

APPENDIX C

SEVILLE 4 SOLAR PROJECT TRAFFIC ANALYSIS LETTER

September 1, 2017

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Subject: Seville 4 Solar Project – Traffic Analysis Letter

The purpose of this letter is to document the anticipated trip generation for the proposed Seville 4 Solar Project, as well as provide an assessment of the traffic operations during the project's day-to-day operations and during the construction of the project.

PROJECT LOCATION

Titan Solar II, LLC (the project applicant) is proposing to develop the Seville 4 Solar Project which will contain a 20-megawatt alternating current solar photovoltaic energy generation facilities. The proposed project will be developed on up to 174 acres of land located in Imperial County, CA, approximately eight miles west of State Route (SR) 86 and directly south of SR-78, as shown in **Figure 1** below.

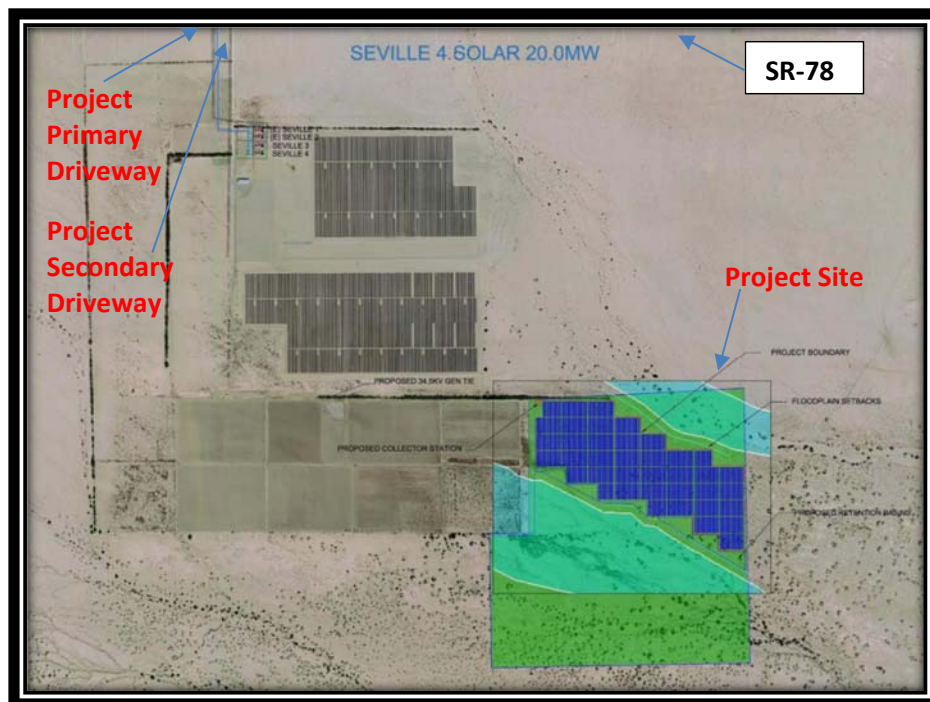


Figure 1 -Project Location

The main access to the property will be via private access road from the north, connecting to SR-78. The existing main access road is equipped with a minimum of 30-foot double swing gate which has a coded entry system and a “Knox Box” for emergency access. The secondary access point to the property is via an existing private road which connects to SR-78. The Secondary access point will continue to be used for access to any agricultural operations on the property, as well as for secondary emergency access to the solar development project. The secondary access point is also controlled via a gate. Internal to the property, a network of private roads provides operations and maintenance access to all property parcels and Project components.

ANALYSIS METHODOLOGY

The analyses performed in this Traffic Assessment Letter was performed in accordance with the requirements of 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 as well as the procedures developed by Caltrans District 11. Additionally, coordination efforts took place with County of Imperial Traffic Engineer, Francisco Olmedo, and Caltrans Associate Transportation Planner, Mark McCumsey, between the months of June and July of 2017.

HIGHWAY SEGMENT LEVEL OF SERVICE (LOS) STANDARDS AND THRESHOLDS

State Highway Level of Service and performance is based upon procedures developed by Caltrans District 11, which are derived from the 2010 Highway Capacity Manual (HCM 2010). The procedure for calculating highway Level of Service involves estimating a peak hour volume to capacity (V/C) ratio. Peak hour volumes are estimated from the application of design hour (“K”), directional (“D”) and Heavy Vehicle Factors (“HVF”) to Average Daily Traffic (ADT) volumes. The analysis assumed a capacity of 1,700 passenger-cars per hour per lane (pc/h/ln), a peak-hour factor (PHF) of 0.92, and a 60/40 directional split.

PEAK HOUR INTERSECTION LEVEL OF SERVICE STANDARDS AND THRESHOLDS

Unsignalized Intersection Analysis

Unsignalized intersections, including two-way and all-way stop controlled intersections were analyzed using the 2010 Highway Capacity Manual unsignalized intersection analysis methodology. The *Synchro 9.0* software supports this methodology and was utilized to produce LOS results. 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. **Table 1** summarizes the LOS criteria for unsignalized intersections.

The County of Imperial traffic impact study guidelines consider LOS C or better during the AM and PM peak hours to be the threshold of significance for intersection Level of Service.

Table 1: Level of Service Criteria For Stop Controlled Unsignalized Intersections

Average Control Delay (sec/veh)	Level of Service (LOS)
≤10	A
>10 to ≤15	B
>15 to ≤25	C
>25 to ≤35	D
>35 to ≤50	E
>50	F

Source: 2010 Highway Capacity Manual, TRB Special Report 209

Determination of Significant Impacts

The significance criteria for traffic impacts are based on the Imperial County Planning & Development Services Department level of service standard as outlined on page 55 of the *Circulation and Scenic Highways Element dated January 29, 2008*, which states “The County’s goal for an acceptable traffic service standard on an ADT basis and during AM and PM peak periods for all County-Maintained Road shall be LOS C for all street segment links and intersections. The current practice of determining direct or cumulative impacts is defined by the significance criteria outlined below in **Table 2** which summarizes the impact significance thresholds for facilities operating at substandard level of service with and without the project. These thresholds, as applied to roadway segments, are based upon an acceptable increase in the Volume / Capacity (V/C) ratio.

Table 2: Significance Criteria

<u>Existing</u>	<u>Existing + Project</u>	<u>Existing + Project + Cumulative Projects</u>	<u>Impact Type</u>
<u>Intersections</u>			
LOS C or better	LOS C or better	LOS C or better	None
LOS C or better	LOS D or worse	NA	Direct
LOS D	LOS D and adds >2.0 seconds of delay	LOS D or worse	Cumulative
LOS D	LOS D and project adds <2.0 seconds of delay	LOS D or worse	None
LOS D	LOS E or F	NA	Direct
LOS E	LOS F	NA	Direct
LOS F	LOS F and delay increases by > 10.0 seconds	LOS F	Direct
Any LOS	Project does not degrade LOS and adds <2.0 seconds of delay	Any LOS	None
Any LOS	Project does not degrade LOS but adds 2.0 to 9.9 seconds of delay	LOS E or worse	Cumulative
<u>Segments</u>			
LOS C or better	LOS C or better	LOS C or better	None
LOS C or better	LOS C or better and v/c >0.02	LOS D or worse	Cumulative
LOS C or better	LOS D or worse	NA	Direct ¹
LOS D	LOS D and v/c >0.02	LOS D or worse	Cumulative
LOS D	LOS D and v/c <0.02	LOS D or worse	None
LOS D	LOS E or F	NA	Direct
LOS E	LOS F	NA	Direct
LOS F	LOS F and v/c increases by >0.09	LOS F	Direct
Any LOS	LOS E or worse & v/c 0.02 to 0.09	LOS E or worse	Cumulative
Any LOS	LOS E or worse and v/c <0.02	Any LOS	None

Notes:

LOS: Level of Service

NA: Not Applicable

¹ Exception: post-project segment operation is LOS D and intersections along segment are LOS D or better resulting in no significant impact.

TYPICAL DAILY OPERATIONS

This section assesses traffic operations on a typical day at the site and potential traffic impacts of the proposed Seville 4 Solar Project.

TYPICAL PROJECT TRIP GENERATION

The proposed project is not expected to have staff on-site on a regular basis, security for the site will be handled at an off-site location and will be monitored via closed circuit cameras. Additional workers would be required to access the site for maintenance of the equipment and cleaning of the solar panels. The cleaning of the solar panels is anticipated to be the highest trip generator activity and it will take place for one week every six months, therefore, this activity was selected to be analyzed. As a worst-case scenario, it was assumed that all employees would drive separate vehicles to/from the project site, and that all employees would arrive during the AM peak hour and depart during the PM peak hour. **Table 3** displays the assumed project vehicle trip generation during its day-to-day operations.

Table 3: Typical Daily Trip Generation

Task	Number of On-Site Employees Required	Total Daily Trips	AM Peak		PM Peak	
			In	Out	In	Out
Panel Washing	4	8	4	0	0	4

Source: EMA, July 2017

As shown, the proposed project is anticipated to generate 8 daily vehicle trips with 4 trips arriving at the project site during the AM peak hour and 4 trips departing from the project site during the PM peak hour.

PROJECT STUDY AREA

The closest intersections to the project site (with a paved road) is located over eight miles to the east (SR-86) and over eight miles to the west (Split Mountain Road), along SR-78. Due to the distance of these intersections from the proposed project site, as well as the anticipated low project trip generation (8 daily trips and 4 peak hour trips) the only facilities analyzed by this study are the following:

Highway Segment

- SR-78, between Project Driveway and SR-86

Intersection

1. Project Driveway / SR-78 (SSSC – Side-street stop controlled)
2. SR-86 / SR-78 (SSSC – Side-street stop controlled)

Due to the location of the project site, it is anticipated that the project related traffic would have minimal effect on the operations of any intersection under the County's jurisdiction. Therefore, no analysis of County controlled intersections was included in this study.

STUDY SCENARIOS

Highway segment and intersection analyses were conducted for the following scenarios:

Existing Conditions

Based on Caltrans 2015 count data, the segment of SR-78 that fronts the proposed project site serves an annual average daily traffic (AADT) volume of 780 vehicles per day (vpd) with a two-way volume of 170 vehicles during the peak hour.

Existing and Normal Background Growth (Near-Term)

Construction of the proposed project is anticipated to take place early-mid 2018 conditions. The year 2018 background volumes are based on applying a growth rate to existing conditions volumes by an annual growth rate. Determination of the annual growth rate was based on guidelines defined 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. This document indicates that traffic projections should be based on demonstrated growth as detailed in the general plan. Three growth rate options were reviewed:

- 1) The Land Use Element of the general plan indicates that the Population Research Unit of the California Department of Finance (DOF) estimates the annual change in population. Using the DOF revised July 1, 2015 population estimate of 185,328 and the projected population of Imperial County in 2035 of 232,298, an annual growth rate of 1.3 percent is calculated.
- 2) The Housing Element section of the general plan states that the total population of Imperial County in 2010 was 174,528, an increase of 23 percent since 2000. Based on this information, an annual growth rate of 2.3 percent is calculated.
- 3) The *Southern California Association of Governments (SCAG) Regional Transportation Plan 2012-2035 Sustainable Communities Strategy, adopted in April 2012*, states that the population of Imperial County is projected to grow at an annual rate of 2.6 percent.

For the purpose of this report, the most conservative growth rate of 2.6 percent per year was utilized to develop the traffic volumes to be analyzed in the “Normal background growth” scenarios. It is important to note that Existing Conditions traffic volumes for the analyzed roadway segment of SR-78 are based on the latest published Caltrans 2015 data, therefore, a total growth rate of 7.8 percent was applied to the volumes to account for the three-year difference between 2015 and 2018.

Existing and Normal Background Growth and Project (Near-Term + Project)

This scenario analyzes traffic conditions within the study area under “Near-Term” conditions with the addition of the traffic related to the proposed project during its typical operations. Year 2018 is assumed to be the year of project operations.

Existing and Normal Background Growth and New Development and Project (Near-Term + Cumulative + Project)

Based on a review of a list of cumulative projects provided by County of Imperial staff and information from the project applicant, the Ocotillo Wells Solar Farm project and Seville 3 Solar Project were identified to contribute additional traffic to the segment of SR-78 that fronts the project site, prior to the construction of the proposed project.

As identified in the Ocotillo Wells Solar Farm project description, the project is anticipated to have a higher trip generation when maintenance activities are taking place. The Ocotillo Wells Solar Farm project is anticipated to contribute 476 average daily trips to SR-78 when maintenance activities such as cleaning panels and soil binding are taking place.

The second project identified as a cumulative project is the Seville 3 Solar Project. This project is anticipated to have a higher trip generation during its construction phase as opposed to typical operations, therefore, construction traffic for this project was utilized to be analyzed. Seville 3 Solar

Project is anticipated to generate 384 average daily trips and 150 peak hour trips during the AM and PM peak hours, to SR-78 during its construction phase.

Relevant pages from the Ocotillo Wells Solar Farm Project Description and the Seville Solar Farm Project Transportation Analysis are provided in **Attachment 1**.

Long-Term Conditions

This scenario analyzes the traffic conditions, within the study area, under “Long-Term” conditions utilizing the year 2050 ADT volumes and roadway geometries contained in the *County of Imperial Circulation and Scenic Highways Element*. Peak hour intersection volumes were developed by comparing existing year 2015 ADT to the projected year 2050 ADT. Based on this comparison, the growth rate was applied to existing peak hour intersection approach and departure volumes. Relevant Excerpts are provided in Attachment 1.

Long-Term Plus Project Conditions

This scenario analyzes traffic conditions within the study area under “Long-Term” conditions with the addition of the traffic related to the proposed project during its typical operations.

Existing and Normal Background Growth and Project Construction Period (Near-Term + Project Construction)

This scenario analyzes traffic conditions within the study area under “Near-Term” conditions with the addition of the traffic related to the proposed project during construction.

Existing and Normal Background Growth and New Development and Project Construction (Near-Term + Cumulative + Project Construction)

This scenario analyzes traffic conditions within the study area under “Near-Term” conditions with the addition of the traffic related to cumulative projects and the proposed project during construction.

It is important to note that the “Plus Project” scenarios analyzed in this traffic analysis letter only assume the proposed Seville 4 project and do not consider different future land uses at the site that may result from reclamation of the site. Further analyses will be necessary to assess different land uses at the proposed project site during the reclamation of the project site.

TYPICAL PROJECT LEVEL OF SERVICE ANALYSIS

Highway Segment Level of Service Analysis

Table 4 displays Highway Segment LOS results for the study area highway segment of SR-78, with and without project traffic under all of the study scenarios. Traffic count data is provided in **Attachment 2**.

Table 4: SR-78 Highway Segment Level of Service – Typical Operations

Scenario	AADT	K	Peak Hour Volume (one direction)	D	Lanes Per Direction	PHF	HVF	Volume (pc/h/ln)	V/C	LOS
Existing	780	24.9%	194	0.6	1	0.92	24.3%	167	0.10	A
Near-Term Year 2018	840	24.9%	209	0.6	1	0.92	24.3%	180	0.11	A
Near-Term Year 2018 Plus Project	848	24.9%	211	0.6	1	0.92	24.3%	182	0.11	A
Near-Term Year 2018 Plus Cumulative Projects Plus Project	1,708	24.9%	425	0.6	1	0.92	24.3%	366	0.22	A
Long-Term	13,500	24.9%	3,362	0.6	2 ^a	0.92	24.3%	1,448	0.85	D
Long-Term Plus Project	13,508	24.9%	3,363	0.6	2 ^a	0.92	24.3%	1,449	0.85	D

Source: Chen Ryan Associates; August 2017

Notes:

- K: Percent of AADT that occurs during the peak hour. The source for existing K factor is the Caltrans 2015 Traffic Volumes on the California State Highway System. It is assumed that as traffic volumes increase on the segment, the K factor will reduce to a level that is more consistent with the adjacent segments both to the east and the west.
- D: Directional split, assumed value
- PHF: Peak Hour Factor, assumed value
- HVF: Heavy Vehicle Factor, based on Caltrans 2015 Annual Average Daily Truck Traffic on the California State Highway System.
- V/C: Volume to Capacity Ratio
- a: County of Imperial Circulation & Scenic Highways Element identifies SR-78 between County of San Diego line and SR-86 as a 4-Lane Highway.

As shown in the table above, the analyzed highway segment operates at LOS D or better under all analyzed scenarios. The addition of the proposed project traffic does not cause a significant impact at the analyzed SR-78 Highway segment based on the significance criteria described in Table 2:

Near-Term Year 2018 Plus Project – SR-78 between Project Driveway and SR-86 continues to operate at LOS A with the addition of proposed project traffic. The addition of the proposed project traffic does not cause the operations of the highway segment to degrade from acceptable to unacceptable LOS. Therefore, no direct nor cumulative transportation-related impacts would be associated with the proposed project during its typical daily operations. No mitigation is required and no additional analyses are required.

Near-Term Year 2018 Plus Cumulative Projects Plus Project – SR-78 between Project Driveway and SR-86 continues to operate at LOS A with the addition of cumulative projects traffic and proposed project traffic. The addition of cumulative projects traffic and proposed project traffic does not cause the operations of the highway segment to degrade from acceptable to unacceptable LOS. Therefore, no direct nor cumulative transportation-related impacts would be associated with the proposed project during its typical daily operations. No mitigation is required and no additional analyses are required.

Long-Term Plus Project - SR-78 between Project Driveway and SR-86 continues to operate at LOS D with the addition of cumulative projects traffic and proposed project traffic. The addition of the proposed project traffic does not cause the operations of the highway segment to degrade LOS nor surpass the

acceptable increase of 0.02 in v/c ratio. Therefore, no direct nor cumulative transportation-related impacts would be associated with the proposed project during its typical daily operations. No mitigation is required and no additional analyses are required.

Intersection Level of Service Analysis

Table 5 displays intersection LOS and average vehicle delay results for the study area intersections under all of the study scenarios. LOS calculation worksheets for all scenarios are provided in **Attachment 3**.

Table 5: Peak Hour Intersection Level of Service Results - Typical Operations

Scenario	Intersections	Traffic Control	AM Peak Hour		PM Peak Hour	
			Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS
Existing Conditions	1. Project Driveway / SR-78	SSSC	0.0	A	0.0	A
	2. SR-86 / SR-78	SSSC	12.4	B	11.4	B
Near-Term 2018	1. Project Driveway / SR-78	SSSC	0.0	A	0.0	A
	2. SR-86 / SR-78	SSSC	12.6	B	11.5	B
Near-Term 2018 + Project Typical Operations	1. Project Driveway / SR-78	SSSC	7.3	A	8.5	A
	2. SR-86 / SR-78	SSSC	12.7	B	11.5	B
Near-Term 2018 + Cumulative Projects + Project Typical Operations	1. Project Driveway / SR-78	SSSC	7.3	A	8.5	A
	2. SR-86 / SR-78	SSSC	12.7	B	11.5	B
Long-Term	1. Project Driveway / SR-78	SSSC	0.0	A	0.0	A
	2. SR-86 / SR-78	SSSC	33.9	D	34.3	D
Long-Term Plus Project	1. Project Driveway / SR-78	SSSC	8.1	A	9.6	A
	2. SR-86 / SR-78	SSSC	34.6	D	34.3	D

Source: Chen Ryan Associates; July 2017.

Notes:

SSSC – side street stop controlled.

For SSSC intersections, the delay shown is the worst delay experienced by any of the approaches.

As shown in the table above, both analyzed intersections operate at LOS D or better under all analyzed scenarios. The addition of the proposed project traffic does not cause a significant impact at the analyzed intersections based on the significance criteria described in Table 2:

Near-Term Year 2018 Plus Project - Both intersections continue to operate at LOS B or better with the addition of proposed project traffic. The addition of the proposed project traffic does not cause the operations of the intersections to degrade from acceptable to unacceptable LOS. Therefore, no direct nor cumulative transportation-related impacts would be associated with the proposed project during its typical daily operations. No mitigation is required and no additional analyses are required.

Near-Term 2018 Plus Cumulative Projects Plus Project - Both intersections continue to operate at LOS B or better with the addition of cumulative projects traffic and proposed project traffic. The addition of cumulative projects traffic and proposed project traffic does not cause the operations of the highway segment to degrade from acceptable to unacceptable LOS. Therefore, no direct nor cumulative

transportation-related impacts would be associated with the proposed project during its typical daily operations. No mitigation is required and no additional analyses are required.

Long-Term Plus Project - Both intersections continue to operate at LOS D or better with the addition of proposed project traffic. The addition of the proposed project traffic does not cause the operations of the intersections to degrade from acceptable to unacceptable LOS nor adds more than 2.0 seconds of delay. Therefore, no direct nor cumulative transportation-related impacts would be associated with the proposed project during its typical daily operations. No mitigation is required and no additional analyses are required.

CONSTRUCTION-RELATED OPERATIONS

Construction of the proposed project is expected to be completed in approximately six months, with the fourth month being the highest trip generator. Construction activities related to the proposed project consist of the following:

- Racking Installation
- Solar Panel Installation
- System Wiring and Trenching
- Substation Construction

CONSTRUCTION TRAFFIC TRIP GENERATION

Based on information provided by the project applicant, project construction would require a maximum of 136 workers on-site at any given time and 17 haul trucks. To provide a worst-case scenario, all construction workers were assumed to arrive during the AM peak hour and depart during the PM peak hour, and all workers were assumed to drive separate vehicles to and from the project site. **Table 6** displays the assumed project vehicle trip generation during project construction. Construction estimates provided by the project applicant are included in **Attachment 4**.

Table 6: Project Construction Trip Generation

Task	Units	PVE	Rate	Total Daily Trips	AM Peak		PM Peak	
					In	Out	In	Out
Workers	136	1	2 / Worker	272	136	0	0	136
Haul Trucks	17	3	2 / Truck	102	51	0	0	51
Total				374	187	0	0	187

Source: EMA, July 2017

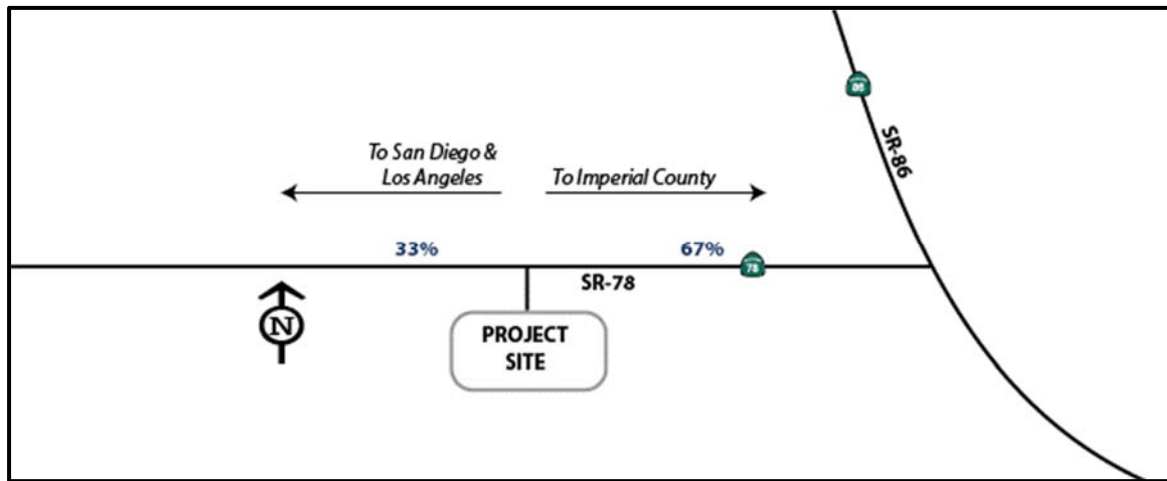
As shown, during project construction the solar farm is anticipated to generate 374 daily vehicle trips per day with 187 trips arriving to the project site during the AM peak hour and 187 trips departing from the project site during the PM peak hour.

PROJECT TRIP DISTRIBUTION

Trip distribution for the proposed project was determined based on adjacent land uses, population from the surrounding cities, and information from the project applicant. Based on this, it was assumed that one third of the construction worker traffic would travel to and from the west (i.e., in San Diego and other local residential developments) while the remaining two-thirds would originate from the various Imperial

Valley Cities to the east, such as Westmorland, Brawley, Imperial, El Centro, Holtville, Calexico, etc. as shown in **Figure 2**.

Figure 2 - Assumed Trip Distribution - Project Construction Traffic



PROJECT TRIP ASSIGNMENT

Based upon the project trip distribution, daily and AM/PM peak hour project trips were assigned to the adjacent roadway network.

CONSTRUCTION-LEVEL OF SERVICE ANALYSIS

Highway Segment Level of Service Analysis

Near-Term Year 2018 conditions were used as the base condition for the analysis of project construction. Traffic volumes during project construction were developed by adding the estimated number of trips associated with project construction (displayed in Table 6) to Near-Term Year 2018 highway volumes (Table 4). As shown in **Table 7**, this segment of SR-78 is projected to operate at LOS A, with and without project construction traffic both of the study scenarios.

Table 7: SR-78 Highway Segment Level of Service – Project Construction

Scenario	AADT	K	Peak Hour Volume (one direction)	D	Lanes Per Direction	PHF	HVF	Volume (pc/h/l/n)	V/C	LOS
Near-Term Year 2018 Plus Project Construction	1,214	24.9%	302	0.67	1	0.92	24.3%	291	0.17	A
Near-Term Year 2018 Plus Cumulative Projects Plus Project Construction	2,074	24.9%	516	0.67	1	0.92	24.3%	497	0.29	A

Source: Chen Ryan Associates; July 2017

Notes:

- K: Percent of AADT that occurs during the peak hour. The source for existing K factor is the Caltrans 2015 *Traffic Volumes on the California State Highway System*. It is assumed that as traffic volumes increase on the segment, the K factor will reduce to a level that is more consistent with the adjacent segments both to the east and the west.
- D: The source for D factor is the Caltrans 2015 *Traffic Volumes on the California State Highway System*.
- PHF: Peak Hour Factor, assumed value
- HVF: Heavy Vehicle Factor, based on Caltrans 2015 *Annual Average Daily Truck Traffic on the California State Highway System*.
- V/C: Volume to Capacity Ratio

As shown, SR-78 is projected to continue to operate LOS A during the construction period of the proposed project.

Intersection Level of Service Analysis

Table 8 provides a summary of the projected peak hour driveway operations during project construction.

Table 8: Peak Hour Intersection Level of Service Results – Project Construction

Scenario	Intersections	Traffic Control	AM Peak Hour		PM Peak Hour	
			Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS
Near-Term 2018 + Project	1. Project Driveway / SR-78	SSSC	7.7	A	9.4	A
	2. SR-86 / SR-78	SSSC	16.8	C	11.5	B
Near-Term 2018 + Cumulative Projects + Project	1. Project Driveway / SR-78	SSSC	8.2	A	10.5	B
	2. SR-86 / SR-78	SSSC	23.1	C	12.1	B

Source: Chen Ryan Associates; July 2017.

Notes:

SSSC – side street stop controlled.

For SSSC intersections, the delay shown is the worst delay experienced by any of the approaches.

As shown in the table above, both analyzed intersections are anticipated to operate at LOS C or better during project construction; therefore, it is anticipated that there will be no traffic related impacts associated with the construction of the proposed project. However, it is recommended that a construction management plan be prepared to address Caltrans requirements. Peak hour LOS analysis worksheets are provided in **Attachment 5**.

Please feel free to contact me if you have any questions or concerns regarding this letter.

Sincerely

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**ATTACHMENT 1 – CUMULATIVE PROJECTS
INFORMATION & COUNTY OF IMPERIAL CIRCULATION &
SCENIC HIGHWAYS ELEMENT**

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such specific requirements have been identified. Joining the CFD for fire protection services and payment of the required fees will ensure that fire protection services will be adequate to serve the Project, and that no significant cumulative effects occur as the result of Project implementation.

PROJECT TRAFFIC GENERATION

Construction

Overall Project grading would vary depending upon the type of solar technology installed, but is estimated to require a maximum of approximately 370,000 c.y. which would require approximately 13,000,000 gallons of water for soil binding/dust control; refer to Table 2, above. Assuming that 4,000 gallon water trucks are utilized for trucking of the water, the Project would generate an estimated 3,250 truck trips over 14 weeks (five working days per week), or 92 ADT.

Operation

Maintenance activities such as cleaning panels and soil binding activities would require approximately 674,000 gallons of water for panel washing (worst-case) and an additional 0.85 acre-feet (approximate) of water for soil binding maintenance activities each year, for a total of approximately 952,850 gallons of water; refer to Table 3, above. Assuming the Project imports this water from offsite and utilizes 4,000-gallon trucks, such activities would generate an estimated 238 one-way trips, or 476 ADT (round trips).

A second option for panel washing would be to pump water onsite and use a filtration system which would consist of a light truck mounted reverse-osmosis (RO) system with a 90% recovery rate. The RO units can produce 3 gpm or 1,440 gpd. A total of six RO trucks on a 20 workday work schedule (five-day work week) would be required to wash the panels each quarter. This assumes a worst-case scenario of 168,489 gallons of estimated water usage per quarter. Therefore, trips generated by panel washing would total an estimated 960 trips (6 RO units x 20 days x 4 times per year = 480 one-way trips, or 960 round trips). Additionally, the RO units with a 90% recovery rate would produce 16,851 gallons of brine wastewater per quarter, or 842.5 gpd. The brine wastewater would be collected onsite within a 10,000-gallon reservoir. The brine wastewater would then be trucked offsite quarterly via 5,000-gallon capacity trucks to the City of San Diego Wastewater pumping station No. 1 or No. 2, located on East Harbor Drive in San Diego. A total of four one-way trips (8 ADT, or round-trips) per quarter or 16 one-way (32 ADT, or round-trips) per year would be required to dispose of the brine wastewater. Over 365 days, this equals an estimated 2.71 average daily trips (ADT). Further, the Project would generate approximately 10 trips per day with up to 25 daily trips occurring during maintenance periods from the regular employees working at the facility.

IMPERIAL IRRIGATION DISTRICT

R-Line

As stated above, energy generated by the Project with any of the four alternative technology systems would be transmitted to a private substation proposed in the northeast corner of the site, adjacent to an existing 92 kV "R-Line" that crosses the Project site. The Project would connect directly to the existing R-Line through a loop-in, pursuant to an interconnection agreement with the IID. The R-Line runs aboveground and

Table 3
Project Construction Trip Generation

Task	Total Daily Trips	PVE	Total Daily Trips	AM Peak		PM Peak	
				In	Out	In	Out
Workers	300	1	300	150	0	0	150
Vendor Trucks	14	3	42	0	0	0	0
Haul Trucks	14	3	42	0	0	0	0
Total			384	150	0	0	150

Source: EMA, October 2013

As shown, during project construction the solar farm is anticipated to generate 384 daily vehicle trips per day with 150 trips arriving to the plant during the AM peak hour and 150 trips departing from the plant during the PM peak hour.

Construction-Level of Service Analysis

Near-Term Year 2015 conditions were used as the base condition for the analysis of project construction. Traffic volumes during project construction were developed by adding the estimated number of trips associated with project construction (displayed in Table 3) to Near-Term Year 2015 roadway volumes (Table 2). It was assumed that a third of the construction worker traffic would travel to and from the west (i.e., in San Diego and other local residential developments) while the remaining two-thirds would originate from the various Imperial Valley Cities to the east, as shown in **Figure 2**.

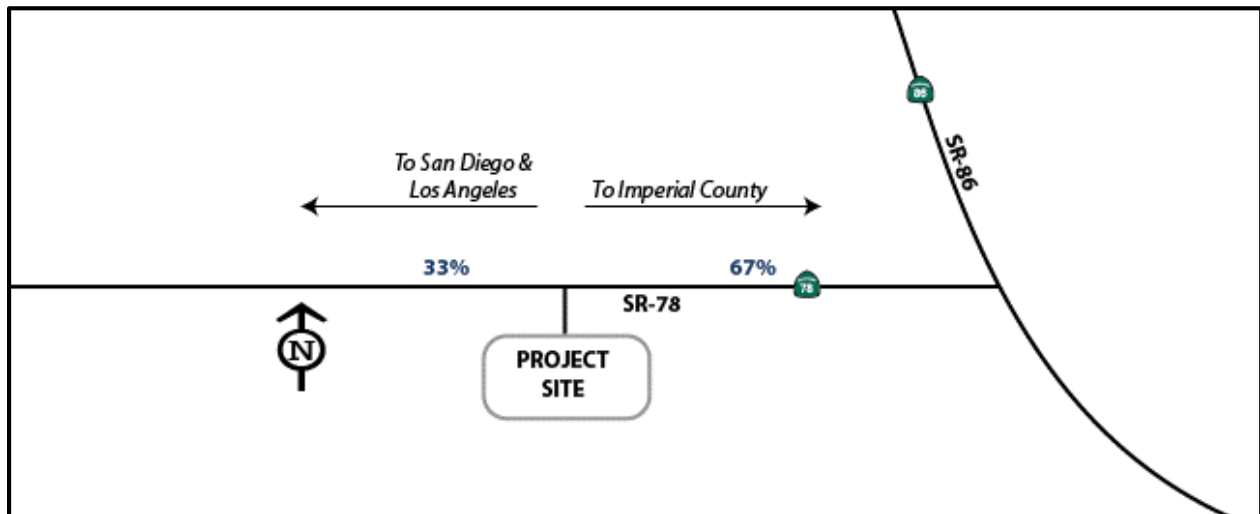


Figure 2
Assumed Trip Distribution - Project Construction Traffic

**TABLE 3
IMPERIAL COUNTY PROJECTED STREET SEGMENT CONFIGURATIONS AND
VOLUMES (continued)**

Segment Location	2003 Classification	Year 2002 ADT Volume ^a	Year 2005 ADT Volume ^a	Year 2025 ADT Volume ^c	25 Year Total Growth Factor ^d	Year 2050 ADT Volume	Year 2050 Recommended Classification (# of Lanes)	2050 LOS ^e
Verde School Road								
Keffer/Bornt	Minor Collector						Minor Collector (2)	
Villa Road								
Dogwood/Cooley	Minor Collector						Minor Collector (2)	
Wahl Road								
Nichols/Clark	Minor Collector						Minor Collector (2)	
Walker Road								
Gentry/End	Major Collector						Major Collector (4)	
Gentry/Brandt	Minor Collector						Minor Collector (2)	
Ware Road								
Fawcett/Willoughby	Major Collector						Major Collector (4)	
Weaver Road								
Kalin/SR-86	Minor Collector						Minor Collector (2)	
Webster Road								
Kalin/Brandt	Minor Collector						Minor Collector (2)	
Westmorland Road								
Boley/Evan Hewes Hwy	Minor Collector						Minor Collector (2)	
Westside Road								
Evan Hewes Hwy/End	Minor Collector						Minor Collector (2)	
Wheeler Road								
Erskine/Pierle	Minor Collector						Minor Collector (2)	
Wieman Road								
Steiner/Cady	Minor Collector						Minor Collector (2)	
Wienert Road								
Guthrie/Forrester	Minor Collector						Minor Collector (2)	
Wiest Road								
SR-78/Griffin	Minor Collector						Minor Collector (2)	
Griffin/Boyd	Local						Minor Collector (2)	
McDonald/SR-115	Minor Collector						Minor Collector (2)	
Wilkins Road								
English/Cuff	Minor Collector						Minor Collector (2)	
Wilkinson Road								
Brandt/SR-111	Minor Collector						Minor Collector (2)	
Wiest/Flett	Minor Collector						Minor Collector (2)	
Willoughby Road								
Proposed La Brucherie/Clark	none						Major Collector (4)	
Clark/Dogwood	Minor Collector						Major Collector (4)	
Dogwood/Kloke	Major Collector						Major Collector (4)	
Wirt Road								
Wiest/Kaiser	Minor Collector						Minor Collector (2)	
Wixom Road								
Liebert/Drew	Minor Collector						Minor Collector (2)	
Wormwood Road								
Dearborn/Fisher	Minor Collector						Minor Collector (2)	
Worthington Road (S28)								
Huff/Highline	Major Collector						Major Collector (4)	
Yocum Road								
Proposed Dogwood/Lyerly	none						Major Collector (2)	
Lyerly/Kershaw	Minor Collector						Major Collector (4)	
Kershaw/Blair	Local						Major Collector (4)	
Young Road								
SR-111/Blair	Minor Collector						Minor Collector (2)	
Zenos Road								
Barbara Worth/Holtville (City)	Minor Collector						Minor Collector (2)	
State Route 78								
S.D.-Imperial County Line/Junction SR-86	State Hwy	N/A	920	8,104	1.64	13,500	Collector (4)	A
SR-111/SR-115N	State Hwy	N/A	3,950	10,592	1.64	17,500	Collector (4)	B
SR-115N/SR-115S	State Hwy	N/A	3,100	13,447	1.64	22,500	Collector (4)	B
115S/Glamis	State Hwy	N/A	1,950	7,340	1.64	12,500	Collector (4)	A
Glamis/Ogilby	State Hwy	N/A	1,850	4,909	1.64	8,500	Collector (4)	A
Ogilby/Palo Verde, Fourth	State Hwy	N/A	2,000	5,307	1.64	9,000	Collector (4)	A
Palo Verde, Fourth/Imperial County Line	State Hwy	N/A	2,000	5,307	1.64	9,000	Collector (4)	A

**TABLE 3
IMPERIAL COUNTY PROJECTED STREET SEGMENT CONFIGURATIONS AND
VOLUMES (continued)**

Segment Location	2003 Classification	Year 2002 ADT Volume ^a	Year 2005 ADT Volume ^a	Year 2025 ADT Volume ^c	25 Year Total Growth Factor ^d	Year 2050 ADT Volume	Year 2050 Recommended Classification (# of Lanes)	2050 LOS ^e
State Route 86								
Imperial County Line/Desert Shores	State Hwy	N/A	12,900	21,138	1.28	27,500	Minor Arterial (4)	C
Desert Shores/Brawley Ave.	State Hwy	N/A	12,400	20,319	1.28	26,500	Collector (4)	C
Brawley Ave./S. Marina	State Hwy	N/A	13,400	21,957	1.28	28,500	Minor Arterial (4)	C
S. Marina/Air Park	State Hwy	N/A	12,100	19,827	1.64	33,000	Prime Arterial (6-divided)	B
Air Park/SR-78 West	State Hwy	N/A	10,800	17,697	1.64	29,500	Minor Arterial (4)	C
SR-78 West/Lack	State Hwy	N/A	10,800	17,890	1.64	29,500	Minor Arterial (4)	C
Lack/West Westmorland City Limits	State Hwy	N/A	10,200	19,650	1.64	32,500	Prime Arterial (6-divided)	B
E Westmorland C. Limits/W Brawley C. Limits	State Hwy	N/A	14,000	19,440	1.64	32,000	Prime Arterial (6-divided)	B
South Brawley City Limits/Legion	State Hwy	N/A	21,400	28,300	1.13	32,500	Prime Arterial (6-divided)	B
Legion/Keystone	State Hwy	N/A	19,100	27,940	1.13	32,000	Prime Arterial (6-divided)	B
Keystone/Imperial Ave.	State Hwy	N/A	14,700	27,980	1.13	32,000	Prime Arterial (6-divided)	B
I-8/McCabe	State Hwy	N/A	21,500	24,890	1.28	32,000	Prime Arterial (6-divided)	B
McCabe/Heber	State Hwy	N/A	7,100	26,100	1.28	33,500	Prime Arterial (6-divided)	B
Heber/Dogwood	State Hwy	N/A	7,500	26,100	1.28	33,500	Prime Arterial (6-divided)	B
Dogwood/SR-111	State Hwy	N/A	5,200	26,000	1.28	33,500	Prime Arterial (6-divided)	B
South Imperial City Limits/North El Centro City Limits	State Hwy	N/A	6,500	27,980	1.13	32,000	Prime Arterial (6-divided)	B
State Route 98								
Imperial Hwy/Drew	State Hwy	N/A	2,300	1,730	1.64	3,000	Local Collector (2)	B
Drew/Clark	State Hwy	N/A	3,800	5,350	1.64	9,000	Collector (4)	A
Clark/Dogwood	State Hwy	N/A	4,550	8,800	1.64	14,500	Collector (4)	B
Dogwood/West Calexico City Limits	State Hwy	N/A	9,800	24,180	1.64	31,500	Prime Arterial (6-divided)	B
East Calexico City Limits/Barbara Worth	State Hwy	N/A	24,400	26,000	1.64	33,500	Prime Arterial (6-divided)	B
Barbara Worth/Bonds Corner	State Hwy	N/A	16,300	26,000	1.64	33,500	Prime Arterial (6-divided)	B
Bonds Corner/E. Highline Canal	State Hwy	N/A	4,500	770	1.64	1,500	Local Collector (2)	A
E. Highline Canal/I-8	State Hwy	N/A	2,200	250	1.64	500	Local Collector (2)	A
State Route 111								
North Calexico City Limits	State Hwy	N/A	50,000	97,570	1.13	111,000	Freeway (8)	C
Heber/McCabe	State Hwy	N/A	33,500	98,650	1.13	112,000	Freeway (8)	C
McCabe/I-8	State Hwy	N/A	37,000	90,830	1.13	103,000	Freeway (8)	C
I-8/Evan Hewes Hwy	State Hwy	N/A	16,300	52,980	1.13	60,500	Expressway (6)	D
Evan Hewes/Aten	State Hwy	N/A	14,100	60,200	1.13	68,500	Expressway (6)	D
Aten/Worthington	State Hwy	N/A	11,300	58,160	1.13	66,000	Expressway (6)	D
Worthington/Keystone	State Hwy	N/A	10,600	58,710	1.13	67,000	Expressway (6)	D
Keystone/E. Junction 78	State Hwy	N/A	9,300	57,590	1.13	65,500	Expressway (6)	D
North Brawley City Limits/Rutherford	State Hwy	N/A	9,500	18,510	1.64	30,500	Prime Arterial (6-divided)	B
Rutherford/South Calipatria City Limits	State Hwy	N/A	6,600	18,560	1.64	30,500	Prime Arterial (6-divided)	B
North Calipatria City Limits/Sinclair	State Hwy	N/A	5,700	15,640	1.64	26,000	Minor Arterial (4)	C
Sinclair/Niland Ave	State Hwy	N/A	5,100	13,532	1.64	22,500	Collector (4)	B
Niland Ave/English	State Hwy	N/A	3,700	9,817	1.64	16,500	Collector (4)	B
English/Bombay Beach	State Hwy	N/A	2,300	6,103	1.64	10,500	Collector (4)	A
Bombay Beach/Imperial-Riverside County line	State Hwy	N/A	1,900	5,041	1.64	8,500	Collector (4)	A
State Route 115								
Junction I-8/East Holtville City Limits	State Hwy	N/A	1,850	4,140	1.64	7,000	Local Collector (2)	C
West Holtville City Limits/West Junction Evan Hewes Hwy	State Hwy	N/A	6,600	8,320	1.64	14,000	Collector (4)	B
West Junction Evan Hewes Hwy/SR-78	State Hwy	N/A	2,850	27,870	1.13	32,000	Prime Arterial (6-divided)	B
SR-78/Rutherford	State Hwy	N/A	990	13,450	1.64	22,500	Minor Arterial (4)	B
Rutherford/Wirt	State Hwy	N/A	1,650	9,720	1.64	16,000	Collector (4)	B
Wirt/East Calipatria City Limits	State Hwy	N/A	1,150	9,240	1.64	15,500	Collector (4)	B
State Route 186								
I-8/International Border	State Hwy	N/A					State Hwy	

Notes:

- * See Table 1 regarding additional right-of-way for transit facility with roadway.
- a. Volume from Imperial County Circulation and Scenic Highways Element Manual (Dec. 2003).
- b. Volume from Caltrans, Imperial County, or Linscott Law & Greenspan, Engineers counts.
- c. Volumes from Caltrans CalexGP+ Model and adjusted higher in some cases.
- d. A 0.5%, 1.0%, or 2.0% annual growth rate was applied to the Year 2025 volumes to obtain Year 2050 volumes.
- e. Capacity based on the Imperial County Classification Table (depending on the Year 2050 volume amount).

ATTACHMENT 2 – TRAFFIC COUNTS DATA

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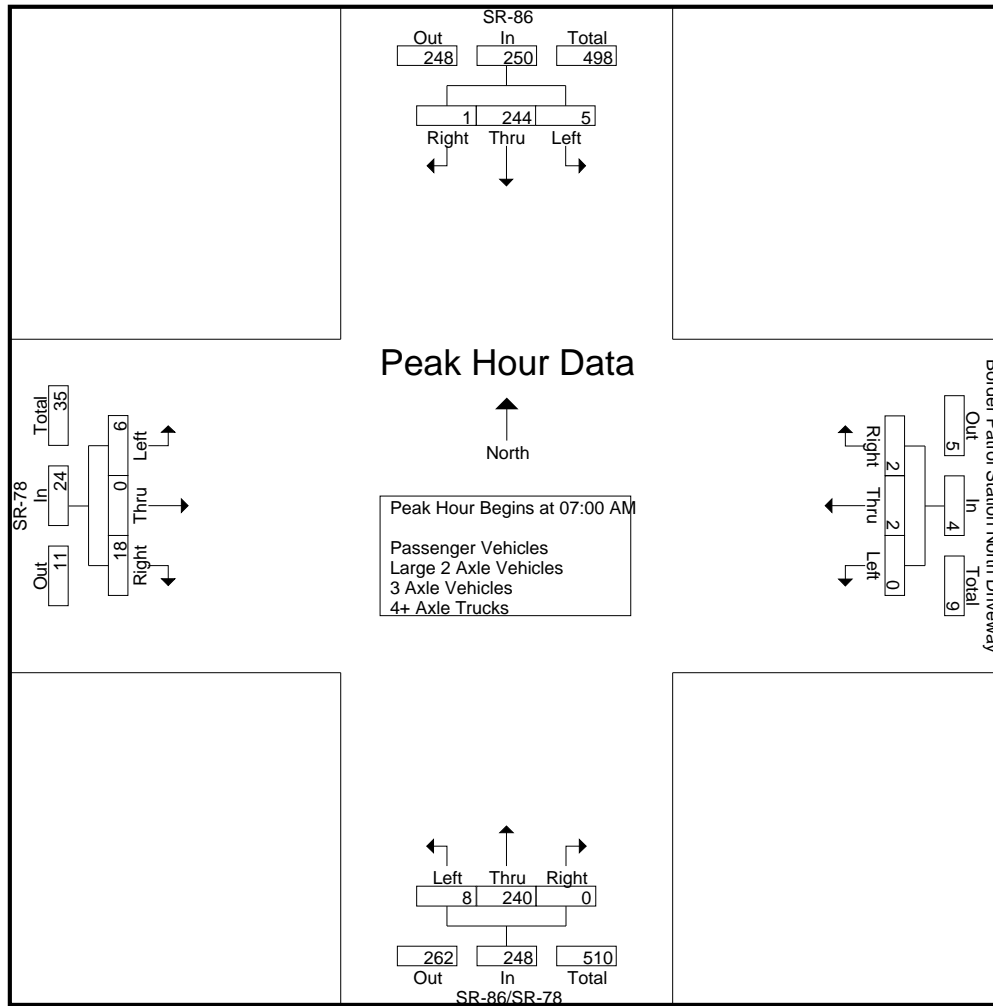
County of Imperial
 N/S: SR-86/SR-78
 E/W: SR- 78/Border Patrol Station N DW
 Weather: Clear

File Name : 02_CIM_78_86 AM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	2	63	0	65	0	1	2	3	2	60	0	62	1	0	5	6	136
07:15 AM	3	60	0	63	0	0	0	0	3	63	0	66	3	0	4	7	136
07:30 AM	0	52	0	52	0	1	0	1	2	50	0	52	1	0	3	4	109
07:45 AM	0	69	1	70	0	0	0	0	1	67	0	68	1	0	6	7	145
Total	5	244	1	250	0	2	2	4	8	240	0	248	6	0	18	24	526
08:00 AM	0	56	0	56	0	0	1	1	0	55	0	55	3	0	3	6	118
08:15 AM	1	72	0	73	0	0	0	0	3	50	0	53	1	0	1	2	128
08:30 AM	0	73	0	73	0	0	0	0	0	43	0	43	4	0	1	5	121
08:45 AM	1	63	1	65	0	0	0	0	2	69	0	71	1	0	5	6	142
Total	2	264	1	267	0	0	1	1	5	217	0	222	9	0	10	19	509
Grand Total	7	508	2	517	0	2	3	5	13	457	0	470	15	0	28	43	1035
Apprch %	1.4	98.3	0.4		0	40	60		2.8	97.2	0		34.9	0	65.1		
Total %	0.7	49.1	0.2	50	0	0.2	0.3	0.5	1.3	44.2	0	45.4	1.4	0	2.7	4.2	
Passenger Vehicles	7	355	2	364	0	1	3	4	10	331	0	341	8	0	26	34	743
% Passenger Vehicles	100	69.9	100	70.4	0	50	100	80	76.9	72.4	0	72.6	53.3	0	92.9	79.1	71.8
Large 2 Axle Vehicles	0	11	0	11	0	0	0	0	0	7	0	7	0	0	0	0	18
% Large 2 Axle Vehicles	0	2.2	0	2.1	0	0	0	0	0	1.5	0	1.5	0	0	0	0	1.7
3 Axle Vehicles	0	2	0	2	0	1	0	1	0	2	0	2	0	0	0	0	5
% 3 Axle Vehicles	0	0.4	0	0.4	0	50	0	20	0	0.4	0	0.4	0	0	0	0	0.5
4+ Axle Trucks	0	140	0	140	0	0	0	0	3	117	0	120	7	0	2	9	269
% 4+ Axle Trucks	0	27.6	0	27.1	0	0	0	0	23.1	25.6	0	25.5	46.7	0	7.1	20.9	26

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	2	63	0	65	0	1	2	3	2	60	0	62	1	0	5	6	136
07:15 AM	3	60	0	63	0	0	0	0	3	63	0	66	3	0	4	7	136
07:30 AM	0	52	0	52	0	1	0	1	2	50	0	52	1	0	3	4	109
07:45 AM	0	69	1	70	0	0	0	0	1	67	0	68	1	0	6	7	145
Total Volume	5	244	1	250	0	2	2	4	8	240	0	248	6	0	18	24	526
% App. Total	2	97.6	0.4		0	50	50		3.2	96.8	0		25	0	75		
PHF	.417	.884	.250	.893	.000	.500	.250	.333	.667	.896	.000	.912	.500	.000	.750	.857	.907



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

	07:45 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	69	1	70	0	1	2	3	2	60	0	62	1	0	5	6
+15 mins.	0	56	0	56	0	0	0	0	3	63	0	66	3	0	4	7
+30 mins.	1	72	0	73	0	1	0	1	2	50	0	52	1	0	3	4
+45 mins.	0	73	0	73	0	0	0	0	1	67	0	68	1	0	6	7
Total Volume	1	270	1	272	0	2	2	4	8	240	0	248	6	0	18	24
% App. Total	0.4	99.3	0.4		0	50	50		3.2	96.8	0		25	0	75	
PHF	.250	.925	.250	.932	.000	.500	.250	.333	.667	.896	.000	.912	.500	.000	.750	.857

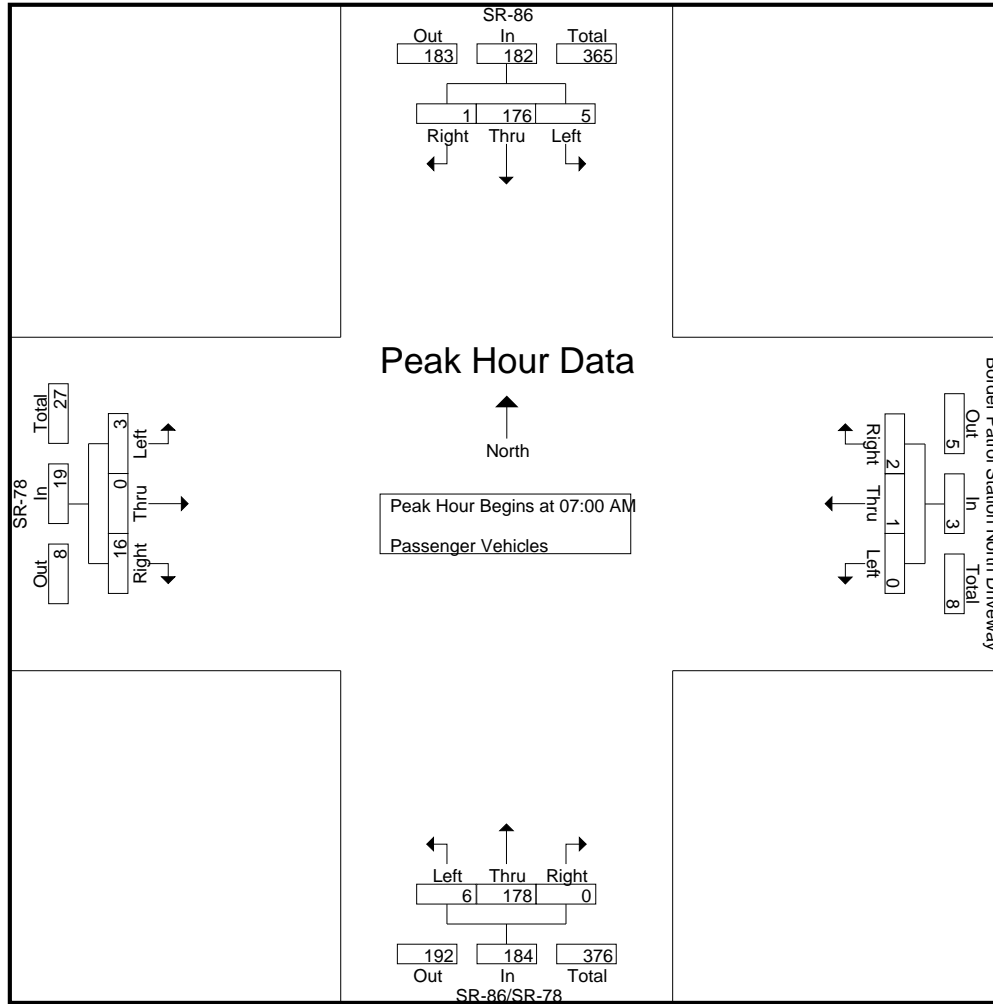
County of Imperial
 N/S: SR-86/SR-78
 E/W: SR- 78/Border Patrol Station N DW
 Weather: Clear

File Name : 02_CIM_78_86 AM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	2	44	0	46	0	0	2	2	2	46	0	48	0	0	4	4	100
07:15 AM	3	46	0	49	0	0	0	0	2	48	0	50	1	0	4	5	104
07:30 AM	0	38	0	38	0	1	0	1	2	35	0	37	1	0	3	4	80
07:45 AM	0	48	1	49	0	0	0	0	0	49	0	49	1	0	5	6	104
Total	5	176	1	182	0	1	2	3	6	178	0	184	3	0	16	19	388
08:00 AM	0	43	0	43	0	0	1	1	0	41	0	41	1	0	3	4	89
08:15 AM	1	42	0	43	0	0	0	0	3	29	0	32	1	0	1	2	77
08:30 AM	0	50	0	50	0	0	0	0	0	28	0	28	3	0	1	4	82
08:45 AM	1	44	1	46	0	0	0	0	1	55	0	56	0	0	5	5	107
Total	2	179	1	182	0	0	1	1	4	153	0	157	5	0	10	15	355
Grand Total	7	355	2	364	0	1	3	4	10	331	0	341	8	0	26	34	743
Apprch %	1.9	97.5	0.5		0	25	75		2.9	97.1	0		23.5	0	76.5		
Total %	0.9	47.8	0.3	49	0	0.1	0.4	0.5	1.3	44.5	0	45.9	1.1	0	3.5	4.6	

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	2	44	0	46	0	0	2	2	2	46	0	48	0	0	4	4	100
07:15 AM	3	46	0	49	0	0	0	0	2	48	0	50	1	0	4	5	104
07:30 AM	0	38	0	38	0	1	0	1	2	35	0	37	1	0	3	4	80
07:45 AM	0	48	1	49	0	0	0	0	0	49	0	49	1	0	5	6	104
Total Volume	5	176	1	182	0	1	2	3	6	178	0	184	3	0	16	19	388
% App. Total	2.7	96.7	0.5		0	33.3	66.7		3.3	96.7	0		15.8	0	84.2		
PHF	.417	.917	.250	.929	.000	.250	.250	.375	.750	.908	.000	.920	.750	.000	.800	.792	.933



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	2	44	0	46	0	0	2	2	2	46	0	48	0	0	4	4
+15 mins.	3	46	0	49	0	0	0	0	2	48	0	50	1	0	4	5
+30 mins.	0	38	0	38	0	1	0	1	2	35	0	37	1	0	3	4
+45 mins.	0	48	1	49	0	0	0	0	0	49	0	49	1	0	5	6
Total Volume	5	176	1	182	0	1	2	3	6	178	0	184	3	0	16	19
% App. Total	2.7	96.7	0.5		0	33.3	66.7		3.3	96.7	0		15.8	0	84.2	
PHF	.417	.917	.250	.929	.000	.250	.250	.375	.750	.908	.000	.920	.750	.000	.800	.792

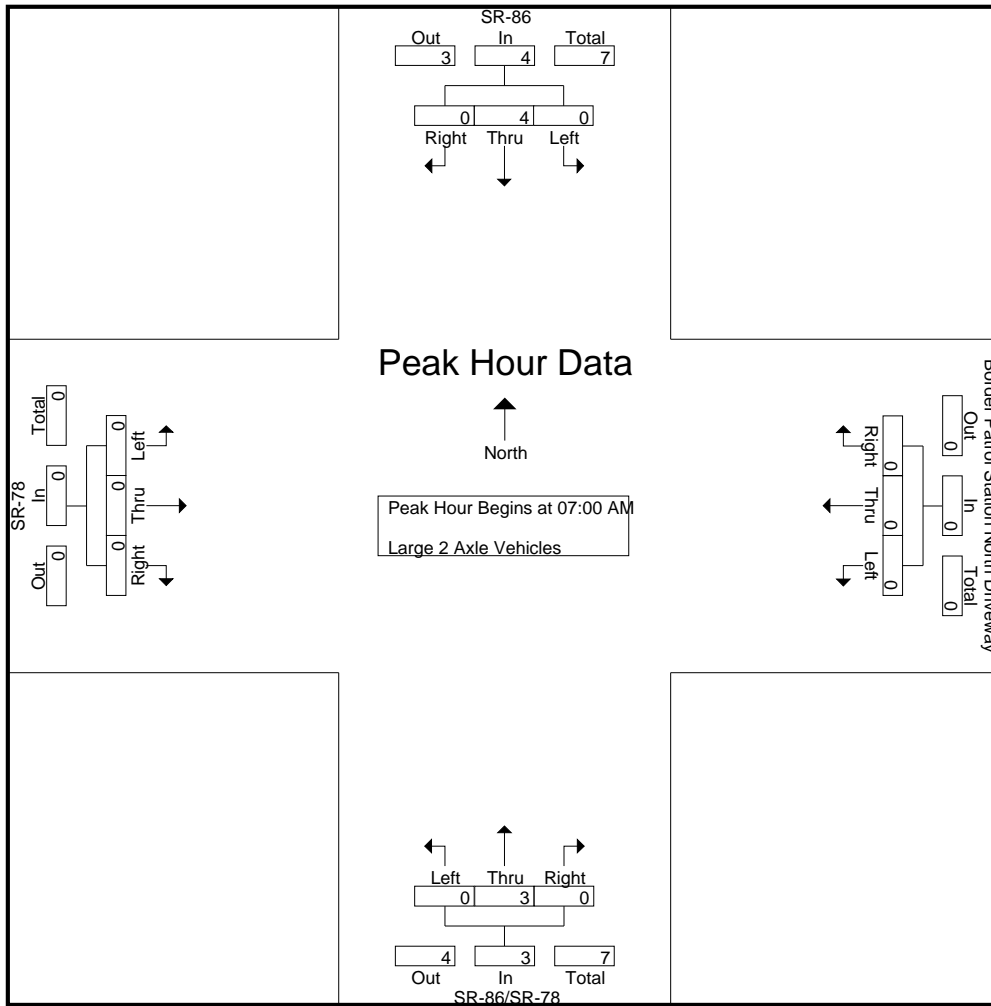
County of Imperial
 N/S: SR-86/SR-78
 E/W: SR- 78/Border Patrol Station N DW
 Weather: Clear

File Name : 02_CIM_78_86 AM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

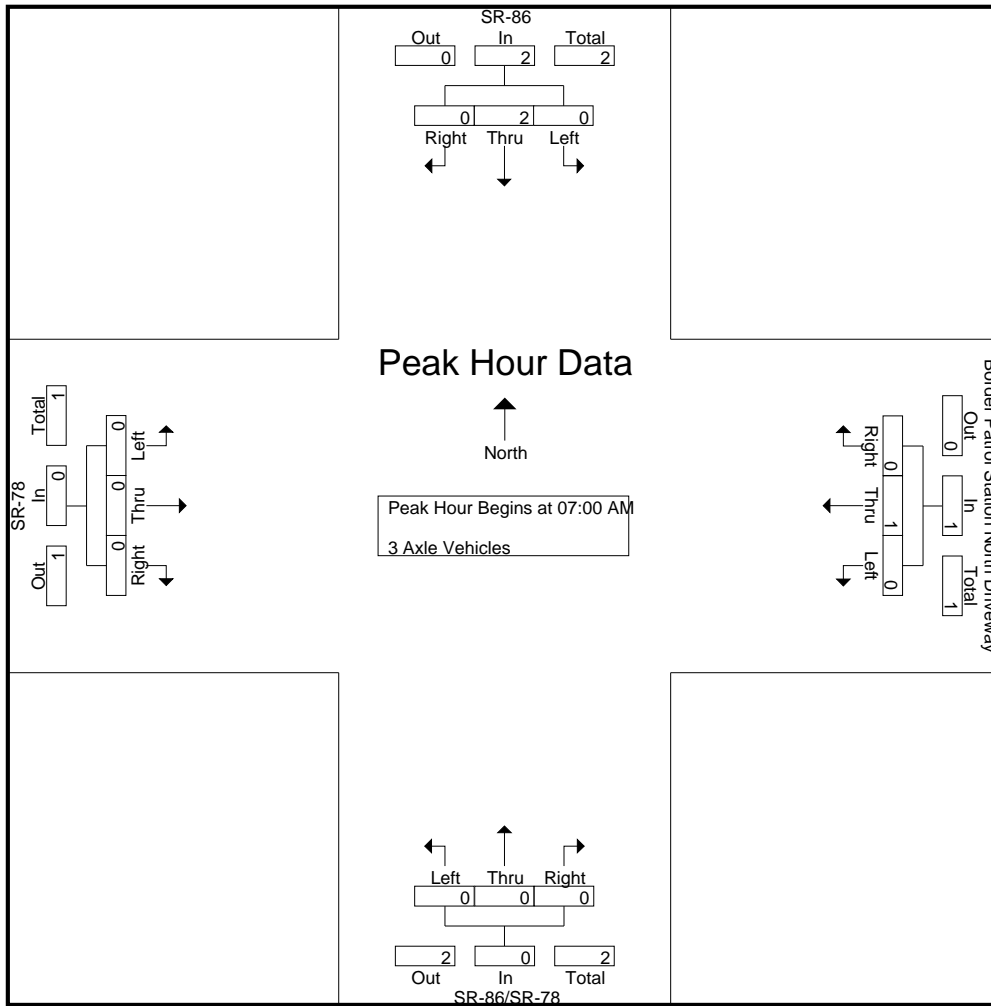
Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
07:15 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:30 AM	0	2	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	4	0	4	0	0	0	0	0	0	3	0	3	0	0	0	0	7
08:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	5	0	5	0	0	0	0	0	0	3	0	3	0	0	0	0	8
08:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	7	0	7	0	0	0	0	0	0	4	0	4	0	0	0	0	11
Grand Total	0	11	0	11	0	0	0	0	0	0	7	0	7	0	0	0	0	18
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0			
Total %	0	61.1	0	61.1	0	0	0	0	0	38.9	0	38.9	0	0	0	0	0	

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:00 AM																		
07:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
07:15 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:30 AM	0	2	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	4	0	4	0	0	0	0	0	0	3	0	3	0	0	0	0	7
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0			
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.583



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0
% App. Total	0	100	0	0	0	100	0	0	0	0	0	0	0	0	0	0
PHF	.000	.500	.000	.500	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000

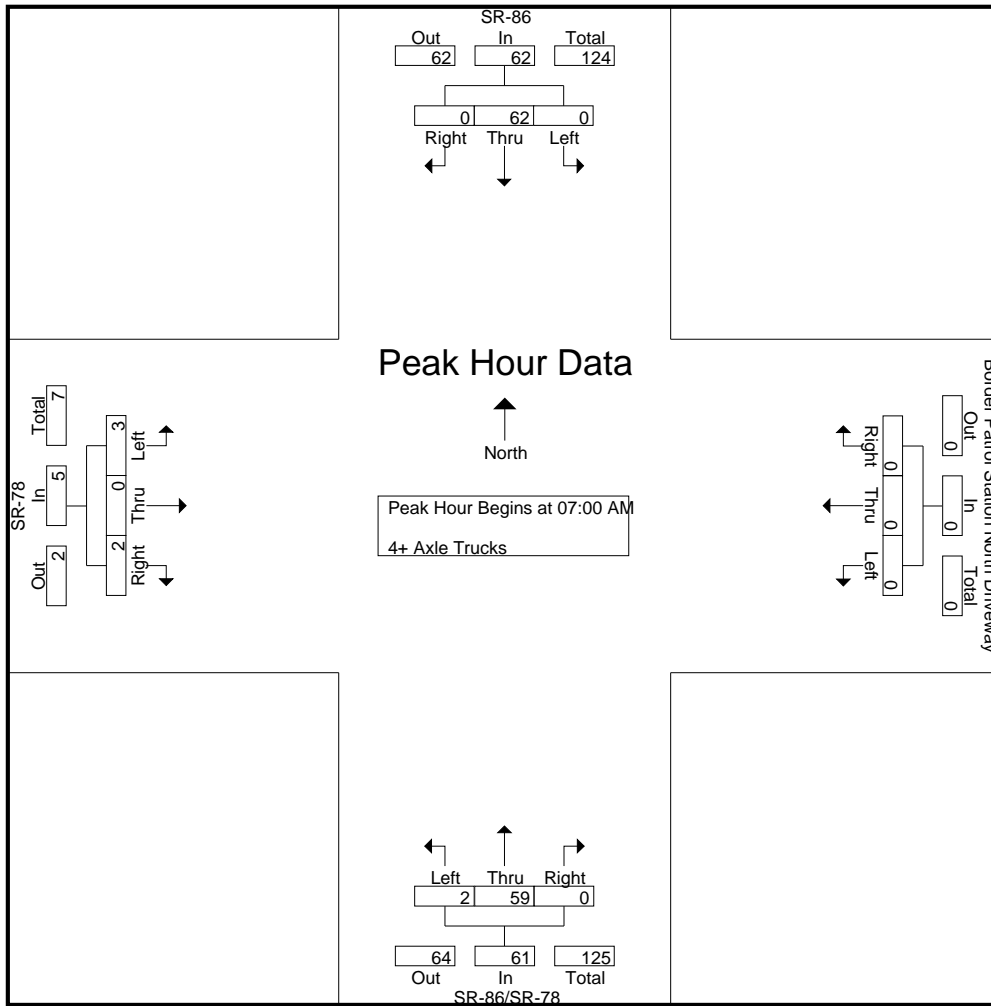
County of Imperial
 N/S: SR-86/SR-78
 E/W: SR- 78/Border Patrol Station N DW
 Weather: Clear

File Name : 02_CIM_78_86 AM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	18	0	18	0	0	0	0	0	12	0	12	1	0	1	2	32
07:15 AM	0	12	0	12	0	0	0	0	0	15	0	16	2	0	0	2	30
07:30 AM	0	12	0	12	0	0	0	0	0	14	0	14	0	0	0	0	26
07:45 AM	0	20	0	20	0	0	0	0	0	18	0	19	0	0	1	1	40
Total	0	62	0	62	0	0	0	0	0	59	0	61	3	0	2	5	128
08:00 AM	0	12	0	12	0	0	0	0	0	13	0	13	2	0	0	2	27
08:15 AM	0	25	0	25	0	0	0	0	0	18	0	18	0	0	0	0	43
08:30 AM	0	22	0	22	0	0	0	0	0	14	0	14	1	0	0	1	37
08:45 AM	0	19	0	19	0	0	0	0	0	13	0	14	1	0	0	1	34
Total	0	78	0	78	0	0	0	0	0	58	0	59	4	0	0	4	141
Grand Total	0	140	0	140	0	0	0	0	0	117	0	120	7	0	2	9	269
Apprch %	0	100	0		0	0	0			2.5	97.5	0	77.8	0	22.2		
Total %	0	52	0	52	0	0	0	0	0	1.1	43.5	0	2.6	0	0.7	3.3	

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	18	0	18	0	0	0	0	0	12	0	12	1	0	1	2	32
07:15 AM	0	12	0	12	0	0	0	0	0	15	0	16	2	0	0	2	30
07:30 AM	0	12	0	12	0	0	0	0	0	14	0	14	0	0	0	0	26
07:45 AM	0	20	0	20	0	0	0	0	0	18	0	19	0	0	1	1	40
Total Volume	0	62	0	62	0	0	0	0	0	59	0	61	3	0	2	5	128
% App. Total	0	100	0		0	0	0			3.3	96.7	0	60	0	40		
PHF	.000	.775	.000	.775	.000	.000	.000	.000	.000	.500	.819	.000	.803	.375	.000	.500	.800



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	18	0	18	0	0	0	0	0	12	0	12	1	0	1	2
+15 mins.	0	12	0	12	0	0	0	0	1	15	0	16	2	0	0	2
+30 mins.	0	12	0	12	0	0	0	0	0	14	0	14	0	0	0	0
+45 mins.	0	20	0	20	0	0	0	0	1	18	0	19	0	0	1	1
Total Volume	0	62	0	62	0	0	0	0	2	59	0	61	3	0	2	5
% App. Total	0	100	0		0	0	0		3.3	96.7	0		60	0	40	
PHF	.000	.775	.000	.775	.000	.000	.000	.000	.500	.819	.000	.803	.375	.000	.500	.625

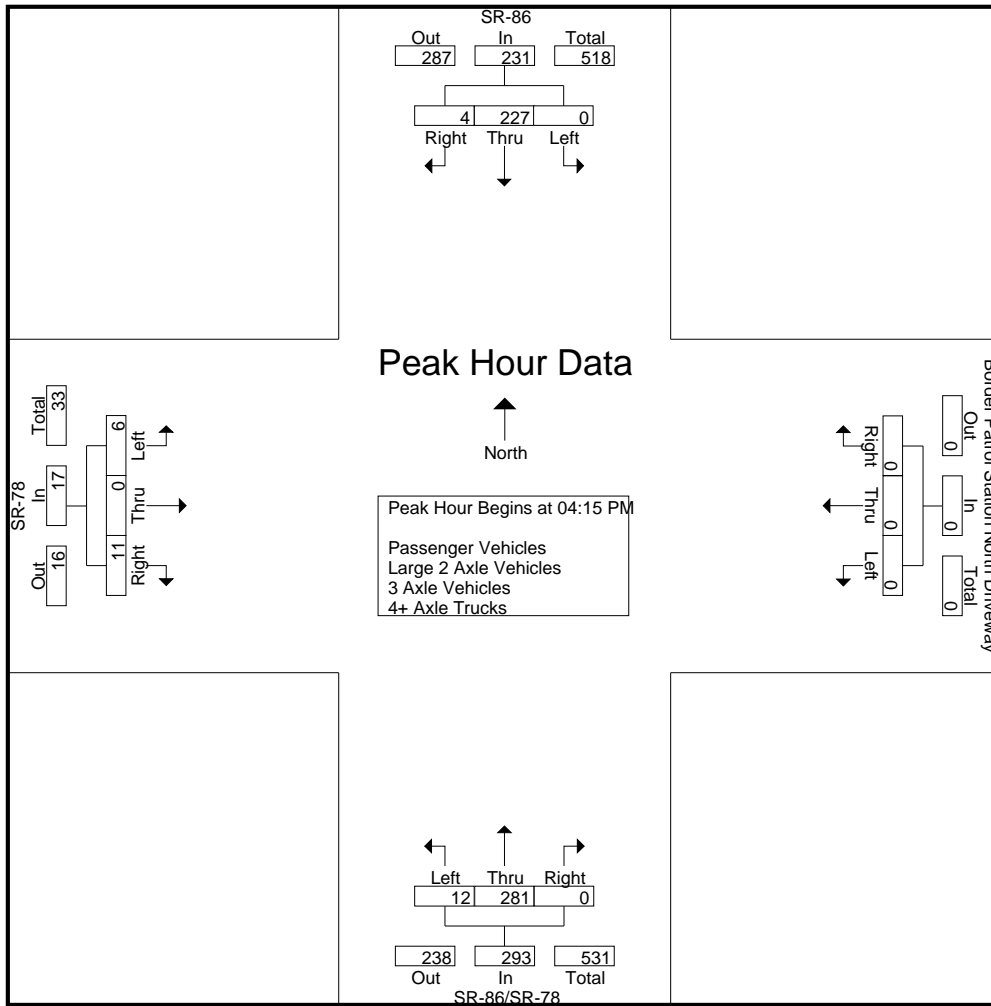
County of Imperial
 N/S: SR-86/SR-78
 E/W: SR- 78/Border Patrol Station N DW
 Weather: Clear

File Name : 02_CIM_78_86 PM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	2	66	1	69	0	0	0	0	1	55	0	56	3	0	2	5	130
04:15 PM	0	61	2	63	0	0	0	0	3	78	0	81	1	0	3	4	148
04:30 PM	0	53	0	53	0	0	0	0	0	67	0	67	3	0	3	6	126
04:45 PM	0	51	0	51	0	0	0	0	6	65	0	71	0	0	3	3	125
Total	2	231	3	236	0	0	0	0	10	265	0	275	7	0	11	18	529
05:00 PM	0	62	2	64	0	0	0	0	3	71	0	74	2	0	2	4	142
05:15 PM	0	49	1	50	0	0	0	0	1	63	0	64	0	0	2	2	116
05:30 PM	0	50	0	50	0	0	0	0	2	70	0	72	0	0	4	4	126
05:45 PM	2	54	0	56	0	0	0	0	2	52	0	54	1	0	0	1	111
Total	2	215	3	220	0	0	0	0	8	256	0	264	3	0	8	11	495
Grand Total	4	446	6	456	0	0	0	0	18	521	0	539	10	0	19	29	1024
Apprch %	0.9	97.8	1.3		0	0	0		3.3	96.7	0		34.5	0	65.5		
Total %	0.4	43.6	0.6	44.5	0	0	0	0	1.8	50.9	0	52.6	1	0	1.9	2.8	
Passenger Vehicles	4	317	4	325	0	0	0	0	15	337	0	352	7	0	17	24	701
% Passenger Vehicles	100	71.1	66.7	71.3	0	0	0	0	83.3	64.7	0	65.3	70	0	89.5	82.8	68.5
Large 2 Axle Vehicles	0	12	0	12	0	0	0	0	2	6	0	8	0	0	0	0	20
% Large 2 Axle Vehicles	0	2.7	0	2.6	0	0	0	0	11.1	1.2	0	1.5	0	0	0	0	2
3 Axle Vehicles	0	4	0	4	0	0	0	0	0	4	0	4	1	0	0	1	9
% 3 Axle Vehicles	0	0.9	0	0.9	0	0	0	0	0	0.8	0	0.7	10	0	0	3.4	0.9
4+ Axle Trucks	0	113	2	115	0	0	0	0	1	174	0	175	2	0	2	4	294
% 4+ Axle Trucks	0	25.3	33.3	25.2	0	0	0	0	5.6	33.4	0	32.5	20	0	10.5	13.8	28.7

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	61	2	63	0	0	0	0	3	78	0	81	1	0	3	4	148
04:30 PM	0	53	0	53	0	0	0	0	0	67	0	67	3	0	3	6	126
04:45 PM	0	51	0	51	0	0	0	0	6	65	0	71	0	0	3	3	125
05:00 PM	0	62	2	64	0	0	0	0	3	71	0	74	2	0	2	4	142
Total Volume	0	227	4	231	0	0	0	0	12	281	0	293	6	0	11	17	541
% App. Total	0	98.3	1.7		0	0	0		4.1	95.9	0		35.3	0	64.7		
PHF	.000	.915	.500	.902	.000	.000	.000	.000	.500	.901	.000	.904	.500	.000	.917	.708	.914



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				04:00 PM			
+0 mins.	2	66	1	69	0	0	0	0	3	78	0	81	3	0	2	5
+15 mins.	0	61	2	63	0	0	0	0	0	67	0	67	1	0	3	4
+30 mins.	0	53	0	53	0	0	0	0	6	65	0	71	3	0	3	6
+45 mins.	0	51	0	51	0	0	0	0	3	71	0	74	0	0	3	3
Total Volume	2	231	3	236	0	0	0	0	12	281	0	293	7	0	11	18
% App. Total	0.8	97.9	1.3		0	0	0	0	4.1	95.9	0		38.9	0	61.1	
PHF	.250	.875	.375	.855	.000	.000	.000	.000	.500	.901	.000	.904	.583	.000	.917	.750

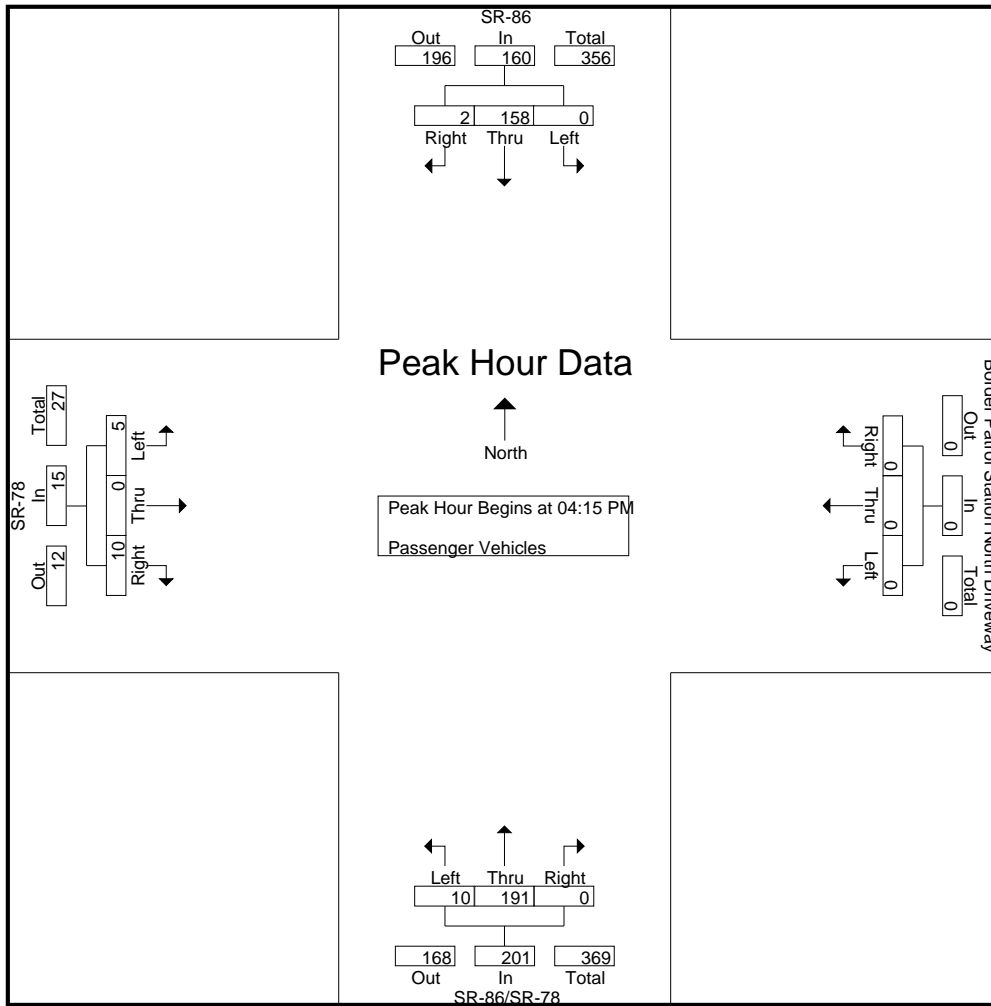
County of Imperial
 N/S: SR-86/SR-78
 E/W: SR- 78/Border Patrol Station N DW
 Weather: Clear

File Name : 02_CIM_78_86 PM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	2	53	1	56	0	0	0	0	1	36	0	37	1	0	2	3	96
04:15 PM	0	40	1	41	0	0	0	0	3	51	0	54	1	0	3	4	99
04:30 PM	0	37	0	37	0	0	0	0	0	43	0	43	2	0	3	5	85
04:45 PM	0	40	0	40	0	0	0	0	4	50	0	54	0	0	3	3	97
Total	2	170	2	174	0	0	0	0	8	180	0	188	4	0	11	15	377
05:00 PM	0	41	1	42	0	0	0	0	3	47	0	50	2	0	1	3	95
05:15 PM	0	30	1	31	0	0	0	0	1	39	0	40	0	0	2	2	73
05:30 PM	0	38	0	38	0	0	0	0	1	43	0	44	0	0	3	3	85
05:45 PM	2	38	0	40	0	0	0	0	2	28	0	30	1	0	0	1	71
Total	2	147	2	151	0	0	0	0	7	157	0	164	3	0	6	9	324
Grand Total	4	317	4	325	0	0	0	0	15	337	0	352	7	0	17	24	701
Apprch %	1.2	97.5	1.2		0	0	0		4.3	95.7	0		29.2	0	70.8		
Total %	0.6	45.2	0.6	46.4	0	0	0	0	2.1	48.1	0	50.2	1	0	2.4	3.4	

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	40	1	41	0	0	0	0	3	51	0	54	1	0	3	4	99
04:30 PM	0	37	0	37	0	0	0	0	0	43	0	43	2	0	3	5	85
04:45 PM	0	40	0	40	0	0	0	0	4	50	0	54	0	0	3	3	97
05:00 PM	0	41	1	42	0	0	0	0	3	47	0	50	2	0	1	3	95
Total Volume	0	158	2	160	0	0	0	0	10	191	0	201	5	0	10	15	376
% App. Total	0	98.8	1.2		0	0	0		5	95	0		33.3	0	66.7		
PHF	.000	.963	.500	.952	.000	.000	.000	.000	.625	.936	.000	.931	.625	.000	.833	.750	.949



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	40	1	41	0	0	0	0	3	51	0	54	1	0	3	4
+15 mins.	0	37	0	37	0	0	0	0	0	43	0	43	2	0	3	5
+30 mins.	0	40	0	40	0	0	0	0	4	50	0	54	0	0	3	3
+45 mins.	0	41	1	42	0	0	0	0	3	47	0	50	2	0	1	3
Total Volume	0	158	2	160	0	0	0	0	10	191	0	201	5	0	10	15
% App. Total	0	98.8	1.2		0	0	0	0	5	95	0		33.3	0	66.7	
PHF	.000	.963	.500	.952	.000	.000	.000	.000	.625	.936	.000	.931	.625	.000	.833	.750

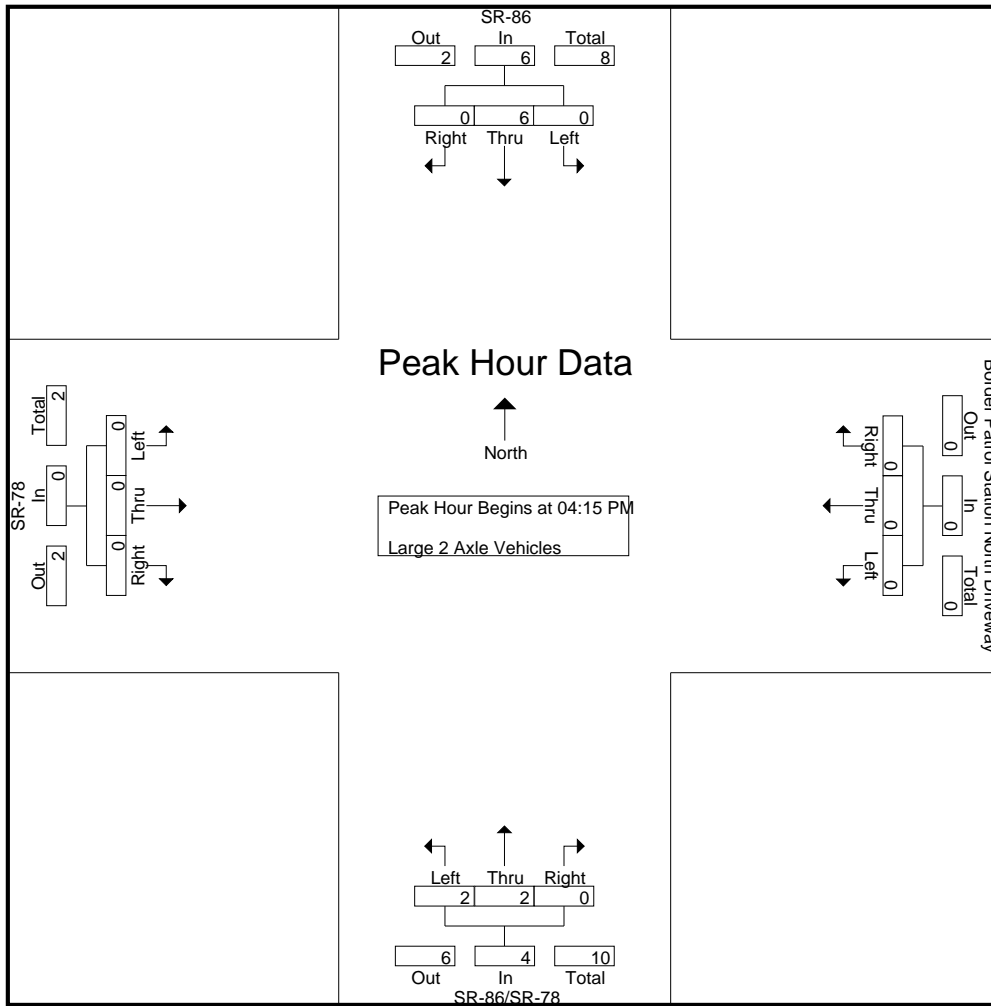
County of Imperial
 N/S: SR-86/SR-78
 E/W: SR- 78/Border Patrol Station N DW
 Weather: Clear

File Name : 02_CIM_78_86 PM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	3	0	3	0	0	0	0	0	2	1	0	3	0	0	0	0	6
Total	0	5	0	5	0	0	0	0	0	2	3	0	5	0	0	0	0	10
05:00 PM	0	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	2
05:15 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	4	0	4	0	0	0	0	0	0	2	0	2	0	0	0	0	6
Total	0	7	0	7	0	0	0	0	0	0	3	0	3	0	0	0	0	10
Grand Total	0	12	0	12	0	0	0	0	0	2	6	0	8	0	0	0	0	20
Apprch %	0	100	0		0	0	0			25	75	0		0	0	0		
Total %	0	60	0	60	0	0	0	0	0	10	30	0	40	0	0	0	0	

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:15 PM																		
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	3	0	3	0	0	0	0	0	2	1	0	3	0	0	0	0	6
05:00 PM	0	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	2
Total Volume	0	6	0	6	0	0	0	0	0	2	2	0	4	0	0	0	0	10
% App. Total	0	100	0		0	0	0			50	50	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.500	.000	.333	.000	.000	.000	.000	.417



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	3	0	3	0	0	0	0	2	1	0	3	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	6	0	6	0	0	0	0	2	2	0	4	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	50	50	0	0	0	0	0	0
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.250	.500	.000	.333	.000	.000	.000	.000

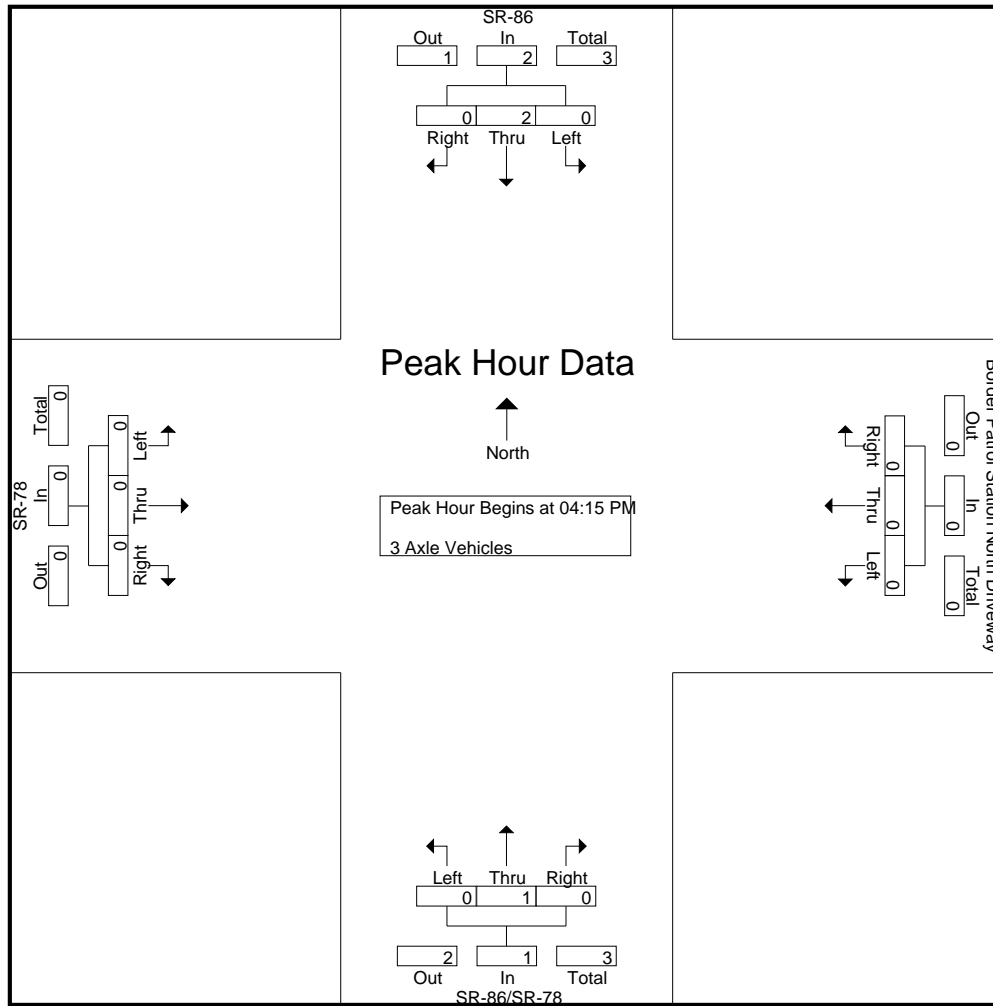
County of Imperial
 N/S: SR-86/SR-78
 E/W: SR- 78/Border Patrol Station N DW
 Weather: Clear

File Name : 02_CIM_78_86 PM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	2
05:00 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0	7
Grand Total	0	4	0	4	0	0	0	0	0	4	0	4	1	0	0	1	9
Apprch %	0	100	0		0	0	0		0	100	0		100	0	0		
Total %	0	44.4	0	44.4	0	0	0	0	0	44.4	0	44.4	11.1	0	0	11.1	

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.375



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

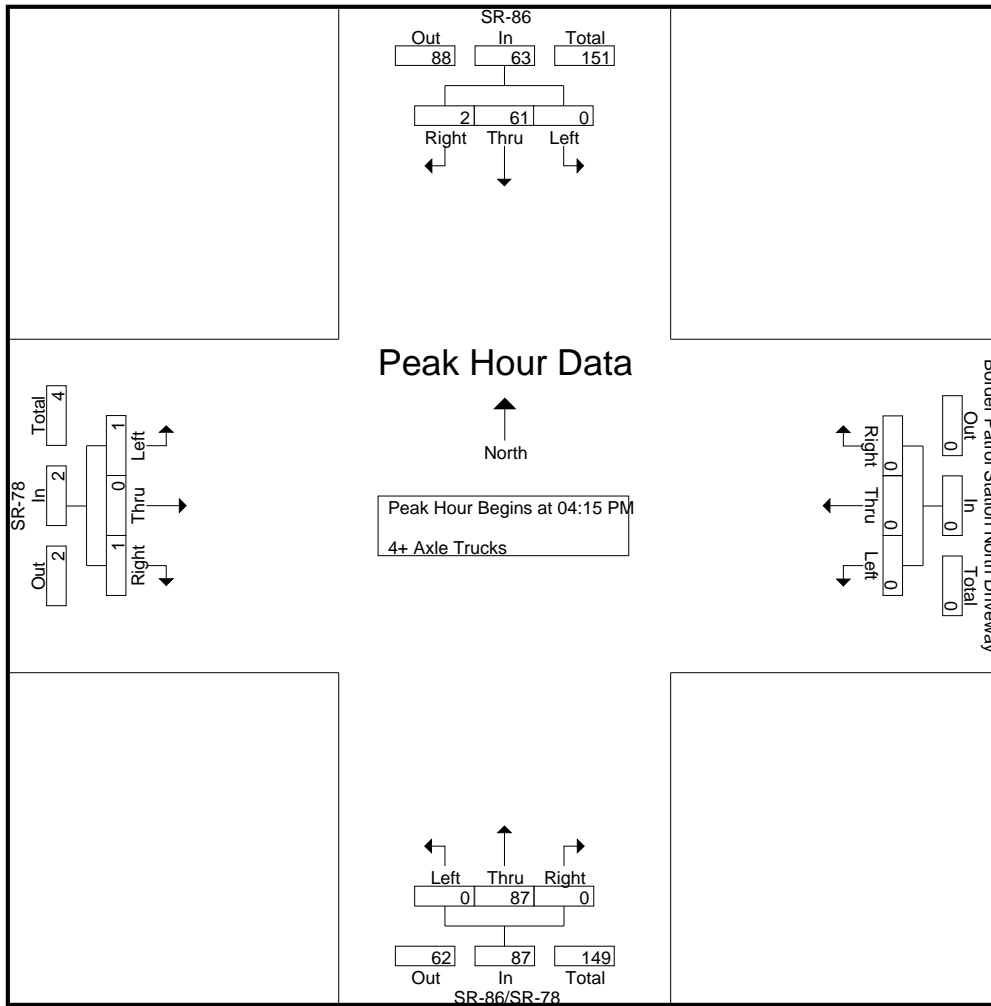
County of Imperial
 N/S: SR-86/SR-78
 E/W: SR- 78/Border Patrol Station N DW
 Weather: Clear

File Name : 02_CIM_78_86 PM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	13	0	13	0	0	0	0	0	17	0	17	1	0	0	1	31
04:15 PM	0	21	1	22	0	0	0	0	0	26	0	26	0	0	0	0	48
04:30 PM	0	14	0	14	0	0	0	0	0	24	0	24	1	0	0	1	39
04:45 PM	0	8	0	8	0	0	0	0	0	14	0	14	0	0	0	0	22
Total	0	56	1	57	0	0	0	0	0	81	0	81	2	0	0	2	140
05:00 PM	0	18	1	19	0	0	0	0	0	23	0	23	0	0	1	1	43
05:15 PM	0	17	0	17	0	0	0	0	0	24	0	24	0	0	0	0	41
05:30 PM	0	10	0	10	0	0	0	0	1	25	0	26	0	0	1	1	37
05:45 PM	0	12	0	12	0	0	0	0	0	21	0	21	0	0	0	0	33
Total	0	57	1	58	0	0	0	0	1	93	0	94	0	0	2	2	154
Grand Total	0	113	2	115	0	0	0	0	1	174	0	175	2	0	2	4	294
Apprch %	0	98.3	1.7		0	0	0		0.6	99.4	0		50	0	50		
Total %	0	38.4	0.7	39.1	0	0	0	0	0.3	59.2	0	59.5	0.7	0	0.7	1.4	

Start Time	SR-86 Southbound				Border Patrol Station North Driveway Westbound				SR-86/SR-78 Northbound				SR-78 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	21	1	22	0	0	0	0	0	26	0	26	0	0	0	0	48
04:30 PM	0	14	0	14	0	0	0	0	0	24	0	24	1	0	0	1	39
04:45 PM	0	8	0	8	0	0	0	0	0	14	0	14	0	0	0	0	22
05:00 PM	0	18	1	19	0	0	0	0	0	23	0	23	0	0	1	1	43
Total Volume	0	61	2	63	0	0	0	0	0	87	0	87	1	0	1	2	152
% App. Total	0	96.8	3.2		0	0	0		0	100	0		50	0	50		
PHF	.000	.726	.500	.716	.000	.000	.000	.000	.000	.837	.000	.837	.250	.000	.250	.500	.792



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	21	1	22	0	0	0	0	0	26	0	26	0	0	0	0
+15 mins.	0	14	0	14	0	0	0	0	0	24	0	24	1	0	0	1
+30 mins.	0	8	0	8	0	0	0	0	0	14	0	14	0	0	0	0
+45 mins.	0	18	1	19	0	0	0	0	0	23	0	23	0	0	1	1
Total Volume	0	61	2	63	0	0	0	0	0	87	0	87	1	0	1	2
% App. Total	0	96.8	3.2		0	0	0	0	0	100	0		50	0	50	
PHF	.000	.726	.500	.716	.000	.000	.000	.000	.000	.837	.000	.837	.250	.000	.250	.500

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW AM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

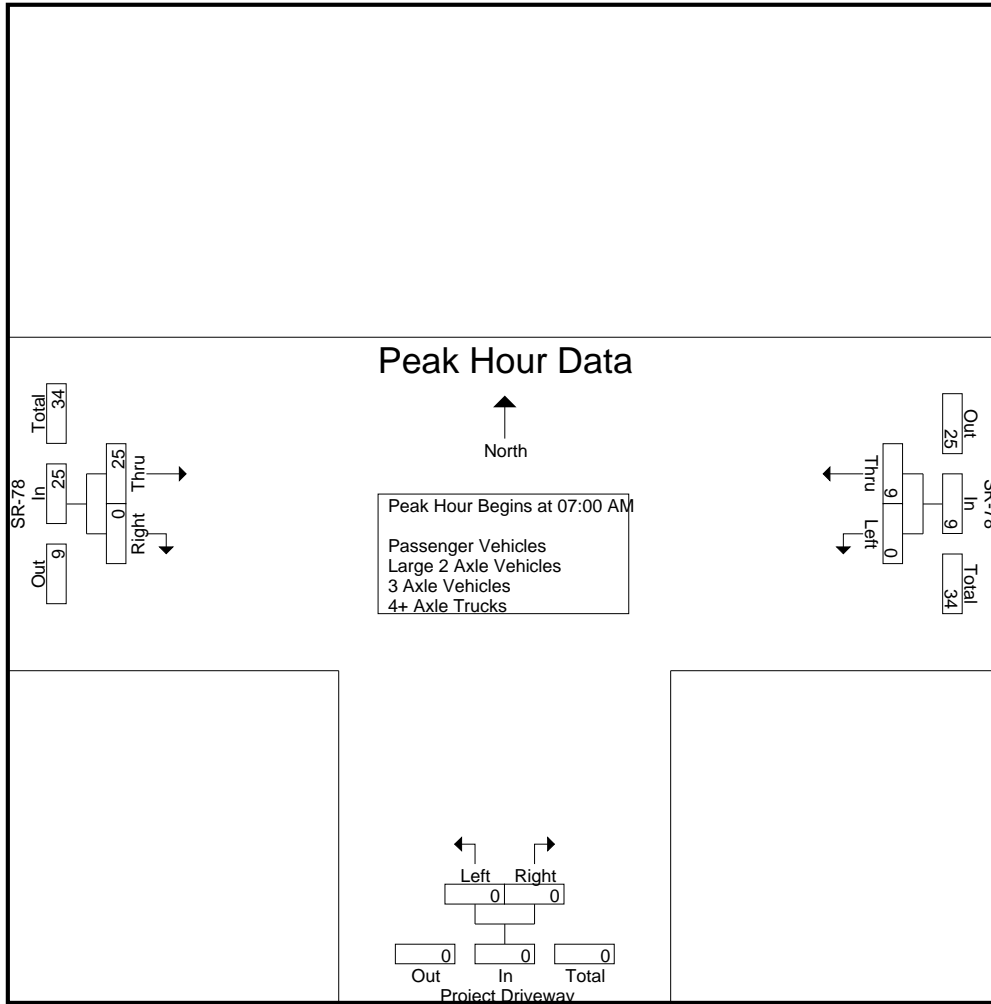
Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	2	2	0	0	0	7	0	7	9
07:15 AM	0	2	2	0	0	0	5	0	5	7
07:30 AM	0	3	3	0	0	0	7	0	7	10
07:45 AM	0	2	2	0	0	0	6	0	6	8
Total	0	9	9	0	0	0	25	0	25	34
08:00 AM	0	0	0	0	0	0	2	0	2	2
08:15 AM	0	2	2	0	0	0	4	0	4	6
08:30 AM	0	0	0	0	0	0	6	0	6	6
08:45 AM	0	2	2	0	0	0	6	0	6	8
Total	0	4	4	0	0	0	18	0	18	22
Grand Total	0	13	13	0	0	0	43	0	43	56
Apprch %	0	100		0	0		100	0		
Total %	0	23.2	23.2	0	0	0	76.8	0	76.8	
Passenger Vehicles	0	10	10	0	0	0	35	0	35	45
% Passenger Vehicles	0	76.9	76.9	0	0	0	81.4	0	81.4	80.4
Large 2 Axle Vehicles	0	1	1	0	0	0	0	0	0	1
% Large 2 Axle Vehicles	0	7.7	7.7	0	0	0	0	0	0	1.8
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	2	2	0	0	0	8	0	8	10
% 4+ Axle Trucks	0	15.4	15.4	0	0	0	18.6	0	18.6	17.9

Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	2	2	0	0	0	7	0	7	9
07:15 AM	0	2	2	0	0	0	5	0	5	7
07:30 AM	0	3	3	0	0	0	7	0	7	10
07:45 AM	0	2	2	0	0	0	6	0	6	8
Total Volume	0	9	9	0	0	0	25	0	25	34
% App. Total	0	100		0	0		100	0		
PHF	.000	.750	.750	.000	.000	.000	.893	.000	.893	.850

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

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW AM
 Site Code : 99917415
 Start Date : 6/27/2017
 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:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	2	2	0	0	0	7	0	7
+15 mins.	0	2	2	0	0	0	5	0	5
+30 mins.	0	3	3	0	0	0	7	0	7
+45 mins.	0	2	2	0	0	0	6	0	6
Total Volume	0	9	9	0	0	0	25	0	25
% App. Total	0	100		0	0		100	0	
PHF	.000	.750	.750	.000	.000	.000	.893	.000	.893

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW AM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

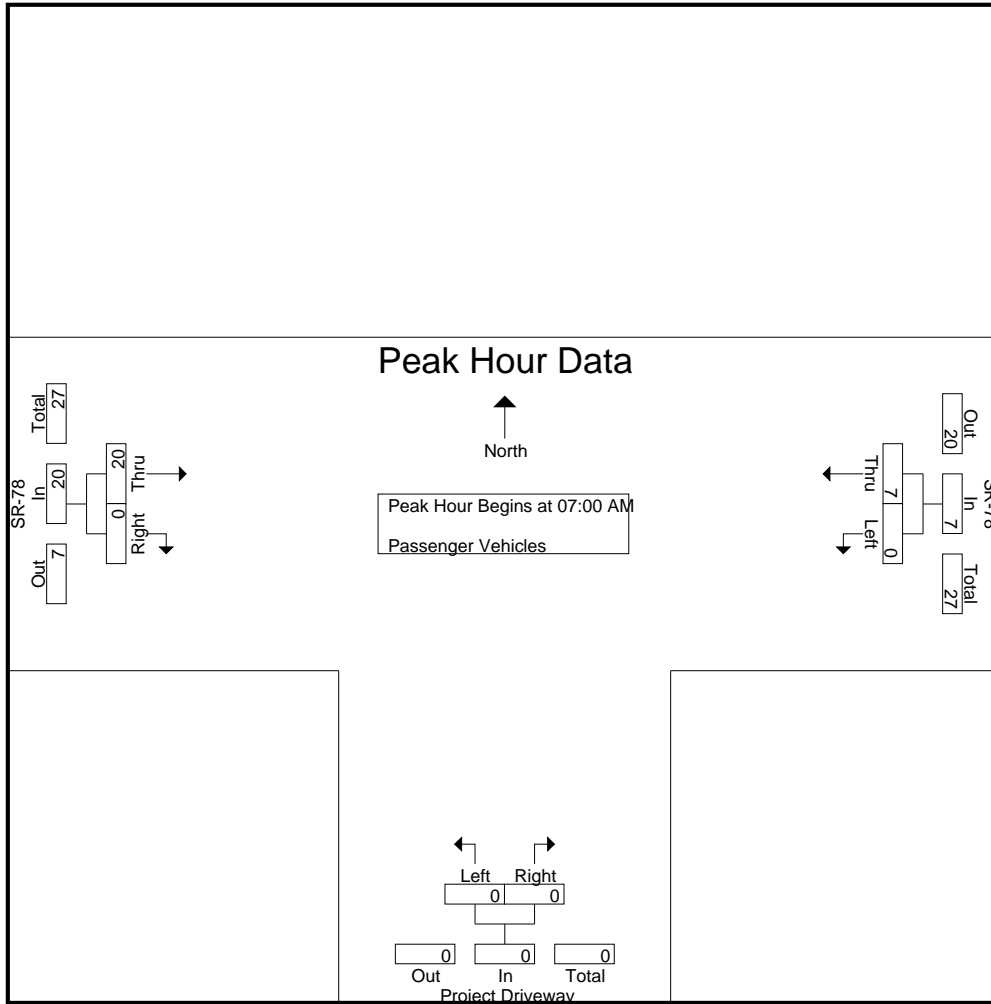
Groups Printed- Passenger Vehicles

Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	2	2	0	0	0	6	0	6	8
07:15 AM	0	1	1	0	0	0	4	0	4	5
07:30 AM	0	3	3	0	0	0	6	0	6	9
07:45 AM	0	1	1	0	0	0	4	0	4	5
Total	0	7	7	0	0	0	20	0	20	27
08:00 AM	0	0	0	0	0	0	2	0	2	2
08:15 AM	0	2	2	0	0	0	3	0	3	5
08:30 AM	0	0	0	0	0	0	5	0	5	5
08:45 AM	0	1	1	0	0	0	5	0	5	6
Total	0	3	3	0	0	0	15	0	15	18
Grand Total	0	10	10	0	0	0	35	0	35	45
Apprch %	0	100		0	0		100	0		
Total %	0	22.2	22.2	0	0	0	77.8	0	77.8	

Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	2	2	0	0	0	6	0	6	8
07:15 AM	0	1	1	0	0	0	4	0	4	5
07:30 AM	0	3	3	0	0	0	6	0	6	9
07:45 AM	0	1	1	0	0	0	4	0	4	5
Total Volume	0	7	7	0	0	0	20	0	20	27
% App. Total	0	100		0	0		100	0		
PHF	.000	.583	.583	.000	.000	.000	.833	.000	.833	.750

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW AM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	2	2	0	0	0	6	0	6
+15 mins.	0	1	1	0	0	0	4	0	4
+30 mins.	0	3	3	0	0	0	6	0	6
+45 mins.	0	1	1	0	0	0	4	0	4
Total Volume	0	7	7	0	0	0	20	0	20
% App. Total	0	100		0	0		100	0	
PHF	.000	.583	.583	.000	.000	.000	.833	.000	.833

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW AM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	1	1	0	0	0	0	0	0	1
Total	0	1	1	0	0	0	0	0	0	1
Grand Total	0	1	1	0	0	0	0	0	0	1
Apprch %	0	100		0	0		0	0		
Total %	0	100	100	0	0	0	0	0	0	

Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:00 AM

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW AM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	1	1	0	0	0	1	0	1	2
07:30 AM	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	1	1	0	0	0	2	0	2	3
Total	0	2	2	0	0	0	5	0	5	7
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	3	0	3	3
Grand Total	0	2	2	0	0	0	8	0	8	10
Apprch %	0	100		0	0		100	0		
Total %	0	20	20	0	0	0	80	0	80	

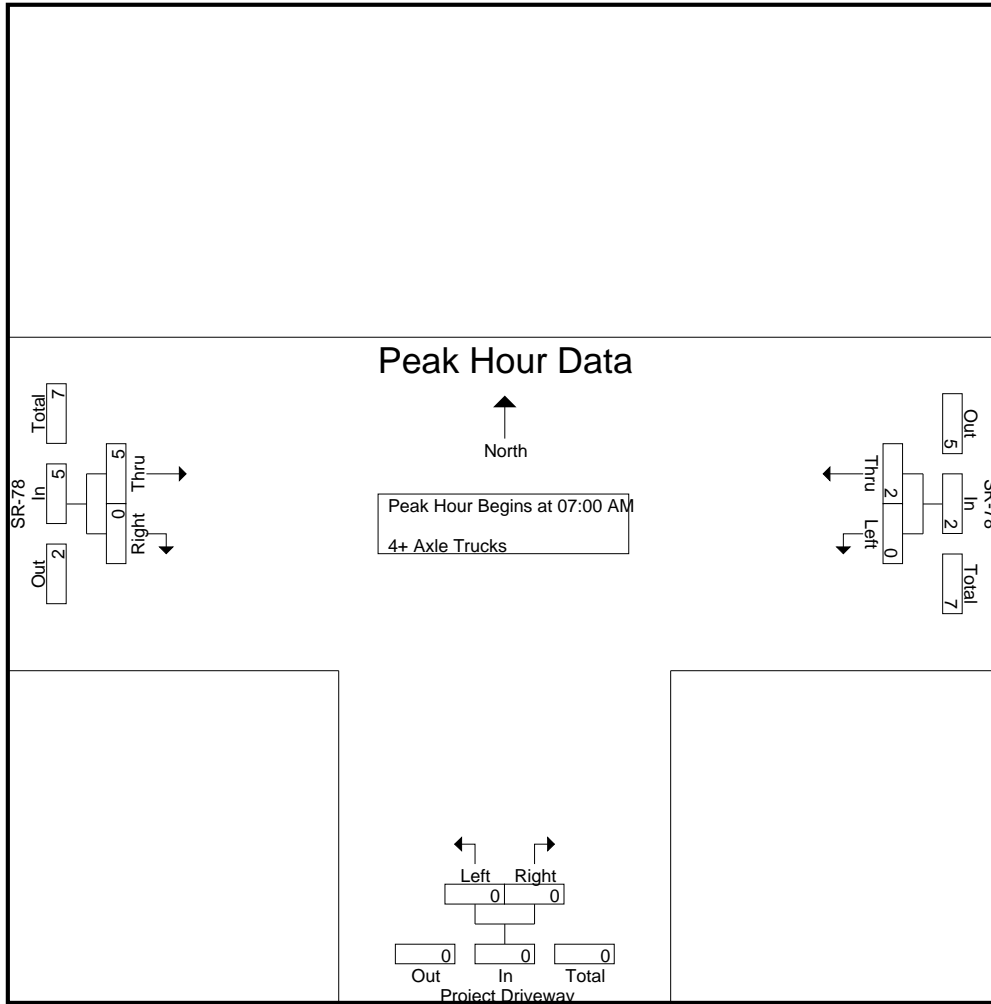
Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	1	1	0	0	0	1	0	1	2
07:30 AM	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	1	1	0	0	0	2	0	2	3
Total Volume	0	2	2	0	0	0	5	0	5	7
% App. Total	0	100		0	0		100	0		
PHF	.000	.500	.500	.000	.000	.000	.625	.000	.625	.583

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:00 AM

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW AM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	1	0	1
+15 mins.	0	1	1	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	1	0	1
+45 mins.	0	1	1	0	0	0	2	0	2
Total Volume	0	2	2	0	0	0	5	0	5
% App. Total	0	100		0	0		100	0	
PHF	.000	.500	.500	.000	.000	.000	.625	.000	.625

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW PM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

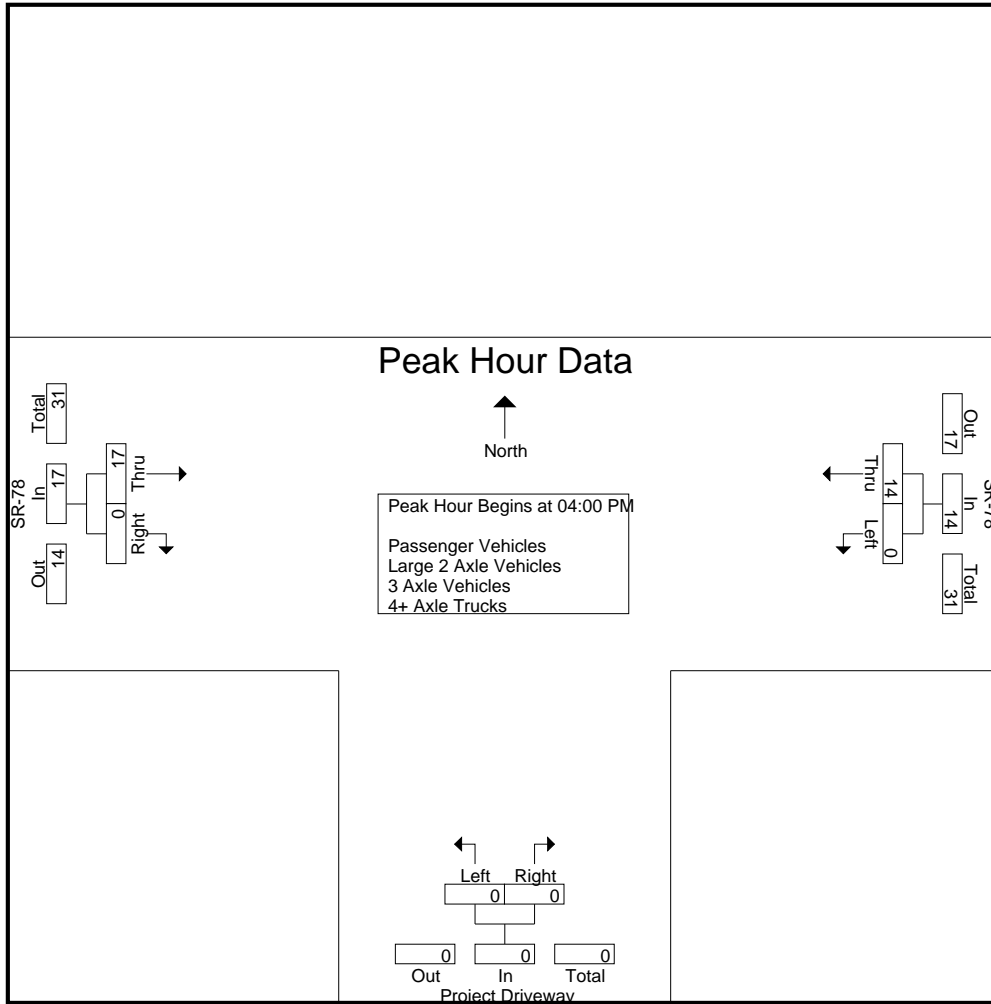
Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	4	4	0	0	0	4	0	4	8
04:15 PM	0	3	3	0	0	0	7	0	7	10
04:30 PM	0	2	2	0	0	0	3	0	3	5
04:45 PM	0	5	5	0	0	0	3	0	3	8
Total	0	14	14	0	0	0	17	0	17	31
05:00 PM	0	2	2	0	0	0	2	0	2	4
05:15 PM	0	5	5	0	0	0	3	0	3	8
05:30 PM	0	1	1	0	0	0	2	0	2	3
05:45 PM	0	2	2	0	0	0	4	0	4	6
Total	0	10	10	0	0	0	11	0	11	21
Grand Total	0	24	24	0	0	0	28	0	28	52
Apprch %	0	100		0	0		100	0		
Total %	0	46.2	46.2	0	0	0	53.8	0	53.8	
Passenger Vehicles	0	17	17	0	0	0	25	0	25	42
% Passenger Vehicles	0	70.8	70.8	0	0	0	89.3	0	89.3	80.8
Large 2 Axle Vehicles	0	3	3	0	0	0	0	0	0	3
% Large 2 Axle Vehicles	0	12.5	12.5	0	0	0	0	0	0	5.8
3 Axle Vehicles	0	0	0	0	0	0	1	0	1	1
% 3 Axle Vehicles	0	0	0	0	0	0	3.6	0	3.6	1.9
4+ Axle Trucks	0	4	4	0	0	0	2	0	2	6
% 4+ Axle Trucks	0	16.7	16.7	0	0	0	7.1	0	7.1	11.5

Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	4	4	0	0	0	4	0	4	8
04:15 PM	0	3	3	0	0	0	7	0	7	10
04:30 PM	0	2	2	0	0	0	3	0	3	5
04:45 PM	0	5	5	0	0	0	3	0	3	8
Total Volume	0	14	14	0	0	0	17	0	17	31
% App. Total	0	100		0	0		100	0		
PHF	.000	.700	.700	.000	.000	.000	.607	.000	.607	.775

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

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW PM
 Site Code : 99917415
 Start Date : 6/27/2017
 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		
+0 mins.	0	4	4	0	0	0	4	0	4
+15 mins.	0	3	3	0	0	0	7	0	7
+30 mins.	0	2	2	0	0	0	3	0	3
+45 mins.	0	5	5	0	0	0	3	0	3
Total Volume	0	14	14	0	0	0	17	0	17
% App. Total	0	100		0	0		100	0	
PHF	.000	.700	.700	.000	.000	.000	.607	.000	.607

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW PM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- Passenger Vehicles

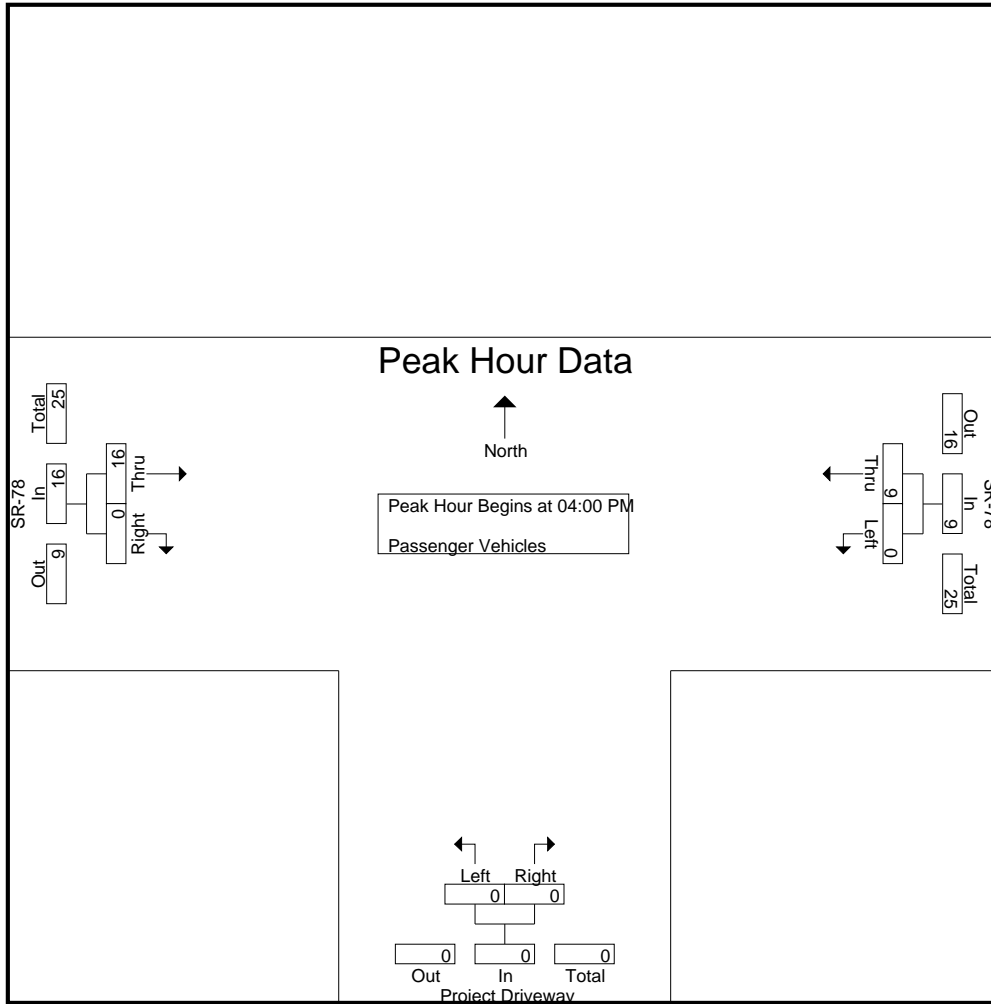
Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	2	2	0	0	0	4	0	4	6
04:15 PM	0	3	3	0	0	0	6	0	6	9
04:30 PM	0	1	1	0	0	0	3	0	3	4
04:45 PM	0	3	3	0	0	0	3	0	3	6
Total	0	9	9	0	0	0	16	0	16	25
05:00 PM	0	2	2	0	0	0	2	0	2	4
05:15 PM	0	4	4	0	0	0	2	0	2	6
05:30 PM	0	1	1	0	0	0	2	0	2	3
05:45 PM	0	1	1	0	0	0	3	0	3	4
Total	0	8	8	0	0	0	9	0	9	17
Grand Total	0	17	17	0	0	0	25	0	25	42
Apprch %	0	100		0	0		100	0		
Total %	0	40.5	40.5	0	0	0	59.5	0	59.5	

Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	2	2	0	0	0	4	0	4	6
04:15 PM	0	3	3	0	0	0	6	0	6	9
04:30 PM	0	1	1	0	0	0	3	0	3	4
04:45 PM	0	3	3	0	0	0	3	0	3	6
Total Volume	0	9	9	0	0	0	16	0	16	25
% App. Total	0	100		0	0		100	0		
PHF	.000	.750	.750	.000	.000	.000	.667	.000	.667	.694

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW PM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	2	2	0	0	0	4	0	4
+15 mins.	0	3	3	0	0	0	6	0	6
+30 mins.	0	1	1	0	0	0	3	0	3
+45 mins.	0	3	3	0	0	0	3	0	3
Total Volume	0	9	9	0	0	0	16	0	16
% App. Total	0	100		0	0		100	0	
PHF	.000	.750	.750	.000	.000	.000	.667	.000	.667

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW PM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	1	1	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	2	2	0	0	0	0	0	0	2
Total	0	3	3	0	0	0	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	3	3	0	0	0	0	0	0	3
Apprch %	0	100		0	0		0	0		
Total %	0	100	100	0	0	0	0	0	0	

Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	1	1	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	2	2	0	0	0	0	0	0	2
Total Volume	0	3	3	0	0	0	0	0	0	3
% App. Total	0	100		0	0		0	0		
PHF	.000	.375	.375	.000	.000	.000	.000	.000	.000	.375

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW PM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 1

Groups Printed- 4+ Axle Trucks

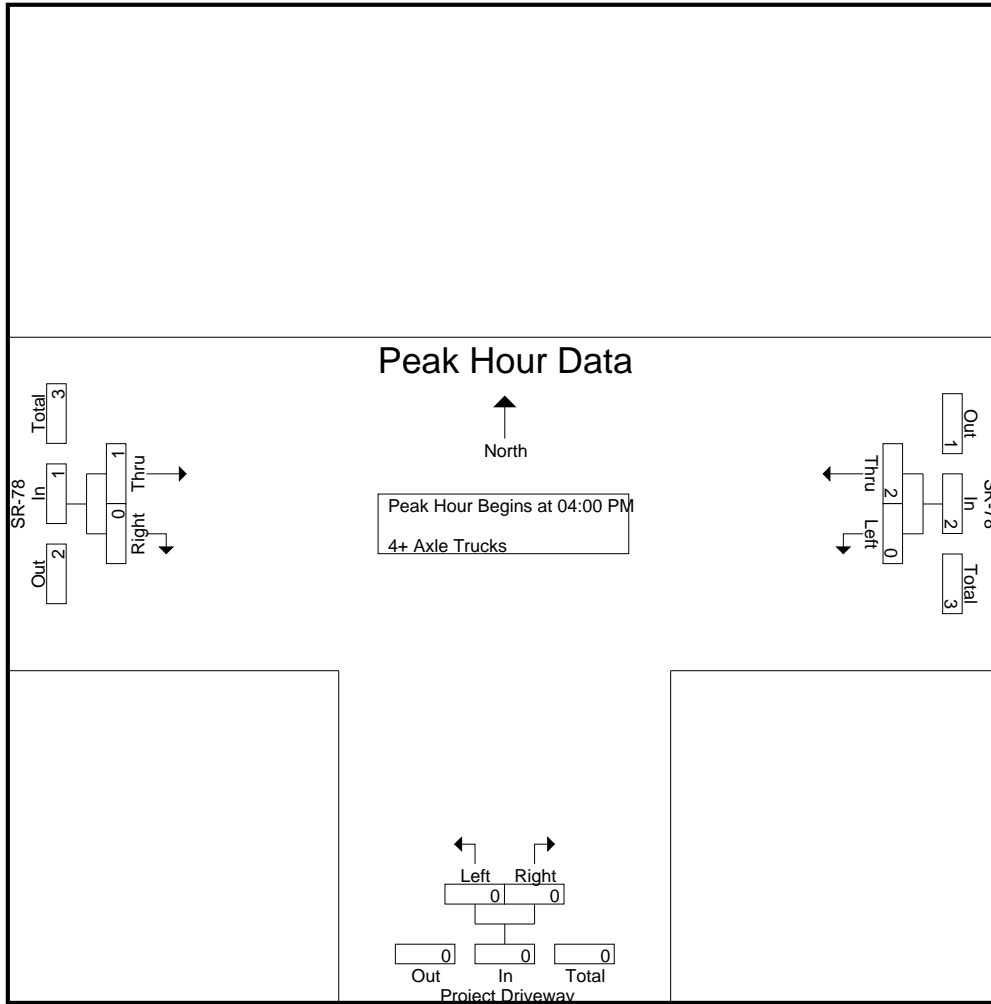
Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	1	1	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	2	2	0	0	0	1	0	1	3
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	1	1	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	1	1	0	0	0	0	0	0	1
Total	0	2	2	0	0	0	1	0	1	3
Grand Total	0	4	4	0	0	0	2	0	2	6
Apprch %	0	100		0	0		100	0		
Total %	0	66.7	66.7	0	0	0	33.3	0	33.3	

Start Time	SR-78 Westbound			Project Driveway Northbound			SR-78 Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	1	1	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	2	0	0	0	1	0	1	3
% App. Total	0	100		0	0		100	0		
PHF	.000	.500	.500	.000	.000	.000	.250	.000	.250	.750

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

County of Imperial
 N/S: Project Driveway
 E/W: SR- 78
 Weather: Clear

File Name : 01_CIM_78_DW PM
 Site Code : 99917415
 Start Date : 6/27/2017
 Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	1	1	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	1	0	1
+30 mins.	0	1	1	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	2	2	0	0	0	1	0	1
% App. Total	0	100		0	0		100	0	
PHF	.000	.500	.500	.000	.000	.000	.250	.000	.250

2015 Traffic Volumes on California State Highways

Dist	Route	County	Postmile	Description	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak Hour	Ahead Peak Month	Ahead AADT
11	078	SD	33.05	WEEKEND VILLA ROAD	1000	10300	9200	1000	10600	9500
11	078	SD	34.352	ASH STREET	1000	10600	9500	1100	11700	10700
11	078	SD	35.12	OLIVE STREET	1100	11700	10700	850	10700	10200
11	078	SD	35.519	JCT. RTE. 67 SOUTHWEST	850	10700	10200	2150	22600	21900
11	078	SD	35.741	RAMONA, EIGHTH STREET	2150	22600	21900	1700	21800	21500
11	078	SD	35.85	RAMONA, SEVENTH STREET	1700	21800	21500	1450	17500	17300
11	078	SD	35.96	RAMONA, SIXTH STREET	1450	17500	17300	1250	15800	15500
11	078	SD	36.29	RAMONA, THIRD STREET	1250	15800	15500	710	18000	9000
11	078	SD	37.11	MAGNOLIA AVENUE	710	18000	9000	710	7400	7200
11	078	SD	41.96	SUTHERLAND DAM ROAD	710	7400	7200	600	5500	5300
11	078	SD	51.108	WEST JCT. RTE. 79	890	5700	5200	760	4650	4100
11	078	SD	56.91	PINE HILLS ROAD	760	4650	4100	810	5200	4550
11	078	SD	57.88	JULIAN, MAIN/ WASHINGTON STREETS	810	5200	4550	690	5300	4900
11	078	SD	58.133	EAST JCT. RTE. 79	690	5300	4900	480	4200	3900
11	078	SD	58.64	MANZANITA ROAD	480	4200	3900	260	2500	2300
11	078	SD	59.24	CANYON DRIVE	260	2500	2300	200	1750	1600
11	078	SD	60.273	WYNOLA ROAD	200	1750	1600	140	1350	1250
11	078	SD	69.693	VALLECITOS ROAD	140	1350	1250	130	1200	1150
11	078	SD	70.01	SAN FELIPE ROAD	130	1200	1150	250	1500	1000
11	078	SD	76.84	YAQUI PASS ROAD	250	1500	1000	180	1200	840
11	078	SD	85.61	BORREGO SPRINGS ROAD	180	1200	840	250	1650	1200
11	078	SD	95.313	SAN DIEGO/IMPERIAL COUNTY LINE	250	1650	1200			
11	078	IMP	0	SAN DIEGO/IMPERIAL COUNTY LINE				170	860	780
11	078	IMP	13.169	NORTH JCT. RTE. 86	170	860	780	170	860	780
11	078	IMP R	9.203	SOUTH JCT. RTE. 86	170	860	780	550	7200	6600
11	078	IMP R	10.809	BRANDT RD	550	7200	6600	700	8500	7500
11	078	IMP R	12.891	JCT. RTE.111 - WEST	700	8500	7500	800	9500	8600
11	078	IMP R	13.897	BEST ROAD	800	9500	8600	770	9300	8800
11	078	IMP	15.499	JCT. RTE. 111 - EAST	770	9300	8800	460	4350	3950
11	078	IMP	18.651	JCT. RTE. 115, WEST	460	4350	3950	420	3850	3300
11	078	IMP	21.023	JCT. RTE. 115, EAST	420	3850	3300	350	2100	1700
11	078	IMP	25.927	GREEN ROAD	350	2100	1700	340	1700	1450
11	078	IMP	41.004	GLAMIS	340	1700	1450	370	1750	1550
11	078	IMP	52.348	OGILBY ROAD	370	1750	1550	430	2050	1700
11	078	IMP	80.442	PALO VERDE, FOURTH/MAIN STREETS	450	2150	1800	200	1750	1550
11	078	IMP	80.743	PALO VERDE, IMPERIAL/RIVERSIDE COUNTY LINE	200	1750	1550			
08	078	RIV	0	PALO VERDE, IMPERIAL/RIVERSIDE COUNTY LINE				220	1600	1500
08	078	RIV	3.06	32ND AVENUE/PALO VERDE BOULEVARD	220	1600	1500	260	1900	1800
08	078	RIV	6.35	CRANNELLS BOULEVARD/28TH AVENUE	260	1900	1800	250	1800	1700

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**ATTACHMENT 3 – PEAK HOUR INTERSECTION ANALYSIS
CALCULATIONS – EXISTING, NEAR-TERM 2018, AND
LONG-TERM (WITH AND WITHOUT PROJECT)**

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Existing AM
1: Project Driveway & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	0	0	9	0	0
Future Vol, veh/h	25	0	0	9	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	75	75	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	28	0	0	12	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	28	40
Stage 1	-	-	28
Stage 2	-	-	12
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1585	972
Stage 1	-	-	995
Stage 2	-	-	1011
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1585	972
Mov Cap-2 Maneuver	-	-	972
Stage 1	-	-	995
Stage 2	-	-	1011

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

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

Existing AM
2: SR-86 & SR-78

07/13/2017

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↔		↕	↕↕	↕
Traffic Vol, veh/h	6	0	18	0	2	2	8	240	0	1	270	1
Future Vol, veh/h	6	0	18	0	2	2	8	240	0	1	270	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	-	-	Free
Storage Length	-	-	-	-	-	-	400	-	-	390	-	500
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	33	33	33	91	91	91	93	93	93
Heavy Vehicles, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	7	0	21	0	6	6	9	264	0	1	290	1
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	444	573	145	428	573	132	290	0	0	264	0	0
Stage 1	292	292	-	281	281	-	-	-	-	-	-	-
Stage 2	152	281	-	147	292	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	425	363	778	438	363	795	1055	-	-	1083	-	0
Stage 1	605	592	-	615	599	-	-	-	-	-	-	0
Stage 2	745	599	-	751	592	-	-	-	-	-	-	0
Platoon blocked, %								-	-			
Mov Cap-1 Maneuver	413	360	778	423	360	795	1055	-	-	1083	-	-
Mov Cap-2 Maneuver	413	360	-	423	360	-	-	-	-	-	-	-
Stage 1	600	591	-	610	594	-	-	-	-	-	-	-
Stage 2	726	594	-	730	591	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.9			12.4			0.3			0		
HCM LOS	B			B								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT					
Capacity (veh/h)	1055	-	-	637	496	1083	-					
HCM Lane V/C Ratio	0.008	-	-	0.044	0.024	0.001	-					
HCM Control Delay (s)	8.4	-	-	10.9	12.4	8.3	-					
HCM Lane LOS	A	-	-	B	B	A	-					
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-					

Existing PM
1: Project Driveway & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	0	0	14	0	0
Future Vol, veh/h	17	0	0	14	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	61	61	70	70	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	28	0	0	20	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	28	48
Stage 1	-	-	28
Stage 2	-	-	20
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1585	962
Stage 1	-	-	995
Stage 2	-	-	1003
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1585	962
Mov Cap-2 Maneuver	-	-	962
Stage 1	-	-	995
Stage 2	-	-	1003

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

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

Existing PM
2: SR-86 & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↕		↕	↕↕	↕
Traffic Vol, veh/h	7	0	11	0	0	0	12	281	0	0	227	4
Future Vol, veh/h	7	0	11	0	0	0	12	281	0	0	227	4
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	-	-	Free
Storage Length	-	-	-	-	-	-	400	-	-	390	-	500
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	92	92	92	90	90	90	85	85	85
Heavy Vehicles, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	9	0	15	0	0	0	13	312	0	0	267	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	450	606	134	473	606	156	267	0	0	312	0	0
Stage 1	267	267	-	339	339	-	-	-	-	-	-	-
Stage 2	183	339	-	134	267	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	421	346	792	404	346	765	1080	-	-	1033	-	0
Stage 1	628	609	-	564	560	-	-	-	-	-	-	0
Stage 2	712	560	-	765	609	-	-	-	-	-	-	0
Platoon blocked, %												
Mov Cap-1 Maneuver	417	342	792	393	342	765	1080	-	-	1033	-	-
Mov Cap-2 Maneuver	417	342	-	393	342	-	-	-	-	-	-	-
Stage 1	620	609	-	557	553	-	-	-	-	-	-	-
Stage 2	703	553	-	751	609	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.4	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1080	-	-	587	-	1033	-
HCM Lane V/C Ratio	0.012	-	-	0.041	-	-	-
HCM Control Delay (s)	8.4	-	-	11.4	0	0	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-

Near-Term Year 2018 - AM
1: Project Driveway & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	0	0	9	0	0
Future Vol, veh/h	25	0	0	9	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	75	75	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	29	0	0	12	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	29	41
Stage 1	-	-	29
Stage 2	-	-	12
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1584	970
Stage 1	-	-	994
Stage 2	-	-	1011
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1584	970
Mov Cap-2 Maneuver	-	-	970
Stage 1	-	-	994
Stage 2	-	-	1011

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1584	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Near-Term Year 2018 - AM
2: SR-86 & SR-78

07/13/2017

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↔		↕	↕↕	↕
Traffic Vol, veh/h	6	0	18	0	2	2	8	240	0	1	270	1
Future Vol, veh/h	6	0	18	0	2	2	8	240	0	1	270	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	-	-	Free
Storage Length	-	-	-	-	-	-	400	-	-	390	-	500
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	33	33	33	91	91	91	93	93	93
Heavy Vehicles, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	7	0	22	0	6	6	9	272	0	1	299	1
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	458	591	150	442	591	136	299	0	0	272	0	0
Stage 1	301	301	-	290	290	-	-	-	-	-	-	-
Stage 2	157	290	-	152	301	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	415	353	772	427	353	790	1046	-	-	1075	-	0
Stage 1	597	586	-	607	593	-	-	-	-	-	-	0
Stage 2	740	593	-	745	586	-	-	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	403	350	772	412	350	790	1046	-	-	1075	-	-
Mov Cap-2 Maneuver	403	350	-	412	350	-	-	-	-	-	-	-
Stage 1	592	585	-	602	588	-	-	-	-	-	-	-
Stage 2	720	588	-	724	585	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	11			12.6			0.3			0		
HCM LOS	B			B								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT					
Capacity (veh/h)	1046	-	-	628	485	1075	-					
HCM Lane V/C Ratio	0.009	-	-	0.046	0.026	0.001	-					
HCM Control Delay (s)	8.5	-	-	11	12.6	8.4	-					
HCM Lane LOS	A	-	-	B	B	A	-					
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-					

Near-Term Year 2018 - PM
1: Project Driveway & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	0	0	14	0	0
Future Vol, veh/h	17	0	0	14	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	61	61	70	70	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	29	0	0	21	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	29	50
Stage 1	-	-	29
Stage 2	-	-	21
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1584	959
Stage 1	-	-	994
Stage 2	-	-	1002
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1584	959
Mov Cap-2 Maneuver	-	-	959
Stage 1	-	-	994
Stage 2	-	-	1002

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1584	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Near-Term Year 2018 - PM
2: SR-86 & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↔		↕	↕↕	↕
Traffic Vol, veh/h	7	0	11	0	0	0	12	281	0	0	227	4
Future Vol, veh/h	7	0	11	0	0	0	12	281	0	0	227	4
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	-	-	Free
Storage Length	-	-	-	-	-	-	400	-	-	390	-	500
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	92	92	92	90	90	90	85	85	85
Heavy Vehicles, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	10	0	15	0	0	0	14	322	0	0	275	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	463	624	138	487	624	161	275	0	0	322	0	0
Stage 1	275	275	-	349	349	-	-	-	-	-	-	-
Stage 2	188	349	-	138	275	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	411	337	787	394	337	758	1071	-	-	1022	-	0
Stage 1	620	604	-	555	554	-	-	-	-	-	-	0
Stage 2	706	554	-	761	604	-	-	-	-	-	-	0
Platoon blocked, %												
Mov Cap-1 Maneuver	407	333	787	383	333	758	1071	-	-	1022	-	-
Mov Cap-2 Maneuver	407	333	-	383	333	-	-	-	-	-	-	-
Stage 1	612	604	-	548	547	-	-	-	-	-	-	-
Stage 2	697	547	-	746	604	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1071	-	-	577	-	1022	-
HCM Lane V/C Ratio	0.013	-	-	0.043	-	-	-
HCM Control Delay (s)	8.4	-	-	11.5	0	0	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-

Near-Term Year 2018 + Project - AM
 1: Project Driveway & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	0	0	9	0	0
Future Vol, veh/h	25	1	3	9	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	75	75	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	29	1	4	12	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	49
Stage 1	-	-	29
Stage 2	-	-	20
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1583	960
Stage 1	-	-	994
Stage 2	-	-	1003
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1583	957
Mov Cap-2 Maneuver	-	-	957
Stage 1	-	-	994
Stage 2	-	-	1000

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1583	-
HCM Lane V/C Ratio	-	-	-	0.003	-
HCM Control Delay (s)	0	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0	-

Near-Term Year 2018 + Project - AM
2: SR-86 & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↕		↕	↕↕	↕
Traffic Vol, veh/h	6	0	18	0	2	2	8	240	0	1	270	1
Future Vol, veh/h	6	0	18	0	2	2	11	240	0	1	270	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	-	-	Free
Storage Length	-	-	-	-	-	-	400	-	-	390	-	500
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	33	33	33	91	91	91	93	93	93
Heavy Vehicles, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	7	0	22	0	6	6	12	272	0	1	299	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	465	598	150	449	598	136	299	0	0	272	0	0
Stage 1	301	301	-	297	297	-	-	-	-	-	-	-
Stage 2	164	297	-	152	301	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	410	350	772	422	350	790	1046	-	-	1075	-	0
Stage 1	597	586	-	600	588	-	-	-	-	-	-	0
Stage 2	732	588	-	745	586	-	-	-	-	-	-	0
Platoon blocked, %												
Mov Cap-1 Maneuver	397	346	772	406	346	790	1046	-	-	1075	-	-
Mov Cap-2 Maneuver	397	346	-	406	346	-	-	-	-	-	-	-
Stage 1	590	585	-	593	581	-	-	-	-	-	-	-
Stage 2	710	581	-	724	585	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11	12.7	0.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1046	-	-	625	481	1075	-
HCM Lane V/C Ratio	0.012	-	-	0.046	0.026	0.001	-
HCM Control Delay (s)	8.5	-	-	11	12.7	8.4	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-

Near-Term 2018 + Project - PM
1: Project Driveway & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	0	0	14	0	0
Future Vol, veh/h	17	0	0	14	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	61	61	70	70	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	29	0	0	21	1	3

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	29	50
Stage 1	-	-	29
Stage 2	-	-	21
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1584	959
Stage 1	-	-	994
Stage 2	-	-	1002
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1584	959
Mov Cap-2 Maneuver	-	-	959
Stage 1	-	-	994
Stage 2	-	-	1002

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1023	-	-	1584	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	8.5	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Near-Term 2018 + Project - PM
2: SR-86 & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	7	0	11	0	0	0	12	281	0	0	227	4
Future Vol, veh/h	7	0	11	0	0	0	12	281	0	0	227	4
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	-	-	Free
Storage Length	-	-	-	-	-	-	400	-	-	390	-	500
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	92	92	92	90	90	90	85	85	85
Heavy Vehicles, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	10	0	15	0	0	0	14	322	0	0	275	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	463	624	138	487	624	161	275	0	0	322	0	0
Stage 1	275	275	-	349	349	-	-	-	-	-	-	-
Stage 2	188	349	-	138	275	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	411	337	787	394	337	758	1071	-	-	1022	-	0
Stage 1	620	604	-	555	554	-	-	-	-	-	-	0
Stage 2	706	554	-	761	604	-	-	-	-	-	-	0
Platoon blocked, %												
Mov Cap-1 Maneuver	407	333	787	383	333	758	1071	-	-	1022	-	-
Mov Cap-2 Maneuver	407	333	-	383	333	-	-	-	-	-	-	-
Stage 1	612	604	-	548	547	-	-	-	-	-	-	-
Stage 2	697	547	-	746	604	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT
Capacity (veh/h)	1071	-	-	577	1022	-
HCM Lane V/C Ratio	0.013	-	-	0.043	-	-
HCM Control Delay (s)	8.4	-	-	11.5	0	0
HCM Lane LOS	A	-	-	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0

Near-Term Year 2018 + Project + Cumulative - AM
 1: Project Driveway & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	0	0	9	0	0
Future Vol, veh/h	25	1	3	9	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	75	75	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	29	1	4	12	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	49
Stage 1	-	-	29
Stage 2	-	-	20
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1583	960
Stage 1	-	-	994
Stage 2	-	-	1003
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1583	957
Mov Cap-2 Maneuver	-	-	957
Stage 1	-	-	994
Stage 2	-	-	1000

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1583	-
HCM Lane V/C Ratio	-	-	-	0.003	-
HCM Control Delay (s)	0	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0	-

Near-Term Year 2018 + Project + Cumulative - AM
2: SR-86 & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↕		↕	↕↕	↕
Traffic Vol, veh/h	6	0	18	0	2	2	8	240	0	1	270	1
Future Vol, veh/h	6	0	18	0	2	2	11	240	0	1	270	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	-	-	Free
Storage Length	-	-	-	-	-	-	400	-	-	390	-	500
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	33	33	33	91	91	91	93	93	93
Heavy Vehicles, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	7	0	22	0	6	6	12	272	0	1	299	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	465	598	150	449	598	136	299	0	0	272	0	0
Stage 1	301	301	-	297	297	-	-	-	-	-	-	-
Stage 2	164	297	-	152	301	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	410	350	772	422	350	790	1046	-	-	1075	-	0
Stage 1	597	586	-	600	588	-	-	-	-	-	-	0
Stage 2	732	588	-	745	586	-	-	-	-	-	-	0
Platoon blocked, %												
Mov Cap-1 Maneuver	397	346	772	406	346	790	1046	-	-	1075	-	-
Mov Cap-2 Maneuver	397	346	-	406	346	-	-	-	-	-	-	-
Stage 1	590	585	-	593	581	-	-	-	-	-	-	-
Stage 2	710	581	-	724	585	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11	12.7	0.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1046	-	-	625	481	1075	-
HCM Lane V/C Ratio	0.012	-	-	0.046	0.026	0.001	-
HCM Control Delay (s)	8.5	-	-	11	12.7	8.4	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-

Near-Term 2018 + Project + Cumulative - PM
1: Project Driveway & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	0	0	14	0	0
Future Vol, veh/h	17	0	0	14	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	61	61	70	70	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	29	0	0	21	1	3

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	29	50
Stage 1	-	-	29
Stage 2	-	-	21
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1584	959
Stage 1	-	-	994
Stage 2	-	-	1002
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1584	959
Mov Cap-2 Maneuver	-	-	959
Stage 1	-	-	994
Stage 2	-	-	1002

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1023	-	-	1584	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	8.5	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Near-Term 2018 + Project + Cumulative - PM
2: SR-86 & SR-78

07/13/2017

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	7	0	11	0	0	0	12	281	0	0	227	4
Future Vol, veh/h	7	0	11	0	0	0	12	281	0	0	227	4
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	-	-	Free
Storage Length	-	-	-	-	-	-	400	-	-	390	-	500
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	92	92	92	90	90	90	85	85	85
Heavy Vehicles, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	10	0	15	0	0	0	14	322	0	0	275	5
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	463	624	138	487	624	161	275	0	0	322	0	0
Stage 1	275	275	-	349	349	-	-	-	-	-	-	-
Stage 2	188	349	-	138	275	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	411	337	787	394	337	758	1071	-	-	1022	-	0
Stage 1	620	604	-	555	554	-	-	-	-	-	-	0
Stage 2	706	554	-	761	604	-	-	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	407	333	787	383	333	758	1071	-	-	1022	-	-
Mov Cap-2 Maneuver	407	333	-	383	333	-	-	-	-	-	-	-
Stage 1	612	604	-	548	547	-	-	-	-	-	-	-
Stage 2	697	547	-	746	604	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	11.5			0			0.3			0		
HCM LOS	B			A								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT					
Capacity (veh/h)	1071	-	-	577	-	1022	-					
HCM Lane V/C Ratio	0.013	-	-	0.043	-	-	-					
HCM Control Delay (s)	8.4	-	-	11.5	0	0	-					
HCM Lane LOS	A	-	-	B	A	A	-					
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-					

Long-Term AM
1: Project Driveway & SR-78

08/09/2017

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	
Traffic Vol, veh/h	360	0	0	20	0	0
Future Vol, veh/h	360	0	0	20	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	391	0	0	22	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	391	402
Stage 1	-	-	391
Stage 2	-	-	11
Critical Hdwy	-	4.14	6.84
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	2.22	3.52
Pot Cap-1 Maneuver	-	1164	576
Stage 1	-	-	653
Stage 2	-	-	1010
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1164	576
Mov Cap-2 Maneuver	-	-	576
Stage 1	-	-	653
Stage 2	-	-	1010

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1164	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Long-Term AM
2: SR-86 & SR-78

08/09/2017

Intersection

Int Delay, s/veh 5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↕		↖	↗		↖	↗	↖
Traffic Vol, veh/h	50	0	310	0	2	2	20	480	0	5	540	5
Future Vol, veh/h	50	0	310	0	2	2	20	480	0	5	540	5
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	-	-	Free
Storage Length	100	-	-	-	-	-	400	-	-	390	-	500
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, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	54	0	337	0	2	2	22	522	0	5	587	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	903	1163	293	869	1163	261	587	0	0	522	0	0
Stage 1	598	598	-	565	565	-	-	-	-	-	-	-
Stage 2	305	565	-	304	598	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	185	149	612	197	149	645	784	-	-	837	-	0
Stage 1	381	413	-	400	430	-	-	-	-	-	-	0
Stage 2	593	430	-	594	413	-	-	-	-	-	-	0
Platoon blocked, %												
Mov Cap-1 Maneuver	178	144	612	86	144	645	784	-	-	837	-	-
Mov Cap-2 Maneuver	178	144	-	86	144	-	-	-	-	-	-	-
Stage 1	370	411	-	389	418	-	-	-	-	-	-	-
Stage 2	571	418	-	265	411	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20	20.6	0.4	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	SBL	SBT
Capacity (veh/h)	784	-	-	178	-	612	235	837	-
HCM Lane V/C Ratio	0.028	-	-	0.305	-	0.551	0.019	0.006	-
HCM Control Delay (s)	9.7	-	-	33.9	0	17.8	20.6	9.3	-
HCM Lane LOS	A	-	-	D	A	C	C	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.2	-	3.3	0.1	0	-

Long-Term PM
1: Project Driveway & SR-78

08/09/2017

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	
Traffic Vol, veh/h	270	0	0	35	0	0
Future Vol, veh/h	270	0	0	35	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	293	0	0	38	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	293	312
Stage 1	-	-	293
Stage 2	-	-	19
Critical Hdwy	-	4.14	6.84
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	2.22	3.52
Pot Cap-1 Maneuver	-	1265	656
Stage 1	-	-	731
Stage 2	-	-	1001
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1265	656
Mov Cap-2 Maneuver	-	-	656
Stage 1	-	-	731
Stage 2	-	-	1001

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1265	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Long-Term PM
2: SR-86 & SR-78

08/09/2017

Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	0	200	0	0	0	25	565	0	0	455	10
Future Vol, veh/h	70	0	200	0	0	0	25	565	0	0	455	10
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	-	-	Free
Storage Length	100	-	-	-	-	-	400	-	-	390	-	500
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, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	76	0	217	0	0	0	27	614	0	0	495	11
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	856	1163	247	915	1163	307	495	0	0	614	0	0
Stage 1	495	495	-	668	668	-	-	-	-	-	-	-
Stage 2	361	668	-	247	495	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	202	149	659	181	149	598	860	-	-	763	-	0
Stage 1	445	467	-	342	380	-	-	-	-	-	-	0
Stage 2	545	380	-	647	467	-	-	-	-	-	-	0
Platoon blocked, %												
Mov Cap-1 Maneuver	197	144	659	118	144	598	860	-	-	763	-	-
Mov Cap-2 Maneuver	197	144	-	118	144	-	-	-	-	-	-	-
Stage 1	431	467	-	331	368	-	-	-	-	-	-	-
Stage 2	528	368	-	434	467	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	18.6			0			0.4			0		
HCM LOS	C			A								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	SBL	SBT			
Capacity (veh/h)	860	-	-	197	-	659	-	763	-			
HCM Lane V/C Ratio	0.032	-	-	0.386	-	0.33	-	-	-			
HCM Control Delay (s)	9.3	-	-	34.3	0	13.1	0	0	-			
HCM Lane LOS	A	-	-	D	A	B	A	A	-			
HCM 95th %tile Q(veh)	0.1	-	-	1.7	-	1.4	-	0	-			

Long-Term AM + Project
1: Project Driveway & SR-78

08/09/2017

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	
Traffic Vol, veh/h	360	0	0	20	0	0
Future Vol, veh/h	360	1	3	20	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	391	1	3	22	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	391
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	1164
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1164
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1164	-
HCM Lane V/C Ratio	-	-	-	0.003	-
HCM Control Delay (s)	0	-	-	8.1	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection

Int Delay, s/veh 5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕			↕		↖	↕		↖	↕	↗
Traffic Vol, veh/h	50	0	310	0	2	2	20	480	0	5	540	5
Future Vol, veh/h	50	0	310	0	2	2	23	480	0	5	540	5
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	-	-	Free
Storage Length	100	-	-	-	-	-	400	-	-	390	-	500
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, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	54	0	337	0	2	2	25	522	0	5	587	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	910	1170	293	876	1170	261	587	0	0	522	0	0
Stage 1	598	598	-	572	572	-	-	-	-	-	-	-
Stage 2	312	572	-	304	598	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	183	148	612	195	148	645	784	-	-	837	-	0
Stage 1	381	413	-	396	426	-	-	-	-	-	-	0
Stage 2	587	426	-	594	413	-	-	-	-	-	-	0
Platoon blocked, %												
Mov Cap-1 Maneuver	175	142	612	85	142	645	784	-	-	837	-	-
Mov Cap-2 Maneuver	175	142	-	85	142	-	-	-	-	-	-	-
Stage 1	369	411	-	383	412	-	-	-	-	-	-	-
Stage 2	563	412	-	265	411	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.1	20.7	0.4	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	SBL	SBT
Capacity (veh/h)	784	-	-	175	-	612	233	837	-
HCM Lane V/C Ratio	0.032	-	-	0.311	-	0.551	0.019	0.006	-
HCM Control Delay (s)	9.7	-	-	34.6	0	17.8	20.7	9.3	-
HCM Lane LOS	A	-	-	D	A	C	C	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.2	-	3.3	0.1	0	-

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	
Traffic Vol, veh/h	270	0	0	35	0	0
Future Vol, veh/h	270	0	0	35	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	293	0	0	38	1	3

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	293	312
Stage 1	-	-	293
Stage 2	-	-	19
Critical Hdwy	-	4.14	7.54
Critical Hdwy Stg 1	-	-	6.54
Critical Hdwy Stg 2	-	-	6.54
Follow-up Hdwy	-	2.22	3.52
Pot Cap-1 Maneuver	-	1265	617
Stage 1	-	-	691
Stage 2	-	-	997
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1265	617
Mov Cap-2 Maneuver	-	-	617
Stage 1	-	-	691
Stage 2	-	-	997

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	791	-	-	1265	-
HCM Lane V/C Ratio	0.005	-	-	-	-
HCM Control Delay (s)	9.6	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection

Int Delay, s/veh 4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↕		↖	↗		↖	↗	↖
Traffic Vol, veh/h	70	0	200	0	0	0	25	565	0	0	455	10
Future Vol, veh/h	70	0	203	0	0	0	25	565	0	0	455	10
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	-	-	Free
Storage Length	100	-	-	-	-	-	400	-	-	390	-	500
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, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	76	0	221	0	0	0	27	614	0	0	495	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	856	1163	247	915	1163	307	495	0	0	614	0	0
Stage 1	495	495	-	668	668	-	-	-	-	-	-	-
Stage 2	361	668	-	247	495	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	202	149	659	181	149	598	860	-	-	763	-	0
Stage 1	445	467	-	342	380	-	-	-	-	-	-	0
Stage 2	545	380	-	647	467	-	-	-	-	-	-	0
Platoon blocked, %												
Mov Cap-1 Maneuver	197	144	659	118	144	598	860	-	-	763	-	-
Mov Cap-2 Maneuver	197	144	-	118	144	-	-	-	-	-	-	-
Stage 1	431	467	-	331	368	-	-	-	-	-	-	-
Stage 2	528	368	-	430	467	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.6	0	0.4	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	SBL	SBT
Capacity (veh/h)	860	-	-	197	-	659	-	763	-
HCM Lane V/C Ratio	0.032	-	-	0.386	-	0.335	-	-	-
HCM Control Delay (s)	9.3	-	-	34.3	0	13.2	0	0	-
HCM Lane LOS	A	-	-	D	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.7	-	1.5	-	0	-

ATTACHMENT 4 – CONSTRUCTION TRAFFIC INFORMATION

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Seville 4 Construction Trips

Seville 4 Solar Project Construction and Operation Schedule - WORKER One Way																														
Construction Phase	Month 1			Month 2			Month 3			Month 4			Month 5			Month 6			Month 7											
	Week #																													
Access Road Construction (all weather)	12	12																												
Grading (all areas)/Fencing			104	104	104																									
Racking Installation						112	112	112	112	112	112	112	112																	
Solar Panel Installation										112	112	112	112	112	112	112														
System Wiring and Trenching														32	32	32	32	32	32	32										
Inverter Installation																	32	32	32	32										
Substation Construction										16	16	16	16	16	16	16	16													
GenTie Power Line Construction										16	16	16	16																	
Battery Facility Installation																														
Paving Driveway																														
Operation Phase																														
Operations																										8	8	8	8	8
Total	12	12	104	104	104	112	112	112	112	112	256	256	256	256	272	160	160	160	176	176	64	32	32	8	8	8	8	8		

Seville 4 Solar Project Construction and Operation Schedule - VENDOR One Way																															
Construction Phase	Month 1			Month 2			Month 3			Month 4			Month 5			Month 6			Month 7												
	Week #																														
Access Road Construction (all weather)	0	0																													
Grading (all areas)/Fencing			6	6	6																										
Racking Installation						0	0	0	0	0	0	0	0	0	0																
Solar Panel Installation										0	0	0	0	0	0	0	0	0	0												
System Wiring and Trenching														0	0	0	0	0	0	0											
Inverter Installation																	0	0	0	0											
Substation Construction										0	0	0	0	0	0	0	0	0													
GenTie Power Line Construction										2	2	2	2																		
Battery Facility Installation																															
Paving Driveway																															
Operation Phase																															
Operations																										2	2	2	2	2	
Total	0	0	6	6	6	0	0	0	0	0	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2

Seville 4 Solar Project Construction and Operation Schedule - HAUL One Way																														
Construction Phase	Month 1			Month 2			Month 3			Month 4			Month 5			Month 6			Month 7											
	Week #																													
Access Road Construction (all weather)	12	12																												
Grading (all areas)/Fencing			4	4	4																									
Racking Installation						10	10	10	10	10	10	10	10	10																
Solar Panel Installation										10	10	10	10	10	10	10	10	10												
System Wiring and Trenching														10	10	10	10	10	10											
Inverter Installation																	16	16	16	16	16									
Substation Construction										4	4	4	4	4	4	4	4													
GenTie Power Line Construction										0	0	0	0																	
Battery Facility Installation																														
Paving Driveway																														
Operation Phase																														
Operations																										0	0	0	0	0
Total	12	12	4	4	4	10	10	10	10	10	24	24	24	24	34	24	24	24	36	36	26	16	16	0	0	0	0	0		

Total	24	24	114	114	114	122	122	122	122	122	282	282	282	282	306	184	184	184	212	212	90	48	48	10	10	10	10	10
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Construction Start Date (XX/XX/XXXX):

Operations Start Date (XX/XX/XXXX):Seville 4

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**ATTACHMENT 5 – PEAK HOUR INTERSECTION ANALYSIS
CALCULATIONS – NEAR-TERM 2018 WITH
CONSTRUCTION TRAFFIC**

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Near-Term 2018 + Construction - AM
 1: Project Driveway & SR-78

07/13/2017

Intersection

Int Delay, s/veh 4.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	0	0	9	0	0
Future Vol, veh/h	25	62	125	9	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	75	75	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	29	70	167	12	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	99	410
Stage 1	-	-	64
Stage 2	-	-	346
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1494	598
Stage 1	-	-	959
Stage 2	-	-	716
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1494	530
Mov Cap-2 Maneuver	-	-	530
Stage 1	-	-	959
Stage 2	-	-	635

Approach	EB	WB	NB
HCM Control Delay, s	0	7.2	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1494	-
HCM Lane V/C Ratio	-	-	-	0.112	-
HCM Control Delay (s)	0	-	-	7.7	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.4	-

Near-Term 2018 + Construction - AM
2: SR-86 & SR-78

07/13/2017

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	6	0	18	0	2	2	8	240	0	1	270	1
Future Vol, veh/h	6	0	18	0	2	2	133	240	0	1	270	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	-	-	Free
Storage Length	-	-	-	-	-	-	400	-	-	390	-	500
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	33	33	33	91	91	91	93	93	93
Heavy Vehicles, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	7	0	22	0	6	6	151	272	0	1	299	1
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	741	874	150	725	874	136	299	0	0	272	0	0
Stage 1	301	301	-	573	573	-	-	-	-	-	-	-
Stage 2	440	573	-	152	301	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	249	232	772	256	232	790	1046	-	-	1075	-	0
Stage 1	597	586	-	396	425	-	-	-	-	-	-	0
Stage 2	484	425	-	745	586	-	-	-	-	-	-	0
Platoon blocked, %								-	-			
Mov Cap-1 Maneuver	214	198	772	221	198	790	1046	-	-	1075	-	-
Mov Cap-2 Maneuver	214	198	-	221	198	-	-	-	-	-	-	-
Stage 1	511	585	-	339	364	-	-	-	-	-	-	-
Stage 2	404	364	-	724	585	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	13.2			16.8			3.2			0		
HCM LOS	B			C								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT					
Capacity (veh/h)	1046	-	-	467	317	1075	-					
HCM Lane V/C Ratio	0.144	-	-	0.062	0.039	0.001	-					
HCM Control Delay (s)	9	-	-	13.2	16.8	8.4	-					
HCM Lane LOS	A	-	-	B	C	A	-					
HCM 95th %tile Q(veh)	0.5	-	-	0.2	0.1	0	-					

Near-Term 2018 + Construction - PM
 1: Project Driveway & SR-78

07/13/2017

Intersection

Int Delay, s/veh 7.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	0	0	14	0	0
Future Vol, veh/h	17	0	0	14	62	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	61	61	70	70	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	29	0	0	21	67	136

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	29	50
Stage 1	-	-	29
Stage 2	-	-	21
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1584	959
Stage 1	-	-	994
Stage 2	-	-	1002
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1584	959
Mov Cap-2 Maneuver	-	-	959
Stage 1	-	-	994
Stage 2	-	-	1002

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1015	-	-	1584	-
HCM Lane V/C Ratio	0.2	-	-	-	-
HCM Control Delay (s)	9.4	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.7	-	-	0	-

Near-Term 2018 + Construction - PM
2: SR-86 & SR-78

07/13/2017

Intersection

Int Delay, s/veh 0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↔		↕	↕↕	↕
Traffic Vol, veh/h	7	0	11	0	0	0	12	281	0	0	227	4
Future Vol, veh/h	7	0	11	0	0	0	12	281	0	0	227	4
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	-	-	Free
Storage Length	-	-	-	-	-	-	400	-	-	390	-	500
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	92	92	92	90	90	90	85	85	85
Heavy Vehicles, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	10	0	15	0	0	0	14	322	0	0	275	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	463	624	138	487	624	161	275	0	0	322	0	0
Stage 1	275	275	-	349	349	-	-	-	-	-	-	-
Stage 2	188	349	-	138	275	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	411	337	787	394	337	758	1071	-	-	1022	-	0
Stage 1	620	604	-	555	554	-	-	-	-	-	-	0
Stage 2	706	554	-	761	604	-	-	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	407	333	787	383	333	758	1071	-	-	1022	-	-
Mov Cap-2 Maneuver	407	333	-	383	333	-	-	-	-	-	-	-
Stage 1	612	604	-	548	547	-	-	-	-	-	-	-
Stage 2	697	547	-	746	604	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT
Capacity (veh/h)	1071	-	-	577	1022	-
HCM Lane V/C Ratio	0.013	-	-	0.043	-	-
HCM Control Delay (s)	8.4	-	-	11.5	0	0
HCM Lane LOS	A	-	-	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0

Near-Term 2018 + Construction + Cumulative - AM
 1: Project Driveway & SR-78

07/13/2017

Intersection

Int Delay, s/veh 5.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	0	0	9	0	0
Future Vol, veh/h	25	112	226	9	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	75	75	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	29	126	301	12	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	155
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1425
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1425
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	7.9	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1425	-
HCM Lane V/C Ratio	-	-	-	0.211	-
HCM Control Delay (s)	0	-	-	8.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.8	-

Near-Term 2018 + Construction + Cumulative - AM
2: SR-86 & SR-78

07/13/2017

Intersection

Int Delay, s/veh 3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↔		↕	↕↕	↕
Traffic Vol, veh/h	6	0	18	0	2	2	8	240	0	1	270	1
Future Vol, veh/h	6	0	18	0	2	2	234	240	0	1	270	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	-	-	Free
Storage Length	-	-	-	-	-	-	400	-	-	390	-	500
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	33	33	33	91	91	91	93	93	93
Heavy Vehicles, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	7	0	22	0	6	6	265	272	0	1	299	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	970	1102	150	953	1102	136	299	0	0	272	0	0
Stage 1	301	301	-	801	801	-	-	-	-	-	-	-
Stage 2	669	801	-	152	301	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	164	164	772	169	164	790	1046	-	-	1075	-	0
Stage 1	597	586	-	279	323	-	-	-	-	-	-	0
Stage 2	342	323	-	745	586	-	-	-	-	-	-	0
Platoon blocked, %												
Mov Cap-1 Maneuver	126	122	772	132	122	790	1046	-	-	1075	-	-
Mov Cap-2 Maneuver	126	122	-	132	122	-	-	-	-	-	-	-
Stage 1	446	585	-	208	241	-	-	-	-	-	-	-
Stage 2	247	241	-	724	585	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.6	23.1	4.7	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1046	-	-	338	211	1075	-
HCM Lane V/C Ratio	0.253	-	-	0.085	0.059	0.001	-
HCM Control Delay (s)	9.6	-	-	16.6	23.1	8.4	-
HCM Lane LOS	A	-	-	C	C	A	-
HCM 95th %tile Q(veh)	1	-	-	0.3	0.2	0	-

Near-Term 2018 + Construction + Cumulative - PM
 1: Project Driveway & SR-78

07/13/2017

Intersection

Int Delay, s/veh 9.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	0	0	14	0	0
Future Vol, veh/h	17	0	0	14	112	226
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	61	92	92	70	92	92
Heavy Vehicles, %	25	2	2	25	2	2
Mvmt Flow	29	0	0	21	122	246

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	29	50
Stage 1	-	-	29
Stage 2	-	-	21
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1584	959
Stage 1	-	-	994
Stage 2	-	-	1002
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1584	959
Mov Cap-2 Maneuver	-	-	959
Stage 1	-	-	994
Stage 2	-	-	1002

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1015	-	-	1584	-
HCM Lane V/C Ratio	0.362	-	-	-	-
HCM Control Delay (s)	10.5	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	1.7	-	-	0	-

Near-Term 2018 + Construction + Cumulative - PM
2: SR-86 & SR-78

07/13/2017

Intersection												
Int Delay, s/veh	3.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↑	↑↔		↑	↑↑	↑
Traffic Vol, veh/h	6	0	11	0	0	0	12	281	0	0	227	4
Future Vol, veh/h	6	0	237	0	0	0	12	281	0	0	227	4
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	-	-	Free
Storage Length	-	-	-	-	-	-	400	-	-	390	-	500
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	92	99	92	92	92	50	90	92	92	92	50
Heavy Vehicles, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	12	0	247	0	0	0	25	322	0	0	254	8
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	464	625	127	498	625	161	254	0	0	322	0	0
Stage 1	254	254	-	371	371	-	-	-	-	-	-	-
Stage 2	210	371	-	127	254	-	-	-	-	-	-	-
Critical Hdwy	8.22	7.22	7.62	8.22	7.22	7.62	4.82	-	-	4.82	-	-
Critical Hdwy Stg 1	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.22	6.22	-	7.22	6.22	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4.36	3.66	3.86	4.36	3.66	2.56	-	-	2.56	-	-
Pot Cap-1 Maneuver	410	336	801	386	336	758	1094	-	-	1022	-	0
Stage 1	640	618	-	537	540	-	-	-	-	-	-	0
Stage 2	684	540	-	773	618	-	-	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	403	328	801	263	328	758	1094	-	-	1022	-	-
Mov Cap-2 Maneuver	403	328	-	263	328	-	-	-	-	-	-	-
Stage 1	625	618	-	525	528	-	-	-	-	-	-	-
Stage 2	668	528	-	535	618	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	12.1			0			0.6			0		
HCM LOS	B			A								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT					
Capacity (veh/h)	1094	-	-	765	-	1022	-					
HCM Lane V/C Ratio	0.023	-	-	0.338	-	-	-					
HCM Control Delay (s)	8.4	-	-	12.1	0	0	-					
HCM Lane LOS	A	-	-	B	A	A	-					
HCM 95th %tile Q(veh)	0.1	-	-	1.5	-	0	-					