle delay of 2.0 seconds or greater is considered to be a significant impact.
- For freeway segments that operate at LOS D or lower, an incremental increase in V/C of greater than 0.01 is considered to be a significant impact.

3.0 Existing Conditions

This section documents the Existing Year Conditions in the study area. The Existing Year is taken to be 2020 for analysis purposes based on existing traffic counts taken in December, 2020 The discussion presented here is limited to segments and intersections in the project's vicinity.

Existing Roadways

Each of the key roadways, as well as associated study intersections within the study area, are discussed below.

Roadway Facilities

1. *State Route 111 (SR-111))* is a two-lane highway with no median and a posted speed limit of 65 mph.

2. *McDonald Road* is a two lane paved local roadway that runs in an east-west direction. This road provides access from the site to/from SR-111.

3. Weist Road is a north-south roadway that connect McDonald Road. North of McDonald Rod, Weist Road is unpaved.

Figure 3.1 displays the existing intersection geometrics for study area intersections.

Traffic Volumes

Existing turning movement counts at the study intersections were conducted on Tuesday, December 8, 2020. The existing condition reflects those land uses that were built and occupied at the time of the traffic counts and represent a typical weekday commute period. Intersection turning movement counts are provided in Appendix A. Existing average daily traffic (ADT) segment counts were obtained from the Caltrans for the year 2019. The ADT, weekday a.m. and p.m. peak hour traffic volumes are shown on Figure 3.2.

Figure 3.1 Intersection Geometrics

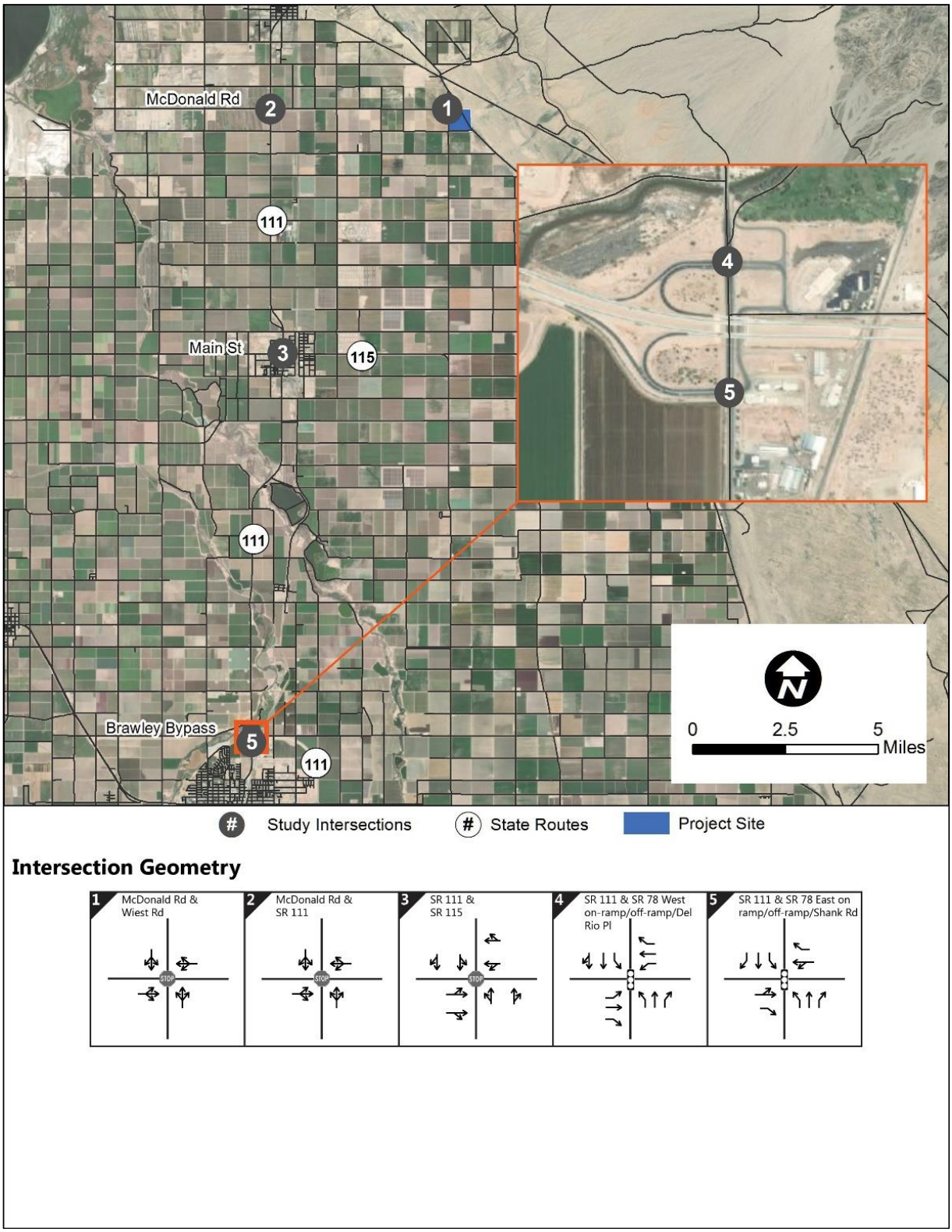
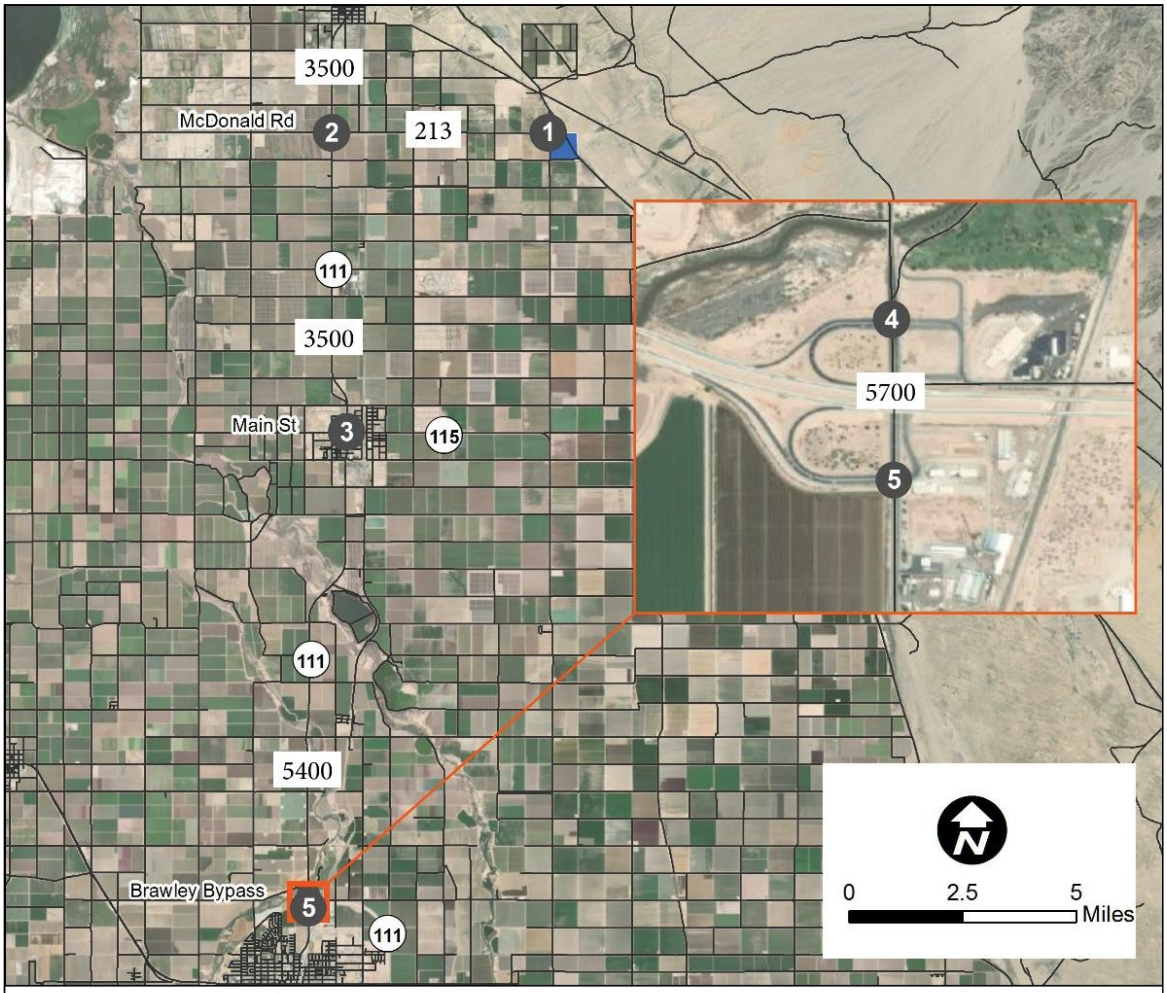
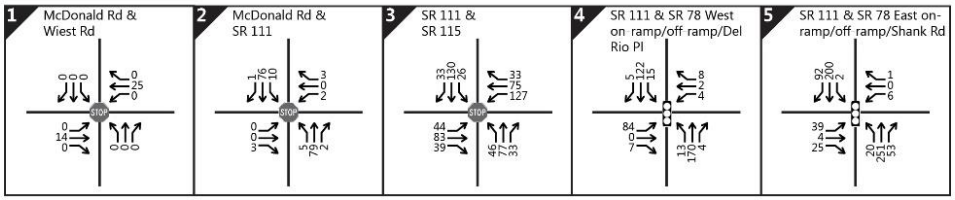


Figure 3.2 Existing Volumes

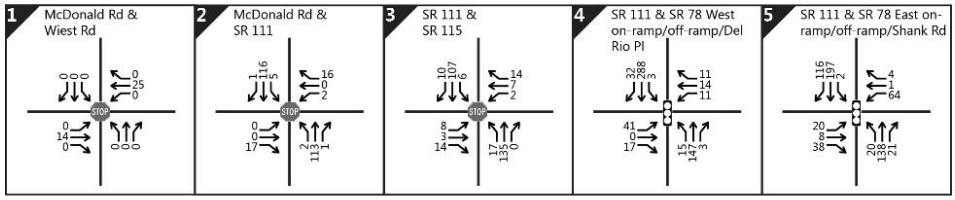


Existing Volumes XXXX Daily Traffic

AM



PM



Existing Year Conditions

This section documents the existing traffic conditions of study area segments and intersections.

Segments

Roadway segment analysis was conducted for the study area's specified segments. Using average daily traffic (ADT) counts, KOA was able to determine the existing level of service for the designated roadway segments. Table 3.1 below displays these levels of service.

Table 3.1 Existing Year Conditions Roadway Segment Analysis

Roadway Segment	From/ To	Lanes/ Class	LOS E Capacity	Existing		
				ADT	V/C	LOS
McDonald Rd	Project to SR 111	Minor Collector	16,200	213	0.01	A
SR-111	McDonald Road to Niland Ave	Major Collector 2 Lane	17,100	3,500	0.20	A
SR-111	McDonald Rd to SR-115	Major Collector 2 Lane	17,100	3,500	0.20	A
SR-111	SR-115 to SR-78 North Ramps	Major Collector 2 Lane	17,100	5,400	0.32	B
SR-111	SR-78 North Ramps to SR-78 South Ramps	Major Collector 4 Lane	34,200	5,700	0.17	A

Intersections

An intersection LOS analysis was prepared for the existing (without-project) condition and is summarized in Table 3.2 which indicates that there are two study area intersections. Detailed LOS worksheets are included in Appendix B.

Table 3.2 Existing Year Conditions Peak Hour Intersection Analysis

#	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	McDonald Road and Weist Road	SB Stop	0.0	A	0.0	A
2	McDonald Road and SR-111	EB/WB Stop	9.2	A	9.1	A
3	SR-111 and SR-115	AWSC	10.2	B	8	A
4	SR-111 and north ramps with SR-78	Sig	11.1	b	10.7	B
5	SR-111 and south ramps with SR-78	Sig	12.3	B	14.3	B

Delay is in seconds/vehicle. LOS = Level of Service

4.0 Trip Generation/Distribution/Assignment

Project Trip Generation

The project trip generation consists of a construction phase and operations phase. Once constructed, the site will not require personnel to be present on-site and will not result in daily trip generation. For this reason, only the trip generation for the construction phase was analyzed.

The number of on–site construction workers for the solar project facilities is not expected to exceed 75 workers at any one time. The number of on-site construction workers for the battery storage facility and the substation is not expected to exceed 50 workers at any one time. The trip generation was estimated if the construction phases were to overlap, so both are included. Delivery trucks are expected to follow the same routes as the construction workers. An estimated two trucks would arrive at the project site each day during the first few weeks of construction of the solar generating facility. Truck trips have been converted into passenger equivalent volumes (PCE) using a PCE factor of 2.5.

Work hours will be between the hours of 8:00 a.m. and 5:00 p.m. Monday through Saturday. The trips generated during the construction phase of construction are shown in Table 4.1.

Table 4.1 Construction Trip Generation –Construction Phase

	Intensity	Unit	Daily Rate	Daily Trips		AM Peak Hour			PM Peak Hour		
						Total	In	Out	Total	In	Out
Solar Construction Workers	75.0	Employee	2	150	Rate	1.00	100%	0%	1.00	0%	100%
					Trips	75	75	0	75	0	75
Battery Storage Workers	50.0	Employee	2	100	Rate	1.00	100%	0%	1.00	0%	100%
					Trips	50	50	0	50	0	50
Equipment Deliveries and Construction Truck Trips (PCE)	4.0	trucks	2.5	10	Rate	0.13	75%	25%	0.13	25%	75%
					Trips	0	0	0	0	0	0
Total				260	Trips	125	125	0	125	0	125

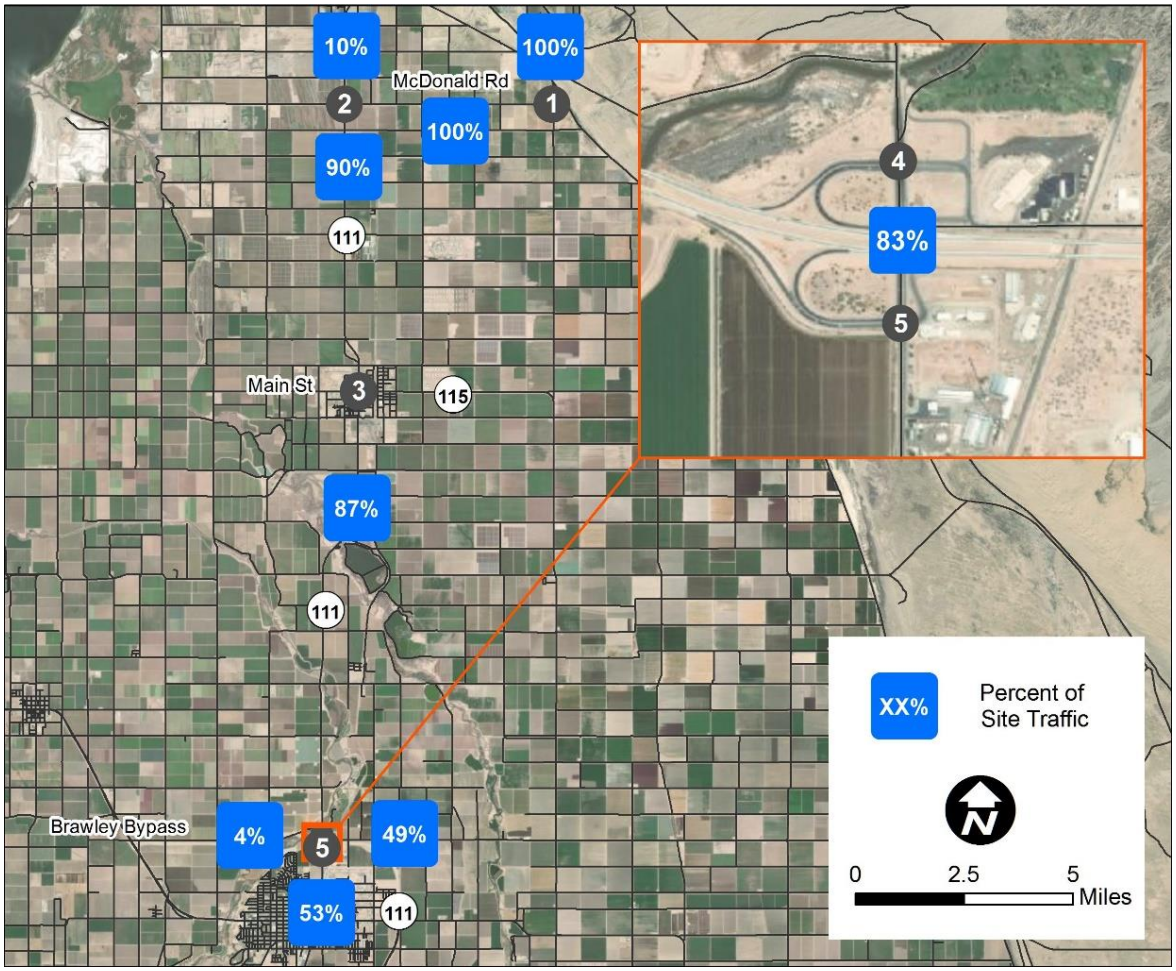
Once construction is completed, the facilities would be remotely operated, controlled and monitored and with no requirement for daily on-site employees.

Trip Distribution and Assignment

Trip distribution and assignment is the process of identifying the probable destinations, directions and traffic routes that project related traffic will likely affect. Trip distribution and assignment information can be estimated from observed traffic patterns, experience or through use of a computerized travel forecast model. Once the proposed developments trips have been estimated, they are assigned to the study area street network. The trip distribution was estimated based on using logical travel paths between the project and local origins.

For the VEGA SES 5 project, the construction worker traffic is expected to travel to the site from SR-111, then east on McDonald Road, north to Weist Road and then the project site. Delivery trucks are expected to follow the same travel route as construction workers. An estimated two trucks would arrive at each project site each day during the first few weeks of construction of each solar facility. The trip distribution for the project-related trips is shown in Figure 4.1.

Figure 4.1 Trip Distribution



5.0 Construction Year Conditions

This section documents the analysis for the Project Completion Year conditions. This scenario considers the traffic conditions at the time that the proposed development is constructed by increasing the existing traffic counts by an ambient growth rate to reflect cumulative projects. Projected project only volumes are then added to create the 2023 Baseline with Project Scenario. It is anticipated that the project construction will begin in 2023. An annual ambient growth of 1.8% was utilized to account for traffic growth between 2020 and 2023.

The growth rate is based on the California Economic Forecast *California County-Level Economic Forecast 2017-2050*, dated September 2017 documents an average annual growth factor of 1.8% from 2020 to 2025 for Imperial County. Year 2021 traffic data was obtained by factoring the 2019 traffic counts by the application of the 1.8% annual growth (5.4 percent for 2020-23). Figure 5.1 illustrates the Project Construction Year background volumes. Figure 5.2 shows the *Construction Year with Project* traffic volumes in the study area.

This section documents the construction year traffic conditions of study area segments and intersections with and without the project.

Segments

Roadway segment analysis was conducted for the study area's specified segments. Using average daily traffic (ADT) counts, KOA determined the opening year level of service for the designated roadway segments. Table 5.1 below displays these levels of service.

Summarized in Table 5.2 are Construction Year and Construction Year plus Project roadway segment average daily traffic volumes and their associated LOS on route segments without and with the project under the near term condition. All roadway segments would operate at LOS B or better with and without the project. Therefore, the project would not result in any significant impacts to any segments within the project study area under the construction year condition.

Table 5.1: Construction Year Roadway Segment Analysis

Roadway Segment	From/ To	Lanes/ Class	LOS E Capacity	Project Volumes	Construction Year			Construction Year + Project			Comparison	
					Volume	V/C	LOS	Volume	V/C	LOS	Δ V/C	Sig?
Mc Donald Rd	Project to SR-111	Local Collector	16,200	260	225	0.01	A	485	0.03	A	0.02	No
SR-111	Mc Donald to Weist Rd	Minor Arterial 2	18,500	26	3,692	0.20	A	3,718	0.20	A	0.00	No
SR-111	Mc Donald to SR-115	Minor Arterial 2	18,500	234	5,697	0.31	A	5,931	0.32	A	0.01	No
SR-111	SR-115 to SR-78 north ramps	Minor Arterial 2	18,500	226	6,013	0.33	A	6,239	0.34	A	0.01	No
SR-111	SR-78 north ramps to So. Ramps	Minor Arterial 2	18,500	129	5,700	0.31	A	5,829	0.32	A	0.01	No

Intersections

Table 5.2 summarizes the LOS at each intersection during the AM and PM peak hours under the construction year condition in 2022, without and with the project volumes. The estimated change in project delay associated with the project is also reported. All intersections would operate at a LOS C or better during both AM and PM peak hours with and without the project. Therefore, the project would not result in any significant impacts to any intersections within the project study area under the construction year condition. Detailed LOS worksheets are for the Construction Year are included in Appendix C and for the Construction Year plus Project in Appendix D.

Table 5.2: Construction Year Peak Hour Intersection Analysis

No.	Intersection	Control	Construction Year		Construction Year + Project		Change Delay	Significant
			Delay	LOS	Delay	LOS		
AM Peak Hour between 7:00 to 9:00 a.m.								
1	McDonald Road and Weist Road	SB Stop	n/a	A	6.7	A	n/a	N
2	McDonald Road and SR-111	SB Stop	9.2	A	9.7	A	0.5	N
3	SR-111 and SR-115	AWSC	10.5	B	12.1	B	1.6	N
4	SR-111 and north ramps with SR-78	EB/WB Stop	11.2	B	11.6	B	0.4	N
5	SR-111 and south ramps with SR-78	EB Stop	10.5	B	12.7	B	2.2	N
PM Peak Hour between 4:00 to 6:00 p.m.								
1	McDonald Road and Weist Road	SB Stop	n/a	A	9	A	n/a	N
2	McDonald Road and SR-111	EB/WB Stop	9.2	A	10	B	0.8	N
3	SR-111 and SR-115	AWSC	8.1	A	8.5	A	0.4	N
4	SR-111 and north ramps with SR-78	Sig	9.6	A	14.1	B	4.5	N
5	SR-111 and south ramps with SR-78	Sig	10.0	B	15.1	B	5.1	N

Figure 5.1 Construction Year Volumes

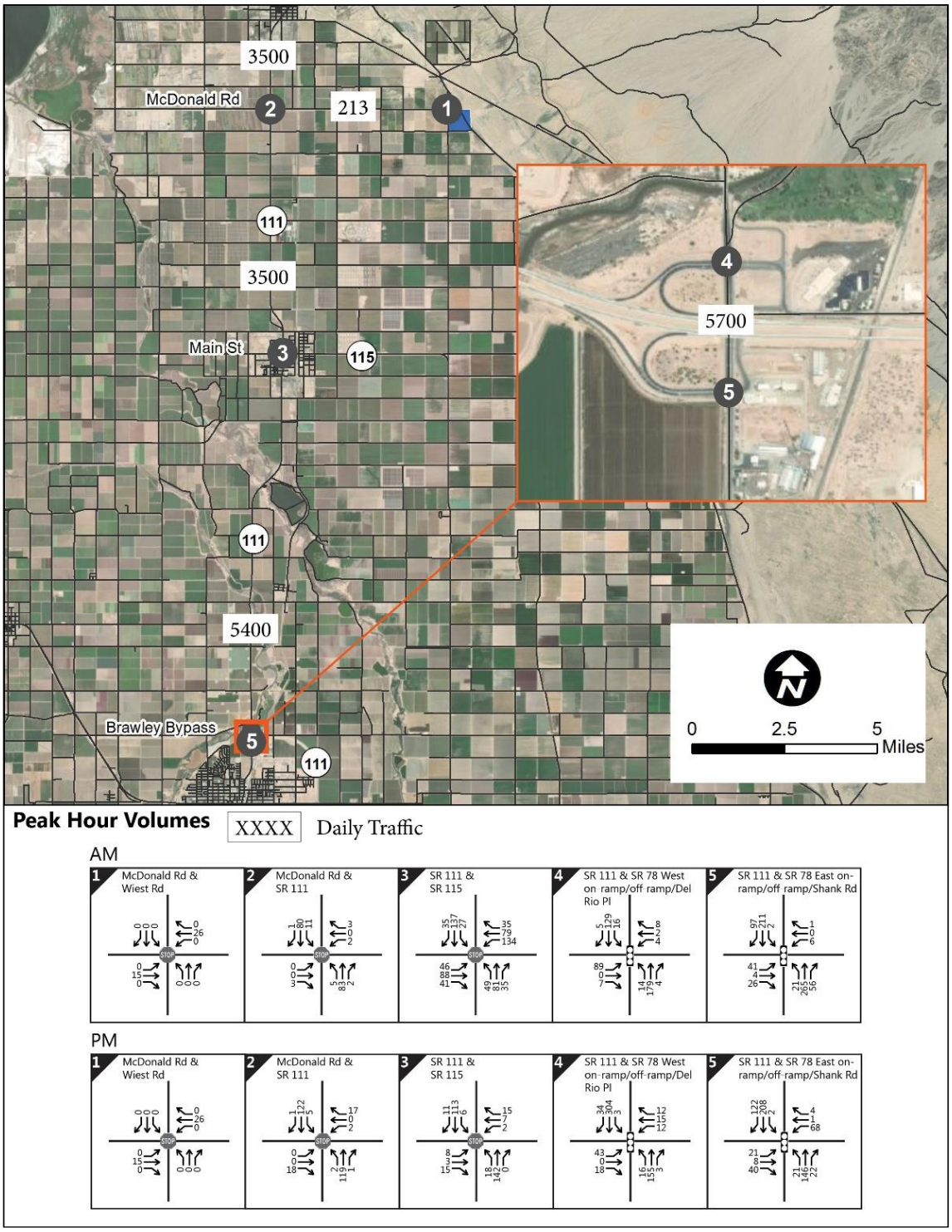
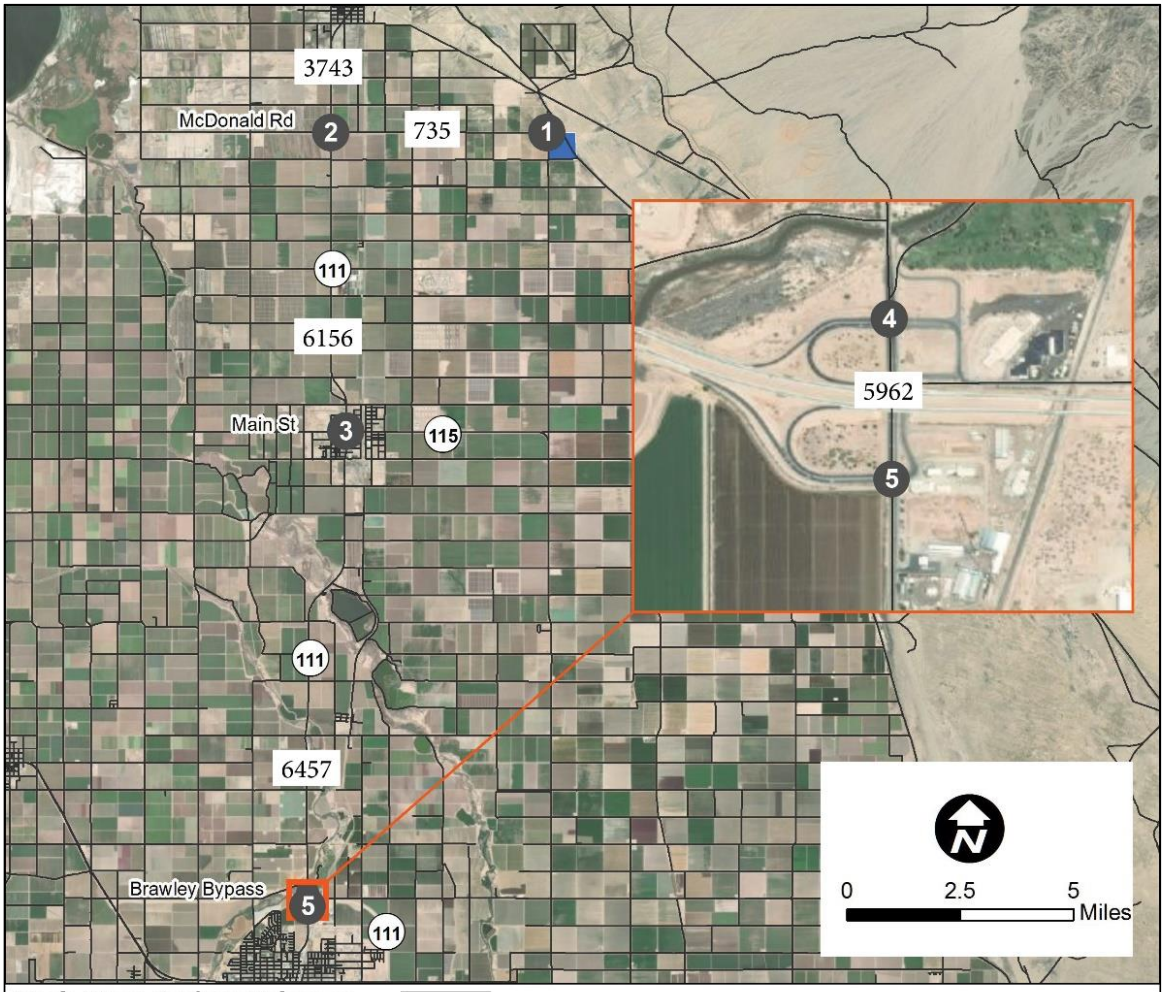
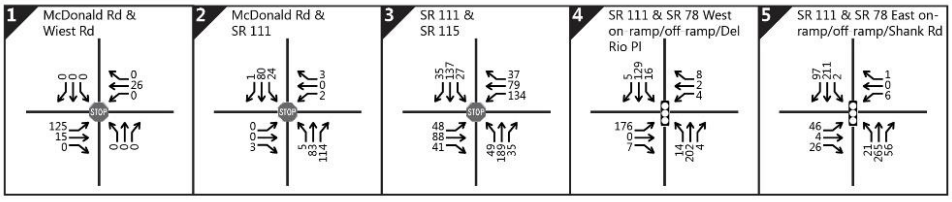


Figure 5.2 Construction Year Plus Project Year Volumes

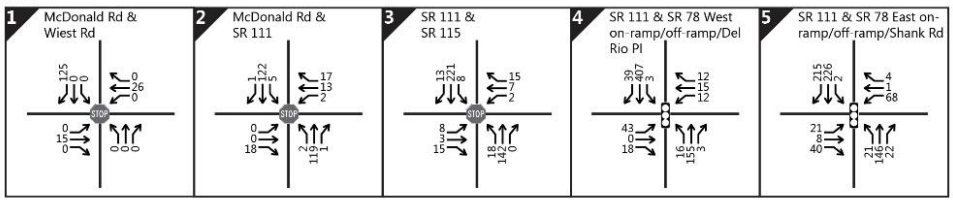


Peak Hour Project Volumes XXXX Daily Traffic

AM



PM



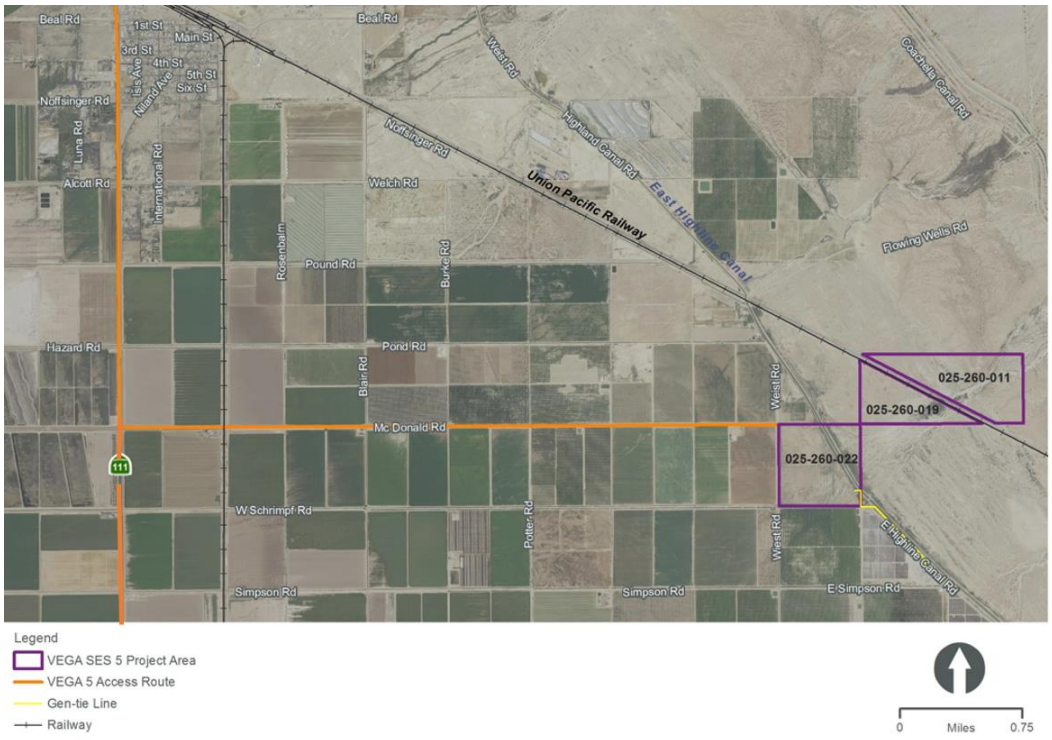
6.0 Circulation

The following section discusses the proposed project's access and circulation characteristics.

Project Access and Circulation

The project site is adjacent to the Highland Canal at McDonald Road and Weist Road. Access to and from the site will be from SR-111 along McDonald Road (see Figure 6.1). A portion of the site construction traffic will travel to the east side of the channel, by using Weist Road and Noffsinger Road. To access the portion of the site east of the UP Railroad tracks, access across the tracks will be made at Flowing Wells Road, and access to the property will be made via an easement that will be acquired. The easement will be a direct vertical south from Flowing Wells Road at the western boundary of AP 025-260-011.

Figure 6.1 Primary Vega 5 Access Route



Parking

The existing parking demand for up to vehicles and for construction equipment associated with site construction will be provided on site.

7.0 Impacts and Mitigation

This traffic impact analysis (TIA) has been prepared to identify the potential traffic impacts associated with constructing a solar photovoltaic (PV) energy generation project and utility-scale battery energy storage system (BESS) at the Vega SES 5 site.

The construction of the project is estimated to take up to 12 months and would begin in late 2023. During the construction phase, at peak construction, the project is anticipated to generate a net total of 260 trips per day with 126 AM peak hour trips and 126 PM peak hour trips. When constructed, the project will not generate any additional trips. The project opening is anticipated to be in 2024.

The project is not expected to create significant impacts at study intersections or study segments, therefore no mitigation measures are required. All study intersections and segments were found to operate at LOS C or better for all of the traffic scenarios analyzed.

APPENDIX A: TRAFFIC COUNT DATA

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of Imperial
N/S: SR-111
E/W: McDonald Road
Weather: Clear

File Name : 06_CIM_SR-111_McDonald AM
Site Code : 04120461
Start Date : 12/8/2020
Page No : 1

Groups Printed- Total Volume

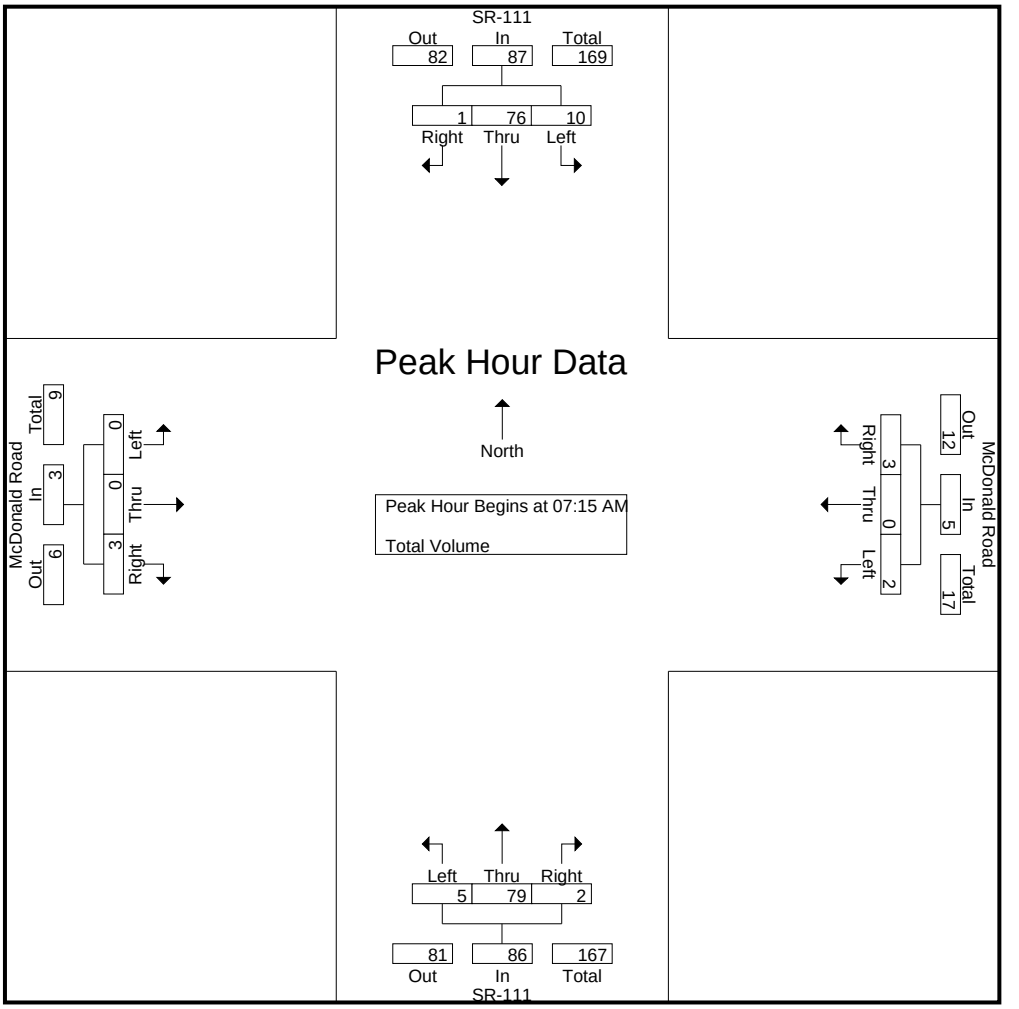
	SR-111 Southbound				McDonald Road Westbound				SR-111 Northbound				McDonald Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	16	0	17	1	0	1	2	0	21	0	21	0	0	0	0	40
07:15 AM	2	18	0	20	0	0	0	0	2	23	0	25	0	0	0	0	45
07:30 AM	2	14	0	16	1	0	2	3	1	23	1	25	0	0	0	0	44
07:45 AM	3	23	1	27	0	0	1	1	2	16	1	19	0	0	1	1	48
Total	8	71	1	80	2	0	4	6	5	83	2	90	0	0	1	1	177
08:00 AM	3	21	0	24	1	0	0	1	0	17	0	17	0	0	2	2	44
08:15 AM	1	18	0	19	1	0	1	2	1	10	1	12	0	0	0	0	33
08:30 AM	3	19	0	22	1	0	0	1	0	14	0	14	0	1	0	1	38
08:45 AM	1	28	1	30	0	0	2	2	1	7	0	8	0	0	0	0	40
Total	8	86	1	95	3	0	3	6	2	48	1	51	0	1	2	3	155
Grand Total	16	157	2	175	5	0	7	12	7	131	3	141	0	1	3	4	332
Apprch %	9.1	89.7	1.1		41.7	0	58.3		5	92.9	2.1		0	25	75		
Total %	4.8	47.3	0.6	52.7	1.5	0	2.1	3.6	2.1	39.5	0.9	42.5	0	0.3	0.9	1.2	

	SR-111 Southbound				McDonald Road Westbound				SR-111 Northbound				McDonald Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	18	0	20	0	0	0	0	**2**	**23**	0	**25**	0	0	0	0	45
07:30 AM	2	14	0	16	**1**	0	**2**	**3**	1	23	**1**	25	0	0	0	0	44
07:45 AM	**3**	**23**	**1**	**27**	0	0	1	1	2	16	1	19	0	0	1	1	**48**
08:00 AM	3	21	0	24	1	0	0	1	0	17	0	17	0	0	**2**	**2**	44
Total Volume	10	76	1	87	2	0	3	5	5	79	2	86	0	0	3	3	181
% App. Total	11.5	87.4	1.1		40	0	60		5.8	91.9	2.3		0	0	100		
PHF	.833	.826	.250	.806	.500	.000	.375	.417	.625	.859	.500	.860	.000	.000	.375	.375	.943

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of Imperial
N/S: SR-111
E/W: McDonald Road
Weather: Clear

File Name : 06_CIM_SR-111_McDonald AM
Site Code : 04120461
Start Date : 12/8/2020
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:30 AM				07:00 AM				07:45 AM			
+0 mins.	**3**	21	0	24	**1**	0	**2**	**3**	0	21	0	21	0	0	1	1
+15 mins.	1	18	0	19	0	0	1	1	**2**	**23**	0	**25**	0	0	**2**	**2**
+30 mins.	3	19	0	22	1	0	0	1	1	23	**1**	25	0	0	0	0
+45 mins.	1	**28**	**1**	**30**	1	0	1	2	2	16	1	19	0	**1**	0	1
Total Volume	8	86	1	95	3	0	4	7	5	83	2	90	0	1	3	4
% App. Total	8.4	90.5	1.1		42.9	0	57.1		5.6	92.2	2.2		0	25	75	
PHF	.667	.768	.250	.792	.750	.000	.500	.583	.625	.902	.500	.900	.000	.250	.375	.500

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County of Imperial
N/S: SR-111
E/W: McDonald Road
Weather: Clear

File Name : 06_CIM_SR-111_McDonald PM
Site Code : 04120461
Start Date : 12/8/2020
Page No : 1

Groups Printed- Total Volume

	SR-111 Southbound				McDonald Road Westbound				SR-111 Northbound				McDonald Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	49	0	50	1	0	6	7	0	25	0	25	0	0	12	12	94
04:15 PM	1	21	0	22	0	0	2	2	1	27	1	29	0	0	2	2	55
04:30 PM	2	21	1	24	0	0	6	6	1	32	0	33	0	0	2	2	65
04:45 PM	1	25	0	26	1	0	2	3	0	29	0	29	0	0	1	1	59
Total	5	116	1	122	2	0	16	18	2	113	1	116	0	0	17	17	273
05:00 PM	1	17	0	18	1	0	1	2	2	22	0	24	0	0	0	0	44
05:15 PM	0	18	0	18	0	0	1	1	1	26	0	27	0	0	1	1	47
05:30 PM	0	5	0	5	1	0	1	2	1	21	0	22	0	0	1	1	30
05:45 PM	0	8	0	8	0	0	0	0	0	14	0	14	0	0	3	3	25
Total	1	48	0	49	2	0	3	5	4	83	0	87	0	0	5	5	146
Grand Total	6	164	1	171	4	0	19	23	6	196	1	203	0	0	22	22	419
Apprch %	3.5	95.9	0.6		17.4	0	82.6		3	96.6	0.5		0	0	100		
Total %	1.4	39.1	0.2	40.8	1	0	4.5	5.5	1.4	46.8	0.2	48.4	0	0	5.3	5.3	

	SR-111 Southbound				McDonald Road Westbound				SR-111 Northbound				McDonald Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	**49**	0	**50**	**1**	0	**6**	**7**	0	25	0	25	0	0	**12**	**12**	**94**
04:15 PM	1	21	0	22	0	0	2	2	**1**	27	**1**	29	0	0	2	2	55
04:30 PM	**2**	21	**1**	24	0	0	6	6	1	**32**	0	**33**	0	0	2	2	65
04:45 PM	1	25	0	26	1	0	2	3	0	29	0	29	0	0	1	1	59
Total Volume	5	116	1	122	2	0	16	18	2	113	1	116	0	0	17	17	273
% App. Total	4.1	95.1	0.8		11.1	0	88.9		1.7	97.4	0.9		0	0	100		
PHF	.625	.592	.250	.610	.500	.000	.667	.643	.500	.883	.250	.879	.000	.000	.354	.354	.726

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PO Box 1178
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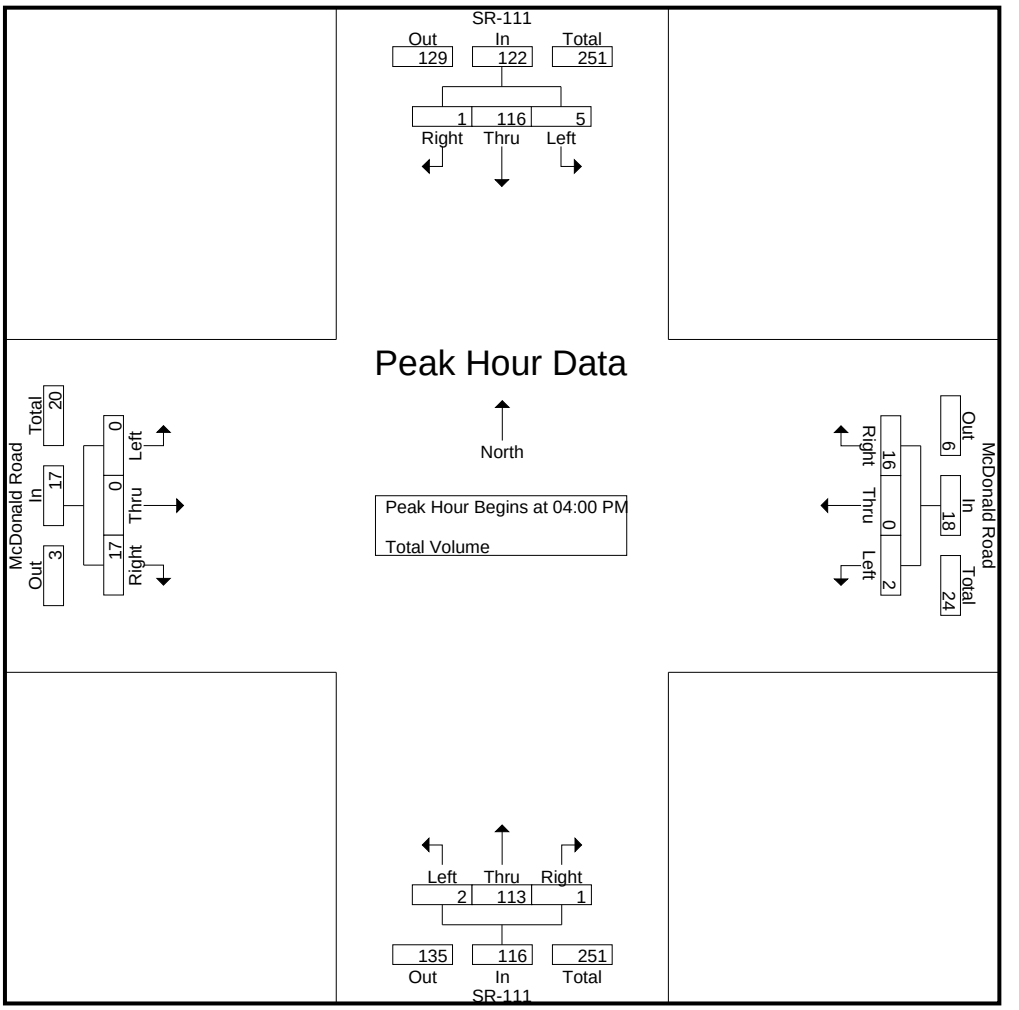
County of Imperial
N/S: SR-111
E/W: McDonald Road
Weather: Clear

File Name : 06_CIM_SR-111_McDonald PM
Site Code : 04120461
Start Date : 12/8/2020
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	1	**49**	0	**50**	**1**	0	**6**	**7**	0	25	0	25	0	0	**12**	**12**
+15 mins.	1	21	0	22	0	0	2	2	**1**	27	**1**	29	0	0	2	2
+30 mins.	**2**	21	**1**	24	0	0	6	6	1	**32**	0	**33**	0	0	2	2
+45 mins.	1	25	0	26	1	0	2	3	0	29	0	29	0	0	1	1
Total Volume	5	116	1	122	2	0	16	18	2	113	1	116	0	0	17	17
% App. Total	4.1	95.1	0.8		11.1	0	88.9		1.7	97.4	0.9		0	0	100	
PHF	.625	.592	.250	.610	.500	.000	.667	.643	.500	.883	.250	.879	.000	.000	.354	.354

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City of Calipatria
N/S: SR-111
E/W: SR-115 (Main Street)
Weather: Clear

File Name : 07_CPA_SR-111_SR-115 AM
Site Code : 04120461
Start Date : 12/8/2020
Page No : 1

Groups Printed- Total Volume

	SR-111 Southbound				SR-115 Westbound				SR-111 Northbound				SR-115 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	15	2	17	7	6	4	17	9	29	23	61	8	9	2	19	114
07:15 AM	5	10	4	19	7	13	4	24	8	19	23	50	10	13	3	26	119
07:30 AM	3	14	1	18	6	11	2	19	8	24	33	65	3	15	6	24	126
07:45 AM	5	12	5	22	8	8	4	20	6	18	41	65	7	15	3	25	132
Total	13	51	12	76	28	38	14	80	31	90	120	241	28	52	14	94	491
08:00 AM	3	21	2	26	9	7	3	19	12	27	14	53	4	12	7	23	121
08:15 AM	5	13	6	24	9	8	4	21	9	18	11	38	7	4	6	17	100
08:30 AM	5	22	4	31	7	8	1	16	6	15	13	34	10	12	7	29	110
08:45 AM	5	16	4	25	10	5	5	20	7	12	5	24	3	6	2	11	80
Total	18	72	16	106	35	28	13	76	34	72	43	149	24	34	22	80	411
Grand Total	31	123	28	182	63	66	27	156	65	162	163	390	52	86	36	174	902
Apprch %	17	67.6	15.4		40.4	42.3	17.3		16.7	41.5	41.8		29.9	49.4	20.7		
Total %	3.4	13.6	3.1	20.2	7	7.3	3	17.3	7.2	18	18.1	43.2	5.8	9.5	4	19.3	

	SR-111 Southbound				SR-115 Westbound				SR-111 Northbound				SR-115 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**5**	10	4	19	7	**13**	**4**	**24**	8	19	23	50	**10**	13	3	**26**	119
07:30 AM	3	14	1	18	6	11	2	19	8	24	33	**65**	3	**15**	6	24	126
07:45 AM	5	12	**5**	22	8	8	4	20	6	18	**41**	65	7	15	3	25	**132**
08:00 AM	3	**21**	2	**26**	**9**	7	3	19	**12**	**27**	14	53	4	12	**7**	23	121
Total Volume	16	57	12	85	30	39	13	82	34	88	111	233	24	55	19	98	498
% App. Total	18.8	67.1	14.1		36.6	47.6	15.9		14.6	37.8	47.6		24.5	56.1	19.4		
PHF	.800	.679	.600	.817	.833	.750	.813	.854	.708	.815	.677	.896	.600	.917	.679	.942	.943

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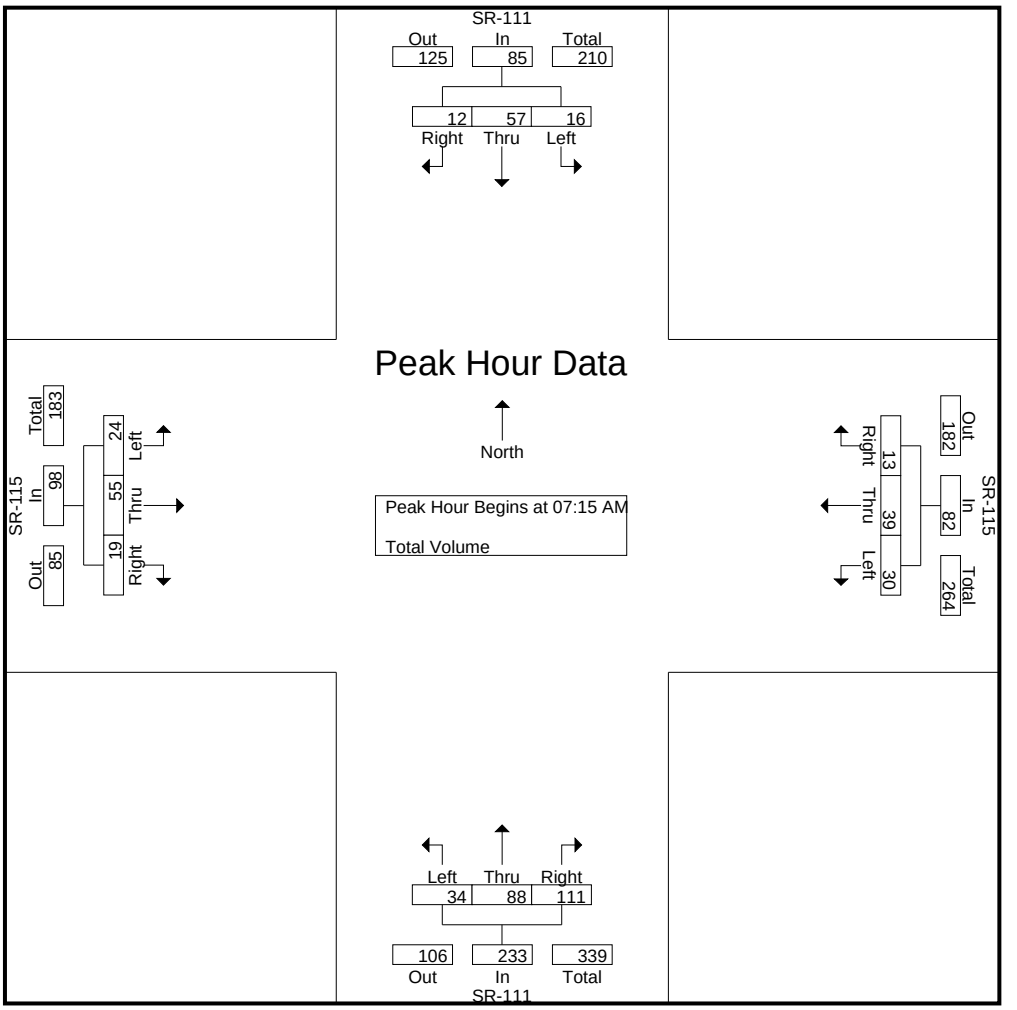
City of Calipatria
N/S: SR-111
E/W: SR-115 (Main Street)
Weather: Clear

File Name : 07_CPA_SR-111_SR-115 AM
Site Code : 04120461
Start Date : 12/8/2020
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	3	21	2	26	7	**13**	**4**	**24**	**9**	**29**	23	61	**10**	13	3	**26**
+15 mins.	**5**	13	**6**	24	6	11	2	19	8	19	23	50	3	**15**	6	24
+30 mins.	5	**22**	4	**31**	8	8	4	20	8	24	33	**65**	7	15	3	25
+45 mins.	5	16	4	25	**9**	7	3	19	6	18	**41**	65	4	12	**7**	23
Total Volume	18	72	16	106	30	39	13	82	31	90	120	241	24	55	19	98
% App. Total	17	67.9	15.1		36.6	47.6	15.9		12.9	37.3	49.8		24.5	56.1	19.4	
PHF	.900	.818	.667	.855	.833	.750	.813	.854	.861	.776	.732	.927	.600	.917	.679	.942

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City of Calipatria
N/S: SR-111
E/W: SR-115 (Main Street)
Weather: Clear

File Name : 07_CPA_SR-111_SR-115 PM
Site Code : 04120461
Start Date : 12/8/2020
Page No : 1

Groups Printed- Total Volume

	SR-111 Southbound				SR-115 Westbound				SR-111 Northbound				SR-115 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	10	49	5	64	46	24	9	79	13	18	5	36	16	16	10	42	221
04:15 PM	6	38	8	52	28	22	10	60	11	16	7	34	10	33	12	55	201
04:30 PM	6	24	11	41	26	18	4	48	11	15	14	40	9	18	13	40	169
04:45 PM	4	19	9	32	27	11	10	48	11	28	7	46	9	16	4	29	155
Total	26	130	33	189	127	75	33	235	46	77	33	156	44	83	39	166	746
05:00 PM	7	21	9	37	16	17	10	43	12	15	8	35	17	16	13	46	161
05:15 PM	3	12	3	18	16	13	5	34	12	14	11	37	3	17	4	24	113
05:30 PM	6	13	4	23	7	9	6	22	11	27	14	52	6	14	4	24	121
05:45 PM	5	17	7	29	13	10	6	29	15	13	8	36	7	12	8	27	121
Total	21	63	23	107	52	49	27	128	50	69	41	160	33	59	29	121	516
Grand Total	47	193	56	296	179	124	60	363	96	146	74	316	77	142	68	287	1262
Apprch %	15.9	65.2	18.9		49.3	34.2	16.5		30.4	46.2	23.4		26.8	49.5	23.7		
Total %	3.7	15.3	4.4	23.5	14.2	9.8	4.8	28.8	7.6	11.6	5.9	25	6.1	11.3	5.4	22.7	

	SR-111 Southbound				SR-115 Westbound				SR-111 Northbound				SR-115 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**10**	**49**	5	**64**	**46**	**24**	9	**79**	**13**	18	5	36	**16**	16	10	42	**221**
04:15 PM	6	38	8	52	28	22	**10**	60	11	16	7	34	10	**33**	12	**55**	201
04:30 PM	6	24	**11**	41	26	18	4	48	11	15	**14**	40	9	18	**13**	40	169
04:45 PM	4	19	9	32	27	11	10	48	11	**28**	7	**46**	9	16	4	29	155
Total Volume	26	130	33	189	127	75	33	235	46	77	33	156	44	83	39	166	746
% App. Total	13.8	68.8	17.5		54	31.9	14		29.5	49.4	21.2		26.5	50	23.5		
PHF	.650	.663	.750	.738	.690	.781	.825	.744	.885	.688	.589	.848	.688	.629	.750	.755	.844

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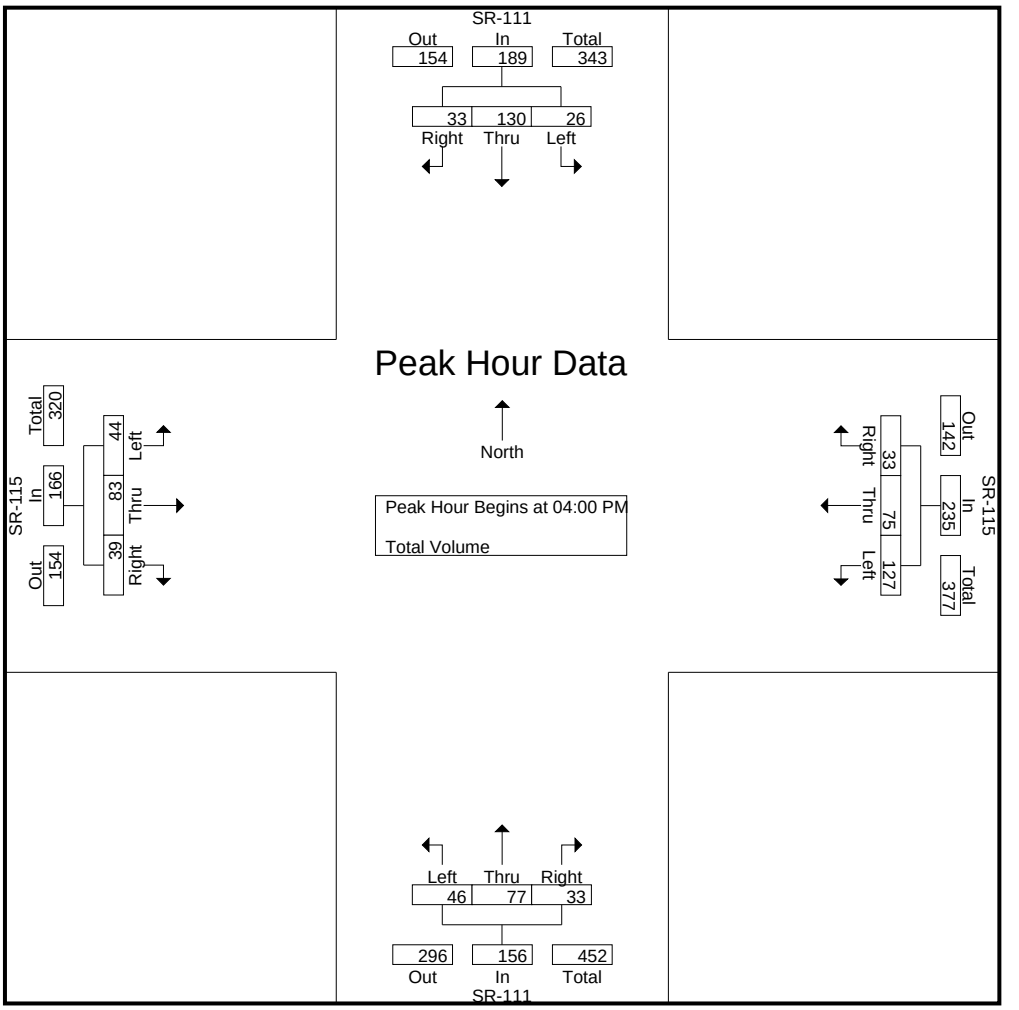
City of Calipatria
N/S: SR-111
E/W: SR-115 (Main Street)
Weather: Clear

File Name : 07_CPA_SR-111_SR-115 PM
Site Code : 04120461
Start Date : 12/8/2020
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:45 PM				04:15 PM			
+0 mins.	**10**	**49**	5	**64**	**46**	**24**	9	**79**	11	**28**	7	46	10	**33**	12	**55**
+15 mins.	6	38	8	52	28	22	**10**	60	**12**	15	8	35	9	18	**13**	40
+30 mins.	6	24	**11**	41	26	18	4	48	12	14	11	37	9	16	4	29
+45 mins.	4	19	9	32	27	11	10	48	11	27	**14**	**52**	**17**	16	13	46
Total Volume	26	130	33	189	127	75	33	235	46	84	40	170	45	83	42	170
% App. Total	13.8	68.8	17.5		54	31.9	14		27.1	49.4	23.5		26.5	48.8	24.7	
PHF	.650	.663	.750	.738	.690	.781	.825	.744	.958	.750	.714	.817	.662	.629	.808	.773

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City of Brawley
N/S: SR-111
E/W: SR-78 Westbound Ramps/Del Rio Place
Weather: Clear

File Name : 08_BWY_SR-111_SR-78W AM
Site Code : 04120461
Start Date : 12/8/2020
Page No : 1

Groups Printed- Total Volume

	SR-111 Southbound				Del Rio Place Westbound				SR-111 Northbound				SR-78 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	31	4	35	1	0	1	2	4	37	0	41	24	0	2	26	104
07:15 AM	1	31	3	35	1	1	3	5	4	50	2	56	24	0	1	25	121
07:30 AM	1	30	4	35	1	0	2	3	3	43	1	47	18	0	2	20	105
07:45 AM	3	30	4	37	1	1	2	4	2	40	1	43	18	0	2	20	104
Total	5	122	15	142	4	2	8	14	13	170	4	187	84	0	7	91	434
08:00 AM	2	24	6	32	1	4	2	7	5	21	1	27	19	0	3	22	88
08:15 AM	2	45	2	49	0	3	1	4	1	26	1	28	9	0	7	16	97
08:30 AM	0	41	4	45	0	2	0	2	3	21	2	26	10	0	4	14	87
08:45 AM	0	36	2	38	0	4	1	5	4	18	1	23	10	2	2	14	80
Total	4	146	14	164	1	13	4	18	13	86	5	104	48	2	16	66	352
Grand Total	9	268	29	306	5	15	12	32	26	256	9	291	132	2	23	157	786
Apprch %	2.9	87.6	9.5		15.6	46.9	37.5		8.9	88	3.1		84.1	1.3	14.6		
Total %	1.1	34.1	3.7	38.9	0.6	1.9	1.5	4.1	3.3	32.6	1.1	37	16.8	0.3	2.9	20	

	SR-111 Southbound				Del Rio Place Westbound				SR-111 Northbound				SR-78 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	**31**	**4**	35	**1**	0	1	2	**4**	37	0	41	**24**	0	**2**	**26**	104
07:15 AM	1	31	3	35	1	**1**	**3**	**5**	4	**50**	**2**	**56**	24	0	1	25	**121**
07:30 AM	1	30	4	35	1	0	2	3	3	43	1	47	18	0	2	20	105
07:45 AM	**3**	30	4	**37**	1	1	2	4	2	40	1	43	18	0	2	20	104
Total Volume	5	122	15	142	4	2	8	14	13	170	4	187	84	0	7	91	434
% App. Total	3.5	85.9	10.6		28.6	14.3	57.1		7	90.9	2.1		92.3	0	7.7		
PHF	.417	.984	.938	.959	1.00	.500	.667	.700	.813	.850	.500	.835	.875	.000	.875	.875	.897

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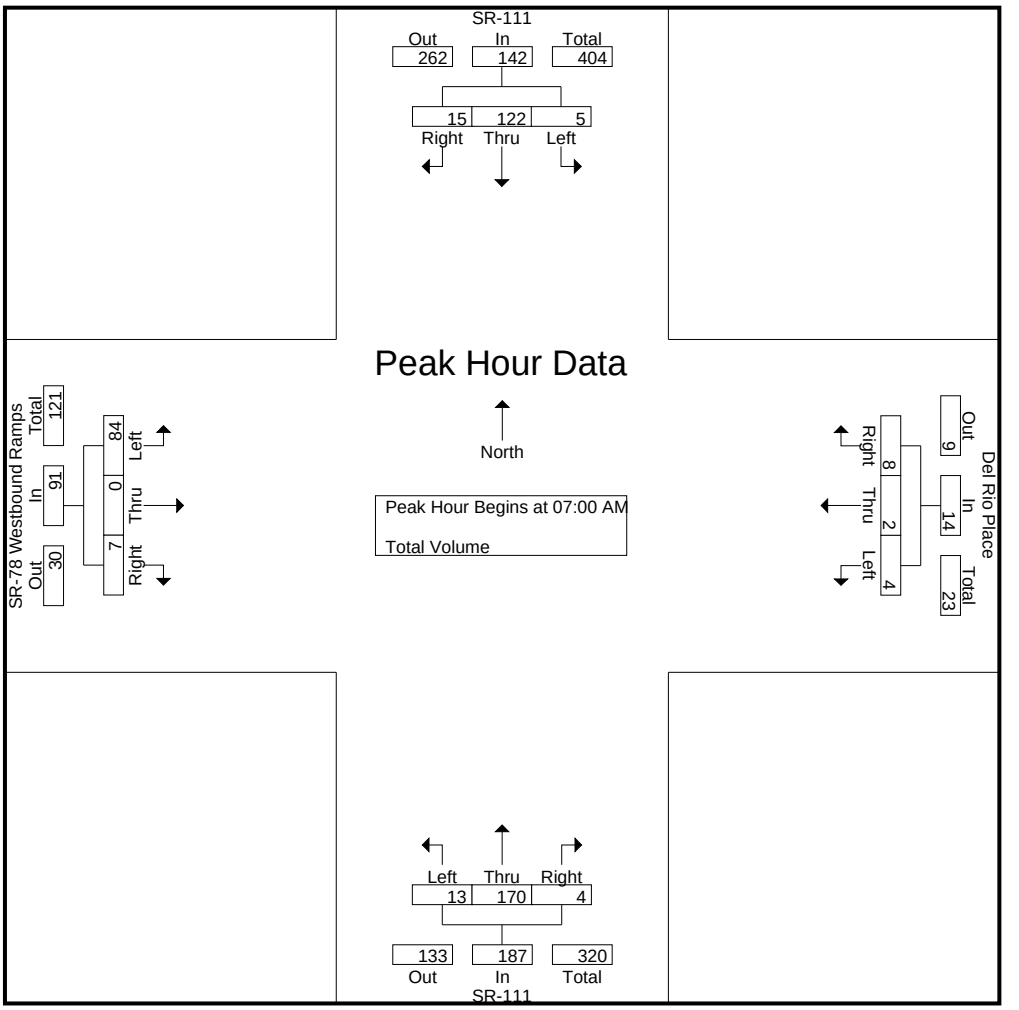
(951)268-6268

City of Brawley
N/S: SR-111
E/W: SR-78 Westbound Ramps/Del Rio Place
Weather: Clear

File Name : 08_BWY_SR-111_SR-78W AM
Site Code : 04120461
Start Date : 12/8/2020



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:15 AM				07:00 AM				07:00 AM			
+0 mins.	**2**	24	**6**	32	**1**	1	**3**	5	**4**	37	0	41	**24**	0	**2**	**26**
+15 mins.	2	**45**	2	**49**	1	0	2	3	4	**50**	**2**	**56**	24	0	1	25
+30 mins.	0	41	4	45	1	1	2	4	3	43	1	47	18	0	2	20
+45 mins.	0	36	2	38	1	**4**	2	**7**	2	40	1	43	18	0	2	20
Total Volume	4	146	14	164	4	6	9	19	13	170	4	187	84	0	7	91
% App. Total	2.4	89	8.5		21.1	31.6	47.4		7	90.9	2.1		92.3	0	7.7	
PHF	.500	.811	.583	.837	1.000	.375	.750	.679	.813	.850	.500	.835	.875	.000	.875	.875

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City of Brawley
N/S: SR-111
E/W: SR-78 Westbound Ramps/Del Rio Place
Weather: Clear

File Name : 08_BWY_SR-111_SR-78W PM
Site Code : 04120461
Start Date : 12/8/2020
Page No : 1

Groups Printed- Total Volume

	SR-111 Southbound				Del Rio Place Westbound				SR-111 Northbound				SR-78 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	72	7	79	7	8	2	17	4	32	1	37	4	0	3	7	140
04:15 PM	1	82	12	95	2	5	5	12	6	40	0	46	7	0	8	15	168
04:30 PM	1	73	8	82	2	1	4	7	3	43	2	48	18	0	4	22	159
04:45 PM	1	61	5	67	0	0	0	0	2	32	0	34	12	0	2	14	115
Total	3	288	32	323	11	14	11	36	15	147	3	165	41	0	17	58	582
05:00 PM	0	50	5	55	1	3	2	6	5	38	0	43	14	1	5	20	124
05:15 PM	4	48	4	56	0	2	2	4	2	34	0	36	15	0	5	20	116
05:30 PM	1	28	2	31	1	4	0	5	1	34	0	35	16	0	4	20	91
05:45 PM	0	33	7	40	1	1	1	3	2	29	0	31	3	0	0	3	77
Total	5	159	18	182	3	10	5	18	10	135	0	145	48	1	14	63	408
Grand Total	8	447	50	505	14	24	16	54	25	282	3	310	89	1	31	121	990
Apprch %	1.6	88.5	9.9		25.9	44.4	29.6		8.1	91	1		73.6	0.8	25.6		
Total %	0.8	45.2	5.1	51	1.4	2.4	1.6	5.5	2.5	28.5	0.3	31.3	9	0.1	3.1	12.2	

	SR-111 Southbound				Del Rio Place Westbound				SR-111 Northbound				SR-78 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	72	7	79	**7**	**8**	2	**17**	4	32	1	37	4	0	3	7	140
04:15 PM	**1**	**82**	**12**	**95**	2	5	**5**	12	**6**	40	0	46	7	0	**8**	15	**168**
04:30 PM	1	73	8	82	2	1	4	7	3	**43**	**2**	**48**	**18**	0	4	**22**	159
04:45 PM	1	61	5	67	0	0	0	0	2	32	0	34	12	0	2	14	115
Total Volume	3	288	32	323	11	14	11	36	15	147	3	165	41	0	17	58	582
% App. Total	0.9	89.2	9.9		30.6	38.9	30.6		9.1	89.1	1.8		70.7	0	29.3		
PHF	.750	.878	.667	.850	.393	.438	.550	.529	.625	.855	.375	.859	.569	.000	.531	.659	.866

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Weather: Clear

File Name : 08_BWY_SR-111_SR-78W PM
Site Code : 04120461
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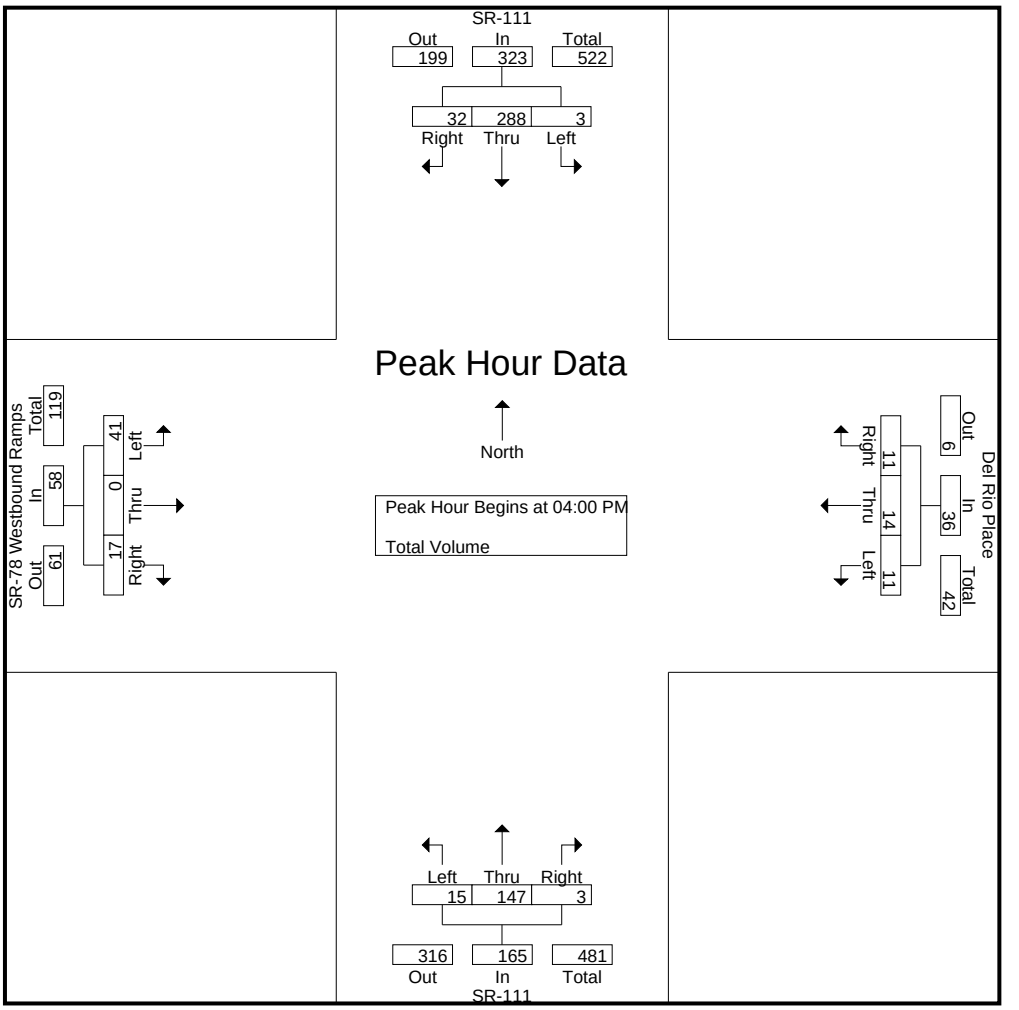

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:15 PM				04:30 PM			
+0 mins.	0	72	7	79	**7**	**8**	2	**17**	**6**	40	0	46	**18**	0	4	**22**
+15 mins.	**1**	**82**	**12**	**95**	2	5	**5**	12	3	**43**	**2**	**48**	12	0	2	14
+30 mins.	1	73	8	82	2	1	4	7	2	32	0	34	14	**1**	**5**	20
+45 mins.	1	61	5	67	0	0	0	0	5	38	0	43	15	0	5	20
Total Volume	3	288	32	323	11	14	11	36	16	153	2	171	59	1	16	76
% App. Total	0.9	89.2	9.9		30.6	38.9	30.6		9.4	89.5	1.2		77.6	1.3	21.1	
PHF	.750	.878	.667	.850	.393	.438	.550	.529	.667	.890	.250	.891	.819	.250	.800	.864

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City of Brawley
N/S: SR-111
E/W: SR-78 Eastbound Ramps/Shank Road
Weather: Clear

File Name : 09_BWY_SR-111_SR-78E AM
Site Code : 04120461
Start Date : 12/8/2020
Page No : 1

Groups Printed- Total Volume

	SR-111 Southbound				Shank Road Westbound				SR-111 Northbound				SR-78 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	22	12	35	2	0	0	2	0	37	8	45	5	0	2	7	89
07:15 AM	0	19	10	29	3	0	0	3	7	45	6	58	3	1	0	4	94
07:30 AM	2	17	18	37	2	0	0	2	3	47	5	55	8	0	4	12	106
07:45 AM	1	24	8	33	6	0	1	7	2	34	11	47	9	1	5	15	102
Total	4	82	48	134	13	0	1	14	12	163	30	205	25	2	11	38	391
08:00 AM	0	23	5	28	3	0	0	3	3	26	3	32	2	1	4	7	70
08:15 AM	0	41	12	53	3	0	0	3	0	20	9	29	6	0	4	10	95
08:30 AM	1	31	12	44	4	0	0	4	3	21	9	33	5	1	2	8	89
08:45 AM	1	23	15	39	2	0	1	3	2	21	2	25	1	0	4	5	72
Total	2	118	44	164	12	0	1	13	8	88	23	119	14	2	14	30	326
Grand Total	6	200	92	298	25	0	2	27	20	251	53	324	39	4	25	68	717
Apprch %	2	67.1	30.9		92.6	0	7.4		6.2	77.5	16.4		57.4	5.9	36.8		
Total %	0.8	27.9	12.8	41.6	3.5	0	0.3	3.8	2.8	35	7.4	45.2	5.4	0.6	3.5	9.5	

	SR-111 Southbound				Shank Road Westbound				SR-111 Northbound				SR-78 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	22	12	35	2	0	0	2	0	37	8	45	5	0	2	7	89
07:15 AM	0	19	10	29	3	0	0	3	**7**	45	6	**58**	3	**1**	0	4	94
07:30 AM	**2**	17	**18**	**37**	2	0	0	2	3	**47**	5	55	8	0	4	12	**106**
07:45 AM	1	**24**	8	33	**6**	0	**1**	**7**	2	34	**11**	47	**9**	1	**5**	**15**	102
Total Volume	4	82	48	134	13	0	1	14	12	163	30	205	25	2	11	38	391
% App. Total	3	61.2	35.8		92.9	0	7.1		5.9	79.5	14.6		65.8	5.3	28.9		
PHF	.500	.854	.667	.905	.542	.000	.250	.500	.429	.867	.682	.884	.694	.500	.550	.633	.922

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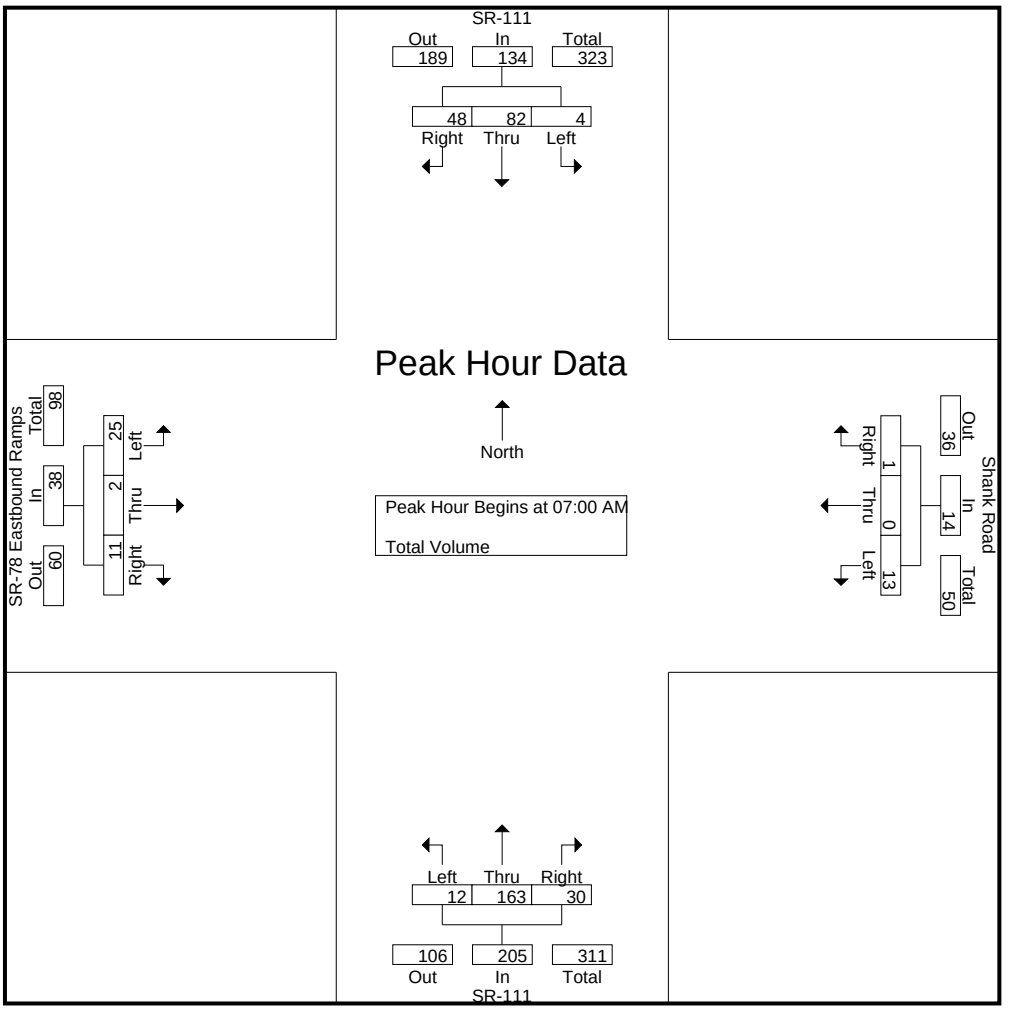
Weather: Clear

File Name : 09_BWY_SR-111_SR-78E AM
Site Code : 04120461
Start Date : 12/8/2020



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				07:00 AM				07:30 AM			
+0 mins.	0	23	5	28	**6**	0	**1**	**7**	0	37	8	45	8	0	4	12
+15 mins.	0	**41**	12	**53**	3	0	0	3	**7**	45	6	**58**	**9**	**1**	**5**	**15**
+30 mins.	**1**	31	12	44	3	0	0	3	3	**47**	5	55	2	1	4	7
+45 mins.	1	23	**15**	39	4	0	0	4	2	34	**11**	47	6	0	4	10
Total Volume	2	118	44	164	16	0	1	17	12	163	30	205	25	2	17	44
% App. Total	1.2	72	26.8		94.1	0	5.9		5.9	79.5	14.6		56.8	4.5	38.6	
PHF	.500	.720	.733	.774	.667	.000	.250	.607	.429	.867	.682	.884	.694	.500	.850	.733

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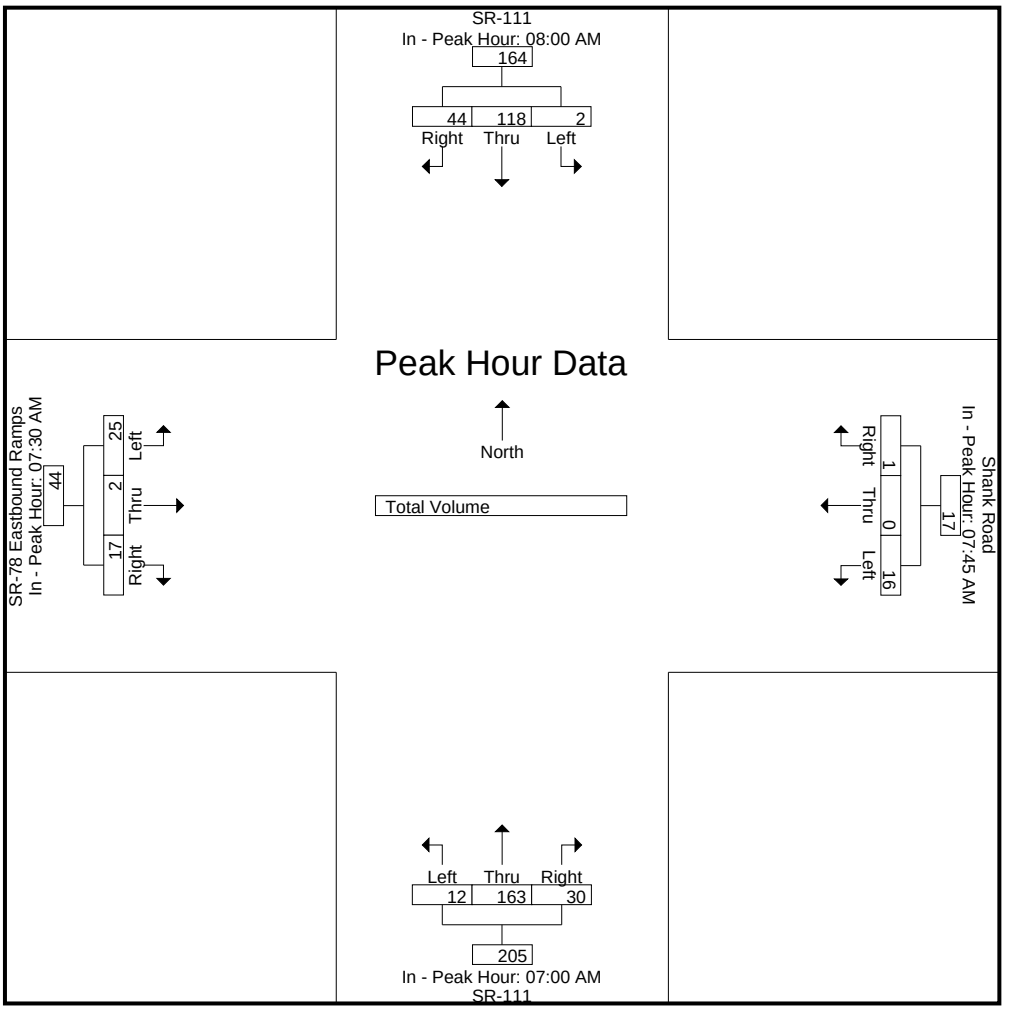

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Weather: Clear

File Name : 09_BWY_SR-111_SR-78E PM
Site Code : 04120461
Start Date : 12/8/2020
Page No : 1

Groups Printed- Total Volume

	SR-111 Southbound				Shank Road Westbound				SR-111 Northbound				SR-78 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	52	32	84	17	0	0	17	5	28	3	36	9	2	10	21	158
04:15 PM	1	56	37	94	15	0	0	15	4	38	6	48	5	1	8	14	171
04:30 PM	1	52	24	77	13	0	4	17	7	38	7	52	5	4	11	20	166
04:45 PM	0	37	23	60	19	1	0	20	4	34	5	43	1	1	9	11	134
Total	2	197	116	315	64	1	4	69	20	138	21	179	20	8	38	66	629
05:00 PM	1	39	18	58	17	0	1	18	11	35	3	49	6	1	8	15	140
05:15 PM	0	39	17	56	5	3	0	8	1	34	3	38	2	1	6	9	111
05:30 PM	1	23	8	32	10	0	0	10	2	30	2	34	6	1	3	10	86
05:45 PM	0	28	7	35	7	2	0	9	0	27	3	30	8	1	1	10	84
Total	2	129	50	181	39	5	1	45	14	126	11	151	22	4	18	44	421
Grand Total	4	326	166	496	103	6	5	114	34	264	32	330	42	12	56	110	1050
Apprch %	0.8	65.7	33.5		90.4	5.3	4.4		10.3	80	9.7		38.2	10.9	50.9		
Total %	0.4	31	15.8	47.2	9.8	0.6	0.5	10.9	3.2	25.1	3	31.4	4	1.1	5.3	10.5	

	SR-111 Southbound				Shank Road Westbound				SR-111 Northbound				SR-78 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	52	32	84	17	0	0	17	5	28	3	36	**9**	2	10	**21**	158
04:15 PM	**1**	**56**	**37**	**94**	15	0	0	15	4	**38**	6	48	5	1	8	14	**171**
04:30 PM	1	52	24	77	13	0	**4**	17	**7**	38	**7**	**52**	5	**4**	**11**	20	166
04:45 PM	0	37	23	60	**19**	**1**	0	**20**	4	34	5	43	1	1	9	11	134
Total Volume	2	197	116	315	64	1	4	69	20	138	21	179	20	8	38	66	629
% App. Total	0.6	62.5	36.8		92.8	1.4	5.8		11.2	77.1	11.7		30.3	12.1	57.6		
PHF	.500	.879	.784	.838	.842	.250	.250	.863	.714	.908	.750	.861	.556	.500	.864	.786	.920

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Start Date : 12/8/2020
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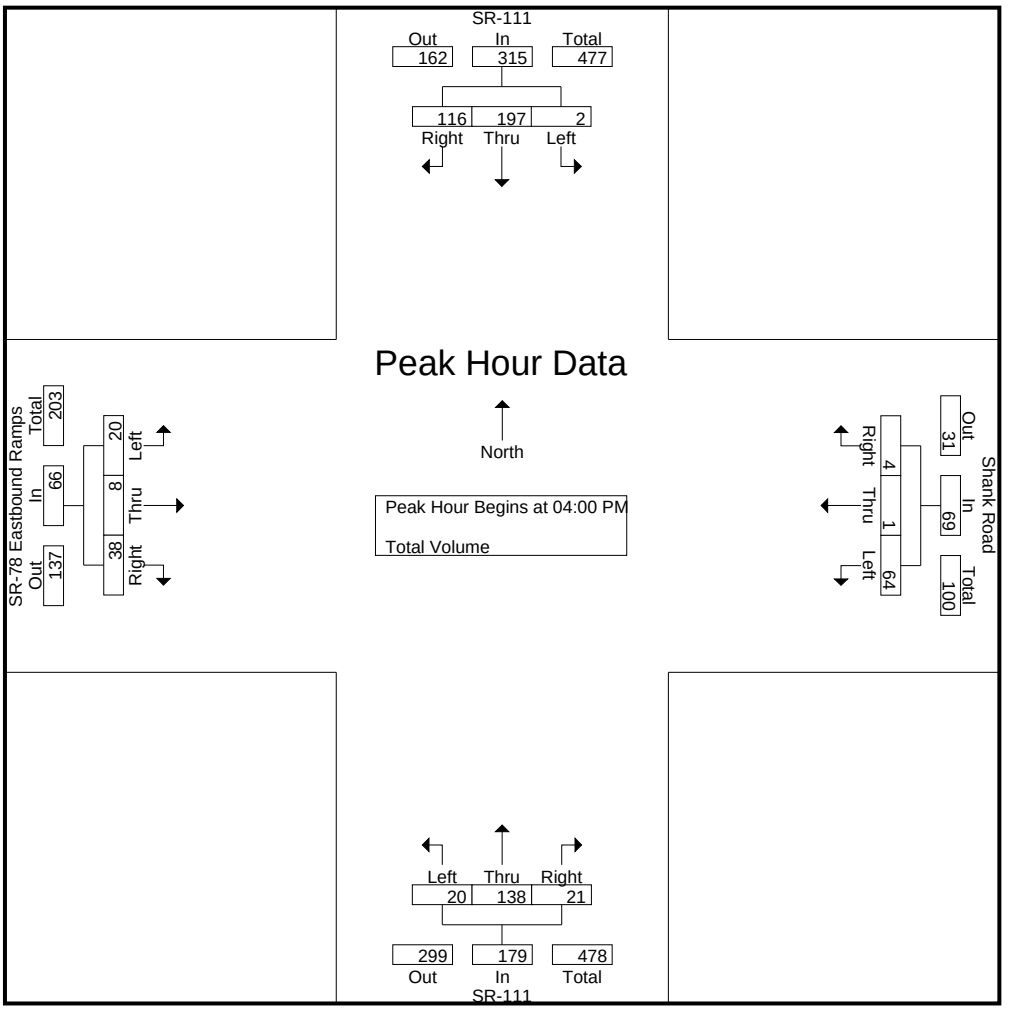

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:15 PM				04:00 PM			
+0 mins.	0	52	32	84	15	0	0	15	4	**38**	6	48	**9**	2	10	**21**
+15 mins.	**1**	**56**	**37**	**94**	13	0	**4**	17	7	38	**7**	**52**	5	1	8	14
+30 mins.	1	52	24	77	**19**	**1**	0	**20**	4	34	5	43	5	**4**	**11**	20
+45 mins.	0	37	23	60	17	0	1	18	**11**	35	3	49	1	1	9	11
Total Volume	2	197	116	315	64	1	5	70	26	145	21	192	20	8	38	66
% App. Total	0.6	62.5	36.8		91.4	1.4	7.1		13.5	75.5	10.9		30.3	12.1	57.6	
PHF	.500	.879	.784	.838	.842	.250	.313	.875	.591	.954	.750	.923	.556	.500	.864	.786

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Weather: Clear

File Name : 09_BWY_SR-111_SR-78E PM
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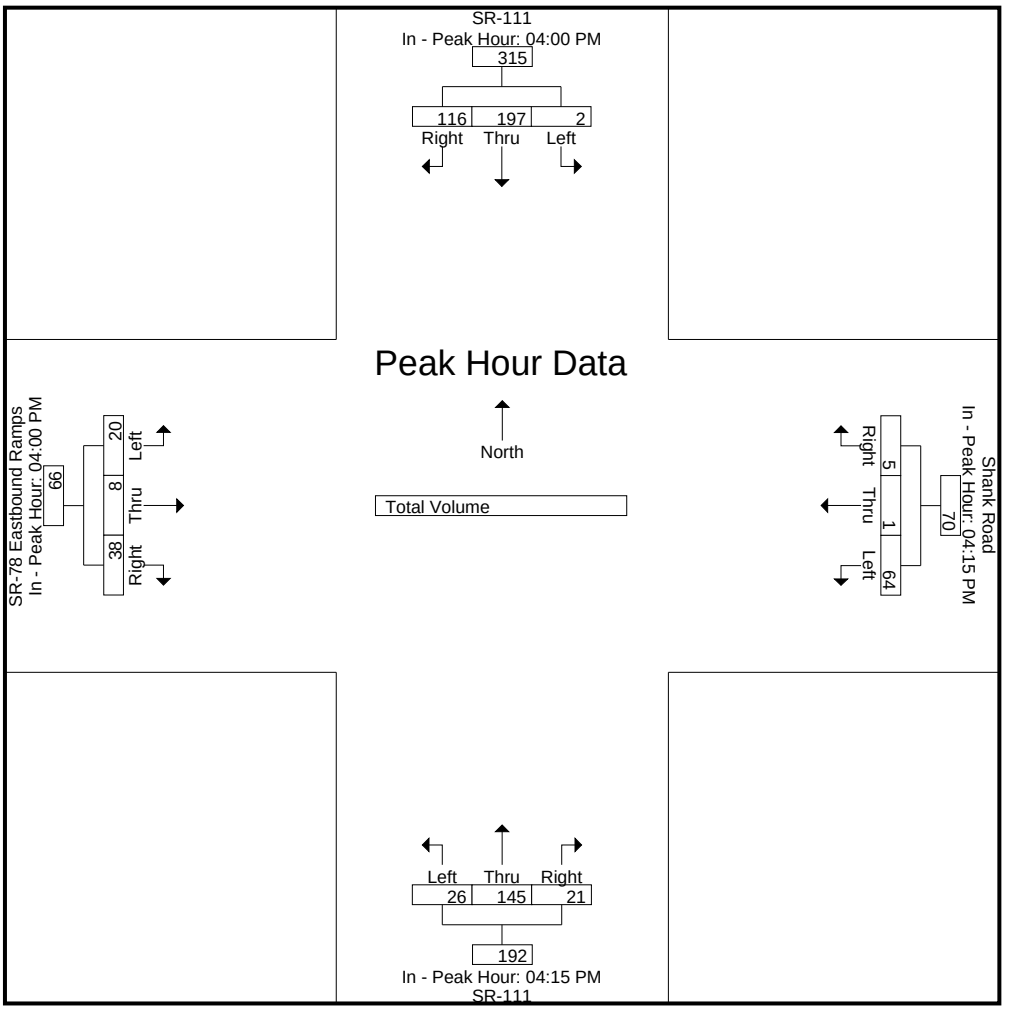

APPENDIX B : EXISTING YEAR CONDITIONS ANALYSIS WORKSHEETS

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	14	0	0	25	0	0	0	0	0	0	0
Future Vol, veh/h	0	14	0	0	25	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	15	0	0	27	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	27	0	0	15	0	0	42	42	15	42	42	27
Stage 1	-	-	-	-	-	-	15	15	-	27	27	-
Stage 2	-	-	-	-	-	-	27	27	-	15	15	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1587	-	-	1603	-	-	961	850	1065	961	850	1048
Stage 1	-	-	-	-	-	-	1005	883	-	990	873	-
Stage 2	-	-	-	-	-	-	990	873	-	1005	883	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1587	-	-	1603	-	-	961	850	1065	961	850	1048
Mov Cap-2 Maneuver	-	-	-	-	-	-	961	850	-	961	850	-
Stage 1	-	-	-	-	-	-	1005	883	-	990	873	-
Stage 2	-	-	-	-	-	-	990	873	-	1005	883	-

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

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1587	-	-	1603	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	14	0	0	25	0	0	0	0	0	0	0
Future Vol, veh/h	0	14	0	0	25	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	15	0	0	27	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	27	0	0	15	0	0	42	42	15	42	42	27
Stage 1	-	-	-	-	-	-	15	15	-	27	27	-
Stage 2	-	-	-	-	-	-	27	27	-	15	15	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1587	-	-	1603	-	-	961	850	1065	961	850	1048
Stage 1	-	-	-	-	-	-	1005	883	-	990	873	-
Stage 2	-	-	-	-	-	-	990	873	-	1005	883	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1587	-	-	1603	-	-	961	850	1065	961	850	1048
Mov Cap-2 Maneuver	-	-	-	-	-	-	961	850	-	961	850	-
Stage 1	-	-	-	-	-	-	1005	883	-	990	873	-
Stage 2	-	-	-	-	-	-	990	873	-	1005	883	-

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

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1587	-	-	1603	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	3	2	0	3	5	79	2	10	76	1
Future Vol, veh/h	0	0	3	2	0	3	5	79	2	10	76	1
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	-	-	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	3	2	0	3	5	86	2	11	83	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	205	204	84	204	203	87	84	0	0	88	0	0
Stage 1	106	106	-	97	97	-	-	-	-	-	-	-
Stage 2	99	98	-	107	106	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	753	692	975	754	693	971	1513	-	-	1508	-	-
Stage 1	900	807	-	910	815	-	-	-	-	-	-	-
Stage 2	907	814	-	898	807	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	744	684	975	745	685	971	1513	-	-	1508	-	-
Mov Cap-2 Maneuver	744	684	-	745	685	-	-	-	-	-	-	-
Stage 1	897	801	-	907	813	-	-	-	-	-	-	-
Stage 2	901	812	-	888	801	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	9.2	0.4	0.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1513	-	-	975	866	1508	-	-
HCM Lane V/C Ratio	0.004	-	-	0.003	0.006	0.007	-	-
HCM Control Delay (s)	7.4	0	-	8.7	9.2	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	17	2	0	16	2	113	1	5	116	1
Future Vol, veh/h	0	0	17	2	0	16	2	113	1	5	116	1
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	-	-	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	18	2	0	17	2	123	1	5	126	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	273	265	127	274	265	124	127	0	0	124	0	0
Stage 1	137	137	-	128	128	-	-	-	-	-	-	-
Stage 2	136	128	-	146	137	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	679	640	923	678	640	927	1459	-	-	1463	-	-
Stage 1	866	783	-	876	790	-	-	-	-	-	-	-
Stage 2	867	790	-	857	783	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	664	637	923	662	637	927	1459	-	-	1463	-	-
Mov Cap-2 Maneuver	664	637	-	662	637	-	-	-	-	-	-	-
Stage 1	865	780	-	875	789	-	-	-	-	-	-	-
Stage 2	850	789	-	836	780	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	9.1	0.1	0.3
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1459	-	-	923	888	1463	-	-
HCM Lane V/C Ratio	0.001	-	-	0.02	0.022	0.004	-	-
HCM Control Delay (s)	7.5	0	-	9	9.1	7.5	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	83	39	127	75	33	46	77	33	26	130	33
Future Vol, veh/h	44	83	39	127	75	33	46	77	33	26	130	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	90	42	138	82	36	50	84	36	28	141	36
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	9.8	11	9.9	10
HCM LOS	A	B	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	54%	0%	51%	0%	77%	0%	29%	0%
Vol Thru, %	46%	54%	49%	52%	23%	53%	71%	66%
Vol Right, %	0%	46%	0%	48%	0%	47%	0%	34%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	85	72	86	81	165	71	91	98
LT Vol	46	0	44	0	127	0	26	0
Through Vol	39	39	42	42	38	38	65	65
RT Vol	0	33	0	39	0	33	0	33
Lane Flow Rate	92	78	93	88	179	77	99	107
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.163	0.125	0.162	0.138	0.312	0.118	0.17	0.172
Departure Headway (Hd)	6.375	5.772	6.262	5.658	6.273	5.552	6.192	5.808
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	563	621	573	634	574	646	580	618
Service Time	4.112	3.509	3.996	3.392	4.005	3.283	3.929	3.545
HCM Lane V/C Ratio	0.163	0.126	0.162	0.139	0.312	0.119	0.171	0.173
HCM Control Delay	10.4	9.3	10.2	9.3	11.8	9	10.2	9.8
HCM Lane LOS	B	A	B	A	B	A	B	A
HCM 95th-tile Q	0.6	0.4	0.6	0.5	1.3	0.4	0.6	0.6

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	3	14	2	7	14	17	135	0	6	107	10
Future Vol, veh/h	8	3	14	2	7	14	17	135	0	6	107	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	3	15	2	8	15	18	147	0	7	116	11
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	7.8	7.7	8.2	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	27%	0%	84%	0%	36%	0%	10%	0%
Vol Thru, %	73%	100%	16%	10%	64%	20%	90%	84%
Vol Right, %	0%	0%	0%	90%	0%	80%	0%	16%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	62	90	10	16	6	18	60	64
LT Vol	17	0	8	0	2	0	6	0
Through Vol	45	90	2	2	4	4	54	54
RT Vol	0	0	0	14	0	14	0	10
Lane Flow Rate	67	98	10	17	6	19	65	69
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.09	0.127	0.016	0.022	0.009	0.025	0.085	0.088
Departure Headway (Hd)	4.827	4.69	5.691	4.632	5.454	4.708	4.758	4.597
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	734	755	633	777	660	765	742	768
Service Time	2.613	2.475	3.392	2.333	3.154	2.409	2.553	2.392
HCM Lane V/C Ratio	0.091	0.13	0.016	0.022	0.009	0.025	0.088	0.09
HCM Control Delay	8.1	8.2	8.5	7.4	8.2	7.5	8	7.8
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.4	0	0.1	0	0.1	0.3	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	0	7	4	2	8	13	170	4	15	122	5
Future Volume (veh/h)	84	0	7	4	2	8	13	170	4	15	122	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	91	0	8	4	2	9	14	185	4	16	133	5
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	718	745	633	721	745	633	629	745	633	530	1392	52
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.00	0.40	0.40	0.40	0.40	0.13	0.13	0.13	0.40	0.40	0.40
Ln Grp Delay, s/veh	9.0	0.0	8.2	8.1	8.1	8.2	12.9	14.3	11.8	10.9	8.7	8.7
Ln Grp LOS	A		A	A	A	A	B	B	B	B	A	A
Approach Vol, veh/h		99			15			203			154	
Approach Delay, s/veh		9.0			8.2			14.1			8.9	
Approach LOS		A			A			B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		6.0		5.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.1		3.8		5.1		4.1
Max Q Clear (g_c+I1), s		6.0		3.9		6.4		2.2
Green Ext Time (g_e), s		0.8		0.2		0.5		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1246		1398		1189		1402

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1863		1863		3479		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		130		1583

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	14	0	91	0	16	0	4
Grp Sat Flow (s), veh/h/ln	0	1246	0	1398	0	1189	0	1402
Q Serve Time (g_s), s	0.0	0.4	0.0	1.9	0.0	0.4	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	1.5	0.0	1.9	0.0	4.4	0.0	0.1
Perm LT Sat Flow (s_l), veh/h/ln	0	1246	0	1398	0	1189	0	1402
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	16.9	0.0	18.0	0.0	14.0	0.0	18.0
Perm LT Q Serve Time (g_ps), s	0.0	0.4	0.0	1.9	0.0	0.4	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	629	0	718	0	530	0	721
V/C Ratio (X)	0.00	0.02	0.00	0.13	0.00	0.03	0.00	0.01
Avail Cap (c_a), veh/h	0	629	0	718	0	530	0	721
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.9	0.0	8.7	0.0	10.8	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.4	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
Control Delay (d), s/veh	0.0	12.9	0.0	9.0	0.0	10.9	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.7	0.0	0.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.8	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	185	0	0	0	67	0	2
Grp Sat Flow (s), veh/h/ln	0	1863	0	1863	0	1770	0	1863
Q Serve Time (g_s), s	0.0	4.0	0.0	0.0	0.0	1.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.0	0.0	0.0	0.0	1.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	745	0	745	0	708	0	745
V/C Ratio (X)	0.00	0.25	0.00	0.00	0.00	0.10	0.00	0.00
Avail Cap (c_a), veh/h	0	745	0	745	0	708	0	745
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.5	0.0	0.0	0.0	8.4	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.8	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
Control Delay (d), s/veh	0.0	14.3	0.0	0.0	0.0	8.7	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	0.0	0.0	0.5	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.2	0.0	0.0	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.00	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	8	0	71	0	9
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1840	0	1583
Q Serve Time (g_s), s	0.0	0.1	0.0	0.1	0.0	1.1	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.1	0.0	1.1	0.0	0.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.07	0.00	1.00
Lane Grp Cap (c), veh/h	0	633	0	633	0	736	0	633
V/C Ratio (X)	0.00	0.01	0.00	0.01	0.00	0.10	0.00	0.01
Avail Cap (c_a), veh/h	0	633	0	633	0	736	0	633
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.8	0.0	8.1	0.0	8.4	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.0	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
Control Delay (d), s/veh	0.0	11.8	0.0	8.2	0.0	8.7	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.1	0.0	0.5	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.1	0.0	0.6	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	0	17	11	14	11	15	147	3	3	288	32
Future Volume (veh/h)	41	0	17	11	14	11	15	147	3	3	288	32
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	45	0	18	12	15	12	16	160	3	3	313	35
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	704	745	633	716	745	633	504	745	633	554	1285	143
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.00	0.40	0.40	0.40	0.40	0.13	0.13	0.13	0.40	0.40	0.40
Ln Grp Delay, s/veh	8.7	0.0	8.3	8.2	8.2	8.2	14.7	13.9	11.8	10.3	9.8	9.8
Ln Grp LOS	A		A	A	A	A	B	B	B	B	A	A
Approach Vol, veh/h		63			39			179			351	
Approach Delay, s/veh		8.6			8.2			13.9			9.8	
Approach LOS		A			A			B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		6.0		5.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.2		3.9		5.3		4.4
Max Q Clear (g_c+I1), s		5.6		3.1		5.5		2.2
Green Ext Time (g_e), s		0.7		0.1		1.6		0.1
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1029		1378		1218		1389

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1863		1863		3213		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		357		1583

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	16	0	45	0	3	0	12
Grp Sat Flow (s), veh/h/ln	0	1029	0	1378	0	1218	0	1389
Q Serve Time (g_s), s	0.0	0.6	0.0	0.9	0.0	0.1	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	3.6	0.0	1.1	0.0	3.5	0.0	0.2
Perm LT Sat Flow (s_l), veh/h/ln	0	1029	0	1378	0	1218	0	1389
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	15.1	0.0	17.8	0.0	14.5	0.0	18.0
Perm LT Q Serve Time (g_ps), s	0.0	0.6	0.0	0.9	0.0	0.1	0.0	0.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	504	0	704	0	554	0	716
V/C Ratio (X)	0.00	0.03	0.00	0.06	0.00	0.01	0.00	0.02
Avail Cap (c_a), veh/h	0	504	0	704	0	554	0	716
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.6	0.0	8.5	0.0	10.3	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	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
Control Delay (d), s/veh	0.0	14.7	0.0	8.7	0.0	10.3	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	160	0	0	0	171	0	15
Grp Sat Flow (s), veh/h/ln	0	1863	0	1863	0	1770	0	1863
Q Serve Time (g_s), s	0.0	3.5	0.0	0.0	0.0	2.9	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	3.5	0.0	0.0	0.0	2.9	0.0	0.2
Lane Grp Cap (c), veh/h	0	745	0	745	0	708	0	745
V/C Ratio (X)	0.00	0.21	0.00	0.00	0.00	0.24	0.00	0.02
Avail Cap (c_a), veh/h	0	745	0	745	0	708	0	745
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.2	0.0	0.0	0.0	9.0	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.9	0.0	0.0	0.0	9.8	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	1.8	0.0	0.0	0.0	1.4	0.0	0.1

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.9	0.0	0.0	0.0	1.5	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.00	0.00	0.01	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	3	0	18	0	177	0	12
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1800	0	1583
Q Serve Time (g_s), s	0.0	0.1	0.0	0.3	0.0	2.9	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.3	0.0	2.9	0.0	0.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.20	0.00	1.00
Lane Grp Cap (c), veh/h	0	633	0	633	0	720	0	633
V/C Ratio (X)	0.00	0.00	0.00	0.03	0.00	0.25	0.00	0.02
Avail Cap (c_a), veh/h	0	633	0	633	0	720	0	633
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.8	0.0	8.2	0.0	9.0	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.8	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
Control Delay (d), s/veh	0.0	11.8	0.0	8.3	0.0	9.8	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.1	0.0	1.4	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.1	0.0	1.6	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	4	25	6	0	1	20	251	53	2	200	92
Future Volume (veh/h)	39	4	25	6	0	1	20	251	53	2	200	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	42	4	27	7	0	1	22	273	58	2	217	100
Adj No. of Lanes	0	1	1	0	1	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	402	32	633	409	0	633	472	745	633	470	745	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.13	0.13	0.13
Ln Grp Delay, s/veh	14.0	0.0	8.4	15.2	0.0	8.1	11.6	10.9	8.7	15.9	14.8	13.3
Ln Grp LOS	B		A	B		A	B	B	A	B	B	B
Approach Vol, veh/h		73			8			353			319	
Approach Delay, s/veh		11.9			14.4			10.6			14.3	
Approach LOS		B			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		7.0		5.0		7.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.0		4.8		4.9		5.2
Max Q Clear (g_c+I1), s		7.4		12.4		6.7		12.0
Green Ext Time (g_e), s		1.4		0.1		1.2		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1058		623		1045		621

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1863		79		1863		0

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	22	0	46	0	2	0	7
Grp Sat Flow (s), veh/h/ln	0	1058	0	702	0	1045	0	621
Q Serve Time (g_s), s	0.0	0.7	0.0	0.9	0.0	0.1	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	5.4	0.0	10.4	0.0	4.7	0.0	10.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1058	0	1439	0	1045	0	1400
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	13.3	0.0	8.5	0.0	13.4	0.0	8.1
Perm LT Q Serve Time (g_ps), s	0.0	0.7	0.0	0.9	0.0	0.1	0.0	0.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.91	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	472	0	434	0	470	0	409
V/C Ratio (X)	0.00	0.05	0.00	0.11	0.00	0.00	0.00	0.02
Avail Cap (c_a), veh/h	0	472	0	434	0	470	0	409
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.4	0.0	13.5	0.0	15.9	0.0	15.2
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.5	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
Control Delay (d), s/veh	0.0	11.6	0.0	14.0	0.0	15.9	0.0	15.2
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.5	0.0	0.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.5	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	273	0	0	0	217	0	0
Grp Sat Flow (s), veh/h/ln	0	1863	0	0	0	1863	0	0
Q Serve Time (g_s), s	0.0	4.6	0.0	0.0	0.0	4.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.6	0.0	0.0	0.0	4.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	745	0	0	0	745	0	0
V/C Ratio (X)	0.00	0.37	0.00	0.00	0.00	0.29	0.00	0.00
Avail Cap (c_a), veh/h	0	745	0	0	0	745	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.5	0.0	0.0	0.0	13.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.0	0.0	1.0	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
Control Delay (d), s/veh	0.0	10.9	0.0	0.0	0.0	14.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	0.0	0.0	2.4	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.6	0.0	0.0	0.0	2.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.00	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	58	0	27	0	100	0	1
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	1.0	0.0	0.5	0.0	2.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.0	0.0	0.5	0.0	2.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	633	0	633	0	633	0	633
V/C Ratio (X)	0.00	0.09	0.00	0.04	0.00	0.16	0.00	0.00
Avail Cap (c_a), veh/h	0	633	0	633	0	633	0	633
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.4	0.0	8.2	0.0	12.8	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.1	0.0	0.5	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
Control Delay (d), s/veh	0.0	8.7	0.0	8.4	0.0	13.3	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	0.2	0.0	1.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.0	0.2	0.0	1.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.01	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	8	38	64	1	4	20	138	21	2	197	116
Future Volume (veh/h)	20	8	38	64	1	4	20	138	21	2	197	116
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	22	9	41	70	1	4	22	150	23	2	214	126
Adj No. of Lanes	0	1	1	0	1	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	137	34	633	161	1	633	467	745	633	579	745	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.13	0.13	0.13
Ln Grp Delay, s/veh	13.8	0.0	8.5	30.6	0.0	8.1	11.6	9.4	8.3	13.8	14.7	13.8
Ln Grp LOS	B		A	C		A	B	A	A	B	B	B
Approach Vol, veh/h		72			75			195			342	
Approach Delay, s/veh		10.8			29.4			9.5			14.4	
Approach LOS		B			C			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		7.0		5.0		7.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.0		4.6		4.8		5.3
Max Q Clear (g_c+l1), s		7.4		20.0		6.7		20.0
Green Ext Time (g_e), s		0.7		0.0		1.2		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1036		1		1207		5

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1863		85		1863		3

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	22	0	31	0	2	0	71
Grp Sat Flow (s), veh/h/ln	0	1036	0	87	0	1207	0	8
Q Serve Time (g_s), s	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	5.4	0.0	18.0	0.0	2.4	0.0	18.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1036	0	1434	0	1207	0	1376
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	13.3	0.0	0.0	0.0	15.6	0.0	0.1
Perm LT Q Serve Time (g_ps), s	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.71	0.00	1.00	0.00	0.99
Lane Grp Cap (c), veh/h	0	467	0	171	0	579	0	162
V/C Ratio (X)	0.00	0.05	0.00	0.18	0.00	0.00	0.00	0.44
Avail Cap (c_a), veh/h	0	467	0	171	0	579	0	162
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.4	0.0	11.5	0.0	13.8	0.0	22.2
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.3	0.0	0.0	0.0	8.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.6	0.0	13.8	0.0	13.8	0.0	30.6
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.3	0.0	0.0	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.42
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	150	0	0	0	214	0	0
Grp Sat Flow (s), veh/h/ln	0	1863	0	0	0	1863	0	0
Q Serve Time (g_s), s	0.0	2.4	0.0	0.0	0.0	4.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	2.4	0.0	0.0	0.0	4.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	745	0	0	0	745	0	0
V/C Ratio (X)	0.00	0.20	0.00	0.00	0.00	0.29	0.00	0.00
Avail Cap (c_a), veh/h	0	745	0	0	0	745	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.8	0.0	0.0	0.0	13.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	1.0	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
Control Delay (d), s/veh	0.0	9.4	0.0	0.0	0.0	14.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.2	0.0	0.0	0.0	2.4	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.3	0.0	0.0	0.0	2.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	23	0	41	0	126	0	4
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.4	0.0	0.7	0.0	3.2	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	0.4	0.0	0.7	0.0	3.2	0.0	0.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	633	0	633	0	633	0	633
V/C Ratio (X)	0.00	0.04	0.00	0.06	0.00	0.20	0.00	0.01
Avail Cap (c_a), veh/h	0	633	0	633	0	633	0	633
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.2	0.0	8.3	0.0	13.1	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	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
Control Delay (d), s/veh	0.0	8.3	0.0	8.5	0.0	13.8	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.3	0.0	1.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.3	0.0	1.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.02	0.00	0.03	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	14.3
HCM 2010 LOS	B

APPENDIX C : CONSTRUCTION YEAR ANALYSIS WORKSHEETS

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	15	0	0	26	0	0	0	0	0	0	0
Future Vol, veh/h	0	15	0	0	26	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	16	0	0	28	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	28	0	0	16	0	0	44	44	16	44	44	28
Stage 1	-	-	-	-	-	-	16	16	-	28	28	-
Stage 2	-	-	-	-	-	-	28	28	-	16	16	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1585	-	-	1602	-	-	958	848	1063	958	848	1047
Stage 1	-	-	-	-	-	-	1004	882	-	989	872	-
Stage 2	-	-	-	-	-	-	989	872	-	1004	882	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1585	-	-	1602	-	-	958	848	1063	958	848	1047
Mov Cap-2 Maneuver	-	-	-	-	-	-	958	848	-	958	848	-
Stage 1	-	-	-	-	-	-	1004	882	-	989	872	-
Stage 2	-	-	-	-	-	-	989	872	-	1004	882	-

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

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1585	-	-	1602	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	15	0	0	26	0	0	0	0	0	0	0
Future Vol, veh/h	0	15	0	0	26	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	16	0	0	28	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	28	0	0	16	0	0	44	44	16	44	44	28
Stage 1	-	-	-	-	-	-	16	16	-	28	28	-
Stage 2	-	-	-	-	-	-	28	28	-	16	16	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1585	-	-	1602	-	-	958	848	1063	958	848	1047
Stage 1	-	-	-	-	-	-	1004	882	-	989	872	-
Stage 2	-	-	-	-	-	-	989	872	-	1004	882	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1585	-	-	1602	-	-	958	848	1063	958	848	1047
Mov Cap-2 Maneuver	-	-	-	-	-	-	958	848	-	958	848	-
Stage 1	-	-	-	-	-	-	1004	882	-	989	872	-
Stage 2	-	-	-	-	-	-	989	872	-	1004	882	-

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

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1585	-	-	1602	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	3	2	0	3	5	83	2	11	80	1
Future Vol, veh/h	0	0	3	2	0	3	5	83	2	11	80	1
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	-	-	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	3	2	0	3	5	90	2	12	87	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	215	214	88	214	213	91	88	0	0	92	0	0
Stage 1	112	112	-	101	101	-	-	-	-	-	-	-
Stage 2	103	102	-	113	112	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	742	684	970	743	684	967	1508	-	-	1503	-	-
Stage 1	893	803	-	905	811	-	-	-	-	-	-	-
Stage 2	903	811	-	892	803	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	733	676	970	734	676	967	1508	-	-	1503	-	-
Mov Cap-2 Maneuver	733	676	-	734	676	-	-	-	-	-	-	-
Stage 1	890	797	-	902	809	-	-	-	-	-	-	-
Stage 2	897	809	-	882	797	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	9.2	0.4	0.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1508	-	-	970	858	1503	-	-
HCM Lane V/C Ratio	0.004	-	-	0.003	0.006	0.008	-	-
HCM Control Delay (s)	7.4	0	-	8.7	9.2	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	18	2	0	17	2	119	1	5	122	1
Future Vol, veh/h	0	0	18	2	0	17	2	119	1	5	122	1
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	-	-	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	20	2	0	18	2	129	1	5	133	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	287	278	134	288	278	130	134	0	0	130	0	0
Stage 1	144	144	-	134	134	-	-	-	-	-	-	-
Stage 2	143	134	-	154	144	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	665	630	915	664	630	920	1451	-	-	1455	-	-
Stage 1	859	778	-	869	785	-	-	-	-	-	-	-
Stage 2	860	785	-	848	778	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	649	627	915	647	627	920	1451	-	-	1455	-	-
Mov Cap-2 Maneuver	649	627	-	647	627	-	-	-	-	-	-	-
Stage 1	858	775	-	868	784	-	-	-	-	-	-	-
Stage 2	842	784	-	827	775	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	9.2	0.1	0.3
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1451	-	-	915	881	1455	-	-
HCM Lane V/C Ratio	0.001	-	-	0.021	0.023	0.004	-	-
HCM Control Delay (s)	7.5	0	-	9	9.2	7.5	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	88	41	134	79	35	49	81	35	27	137	35
Future Vol, veh/h	46	88	41	134	79	35	49	81	35	27	137	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	50	96	45	146	86	38	53	88	38	29	149	38
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	10	11.4	10.1	10.2
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	55%	0%	51%	0%	77%	0%	28%	0%
Vol Thru, %	45%	54%	49%	52%	23%	53%	72%	66%
Vol Right, %	0%	46%	0%	48%	0%	47%	0%	34%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	76	90	85	174	75	96	104
LT Vol	49	0	46	0	134	0	27	0
Through Vol	41	41	44	44	40	40	69	69
RT Vol	0	35	0	41	0	35	0	35
Lane Flow Rate	97	82	98	92	189	81	104	112
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.175	0.134	0.173	0.148	0.333	0.127	0.182	0.185
Departure Headway (Hd)	6.485	5.878	6.363	5.762	6.365	5.642	6.295	5.912
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	554	610	563	622	566	635	570	606
Service Time	4.225	3.618	4.104	3.503	4.104	3.38	4.033	3.65
HCM Lane V/C Ratio	0.175	0.134	0.174	0.148	0.334	0.128	0.182	0.185
HCM Control Delay	10.6	9.5	10.4	9.5	12.3	9.2	10.4	10
HCM Lane LOS	B	A	B	A	B	A	B	A
HCM 95th-tile Q	0.6	0.5	0.6	0.5	1.5	0.4	0.7	0.7

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	3	15	2	7	15	18	142	0	6	113	11
Future Vol, veh/h	8	3	15	2	7	15	18	142	0	6	113	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	3	16	2	8	16	20	154	0	7	123	12
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	7.9	7.7	8.2	8
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	28%	0%	84%	0%	36%	0%	10%	0%
Vol Thru, %	72%	100%	16%	9%	64%	19%	90%	84%
Vol Right, %	0%	0%	0%	91%	0%	81%	0%	16%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	65	95	10	17	6	19	63	68
LT Vol	18	0	8	0	2	0	6	0
Through Vol	47	95	2	2	4	4	57	57
RT Vol	0	0	0	15	0	15	0	11
Lane Flow Rate	71	103	10	18	6	20	68	73
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.095	0.134	0.016	0.023	0.009	0.026	0.092	0.094
Departure Headway (Hd)	4.836	4.698	5.731	4.668	5.494	4.741	4.863	4.601
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	732	753	628	771	655	759	741	767
Service Time	2.626	2.488	3.435	2.372	3.198	2.445	2.563	2.4
HCM Lane V/C Ratio	0.097	0.137	0.016	0.023	0.009	0.026	0.092	0.095
HCM Control Delay	8.1	8.2	8.5	7.5	8.2	7.6	8.1	7.9
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.5	0	0.1	0	0.1	0.3	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	0	7	4	2	8	14	179	4	16	129	5
Future Volume (veh/h)	89	0	7	4	2	8	14	179	4	16	129	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	97	0	8	4	2	9	15	195	4	17	140	5
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	718	745	633	721	745	633	624	745	633	521	1395	50
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.00	0.40	0.40	0.40	0.40	0.13	0.13	0.13	0.40	0.40	0.40
Ln Grp Delay, s/veh	9.1	0.0	8.2	8.1	8.1	8.2	13.0	14.4	11.8	11.1	8.7	8.7
Ln Grp LOS	A		A	A	A	A	B	B	B	B	A	A
Approach Vol, veh/h		105			15			214			162	
Approach Delay, s/veh		9.0			8.2			14.3			9.0	
Approach LOS		A			A			B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		6.0		5.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.1		3.8		5.1		4.1
Max Q Clear (g_c+I1), s		6.2		4.0		6.7		2.2
Green Ext Time (g_e), s		0.8		0.2		0.5		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1238		1398		1179		1402

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1863		1863		3486		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		124		1583

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	15	0	97	0	17	0	4
Grp Sat Flow (s), veh/h/ln	0	1238	0	1398	0	1179	0	1402
Q Serve Time (g_s), s	0.0	0.5	0.0	2.0	0.0	0.5	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	1.6	0.0	2.0	0.0	4.7	0.0	0.1
Perm LT Sat Flow (s_l), veh/h/ln	0	1238	0	1398	0	1179	0	1402
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	16.9	0.0	18.0	0.0	13.8	0.0	18.0
Perm LT Q Serve Time (g_ps), s	0.0	0.5	0.0	2.0	0.0	0.5	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	624	0	718	0	521	0	721
V/C Ratio (X)	0.00	0.02	0.00	0.14	0.00	0.03	0.00	0.01
Avail Cap (c_a), veh/h	0	624	0	718	0	521	0	721
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.9	0.0	8.7	0.0	11.0	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.4	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
Control Delay (d), s/veh	0.0	13.0	0.0	9.1	0.0	11.1	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.8	0.0	0.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.9	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	195	0	0	0	71	0	2
Grp Sat Flow (s), veh/h/ln	0	1863	0	1863	0	1770	0	1863
Q Serve Time (g_s), s	0.0	4.2	0.0	0.0	0.0	1.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.2	0.0	0.0	0.0	1.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	745	0	745	0	708	0	745
V/C Ratio (X)	0.00	0.26	0.00	0.00	0.00	0.10	0.00	0.00
Avail Cap (c_a), veh/h	0	745	0	745	0	708	0	745
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.6	0.0	0.0	0.0	8.4	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.9	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
Control Delay (d), s/veh	0.0	14.4	0.0	0.0	0.0	8.7	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	2.2	0.0	0.0	0.0	0.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.4	0.0	0.0	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.00	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	8	0	74	0	9
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1841	0	1583
Q Serve Time (g_s), s	0.0	0.1	0.0	0.1	0.0	1.1	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.1	0.0	1.1	0.0	0.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.07	0.00	1.00
Lane Grp Cap (c), veh/h	0	633	0	633	0	736	0	633
V/C Ratio (X)	0.00	0.01	0.00	0.01	0.00	0.10	0.00	0.01
Avail Cap (c_a), veh/h	0	633	0	633	0	736	0	633
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.8	0.0	8.1	0.0	8.4	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.0	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
Control Delay (d), s/veh	0.0	11.8	0.0	8.2	0.0	8.7	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.1	0.0	0.6	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.1	0.0	0.6	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	0	18	12	15	12	16	155	3	3	304	34
Future Volume (veh/h)	43	0	18	12	15	12	16	155	3	3	304	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	47	0	20	13	16	13	17	168	3	3	330	37
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	703	745	633	715	745	633	494	745	633	546	1285	143
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.00	0.40	0.40	0.40	0.40	0.13	0.13	0.13	0.40	0.40	0.40
Ln Grp Delay, s/veh	8.7	0.0	8.3	8.2	8.2	8.2	14.9	14.0	11.8	10.5	9.9	9.9
Ln Grp LOS	A		A	A	A	A	B	B	B	B	A	A
Approach Vol, veh/h		67			42			188			370	
Approach Delay, s/veh		8.6			8.2			14.0			9.9	
Approach LOS		A			A			B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		6.0		5.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.2		3.9		5.3		4.4
Max Q Clear (g_c+I1), s		5.8		3.2		5.7		2.3
Green Ext Time (g_e), s		0.7		0.1		1.7		0.1
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1011		1375		1209		1386

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1863		1863		3212		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		358		1583

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	17	0	47	0	3	0	13
Grp Sat Flow (s), veh/h/ln	0	1011	0	1375	0	1209	0	1386
Q Serve Time (g_s), s	0.0	0.7	0.0	1.0	0.0	0.1	0.0	0.3
Cycle Q Clear Time (g_c), s	0.0	3.8	0.0	1.2	0.0	3.7	0.0	0.3
Perm LT Sat Flow (s_l), veh/h/ln	0	1011	0	1375	0	1209	0	1386
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	14.9	0.0	17.8	0.0	14.4	0.0	18.0
Perm LT Q Serve Time (g_ps), s	0.0	0.7	0.0	1.0	0.0	0.1	0.0	0.3
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	494	0	703	0	546	0	715
V/C Ratio (X)	0.00	0.03	0.00	0.07	0.00	0.01	0.00	0.02
Avail Cap (c_a), veh/h	0	494	0	703	0	546	0	715
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.8	0.0	8.5	0.0	10.5	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	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
Control Delay (d), s/veh	0.0	14.9	0.0	8.7	0.0	10.5	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	168	0	0	0	181	0	16
Grp Sat Flow (s), veh/h/ln	0	1863	0	1863	0	1770	0	1863
Q Serve Time (g_s), s	0.0	3.6	0.0	0.0	0.0	3.1	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	3.6	0.0	0.0	0.0	3.1	0.0	0.2
Lane Grp Cap (c), veh/h	0	745	0	745	0	708	0	745
V/C Ratio (X)	0.00	0.23	0.00	0.00	0.00	0.26	0.00	0.02
Avail Cap (c_a), veh/h	0	745	0	745	0	708	0	745
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.3	0.0	0.0	0.0	9.0	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	0.9	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
Control Delay (d), s/veh	0.0	14.0	0.0	0.0	0.0	9.9	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	0.0	0.0	1.5	0.0	0.1

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.0	0.0	0.0	0.0	1.6	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.00	0.00	0.01	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	3	0	20	0	186	0	13
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1800	0	1583
Q Serve Time (g_s), s	0.0	0.1	0.0	0.3	0.0	3.1	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.3	0.0	3.1	0.0	0.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.20	0.00	1.00
Lane Grp Cap (c), veh/h	0	633	0	633	0	720	0	633
V/C Ratio (X)	0.00	0.00	0.00	0.03	0.00	0.26	0.00	0.02
Avail Cap (c_a), veh/h	0	633	0	633	0	720	0	633
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.8	0.0	8.2	0.0	9.0	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.9	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
Control Delay (d), s/veh	0.0	11.8	0.0	8.3	0.0	9.9	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.1	0.0	1.6	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.2	0.0	1.7	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	4	26	6	0	1	21	265	56	2	211	97
Future Volume (veh/h)	41	4	26	6	0	1	21	265	56	2	211	97
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	45	4	28	7	0	1	23	288	61	2	229	105
Adj No. of Lanes	0	1	1	0	1	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	378	27	633	379	0	633	461	745	633	458	745	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.13	0.13	0.13
Ln Grp Delay, s/veh	15.0	0.0	8.4	16.1	0.0	8.1	11.8	11.1	8.7	16.1	15.0	13.4
Ln Grp LOS	B		A	B		A	B	B	A	B	B	B
Approach Vol, veh/h		77			8			372			336	
Approach Delay, s/veh		12.6			15.1			10.8			14.5	
Approach LOS		B			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		7.0		5.0		7.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.0		4.8		4.9		5.2
Max Q Clear (g_c+l1), s		7.7		13.4		7.0		13.0
Green Ext Time (g_e), s		1.4		0.1		1.2		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1042		560		1028		548

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1863		68		1863		0

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	23	0	49	0	2	0	7
Grp Sat Flow (s), veh/h/ln	0	1042	0	628	0	1028	0	548
Q Serve Time (g_s), s	0.0	0.7	0.0	1.1	0.0	0.1	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	5.7	0.0	11.4	0.0	5.0	0.0	11.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1042	0	1439	0	1028	0	1399
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	13.0	0.0	7.6	0.0	13.1	0.0	7.2
Perm LT Q Serve Time (g_ps), s	0.0	0.7	0.0	1.1	0.0	0.1	0.0	0.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.92	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	461	0	405	0	458	0	379
V/C Ratio (X)	0.00	0.05	0.00	0.12	0.00	0.00	0.00	0.02
Avail Cap (c_a), veh/h	0	461	0	405	0	458	0	379
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.6	0.0	14.3	0.0	16.1	0.0	16.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.6	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
Control Delay (d), s/veh	0.0	11.8	0.0	15.0	0.0	16.1	0.0	16.1
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.5	0.0	0.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.6	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	288	0	0	0	229	0	0
Grp Sat Flow (s), veh/h/ln	0	1863	0	0	0	1863	0	0
Q Serve Time (g_s), s	0.0	4.9	0.0	0.0	0.0	5.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.9	0.0	0.0	0.0	5.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	745	0	0	0	745	0	0
V/C Ratio (X)	0.00	0.39	0.00	0.00	0.00	0.31	0.00	0.00
Avail Cap (c_a), veh/h	0	745	0	0	0	745	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.6	0.0	0.0	0.0	13.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.0	0.0	1.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.1	0.0	0.0	0.0	15.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	0.0	0.0	2.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.8	0.0	0.0	0.0	2.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.00	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	61	0	28	0	105	0	1
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	1.1	0.0	0.5	0.0	2.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.1	0.0	0.5	0.0	2.6	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	633	0	633	0	633	0	633
V/C Ratio (X)	0.00	0.10	0.00	0.04	0.00	0.17	0.00	0.00
Avail Cap (c_a), veh/h	0	633	0	633	0	633	0	633
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.4	0.0	8.2	0.0	12.9	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.1	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.7	0.0	8.4	0.0	13.4	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.5	0.0	0.2	0.0	1.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.0	0.2	0.0	1.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.01	0.00	0.03	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	8	40	68	1	4	21	146	22	2	208	122
Future Volume (veh/h)	21	8	40	68	1	4	21	146	22	2	208	122
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	23	9	43	74	1	4	23	159	24	2	226	133
Adj No. of Lanes	0	1	1	0	1	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	138	32	633	160	1	633	456	745	633	571	745	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.13	0.13	0.13
Ln Grp Delay, s/veh	14.0	0.0	8.5	31.7	0.0	8.1	11.8	9.5	8.3	14.0	14.9	13.9
Ln Grp LOS	B		A	C		A	B	A	A	B	B	B
Approach Vol, veh/h		75			79			206			361	
Approach Delay, s/veh		10.9			30.5			9.6			14.5	
Approach LOS		B			C			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		7.0		5.0		7.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.1		4.6		4.8		5.3
Max Q Clear (g_c+I1), s		7.7		20.0		6.9		20.0
Green Ext Time (g_e), s		0.7		0.0		1.3		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1018		0		1196		1

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1863		81		1863		3

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	23	0	32	0	2	0	75
Grp Sat Flow (s), veh/h/ln	0	1018	0	82	0	1196	0	4
Q Serve Time (g_s), s	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.7	0.0	18.0	0.0	2.6	0.0	18.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1018	0	1434	0	1196	0	1374
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	13.1	0.0	0.0	0.0	15.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.72	0.00	1.00	0.00	0.99
Lane Grp Cap (c), veh/h	0	456	0	170	0	571	0	161
V/C Ratio (X)	0.00	0.05	0.00	0.19	0.00	0.00	0.00	0.47
Avail Cap (c_a), veh/h	0	456	0	170	0	571	0	161
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.6	0.0	11.5	0.0	14.0	0.0	22.2
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.4	0.0	0.0	0.0	9.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.8	0.0	14.0	0.0	14.0	0.0	31.7
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.4	0.0	0.0	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	159	0	0	0	226	0	0
Grp Sat Flow (s), veh/h/ln	0	1863	0	0	0	1863	0	0
Q Serve Time (g_s), s	0.0	2.5	0.0	0.0	0.0	4.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	2.5	0.0	0.0	0.0	4.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	745	0	0	0	745	0	0
V/C Ratio (X)	0.00	0.21	0.00	0.00	0.00	0.30	0.00	0.00
Avail Cap (c_a), veh/h	0	745	0	0	0	745	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.9	0.0	0.0	0.0	13.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	1.0	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
Control Delay (d), s/veh	0.0	9.5	0.0	0.0	0.0	14.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.3	0.0	0.0	0.0	2.5	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.4	0.0	0.0	0.0	2.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	24	0	43	0	133	0	4
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.4	0.0	0.8	0.0	3.4	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	0.4	0.0	0.8	0.0	3.4	0.0	0.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	633	0	633	0	633	0	633
V/C Ratio (X)	0.00	0.04	0.00	0.07	0.00	0.21	0.00	0.01
Avail Cap (c_a), veh/h	0	633	0	633	0	633	0	633
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.2	0.0	8.3	0.0	13.2	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.3	0.0	8.5	0.0	13.9	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.3	0.0	1.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.4	0.0	1.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.02	0.00	0.03	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	14.5
HCM 2010 LOS	B

APPENDIX D : CONSTRUCTION YEAR PLUS PROJECT ANALYSIS WORKSHEETS

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	125	15	0	0	26	0	0	0	0	0	0	0
Future Vol, veh/h	125	15	0	0	26	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	136	16	0	0	28	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	28	0	0	16	0	0	316	316	16	316	316	28
Stage 1	-	-	-	-	-	-	288	288	-	28	28	-
Stage 2	-	-	-	-	-	-	28	28	-	288	288	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1585	-	-	1602	-	-	637	600	1063	637	600	1047
Stage 1	-	-	-	-	-	-	720	674	-	989	872	-
Stage 2	-	-	-	-	-	-	989	872	-	720	674	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1585	-	-	1602	-	-	594	548	1063	594	548	1047
Mov Cap-2 Maneuver	-	-	-	-	-	-	594	548	-	594	548	-
Stage 1	-	-	-	-	-	-	657	615	-	903	872	-
Stage 2	-	-	-	-	-	-	989	872	-	657	615	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.7	0	0	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1585	-	-	1602	-	-	-
HCM Lane V/C Ratio	-	0.086	-	-	-	-	-	-
HCM Control Delay (s)	0	7.5	0	-	0	-	-	0
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0.3	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	3	2	0	3	5	83	114	24	80	1
Future Vol, veh/h	0	0	3	2	0	3	5	83	114	24	80	1
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	-	-	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	3	2	0	3	5	90	124	26	87	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	304	364	88	303	302	152	88	0	0	214	0	0
Stage 1	140	140	-	162	162	-	-	-	-	-	-	-
Stage 2	164	224	-	141	140	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	648	564	970	649	611	894	1508	-	-	1356	-	-
Stage 1	863	781	-	840	764	-	-	-	-	-	-	-
Stage 2	838	718	-	862	781	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	634	550	970	635	596	894	1508	-	-	1356	-	-
Mov Cap-2 Maneuver	634	550	-	635	596	-	-	-	-	-	-	-
Stage 1	860	765	-	837	761	-	-	-	-	-	-	-
Stage 2	832	715	-	842	765	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	9.7	0.2	1.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1508	-	-	970	769	1356	-	-
HCM Lane V/C Ratio	0.004	-	-	0.003	0.007	0.019	-	-
HCM Control Delay (s)	7.4	0	-	8.7	9.7	7.7	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0.1	-	-

Intersection	
Intersection Delay, s/veh	11.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	88	41	134	79	37	49	189	35	27	137	35
Future Vol, veh/h	48	88	41	134	79	37	49	189	35	27	137	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	96	45	146	86	40	53	205	38	29	149	38
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	10.6	12.1	11.3	10.6
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	34%	0%	52%	0%	77%	0%	28%	0%
Vol Thru, %	66%	73%	48%	52%	23%	52%	72%	66%
Vol Right, %	0%	27%	0%	48%	0%	48%	0%	34%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	144	130	92	85	174	77	96	104
LT Vol	49	0	48	0	134	0	27	0
Through Vol	95	95	44	44	40	40	69	69
RT Vol	0	35	0	41	0	37	0	35
Lane Flow Rate	156	141	100	92	189	83	104	112
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.281	0.239	0.188	0.158	0.353	0.139	0.19	0.193
Departure Headway (Hd)	6.474	6.109	6.764	6.155	6.742	6.007	6.574	6.19
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	554	586	529	580	532	595	544	577
Service Time	4.231	3.866	4.527	3.918	4.501	3.765	4.337	3.953
HCM Lane V/C Ratio	0.282	0.241	0.189	0.159	0.355	0.139	0.191	0.194
HCM Control Delay	11.8	10.8	11.1	10.1	13.2	9.7	10.9	10.4
HCM Lane LOS	B	B	B	B	B	A	B	B
HCM 95th-tile Q	1.1	0.9	0.7	0.6	1.6	0.5	0.7	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	0	7	4	2	8	14	202	4	16	129	5
Future Volume (veh/h)	176	0	7	4	2	8	14	202	4	16	129	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	191	0	8	4	2	9	15	220	4	17	140	5
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	718	745	633	721	745	633	624	745	633	498	1395	50
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.00	0.40	0.40	0.40	0.40	0.13	0.13	0.13	0.40	0.40	0.40
Ln Grp Delay, s/veh	10.3	0.0	8.2	8.1	8.1	8.2	13.0	14.8	11.8	11.5	8.7	8.7
Ln Grp LOS	B		A	A	A	A	B	B	B	B	A	A
Approach Vol, veh/h		199			15			239			162	
Approach Delay, s/veh		10.2			8.2			14.6			9.0	
Approach LOS		B			A			B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		6.0		5.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.2		3.8		5.2		4.1
Max Q Clear (g_c+I1), s		6.8		6.3		7.3		2.2
Green Ext Time (g_e), s		0.9		0.4		0.5		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1238		1398		1152		1402

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1863		1863		3486		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		124		1583

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	15	0	191	0	17	0	4
Grp Sat Flow (s), veh/h/ln	0	1238	0	1398	0	1152	0	1402
Q Serve Time (g_s), s	0.0	0.5	0.0	4.3	0.0	0.5	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	1.6	0.0	4.3	0.0	5.3	0.0	0.1
Perm LT Sat Flow (s_l), veh/h/ln	0	1238	0	1398	0	1152	0	1402
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	16.9	0.0	18.0	0.0	13.2	0.0	18.0
Perm LT Q Serve Time (g_ps), s	0.0	0.5	0.0	4.3	0.0	0.5	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	624	0	718	0	498	0	721
V/C Ratio (X)	0.00	0.02	0.00	0.27	0.00	0.03	0.00	0.01
Avail Cap (c_a), veh/h	0	624	0	718	0	498	0	721
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.9	0.0	9.4	0.0	11.4	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.9	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
Control Delay (d), s/veh	0.0	13.0	0.0	10.3	0.0	11.5	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	1.6	0.0	0.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	1.8	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	220	0	0	0	71	0	2
Grp Sat Flow (s), veh/h/ln	0	1863	0	1863	0	1770	0	1863
Q Serve Time (g_s), s	0.0	4.8	0.0	0.0	0.0	1.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.8	0.0	0.0	0.0	1.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	745	0	745	0	708	0	745
V/C Ratio (X)	0.00	0.30	0.00	0.00	0.00	0.10	0.00	0.00
Avail Cap (c_a), veh/h	0	745	0	745	0	708	0	745
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.8	0.0	0.0	0.0	8.4	0.0	8.1
Incr Delay (d2), s/veh	0.0	1.0	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
Control Delay (d), s/veh	0.0	14.8	0.0	0.0	0.0	8.7	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	0.0	0.0	0.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.7	0.0	0.0	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.00	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	8	0	74	0	9
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1841	0	1583
Q Serve Time (g_s), s	0.0	0.1	0.0	0.1	0.0	1.1	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.1	0.0	1.1	0.0	0.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.07	0.00	1.00
Lane Grp Cap (c), veh/h	0	633	0	633	0	736	0	633
V/C Ratio (X)	0.00	0.01	0.00	0.01	0.00	0.10	0.00	0.01
Avail Cap (c_a), veh/h	0	633	0	633	0	736	0	633
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.8	0.0	8.1	0.0	8.4	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.0	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
Control Delay (d), s/veh	0.0	11.8	0.0	8.2	0.0	8.7	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.1	0.0	0.6	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.1	0.0	0.6	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	4	26	6	0	1	21	265	56	2	211	97
Future Volume (veh/h)	46	4	26	6	0	1	21	265	56	2	211	97
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	50	4	28	7	0	1	23	288	61	2	229	105
Adj No. of Lanes	0	1	1	0	1	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	336	21	633	331	0	633	461	745	633	458	745	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.13	0.13	0.13
Ln Grp Delay, s/veh	16.7	0.0	8.4	17.5	0.0	8.1	11.8	11.1	8.7	16.1	15.0	13.4
Ln Grp LOS	B		A	B		A	B	B	A	B	B	B
Approach Vol, veh/h		82			8			372			336	
Approach Delay, s/veh		13.9			16.3			10.8			14.5	
Approach LOS		B			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		7.0		5.0		7.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.0		4.8		4.9		5.2
Max Q Clear (g_c+l1), s		7.7		15.2		7.0		14.6
Green Ext Time (g_e), s		1.4		0.1		1.2		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1042		454		1028		427

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1863		53		1863		0

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	23	0	54	0	2	0	7
Grp Sat Flow (s), veh/h/ln	0	1042	0	507	0	1028	0	427
Q Serve Time (g_s), s	0.0	0.7	0.0	1.3	0.0	0.1	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	5.7	0.0	13.2	0.0	5.0	0.0	12.6
Perm LT Sat Flow (s_l), veh/h/ln	0	1042	0	1439	0	1028	0	1399
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	13.0	0.0	6.1	0.0	13.1	0.0	5.6
Perm LT Q Serve Time (g_ps), s	0.0	0.7	0.0	1.3	0.0	0.1	0.0	0.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.93	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	461	0	357	0	458	0	331
V/C Ratio (X)	0.00	0.05	0.00	0.15	0.00	0.00	0.00	0.02
Avail Cap (c_a), veh/h	0	461	0	357	0	458	0	331
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.6	0.0	15.8	0.0	16.1	0.0	17.3
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.9	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
Control Delay (d), s/veh	0.0	11.8	0.0	16.7	0.0	16.1	0.0	17.5
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.6	0.0	0.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.7	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	288	0	0	0	229	0	0
Grp Sat Flow (s), veh/h/ln	0	1863	0	0	0	1863	0	0
Q Serve Time (g_s), s	0.0	4.9	0.0	0.0	0.0	5.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.9	0.0	0.0	0.0	5.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	745	0	0	0	745	0	0
V/C Ratio (X)	0.00	0.39	0.00	0.00	0.00	0.31	0.00	0.00
Avail Cap (c_a), veh/h	0	745	0	0	0	745	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.6	0.0	0.0	0.0	13.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.0	0.0	1.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.1	0.0	0.0	0.0	15.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	0.0	0.0	2.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.8	0.0	0.0	0.0	2.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.00	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	61	0	28	0	105	0	1
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	1.1	0.0	0.5	0.0	2.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.1	0.0	0.5	0.0	2.6	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	633	0	633	0	633	0	633
V/C Ratio (X)	0.00	0.10	0.00	0.04	0.00	0.17	0.00	0.00
Avail Cap (c_a), veh/h	0	633	0	633	0	633	0	633
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.4	0.0	8.2	0.0	12.9	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.1	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.7	0.0	8.4	0.0	13.4	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.5	0.0	0.2	0.0	1.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.0	0.2	0.0	1.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.01	0.00	0.03	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	15	0	0	26	0	0	0	0	0	0	125
Future Vol, veh/h	0	15	0	0	26	0	0	0	0	0	0	125
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	16	0	0	28	0	0	0	0	0	0	136

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	28	0	0	16	0	0	112	44	16	44	44	28
Stage 1	-	-	-	-	-	-	16	16	-	28	28	-
Stage 2	-	-	-	-	-	-	96	28	-	16	16	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1585	-	-	1602	-	-	866	848	1063	958	848	1047
Stage 1	-	-	-	-	-	-	1004	882	-	989	872	-
Stage 2	-	-	-	-	-	-	911	872	-	1004	882	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1585	-	-	1602	-	-	753	848	1063	958	848	1047
Mov Cap-2 Maneuver	-	-	-	-	-	-	753	848	-	958	848	-
Stage 1	-	-	-	-	-	-	1004	882	-	989	872	-
Stage 2	-	-	-	-	-	-	793	872	-	1004	882	-

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

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1585	-	-	1602	-	-	1047
HCM Lane V/C Ratio	-	-	-	-	-	-	-	0.13
HCM Control Delay (s)	0	0	-	-	0	-	-	9
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	18	2	13	17	2	119	1	5	122	1
Future Vol, veh/h	0	0	18	2	13	17	2	119	1	5	122	1
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	-	-	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	20	2	14	18	2	129	1	5	133	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	294	278	134	288	278	130	134	0	0	130	0	0
Stage 1	144	144	-	134	134	-	-	-	-	-	-	-
Stage 2	150	134	-	154	144	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	658	630	915	664	630	920	1451	-	-	1455	-	-
Stage 1	859	778	-	869	785	-	-	-	-	-	-	-
Stage 2	853	785	-	848	778	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	631	627	915	647	627	920	1451	-	-	1455	-	-
Mov Cap-2 Maneuver	631	627	-	647	627	-	-	-	-	-	-	-
Stage 1	858	775	-	868	784	-	-	-	-	-	-	-
Stage 2	820	784	-	827	775	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10	0.1	0.3
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1451	-	-	915	756	1455	-	-
HCM Lane V/C Ratio	0.001	-	-	0.021	0.046	0.004	-	-
HCM Control Delay (s)	7.5	0	-	9	10	7.5	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	3	15	2	7	15	18	142	0	8	221	13
Future Vol, veh/h	8	3	15	2	7	15	18	142	0	8	221	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	3	16	2	8	16	20	154	0	9	240	14
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	8.2	8	8.4	8.5
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	28%	0%	84%	0%	36%	0%	7%	0%
Vol Thru, %	72%	100%	16%	9%	64%	19%	93%	89%
Vol Right, %	0%	0%	0%	91%	0%	81%	0%	11%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	65	95	10	17	6	19	119	124
LT Vol	18	0	8	0	2	0	8	0
Through Vol	47	95	2	2	4	4	111	111
RT Vol	0	0	0	15	0	15	0	13
Lane Flow Rate	71	103	10	18	6	20	129	134
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.099	0.14	0.017	0.025	0.01	0.028	0.174	0.177
Departure Headway (Hd)	5.028	4.89	6.003	4.938	5.766	5.011	4.851	4.743
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	714	735	597	726	622	715	742	758
Service Time	2.746	2.608	3.729	2.663	3.491	2.736	2.567	2.459
HCM Lane V/C Ratio	0.099	0.14	0.017	0.025	0.01	0.028	0.174	0.177
HCM Control Delay	8.3	8.4	8.8	7.8	8.5	7.9	8.6	8.5
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.5	0.1	0.1	0	0.1	0.6	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	0	18	12	15	12	16	155	3	3	407	39
Future Volume (veh/h)	43	0	18	12	15	12	16	155	3	3	407	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	47	0	20	13	16	13	17	168	3	3	442	42
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	703	745	633	715	745	633	438	745	633	546	1307	124
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.00	0.40	0.40	0.40	0.40	0.13	0.13	0.13	0.40	0.40	0.40
Ln Grp Delay, s/veh	8.7	0.0	8.3	8.2	8.2	8.2	16.0	14.0	11.8	10.5	10.6	10.6
Ln Grp LOS	A		A	A	A	A	B	B	B	B	B	B
Approach Vol, veh/h		67			42			188			487	
Approach Delay, s/veh		8.6			8.2			14.1			10.6	
Approach LOS		A			A			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		6.0		5.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.2		3.9		5.3		4.4
Max Q Clear (g_c+I1), s		7.0		3.2		6.2		2.3
Green Ext Time (g_e), s		0.7		0.1		2.3		0.1
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		908		1375		1209		1386

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1863		1863		3268		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		309		1583

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	17	0	47	0	3	0	13
Grp Sat Flow (s), veh/h/ln	0	908	0	1375	0	1209	0	1386
Q Serve Time (g_s), s	0.0	0.8	0.0	1.0	0.0	0.1	0.0	0.3
Cycle Q Clear Time (g_c), s	0.0	5.0	0.0	1.2	0.0	3.7	0.0	0.3
Perm LT Sat Flow (s_l), veh/h/ln	0	908	0	1375	0	1209	0	1386
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	13.8	0.0	17.8	0.0	14.4	0.0	18.0
Perm LT Q Serve Time (g_ps), s	0.0	0.8	0.0	1.0	0.0	0.1	0.0	0.3
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	438	0	703	0	546	0	715
V/C Ratio (X)	0.00	0.04	0.00	0.07	0.00	0.01	0.00	0.02
Avail Cap (c_a), veh/h	0	438	0	703	0	546	0	715
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.8	0.0	8.5	0.0	10.5	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.2	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
Control Delay (d), s/veh	0.0	16.0	0.0	8.7	0.0	10.5	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	168	0	0	0	238	0	16
Grp Sat Flow (s), veh/h/ln	0	1863	0	1863	0	1770	0	1863
Q Serve Time (g_s), s	0.0	3.6	0.0	0.0	0.0	4.2	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	3.6	0.0	0.0	0.0	4.2	0.0	0.2
Lane Grp Cap (c), veh/h	0	745	0	745	0	708	0	745
V/C Ratio (X)	0.00	0.23	0.00	0.00	0.00	0.34	0.00	0.02
Avail Cap (c_a), veh/h	0	745	0	745	0	708	0	745
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.3	0.0	0.0	0.0	9.4	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	1.3	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
Control Delay (d), s/veh	0.0	14.0	0.0	0.0	0.0	10.6	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	0.0	0.0	2.1	0.0	0.1

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.0	0.0	0.0	0.0	2.3	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.00	0.00	0.02	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	3	0	20	0	246	0	13
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1808	0	1583
Q Serve Time (g_s), s	0.0	0.1	0.0	0.3	0.0	4.2	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.3	0.0	4.2	0.0	0.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.17	0.00	1.00
Lane Grp Cap (c), veh/h	0	633	0	633	0	723	0	633
V/C Ratio (X)	0.00	0.00	0.00	0.03	0.00	0.34	0.00	0.02
Avail Cap (c_a), veh/h	0	633	0	633	0	723	0	633
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.8	0.0	8.2	0.0	9.4	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	1.3	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
Control Delay (d), s/veh	0.0	11.8	0.0	8.3	0.0	10.6	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.1	0.0	2.1	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.2	0.0	2.4	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	8	40	68	1	4	21	146	22	2	226	215
Future Volume (veh/h)	21	8	40	68	1	4	21	146	22	2	226	215
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	23	9	43	74	1	4	23	159	24	2	246	234
Adj No. of Lanes	0	1	1	0	1	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	138	32	633	160	1	633	415	745	633	571	745	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.13	0.13	0.13
Ln Grp Delay, s/veh	14.0	0.0	8.5	31.7	0.0	8.1	12.2	9.5	8.3	14.0	15.2	16.0
Ln Grp LOS	B		A	C		A	B	A	A	B	B	B
Approach Vol, veh/h		75			79			206			482	
Approach Delay, s/veh		10.9			30.5			9.7			15.6	
Approach LOS		B			C			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		7.0		5.0		7.0
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.1		4.6		4.7		5.3
Max Q Clear (g_c+I1), s		8.2		20.0		8.1		20.0
Green Ext Time (g_e), s		0.7		0.0		1.6		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		911		0		1196		1

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1863		81		1863		3

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L+T				L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	23	0	32	0	2	0	75
Grp Sat Flow (s), veh/h/ln	0	911	0	82	0	1196	0	4
Q Serve Time (g_s), s	0.0	0.8	0.0	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.2	0.0	18.0	0.0	2.6	0.0	18.0
Perm LT Sat Flow (s_l), veh/h/ln	0	911	0	1434	0	1196	0	1374
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	12.6	0.0	0.0	0.0	15.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.8	0.0	0.0	0.0	0.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.72	0.00	1.00	0.00	0.99
Lane Grp Cap (c), veh/h	0	415	0	170	0	571	0	161
V/C Ratio (X)	0.00	0.06	0.00	0.19	0.00	0.00	0.00	0.47
Avail Cap (c_a), veh/h	0	415	0	170	0	571	0	161
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.0	0.0	11.5	0.0	14.0	0.0	22.2
Incr Delay (d2), s/veh	0.0	0.3	0.0	2.4	0.0	0.0	0.0	9.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.2	0.0	14.0	0.0	14.0	0.0	31.7
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.4	0.0	0.0	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	159	0	0	0	246	0	0
Grp Sat Flow (s), veh/h/ln	0	1863	0	0	0	1863	0	0
Q Serve Time (g_s), s	0.0	2.5	0.0	0.0	0.0	5.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	2.5	0.0	0.0	0.0	5.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	745	0	0	0	745	0	0
V/C Ratio (X)	0.00	0.21	0.00	0.00	0.00	0.33	0.00	0.00
Avail Cap (c_a), veh/h	0	745	0	0	0	745	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.9	0.0	0.0	0.0	14.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	1.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.5	0.0	0.0	0.0	15.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.3	0.0	0.0	0.0	2.8	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.4	0.0	0.0	0.0	3.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	24	0	43	0	234	0	4
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.4	0.0	0.8	0.0	6.1	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	0.4	0.0	0.8	0.0	6.1	0.0	0.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	633	0	633	0	633	0	633
V/C Ratio (X)	0.00	0.04	0.00	0.07	0.00	0.37	0.00	0.01
Avail Cap (c_a), veh/h	0	633	0	633	0	633	0	633
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.2	0.0	8.3	0.0	14.4	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.0	1.7	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
Control Delay (d), s/veh	0.0	8.3	0.0	8.5	0.0	16.0	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.3	0.0	2.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.4	0.0	3.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.02	0.00	0.06	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.1
HCM 2010 LOS	B