Appendix H

Traffic Impact Study Report

TRANSPORTATION IMPACT ANALYSIS

DRAFT

EASLEY RENEWABLE ENERGY PROJECT

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April 21, 2023

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1. EXECUTIVE SUMMARY

A. Project Description

IP Easley, LLC (Applicant or Proponent), a subsidiary of Intersect Power, LLC, proposes to construct, operate, and decommission the Easley Renewable Energy Project (Easley or Project), a utility-scale solar photovoltaic (PV) electrical generating and storage facility, and associated infrastructure to generate and deliver renewable electricity to the statewide electricity transmission grid.

The proposed project application area is located on approximately 3,735 acres of which 990 acres is private and 2,745 ac is Bureau of Land Management (BLM) administered land, in Riverside County north of Desert Center, California. The project would generate and store up to 650 megawatts (MW) of renewable electricity via arrays of PV panels, battery energy storage system (BESS), and appurtenant facilities. A 6.7-mile 500 kilovolt (kV) generation-tie (gen-tie) line would mainly traverse the Intersect Power's adjacent Oberon Renewable Energy Project site and connect to the Oberon Substation (currently under construction). From the Oberon Substation, the power generated by the Easley Project would be transmitted to the SCE Red Bluff Substation via the Oberon 500 kV gen-tie line, which is expected to be online by the end of 2023.

Public lands within the Project solar application area are designated as Development Focus Area (DFA) by the Desert Renewable Energy Conservation Plan (DRECP) and associated Record of Decision (ROD), and thus, have been targeted for renewable energy development. Because the proposed Project is partially located on federal land under management of the U.S. Bureau of Land Management (BLM), the BLM is the lead agency under the National Environmental Policy Act (NEPA), 42 U.S.C. section 4321 et seq. Riverside County will be the lead agency under the California Environmental Quality Act (CEQA).

B. Temporary Construction Impacts With Project

The Other Desert Center Area Project's construction traffic volumes are based on estimates of the number of employees and material and equipment delivery trucks during the height of the construction phase for each identified Other Desert Center Area Project. The Easley Project's construction traffic volumes are based on estimates of the number of employees and material and equipment delivery trucks during the height of the construction phase.

Conservatively, the height of the construction phase for each of the Other Desert Center Area Project are assumed to occur simultaneously. Additionally, the estimated traffic generated by employees assumes that each employee travels to and from work sites in single occupant vehicles and arrive and depart during the same AM peak hour and PM peak hour of the day.

In actuality, the height of the construction phase for each Other Desert Center Area Projects are likely to be offset, and not coincide, depending on the stage of construction of each individual project at any given point in time. Furthermore, many construction employees will carpool from their residence or from remote parking outside of the study area to the work sites and their arrivals and departures will be distributed over the morning (6:00-9:00 AM) peak period and afternoon (3:00-7:00 PM) peak period rather than concentrated in a single hour (AM peak hour) during the morning peak period or single hour (PM peak hour) during afternoon peak period.

As a result, the analysis of temporary construction impacts represents a worst-case scenario.

Under the Temporary Construction Conditions with Project scenario, three study intersections are anticipated to operate at a LOS F during either the AM peak hour and / or PM peak hour. These intersections include Rice Road (SR 177) at I-10 WB Off-Ramp/On-Ramp, and Rice Road (SR 177) at Ragsdale Road.

The movements operating at LOS F at the intersections are the stop-controlled movements from the interchange off ramps intersecting Rice Road (SR 177). These intersections would experience significant delays for the stop-controlled movements if all assumed maximum construction traffic accessed these intersections during a single hour during the AM peak hour and PM peak hour.

C. Temporary Construction Mitigation Measures

Monitoring Construction Traffic Conditions

Implementation of any temporary mitigation of construction traffic impacts should result from periodic and regular monitoring the project's construction access routes. Monitoring is recommended to identify when flagging operations are needed and should be conducted continuously in the initial two weeks of construction and whenever a new stage of construction begins or the number of workers and/or daily delivery of materials or equipment changes materially. A monitoring plan may be developed in coordination with Caltrans and include criteria triggering implementation of mitigation measures.

Temporary Traffic Control Measures

Mitigation of temporary impacts with the addition of project traffic may require flagging operations during maximum inbound or outbound periods when indicated through monitoring traffic operations during construction or determined to be required during construction stage planning.

Measures to Reduce Peak Construction Demands

Demand management measures can reduce construction worker traffic to the extent where flagging operations may be avoided. Types of measures include:

- Worker ridesharing / carpooling – is most effective when incentives such as preferential parking at worksites, or financial incentives such as fuel vouchers or reimbursement are offered.
- Remote parking with shuttle to worksites – when temporary impacts of construction traffic is projected to intensify due to overlapping schedules of the Easley and Sapphire projects, or during a labor-intensive construction stage, designating a temporary off-site parking area with contracted shuttle service operating all day on a frequent schedule can effectively reduce highly peaked periods of demand.
- Offset shifts – offsetting work start and end times, even by 15-minutes but preferably 30-minutes, can reduce peak hour traffic and spread the demand into the hour before the peak hour and the hour after the peak hour. If many workers arrive and depart within the same hour, this measure can be effective enough to avoid flagging operations.

D. Project Operation and Maintenance Traffic Impacts

The opening year is defined as the period in which the Easley project is fully constructed and in now in full commercial operation. Under Opening Year Conditions with Project, the study intersections are anticipated to operate at LOS B or better. Traffic generated from operations and maintenance of the facility is substantially lower than construction generated traffic. Therefore, the project does not cause any level of service-related deficiencies during the operation and maintenance phase.

E. Project Operations and Maintenance Recommended Improvements

Although not required to mitigate level of service impacts, access to the proposed project from Rice Road (SR 177) at the proposed driveway "A" will require general safety related improvements for a two-lane, high speed rural highway.

Improvements required for the Oberon Solar project at the Rice Road (SR 177) at Oberon Solar Project Driveway "A" and "B" have been reviewed and accepted by Caltrans as part of Oberon's permitting process. Similar improvements are recommended for the Easley project's proposed access Rice Road (SR 177) at Driveway #1 and Rice Road (SR 177) at Driveway #2. As such the following outlined recommended improvement are expected to be approved by Caltrans as well.

The recommended access improvements for the project's Rice Road (SR 177) / north and south of Driveway #1 include:

1. Widen Rice Road (SR 177) north and south of Driveway #1 to accommodate the following deceleration and storage lanes into access driveway:
    a. 460-foot-long northbound deceleration / left turn lane
    b. 460-foot-long southbound deceleration / left turn lane
2. Construct Driveway #1 paved at a width of 26’ both east and west of Rice Road (SR 177).

The recommended access improvements for the project’s Rice Road (SR 177) north and south of Driveway #2 include:

1. Widen Rice Road (SR 177) north and south of Driveway #2 to accommodate the following deceleration and storage lanes into access driveway:
    a. 460-foot-long northbound deceleration / left turn lane
    b. 460-foot-long southbound deceleration / left turn lane
2. Construct Driveway #2 paved at a width of 26’ both east and west of Rice Road (SR 177).

2. INTRODUCTION

A. Purpose of Study

This draft Transportation Impact Analysis Report analyzes the effects of the Easley Renewable Energy Project being planned and operated by IP Easley, LLC. The proposed project is in the unincorporated community of Desert Center in Riverside County. The project would generate and store up to 650 megawatts (MW) of renewable electricity via arrays of solar photovoltaic (PV) panels, battery energy storage system (BESS), and appurtenant facilities on approximately 3,735 acres of which 990 acres is private and 2,745 acres is BLM administered land, in Riverside County located off Rice Road (SR 177) near Desert Center, California.

B. Scope of Study

Study Area

The study area covers the approximately 3,735 acres described above in the purpose of study section. Public lands within the solar application area are designated as Development Focus Area (DFA) by the Desert Renewable Energy Conservation Plan (DRECP) and associated Record of Decision (ROD), and thus, have been targeted for renewable energy development. **Figure 1** illustrates the vicinity map and **Figure 2** illustrates the proposed project site plan. This study evaluates five existing study intersections along Rice Road (SR 177). The study also evaluates three Project Access Driveways/future intersections. The study intersections include:

1. Rice Road (SR 177) / I-10 Eastbound Ramps
2. Rice Road (SR 177) / I-10 Westbound Ramps
3. Rice Road (SR 177) / Ragsdale Road
4. Rice Road (SR 177) / Kaiser Road (County R2)
5. Rice Road (SR 177) / Oasis Road
6. Oasis Road / Kaiser Road (County R2)

7A. Rice Road (SR 177) / Project Driveway #1

7B. Rice Road (SR 177) / Project Driveway #2

8. Kaiser Road (County R2) / Project Driveway #3

Study Scenarios and Analysis Periods

In conformance with Riverside County requirements, this study analyzes intersection level of service (LOS) required to maintain traffic operation performance in accordance with Riverside County's General Plan policies. The analysis contained in this report also conforms with the requirements of NEPA and may be incorporated into environmental review documents as deemed necessary. Specifically, this traffic impact analysis evaluates both temporary project construction impacts and permanent project operations and maintenance (O&M) impacts with completion of the project. The construction and O&M analyses address different peak periods of the day since construction traffic typically occurs earlier than operational traffic. The temporary construction impact analysis considers other concurrent construction projects near the proposed project. The traffic impact analysis evaluates the following no build and build scenarios:

1. Existing Conditions (No Build)
2. Temporary Construction Conditions without Project (No Build)
3. Temporary Construction Conditions with Project (Build)
4. Opening Year Conditions without Project (No Build)
5. Opening Year Conditions with Project (Build)
6. Cumulative Year 2045 Conditions without Project (No Build)
7. Cumulative Year 2045 Conditions with Project (Build)

The analysis periods reflect peak hours for construction and O&M traffic occurring within the morning peak period (6:00-9:00 AM) and afternoon peak period (3:00-7:00 PM).

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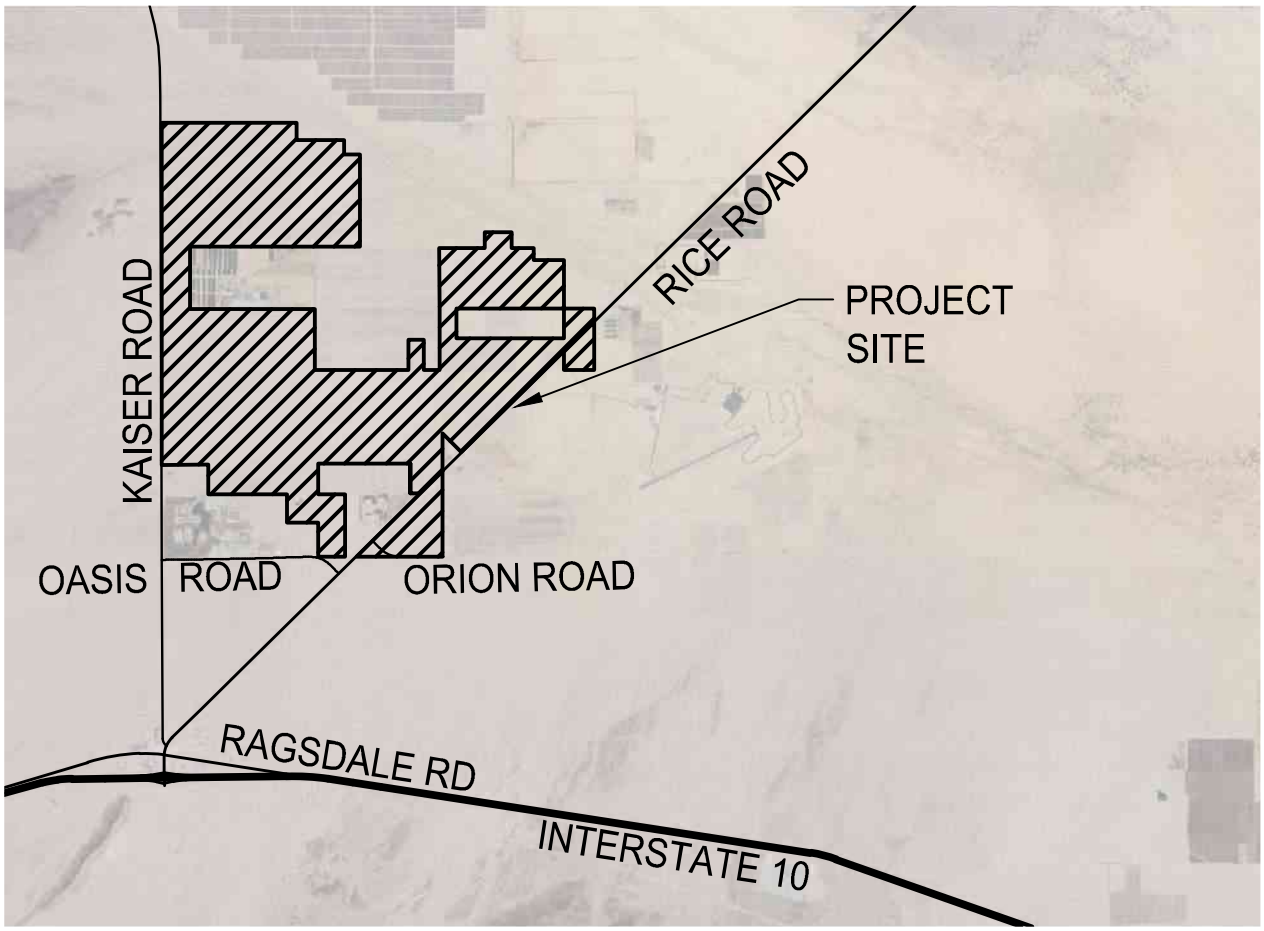

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FIGURE 1: VICINITY MAP
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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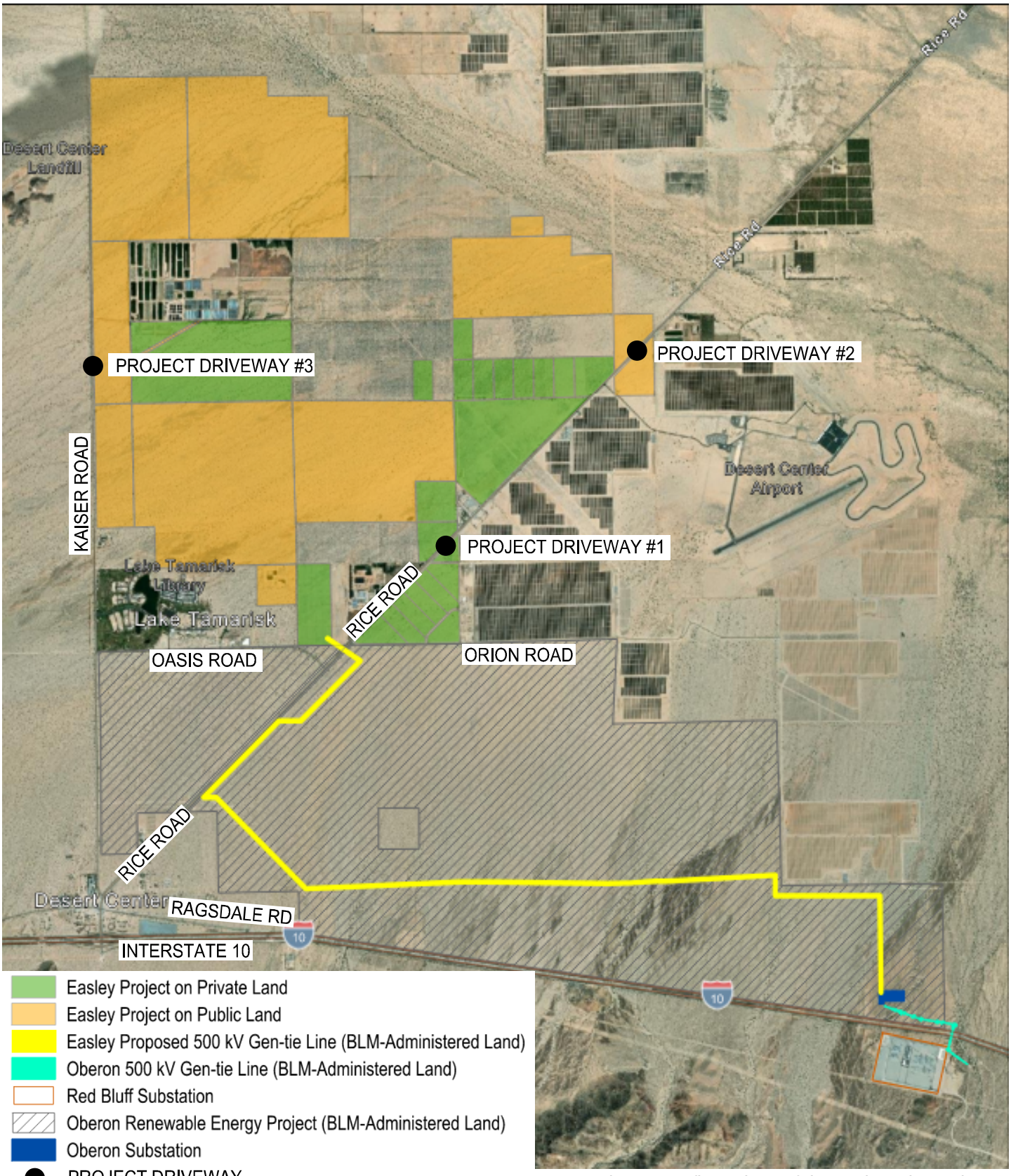

Note: Minor reconfigurations of the Project site and driveway locations would not impact the conclusions of this study.

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FIGURE 2: SITE PLAN
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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3. EXISTING CONDITIONS

A. Caltrans Level of Service Standards

The study intersections are located on state highways and therefore subject to the level of service standards of the California Department of Transportation (Caltrans). The Caltrans' Guide for the Preparation of Traffic Impact Studies (December 2002) states "Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities." For the purpose of this study, LOS D is assumed to be the criteria for the study intersections and LOS E or LOS F is considered unacceptable for these facilities. Caltrans recognizes it is not always feasible to achieve a LOS D and will defer to the local agency's level of service standard.

B. Analysis Methodology

Intersection capacity analyses were conducted using Synchro software (1), which implements the traffic analysis methodology concepts presented in Chapters 20 and 21 of the Highway Capacity Manual, 6th Edition (HCM 6) (2) used in this report. The intersection capacity analyses utilize existing intersection geometrics and existing traffic volumes in analyzing AM peak hour and PM peak hour intersection operating conditions.

The level of service (LOS) for a Two-Way Stop Controlled (TWSC) intersection is determined by the computed or measured control delay. The LOS is determined for each minor-street movement (or shared movement) by using the criteria provided in **Table 3-1** referenced from HCM 6 Chapter 20. The movement with the highest delay and worst level of service is reported as the LOS for the intersection.

Table 3-1: HCM 6 – Level of Service Criteria for Two-Way (TWSC) or Side-Street Stop Controlled Intersections

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c ≤1.0	v/c >1.0
0 - 10	A	F
> 10 -15	B	F
> 15 - 25	C	F
> 25 - 35	D	F
> 35 - 50	E	F
> 50	F	F
Note: The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole. Source: Highway Capacity Manual 6th Edition, Exhibit 20-2.		

The LOS for an All-Way Stop Controlled (AWSC) intersection quantitatively describes the intersection's operating characteristics. The LOS is based on the average delay for the entire intersection using the criteria provided in **Table 3-2** referenced from Chapter 21 of the Highway Capacity Manual.

Table 3-2: HCM 6 – Level of Service Criteria for All-Way Stop Controlled (AWSC) Intersections

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c ≤1.0	v/c >1.0
0 - 10	A	F
> 10 -15	B	F
> 15 - 25	C	F
> 25 - 35	D	F
> 35 - 50	E	F
> 50	F	F
Note: For approach-based and intersectionwide assessments, LOS is defined solely by control delay for the intersection as a whole. Source: Highway Capacity Manual 6th Edition, Exhibit 21-8.		

1 Trafficware Ltd, version 10.

2 Transportation Research Board, Washington D.C., 2010.

C. Study Area Roadways

Interstate 10 (I-10): I-10 is a major east/west interstate freeway providing regional access throughout Riverside County, San Bernardino County, and Los Angeles County. Near the project site, the I-10 is a four-lane freeway with an interchange at SR-177.

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

D. Traffic Counts

Existing turn movement counts were conducted in February 2023 by Newport Traffic Studies (NTS) for the AM (6:00-9:00 AM) Peak Period and PM (3:00-7:00 PM) Peak Period, provided in **Appendix 1**. **Figure 3** illustrates the existing traffic volumes and **Figure 4** illustrates the existing intersection geometrics utilized in the capacity analysis.

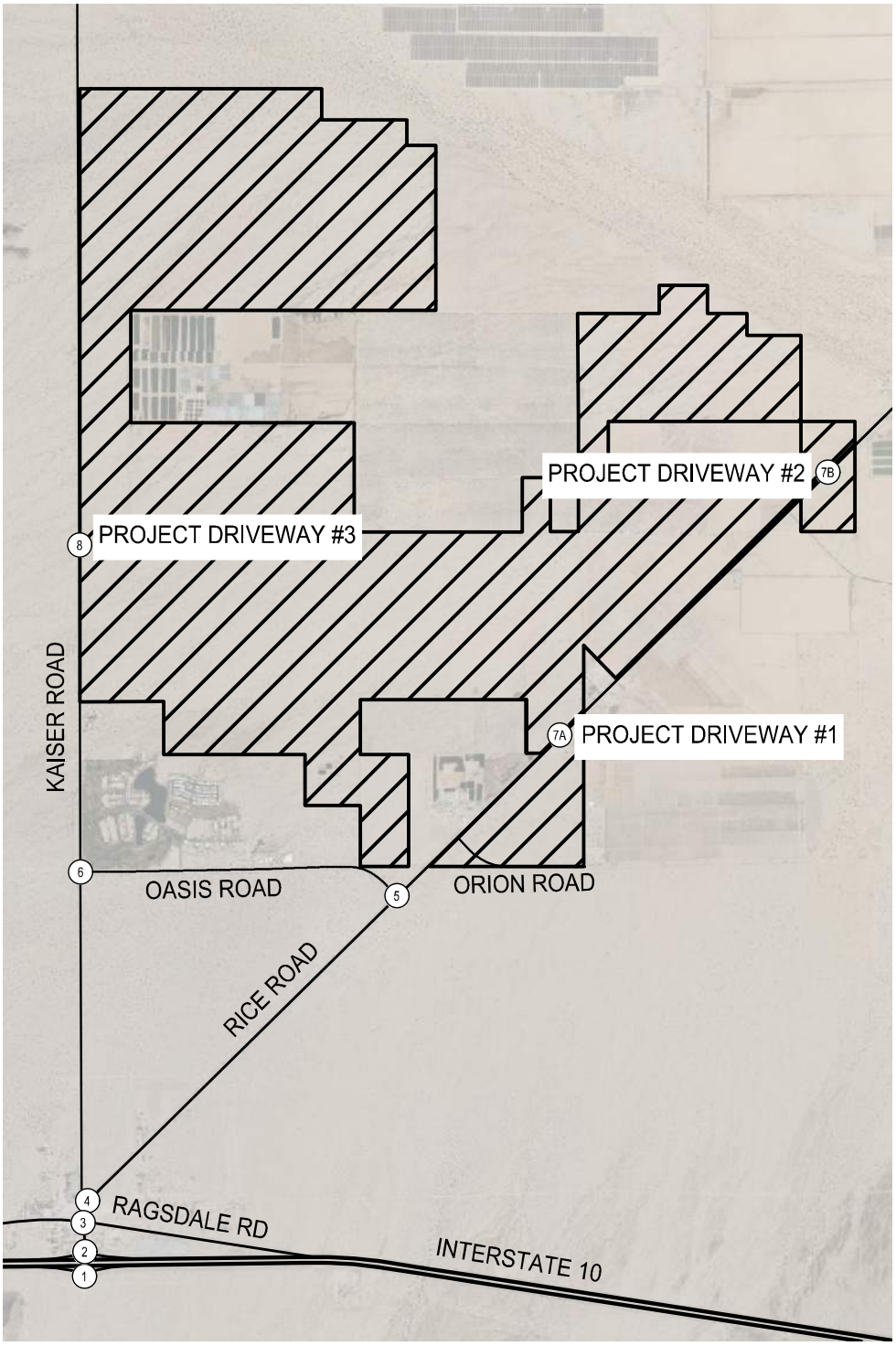
E. Existing Traffic Analysis

Table 3-3 presents the existing intersection levels of service which operate at a LOS B or better for the worst movement from the stop-controlled side streets. The results of the analysis are provided in **Appendix 2**.

Table 3-3: Existing Intersection Levels of Service

Intersection	Control Type	AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
1. Rice Road (SR 177) / I-10 Eastbound Ramps	SSSC	9.5	A	9.4	A
2. Rice Road (SR 177) / I-10 Westbound Ramps	SSSC	9.3	A	9.4	A
3. Rice Road (SR 177) / Ragsdale Road	SSSC	9.7	A	11.5	B
4. Rice Road (SR 177) / Kaiser Road (County R2)	SSSC	8.9	A	9.7	A
5. Rice Road (SR 177) / Oasis Road	SSSC	8.8	A	9.5	A
6. Oasis Road / Kaiser Road (County R2)	SSSC	Not Applicable (Future Intersections)			
7A. Rice Road (SR 177) / Project Driveway #1	SSSC	Not Applicable (Future Driveways)			
7B. Rice Road (SR 177) / Project Driveway #2	SSSC				
8. Kaiser Road (County R2) / Project Driveway #3	SSSC				

Source: David Evans and Associates, Inc.
Definitions and Abbreviations:
SSSC – Side-street stop-controlled intersection, Delay – seconds per vehicle, LOS – Level of Service



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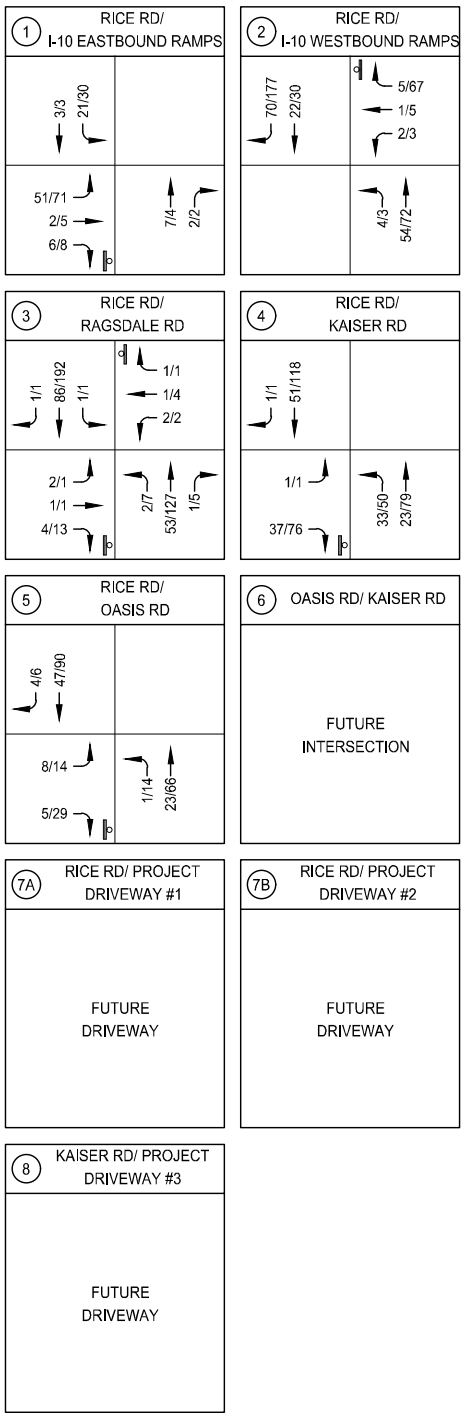

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XX/XX - AM/PM TRAFFIC VOLUMES

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

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FIGURE 3: EXISTING TRAFFIC VOLUMES
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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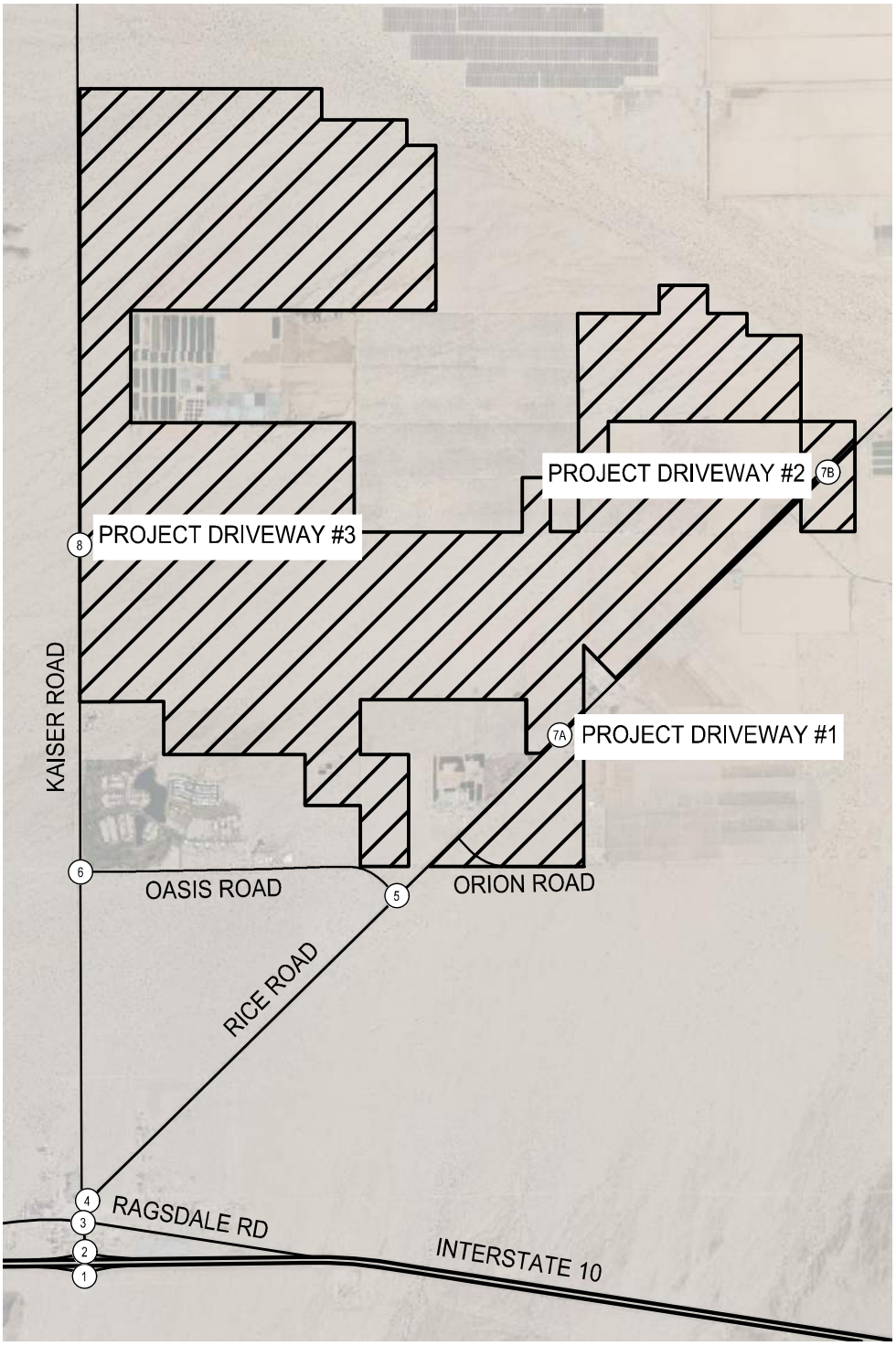

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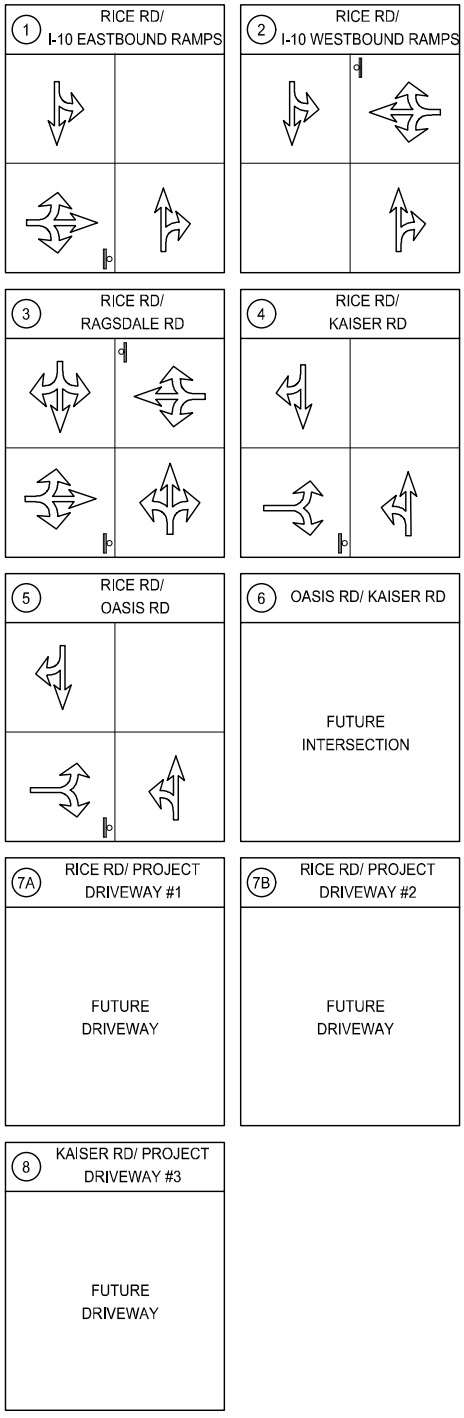

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- EXISTING GEOMETRICS
- # - STUDY INTERSECTIONS
- SIGNALIZED INTERSECTION
- STOP CONTROLLED APPROACH

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FIGURE 4: EXISTING INTERSECTION GEOMETRICS
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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4. TEMPORARY CONSTRUCTION CONDITIONS WITHOUT PROJECT

The Temporary Construction Conditions without Project Scenario reflects the maximum construction-related traffic for Other Desert Center Area Projects undergoing construction during the same period as the project. The Temporary Construction Conditions traffic volume forecasts are comprised of existing traffic volumes, ambient growth, and traffic generated by Other Desert Center Area Projects. The Easley Project's construction related traffic is not included in this scenario. The scenario represents year 2024 consistent with the start of the project's proposed construction timeline and is anticipated to require approximately 24-months to complete.

Ambient growth is a general rate of growth in traffic from overall regional growth (assumed to be 3% annually for this study). The annual growth rate is consistent with the forecasts used in the nearby Oberon Renewable Energy Project (currently under construction) traffic study.

A. Other Desert Center Area Project Construction Projects

Table 4-1 lists past and present projects or programs in the vicinity of the Easley project. Based on current information, the only Other Desert Center Area Projects that would contribute traffic to the study intersections are the Arica, Victory Pass Solar, and Oberon projects which are highlighted in the lower portion of **Table 4-1**. These projects are currently under construction and or will be in operation prior to the start of the proposed projects construction phase.

Table 4-1: Past and Present Cumulative Projects or Programs in the Vicinity of Proposed Project (Easley)

ID	Project Name; Agency ID	Status	Acres
1	West-wide Section 368 Energy Corridors	Approved	N/A
2	Blythe PV Project	Operational	200
3	McCoy Solar Project	Operational	8,100
4	Genesis Solar Energy Project	Operational	1,950
5	Blythe Solar Power Project	Operational	4,100
6	Desert Sunlight Solar Project	Operational	4,400
7	SCE Red Bluff Substation	Operational	75
8	Devers–Palo Verde No. 1 Transmission Line	Operational	N/A
9	Devers–Colorado River Transmission Line	Operational	N/A
10	Blythe Energy Project Transmission Line	Operational	N/A
11	SCE Colorado River Substation	Operational	90
12	NRG Blythe II	Operational	150
13	Desert Harvest Solar Project	Operational	1,208
14	Palen Solar Project	Operational	3,400
15	Desert Quartzite Solar Project	Operational in 2023	3,770
16	Crimson Solar Project	Operational.	2,500
17	Blythe Mesa Solar Project	Under construction.	3,600
18	Athos Renewable Energy Project	Operational	3,400
19	Oberon Renewable Energy Project	Under construction	2,600
20	Ten West Link Transmission Line	Under construction.	N/A
21	Victory Pass Solar Project	Under construction.	1,800
22	Arica Solar Project	Under construction.	2,000

The only Other Desert Center Area Project that may be actively under construction simultaneously with the project's construction and contribute traffic to the study intersections is the Sapphire Project highlighted in the **Table 4-2**. A map of the other area development projects is provided in **Appendix 4.**

Table 4-2: Potential Future Projects in the Project Area in the Vicinity of Proposed Project (Easley)

ID	Project Name	Status	Acres
A	Desert Southwest Transmission Line	Approved in 2006	N/A
B	Palo Verde Mesa Solar Project	Approved in August 2017	3,250
C	Eagle Mountain Pumped Storage Project	Approved	90
D	Sapphire Solar Project	Under review	1,140
E	Lycan Solar Project	Under review	6,944
F	Calypso I Solar Project	Under review	3,271
G	Calypso II Solar Project	Under review	2,133
H	Redonda Solar Project	Under review	3,483

Other Desert Center Area Project Construction Traffic Assumptions

The Arica, Victory Pass Solar, and Oberon projects are anticipated to be in full operation prior to the proposed project (Easley) beginning construction. As a result, the Other Desert Center Area Projects construction traffic trip assumptions for the Temporary Construction Conditions include the operation and maintenance traffic for the Arica, Victory Pass Solar, and Oberon projects and the construction traffic for the Sapphire Solar Project.

The Other Desert Center Area Project's construction traffic volumes are based on estimates of the number of employees and material and equipment delivery trucks occurring at the height of the construction phase of each identified Other Desert Center Area Project.

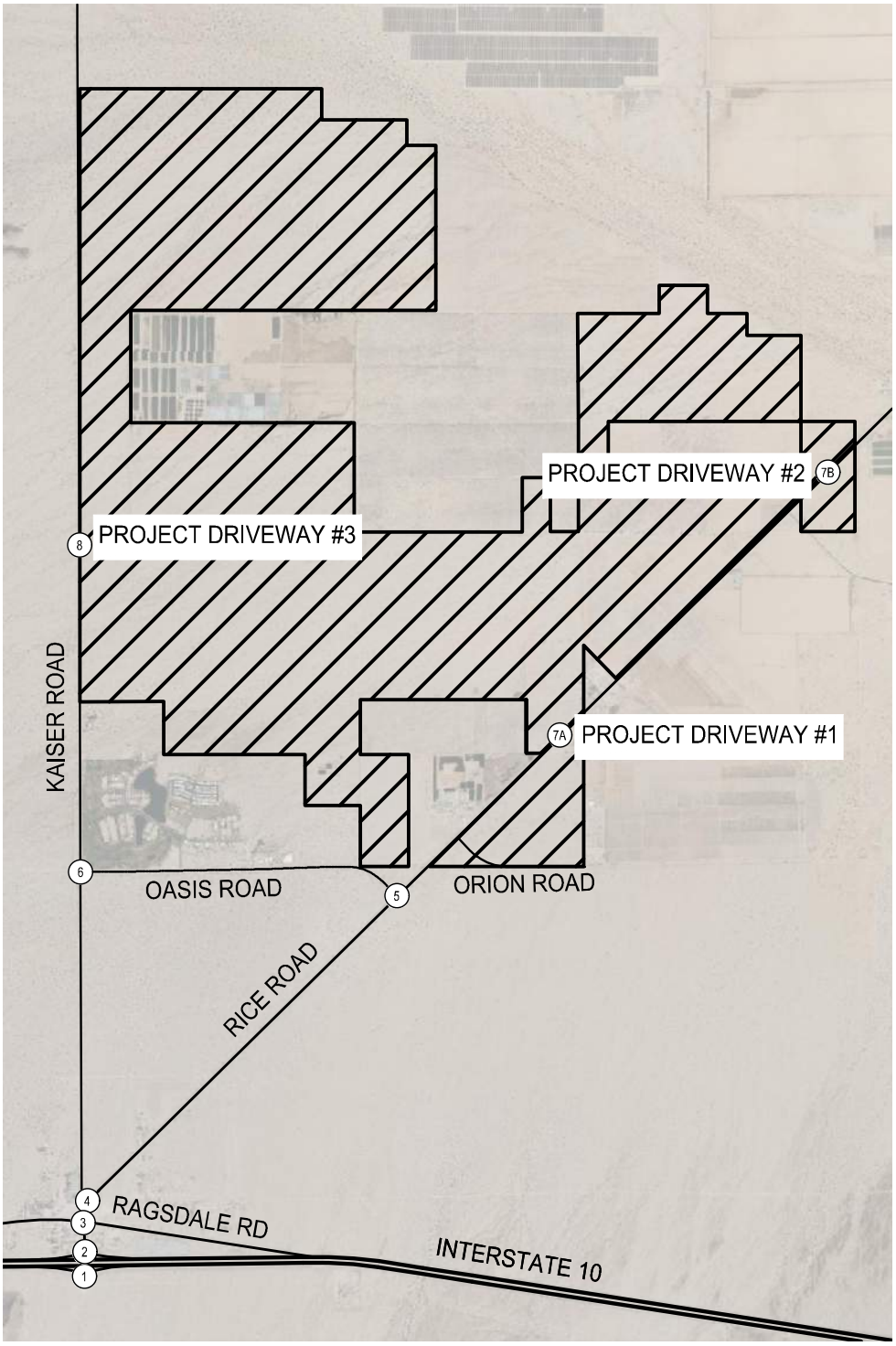
The Easley Project's construction traffic volumes are based on estimates of the number of employees and material and equipment delivery trucks occurring at the height of the construction phase. Conservatively, the height of the construction phase for each of the Other Desert Center Area Project are assumed to occur simultaneously.

Additionally, the estimated traffic generated by employees assumes that each employee travels to and from work sites in single occupant vehicles and arrive and depart during the same AM peak hour and PM peak hour of the day.

In actuality, the height of the construction phase for each Other Desert Center Area Project care likely to be offset depending on stage of construction. Furthermore, many construction employees will carpool from remote parking outside of the study area to the work sites and their arrivals and departures will be distributed over the morning (6:00-9:00 AM) peak period and afternoon (3:00-7:00 PM) peak period rather than concentrated in a single hour (AM peak hour) during the morning peak period or single hour (PM peak hour) during afternoon peak period.

As a result, the analysis of temporary construction impacts represents a worst-case scenario.

Table 4-3 lists the maximum construction activity traffic generation assumptions for the Sapphire Solar Project. Construction related trips from the cumulative projects are provided in **Figure 5.**



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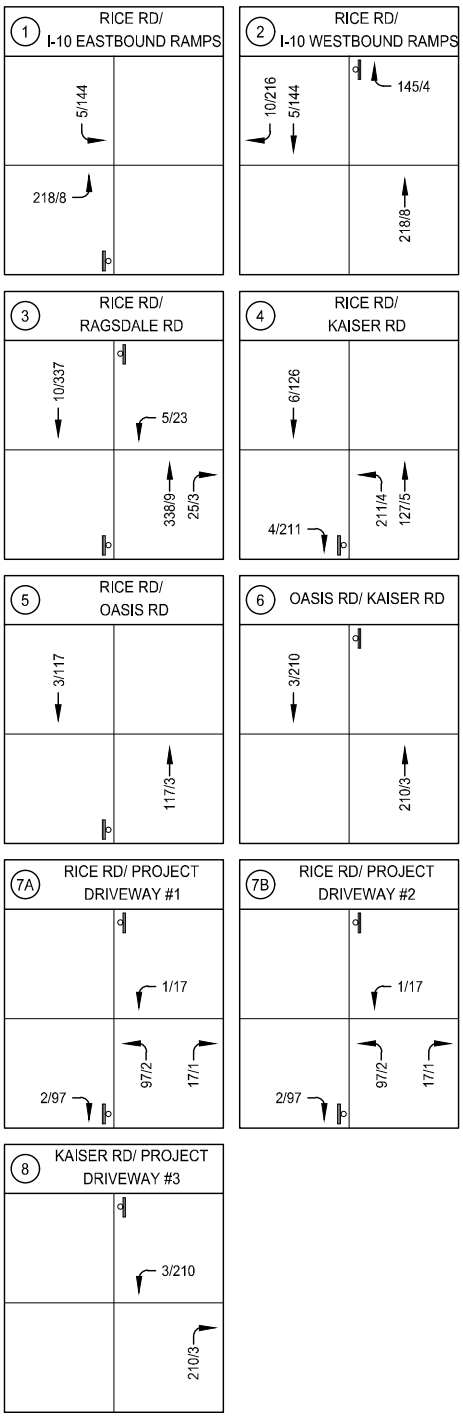

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XX/XX - AM/PM CUMULATIVE PROJECT TRIPS

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

CUMULATIVE PROJECT CONSTRUCTION TRIPS

AM PEAK PERIOD - 359 IN / 10 OUT

PM PEAK PERIOD - 5 IN / 334 OUT

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FIGURE 5: CUMULATIVE PROJECTS CONSTRUCTION TRIPS EASLEY RENEWABLE ENERGY PROJECT DESERT CENTER, CA

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Table 4-3: Other Desert Center Area Project Projects Trips - Temporary Construction Conditions

Description	Quantity	ADT	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Arica Solar Project								
Workers	10	20	10	0	10	0	10	10
Delivery Trucks	3	6	2	2	4	1	1	2
Arica Solar Project Total		26	12	2	14	1	11	12
Victory Pass Solar Project								
Workers	10	20	10	0	10	0	10	10
Delivery Trucks	3	6	2	2	4	1	1	2
Victory Pass Solar Project Total		26	12	2	14	1	11	12
Oberon Solar								
Workers	10	20	10	0	10	0	10	10
Maintenance and Deliveries	3	6	2	2	4	1	1	2
Oberon Solar Project Total		26	12	2	14	1	11	12
Sapphire Solar Project								
Workers	322	650	322	3	325	3	322	325
Delivery Trucks	9	17	1	1	2	1	1	2
Sapphire Solar Project Total		667	323	4	327	4	323	327
Other Desert Center Area Project Construction Traffic Total		**745**	**359**	**10**	**369**	**7**	**356**	**363**

B. Temporary Construction Conditions without Project Traffic Analysis

The primary access routes for construction related traffic are from the I-10 interchange to Kaiser Road and Rice Road for the Sapphire Solar Project.

The Temporary Construction without Project Conditions intersection capacity analysis utilized existing intersection geometrics. The Temporary Construction without Project traffic volumes are shown in **Figure 6**. **Table 4-4** and **Appendix 2** provide the results of the analysis.

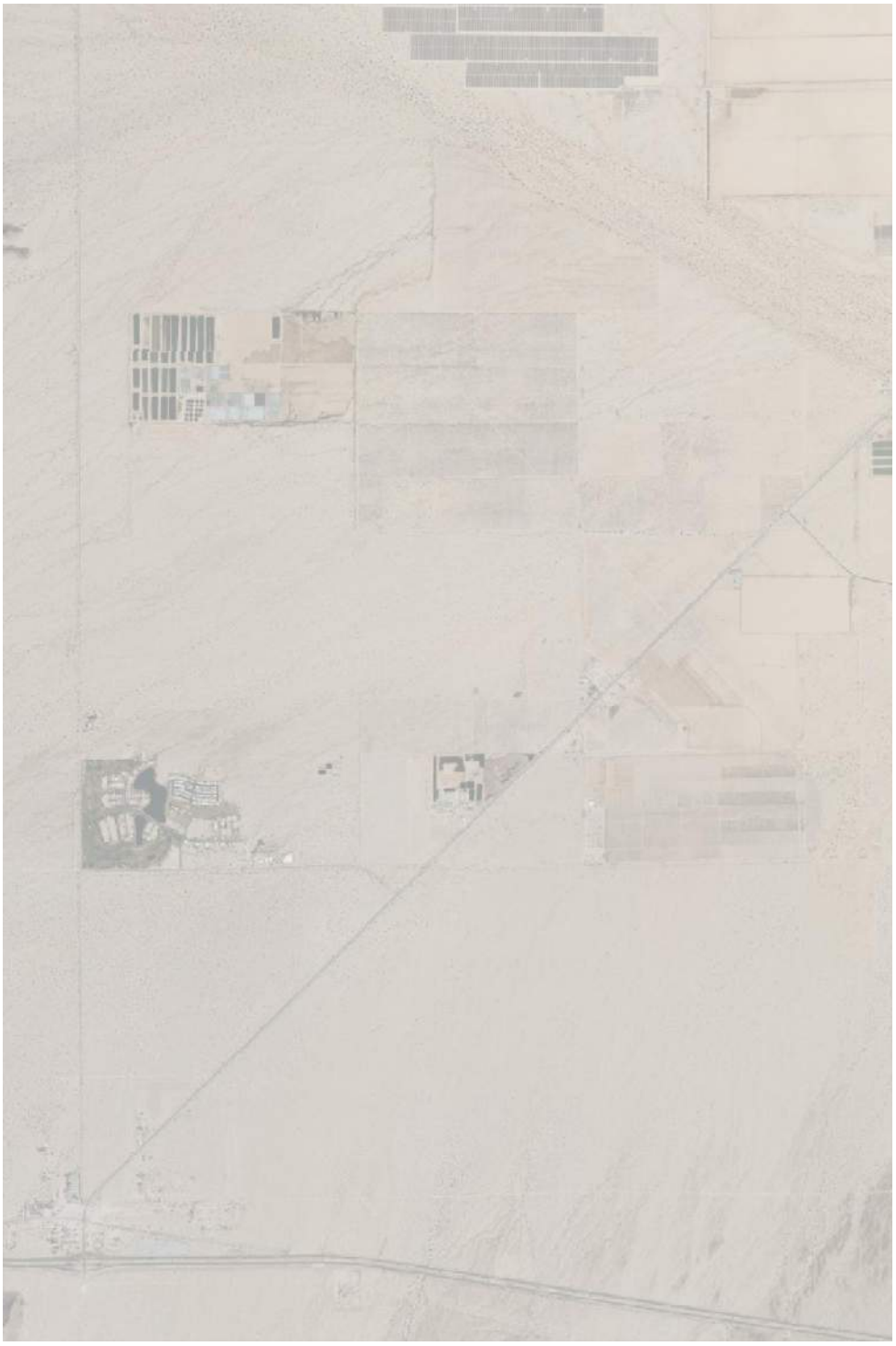
Table 4-4: Temporary Construction Conditions without Project Intersection Levels of Service

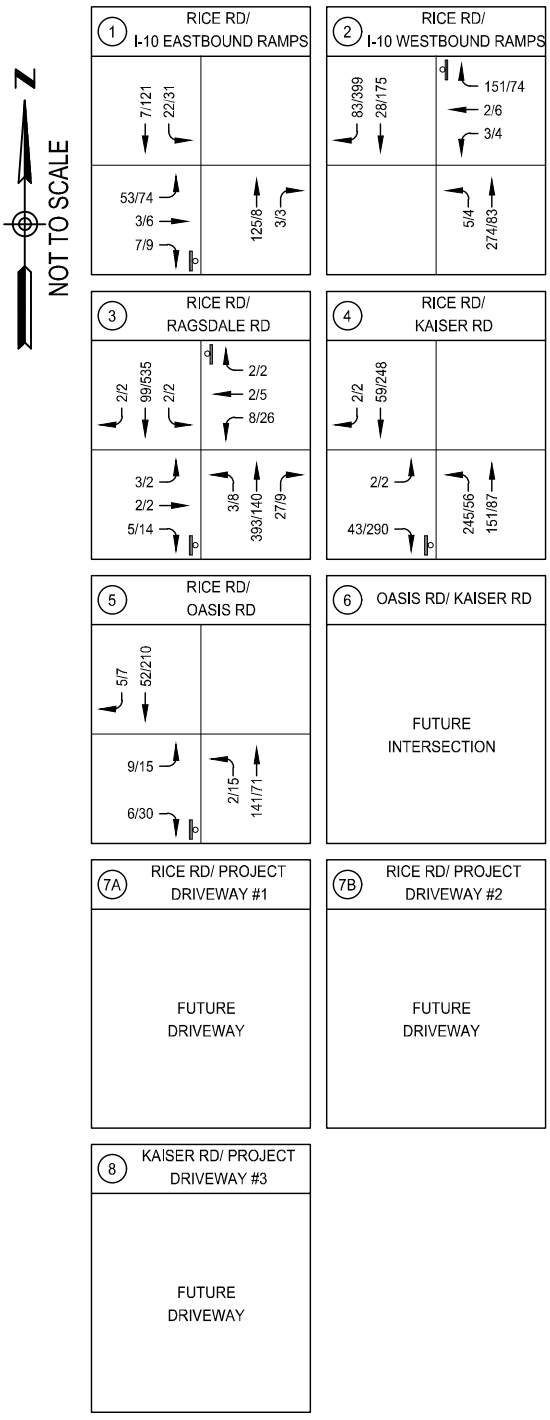
Intersection	Control Type	AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
1. Rice Road (SR 177) / I-10 Eastbound Ramps	SSSC	10.4	B	10.4	B
2. Rice Road (SR 177) / I-10 Westbound Ramps	SSSC	12.9	B	9.7	A
3. Rice Road (SR 177) / Ragsdale Road	SSSC	13.8	B	20.3	C
4. Rice Road (SR 177) / Kaiser Road (County R2)	SSSC	9.4	A	15.5	C
5. Rice Road (SR 177) / Oasis Road	SSSC	9.3	A	10.7	B
6. Oasis Road / Kaiser Road (County R2)	SSSC	Not Applicable (Future Intersections)			
7A. Rice Road (SR 177) / Project Driveway #1	SSSC	Not Applicable (Future Driveways)			
7B. Rice Road (SR 177) / Project Driveway #2	SSSC				
8. Kaiser Road (County R2) / Project Driveway #3	SSSC				

Source: David Evans and Associates, Inc.
Definitions and Abbreviations:
SSSC – Side-street stop-controlled intersection, Delay – seconds per vehicle, LOS – Level of Service

C. Temporary Construction Impacts without Project

As shown in **Table 4-4**, under the Temporary Construction Conditions without Project scenario, the study intersections are anticipated to operate at a LOS C or better for the worst movement from the stop-controlled side streets during both the AM peak hour and PM peak hour.





LEGEND

XX/XX - AM/PM TRAFFIC VOLUMES

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

DAVID EVANS AND ASSOCIATES INC.

FIGURE 6: TEMPORARY CONSTRUCTION TRAFFIC VOLUMES
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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5. TEMPORARY CONSTRUCTION CONDITIONS WITH PROJECT

The Temporary Construction Conditions with Project scenario adds the project's estimated maximum construction-related traffic to the Temporary Construction Conditions without Project Scenario.

A. Estimated Project Construction Traffic

Trip generation for the proposed project (Easley)was developed for the construction phase of the project using information provided by the applicant. **Table 5-1** provides the Average daily (ADT), AM peak hour, and PM peak hour project trips generated for the construction period of the project.

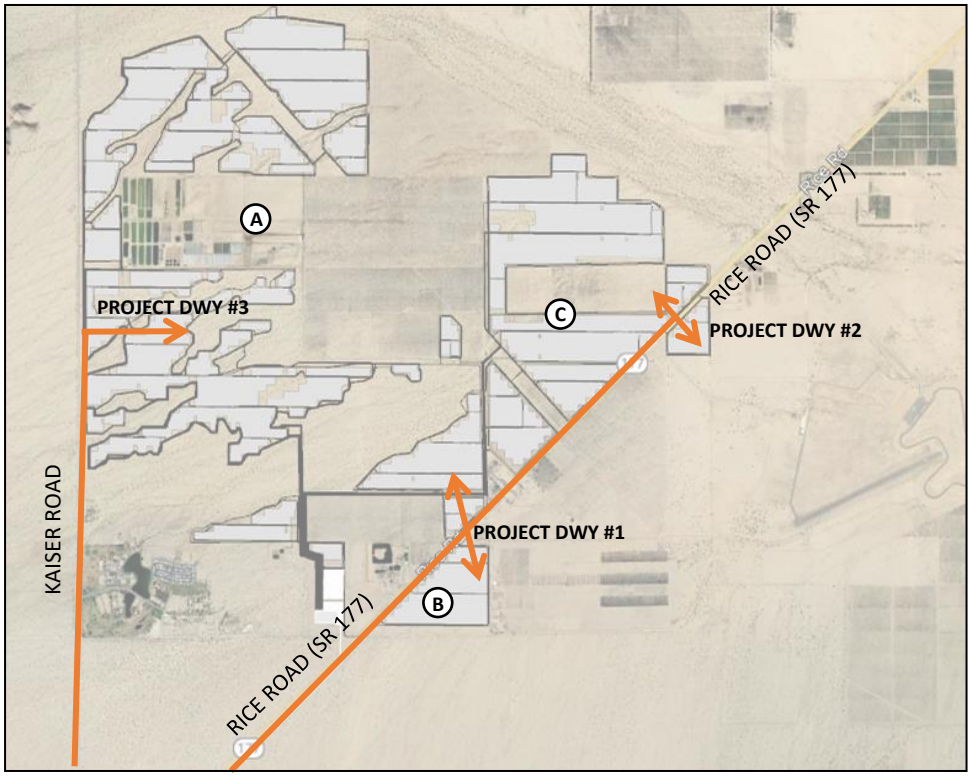
Table 5-1: Easley Renewable Energy Project Estimated Maximum Construction Related Trip Generation

Description	Quantity (Workers or Trucks)	Average Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Workers	530	1080	530	10	540	10	530	540
Delivery Trucks	80	160	3	3	6	3	3	6
	Total Trips	**1240**	**533**	**13**	**546**	**13**	**533**	**546**

B. Construction Traffic Distribution and Assignment

Project Construction Traffic Access Routes to Work Sites

Due to the size of the proposed project (Easley) area and the distribution of work sites, access to the work sites occurs at several locations. For purposes of distributing project construction traffic, the project site was divided into work sites A, B, and C. The diagram below illustrates the routes construction traffic would take to access each work site. Project Driveway #1 will be used as a primary driveway for worksite B and C. Project Driveway #2 will be used as a primary driveway for worksite C. Project Driveway #3 will be used as a primary driveway for worksite A.



Construction traffic routes to work sites.

The estimated project construction traffic was distributed and assigned to the surrounding streets and study intersections based on the anticipated direction of travel for employees and delivery vehicles. The assumed project construction traffic distribution is shown on **Figure 7**. Project-only construction traffic at the study intersections is shown on **Figure 8**.

C. Temporary Construction Conditions with Project Traffic Analysis

Figure 9 shows the Temporary Construction Conditions traffic volumes with the addition of project construction traffic. **Figure 10** illustrates the temporary project construction intersection geometrics utilized in the capacity analysis. **Table 5-2** and **Appendix 2** provide the results of the analysis.

Table 5-2: Temporary Construction Conditions with Project Intersection Levels of Service

Intersection	Control Type	Temporary Construction Traffic Volumes				Temporary Construction with Project Traffic Volumes			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Rice Road (SR 177) / I-10 Eastbound Ramps	SSSC	10.4	B	10.4	B	18.5	C	18.3	C
2. Rice Road (SR 177) / I-10 Westbound Ramps	SSSC	12.9	B	9.7	A	**114.3**	**F**	12.2	B
3. Rice Road (SR 177) / Ragsdale Road	SSSC	13.8	B	20.3	C	29.5	D	**72.8**	**F**
4. Rice Road (SR 177) / Kaiser Road (County R2)	SSSC	9.4	A	15.5	C	14.4	B	**271.6**	**F**
5. Rice Road (SR 177) / Oasis Road	SSSC	9.3	A	10.7	B	10.4	B	13.2	B
6. Oasis Road / Kaiser Road (County R2)	SSSC	Not Applicable (Future Intersection)				13.9	B	12.8	B
7A. Rice Road (SR 177) / Project Driveway #1	SSSC	Not Applicable (Future Driveways)				17.3	C	17.5	C
7B. Rice Road (SR 177) / Project Driveway #2	SSSC					17.3	C	17.5	C
8. Kaiser Road (County R2) / Project Driveway #3	SSSC					11.2	B	29.3	D

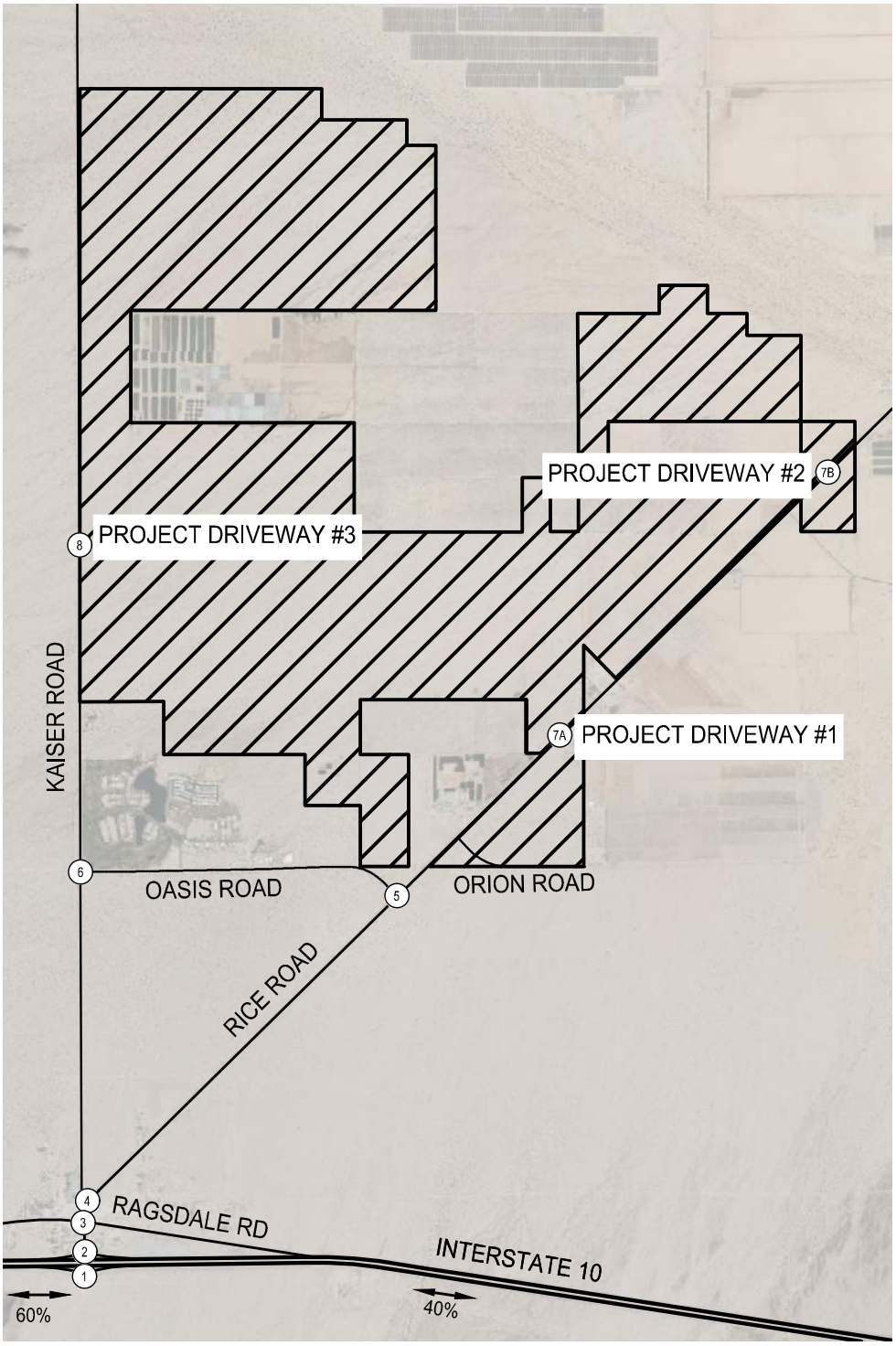
Source: David Evans and Associates, Inc.
Definitions and Abbreviations:
SSSC – Side-street stop-controlled intersection, Delay – seconds per vehicle, LOS – Level of Service

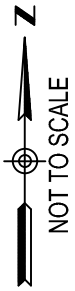
D. Temporary Project Construction Impacts with Project

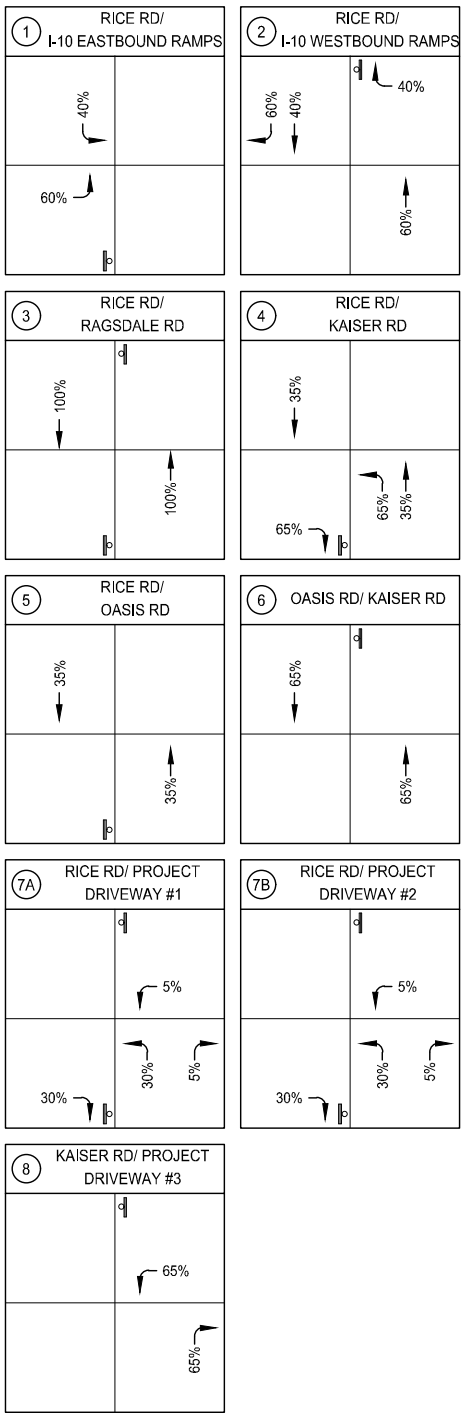
As presented in **Table 5-2***,* under the Temporary Construction Conditions with Project Scenario, three study intersections are anticipated to operate at a LOS F during either the AM peak hour or PM peak hour. These intersections include Rice Road (SR 177) at I-10 WB Ramps, Rice Road (SR 177) at Ragsdale Road, and Rice Road (SR 177) / Kaiser Road (County R2).

The movements operating at LOS F at the intersections are the stop-controlled movements from the side streets or interchange ramps intersecting Rice Road (SR 177). These intersections would experience delays exceeding 50 seconds per vehicle which is the threshold for acceptable delays at side-street stop-controlled intersections, assuming the maximum construction traffic accessed these intersections during a single peak hour.

- **Rice Road (SR 177) at I-10 WB Off-Ramp/On-Ramp**: In the AM peak hour the movement operating at LOS F is the nearly 600 vehicles traveling northbound on the overpass conflicting with more than 350 vehicles exiting the westbound off-ramp and turning right onto Rice Road (all inbound construction employees). There is no impact in the PM peak hour because the outbound construction traffic accesses the interchange ramps with uncontrolled movements and the conflicting off-ramp traffic volumes are very low.
- **Rice Road (SR 177) at Ragsdale Road:** There is no impact in the AM peak hour because the construction traffic at this intersection is traveling northbound as uncontrolled through traffic destined to either the Sapphire Solar Project or Proposed Project (Easley) work sites. Conflicting movements at this intersection in the AM peak hour are very low. However, in the PM peak hour the more than 1,000 southbound through vehicles (combined outbound construction traffic from Sapphire Solar Project and the proposed project traffic) conflicts with 26 stop-controlled westbound left turns (outbound Operation and Maintenance traffic from Arica and Victory Pass).







LEGEND

- XX% - GENERAL PROJECT TRIP DISTRIBUTION
- XX% - SPECIFIC PROJECT TRIP PERCENTAGE
- (#) - STUDY INTERSECTIONS
- STOP CONTROLLED INTERSECTION
- SIGNAL CONTROLLED INTERSECTION

DAVID EVANS AND ASSOCIATES INC.

FIGURE 7: PROJECT CONSTRUCTION TRAFFIC TRIP DISTRIBUTION
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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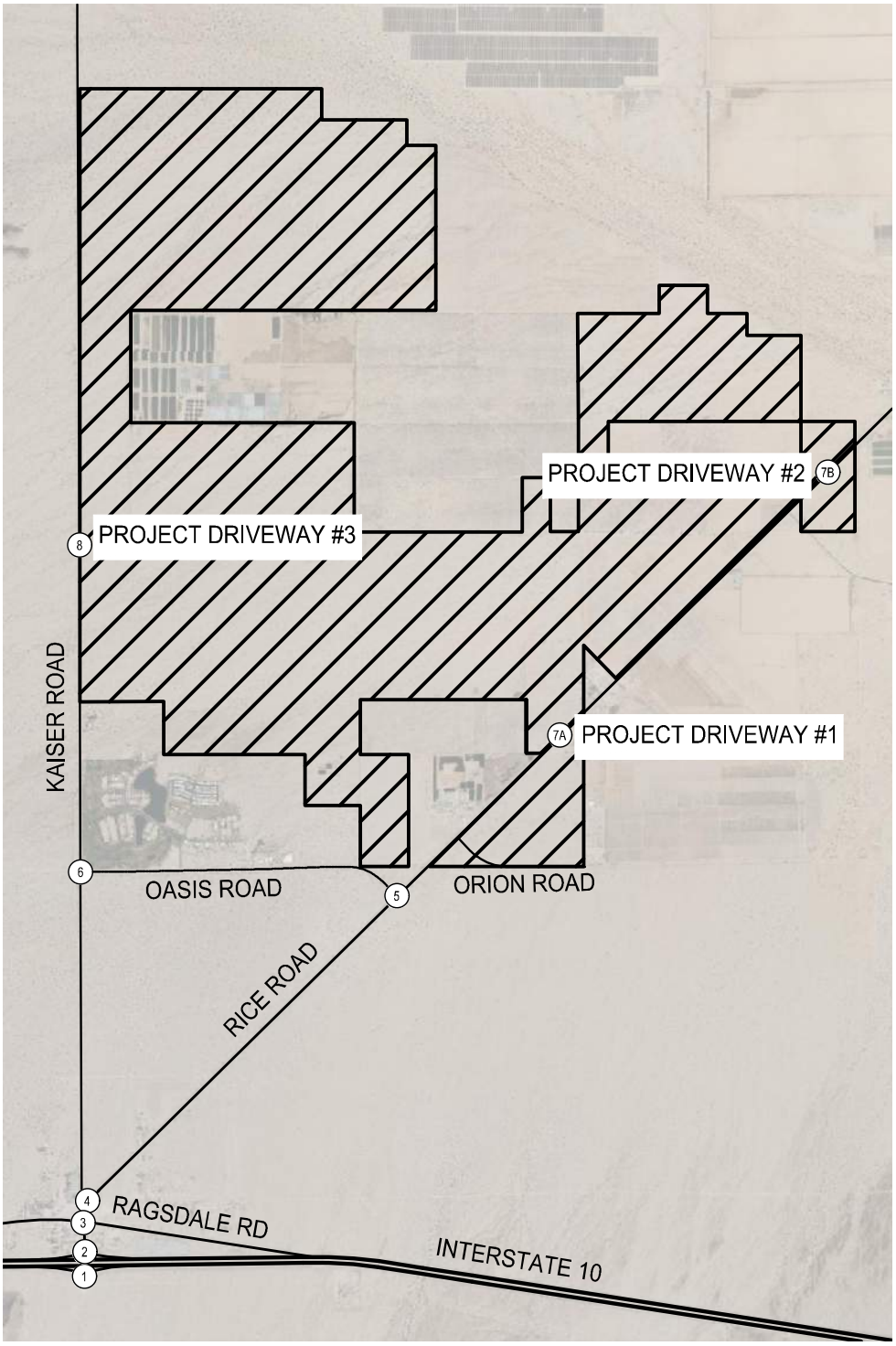

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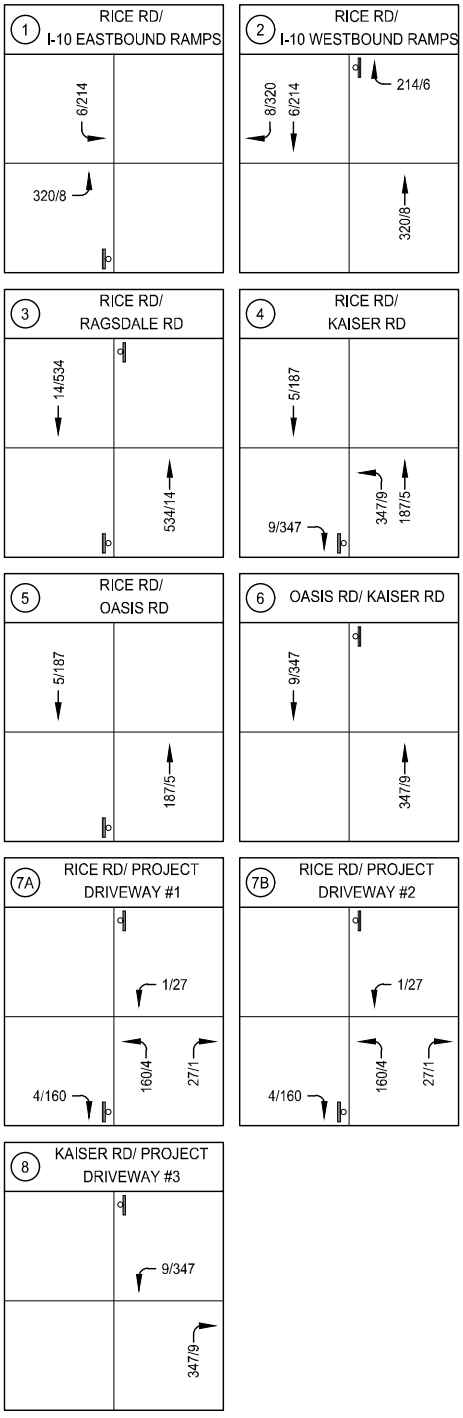

LEGEND

XX/XX - AM/PM PROJECT TRIPS

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

PROJECT CONSTRUCTION TRAFFIC TRIPS

AM PEAK PERIOD - 533 IN / 13 OUT

PM PEAK PERIOD - 13 IN / 533 OUT

DAVID EVANS AND ASSOCIATES INC.

FIGURE 8: PROJECT CONSTRUCTION TRAFFIC TRIPS
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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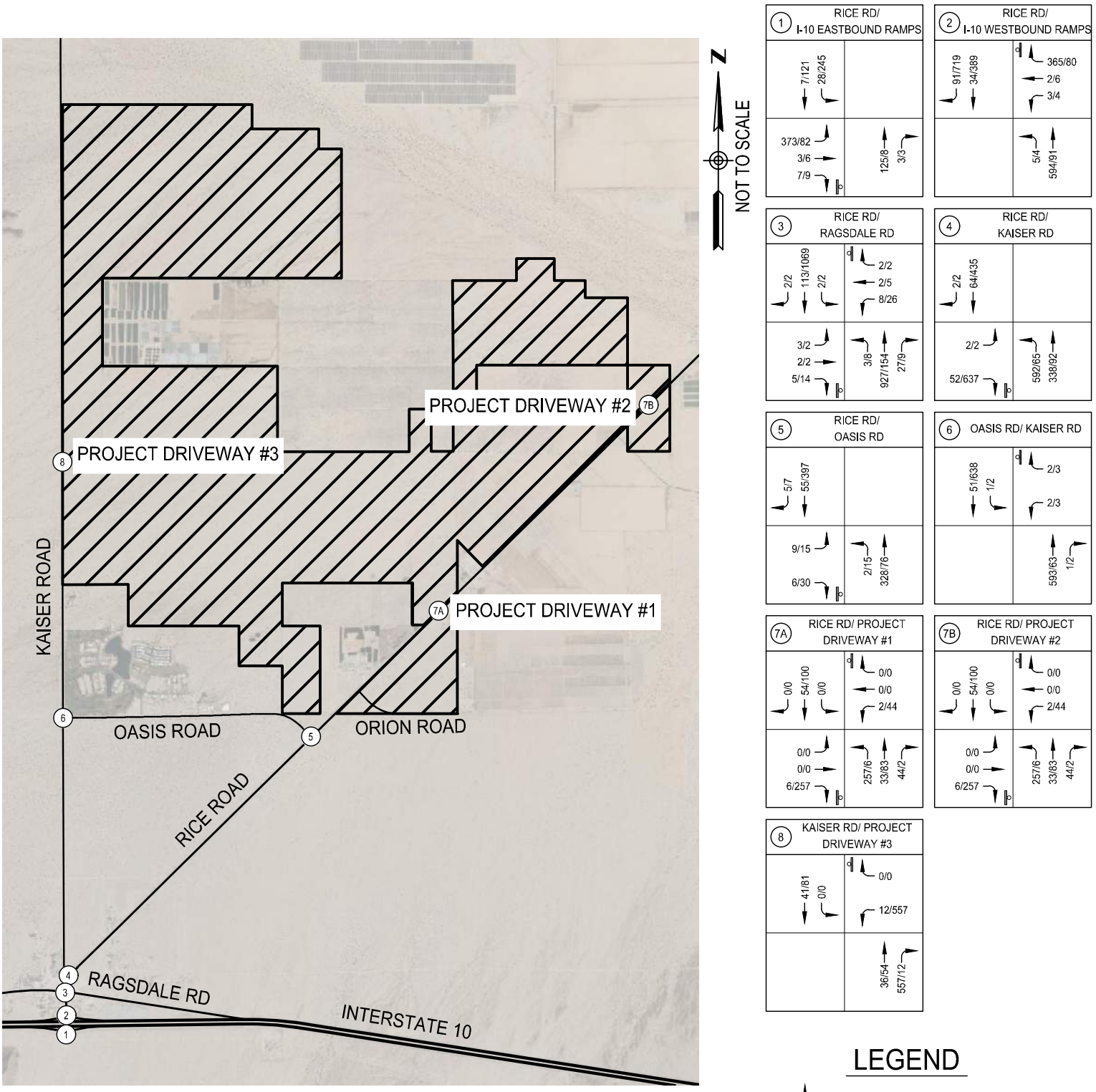

LEGEND

XX/XX - AM/PM TRAFFIC VOLUMES

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

DAVID EVANS AND ASSOCIATES INC.

FIGURE 9: TEMPORARY CONSTRUCTION WITH PROJECT TRAFFIC VOLUMES
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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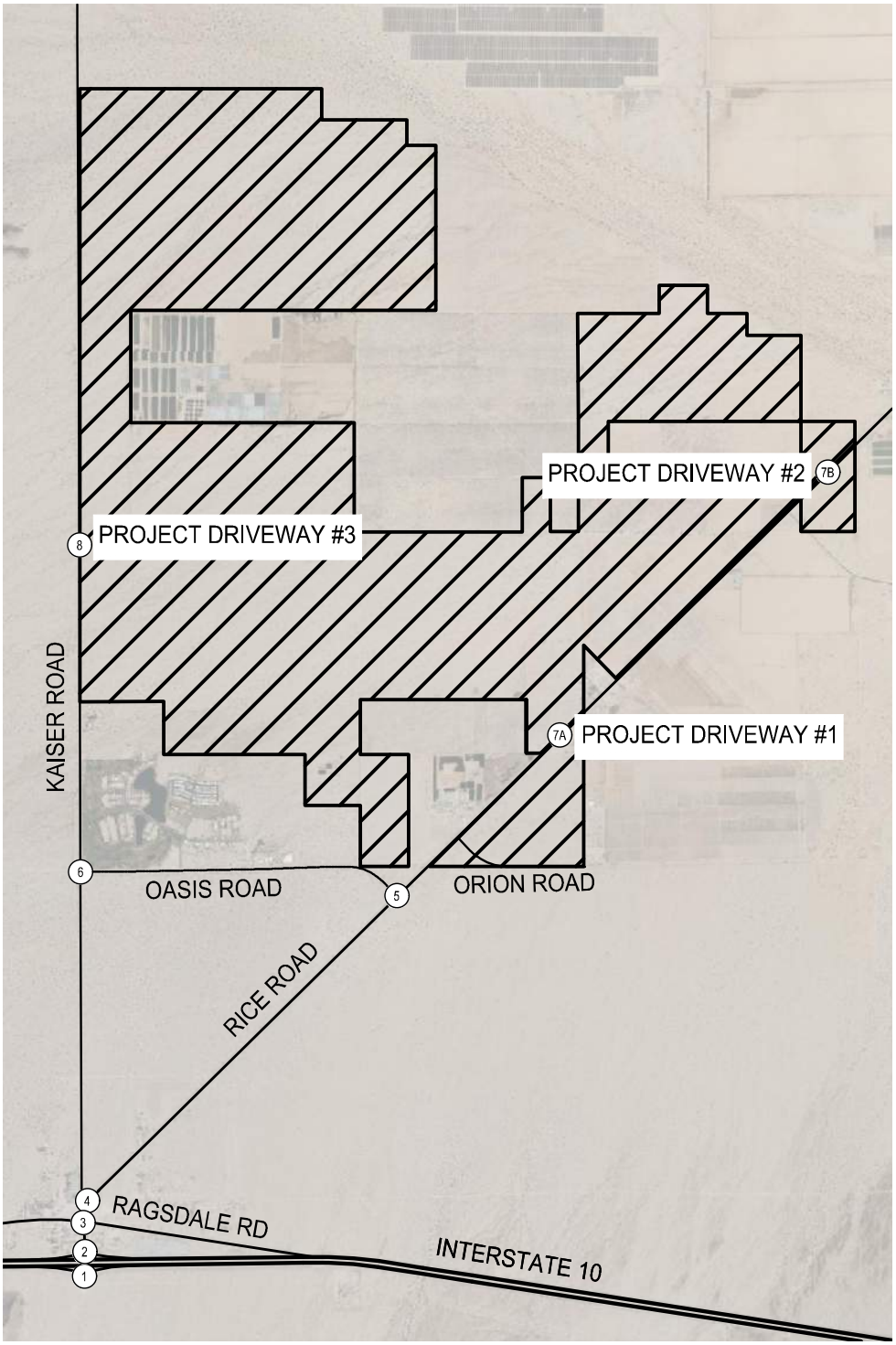

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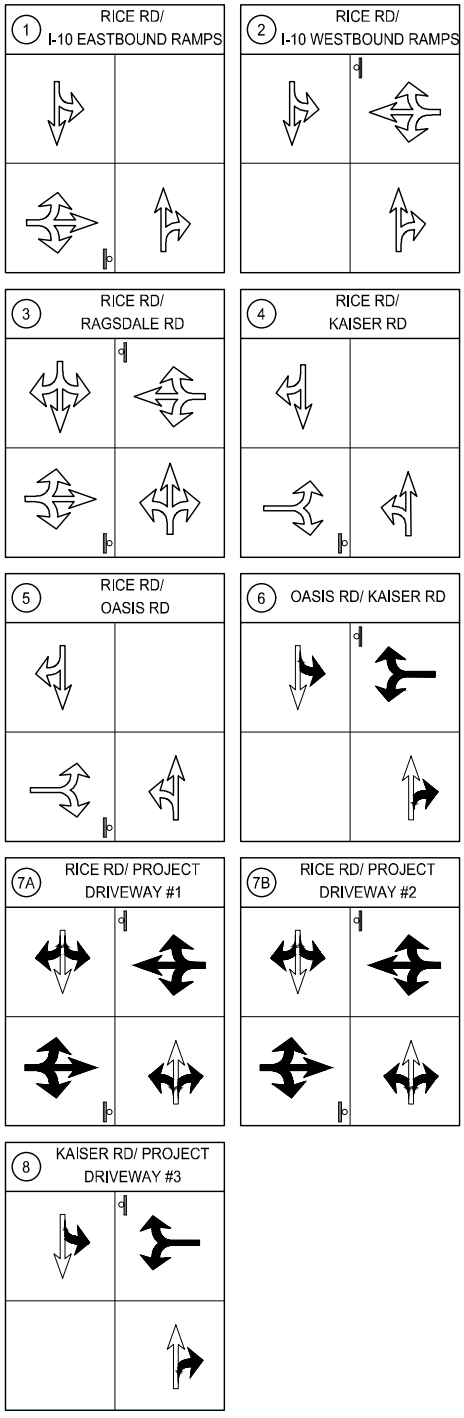

LEGEND

- EXISTING GEOMETRICS
- PROPOSED GEOMETRICS
- # - STUDY INTERSECTIONS
- SIGNALIZED INTERSECTION
- STOP CONTROLLED APPROACH

Note: Minor reconfigurations of the Project site and driveway locations would not impact the conclusions of this study.

DAVID EVANS AND ASSOCIATES INC.

FIGURE 10: TEMPORARY CONSTRUCTION WITH PROJECT INTERSECTION GEOMETRICS
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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- **Rice Road (SR 177) at Kaiser Road:** There is no impact in the AM peak hour because the construction traffic at this intersection are uncontrolled movements turning left northbound or continuing through northbound destined to the Sapphire Solar or proposed project (Easley) work site. Conflicting movements at this intersection in the AM peak hour are very low. However, in the PM peak hour the more than 400 southbound through vehicles (outbound construction traffic from Sapphire Solar Project and the proposed project traffic) conflicts with the more than 600 stop-controlled eastbound right turns (outbound construction traffic from Sapphire Solar Project and the proposed project (Easley)).

E. Temporary Construction Mitigation Measures

Monitoring Construction Traffic Conditions

Initial monitoring is recommended because the conservative assumptions used in forecasting construction traffic may have over-estimated peak hour demands. The actual variability of daily construction traffic is due to different start and end times, subcontractors arriving and departing throughout the day, the offset of the height of construction traffic of the Easley and Sapphire projects, and the potential for workers on the same daily schedule to carpool to work. This variability means the construction traffic will typically be spread throughout the day. However, on occasion when a new stage of construction begins or when labor intensive work is scheduled, there may be substantial demands at the stop-controlled intersections.

Monitoring should be conducted continuously in the initial two weeks of construction and whenever a new stage of construction begins or the number of workers and/or daily deliveries or equipment changes materially to identify when flagging operations are needed.

Monitoring should include observation of off-ramp queues to identify the potential for queues extending into the mainline. Coordinate monitoring with Caltrans to establish criteria for triggering flagging operations.

Temporary Traffic Control Measures

Mitigation of temporary impacts with the addition of project traffic may require flagging operations[3] during maximum inbound or outbound periods or when indicated through monitoring traffic operations during construction or determined to be required during construction stage planning. A plan should be in place prior to the onset of construction, reviewed and approved by Caltrans, for deployment of flagging operations with little lead time.

Measures to Reduce Peak Construction Demands

Demand management measures can reduce construction worker traffic to the extent where flagging operations may be avoided. Demand management options should be developed in coordination with the contracting companies working on the project who are usually familiar with the types of measures suitable for their workforce. Types of measures include:

- Worker ridesharing / carpooling – is most effective when incentives such as preferential parking at worksites, or financial incentives such as fuel vouchers or reimbursement are offered. The demand management plan should include a ride matching program and incentives for workers who commit to carpool two or more days per week.
- Remote parking with shuttle to worksites – when temporary impacts of construction traffic is projected to intensify due to overlapping schedules of the Easley and Sapphire projects, or during a labor-intensive construction stage, designating a temporary off-site parking area with contracted shuttle service operating all day on a frequent schedule can effectively reduce highly peaked periods of demand.

[3] Flagging operations will require a plan in accordance with California Code of Regulations, Title 8, Section 1599, (8 CCR 1599) "Flaggers," and Chapter 6E, "Flagger Control," of the *California MUTCD*. This plan should be prepared and approved before beginning construction.

- Offset shifts – offsetting work start and end times, even by 15-minutes but preferably 30-minutes, can reduce peak hour traffic and spread the demand into the hour before the peak hour and the hour after the peak hour. If many workers arrive and depart within the same hour, this measure can be effective enough to avoid flagging operations.

6. OPENING YEAR CONDITIONS WITHOUT PROJECT

The opening year is defined as the period in which the Easley project is fully constructed and in now in full operation. The Opening Year Conditions forecast traffic volumes are comprised of existing traffic volumes, ambient growth, and operation and maintenance traffic generated by the cumulative projects. The opening year, 2026, represents the first year of commercial operation of the proposed project (Easley) at which time the construction of the Sapphire Solar Project is also anticipated to have been completed. The Arica, Victory Pass, and Oberon Solar Projects are anticipated to be in operation prior to the construction phase of the proposed project (Easley).

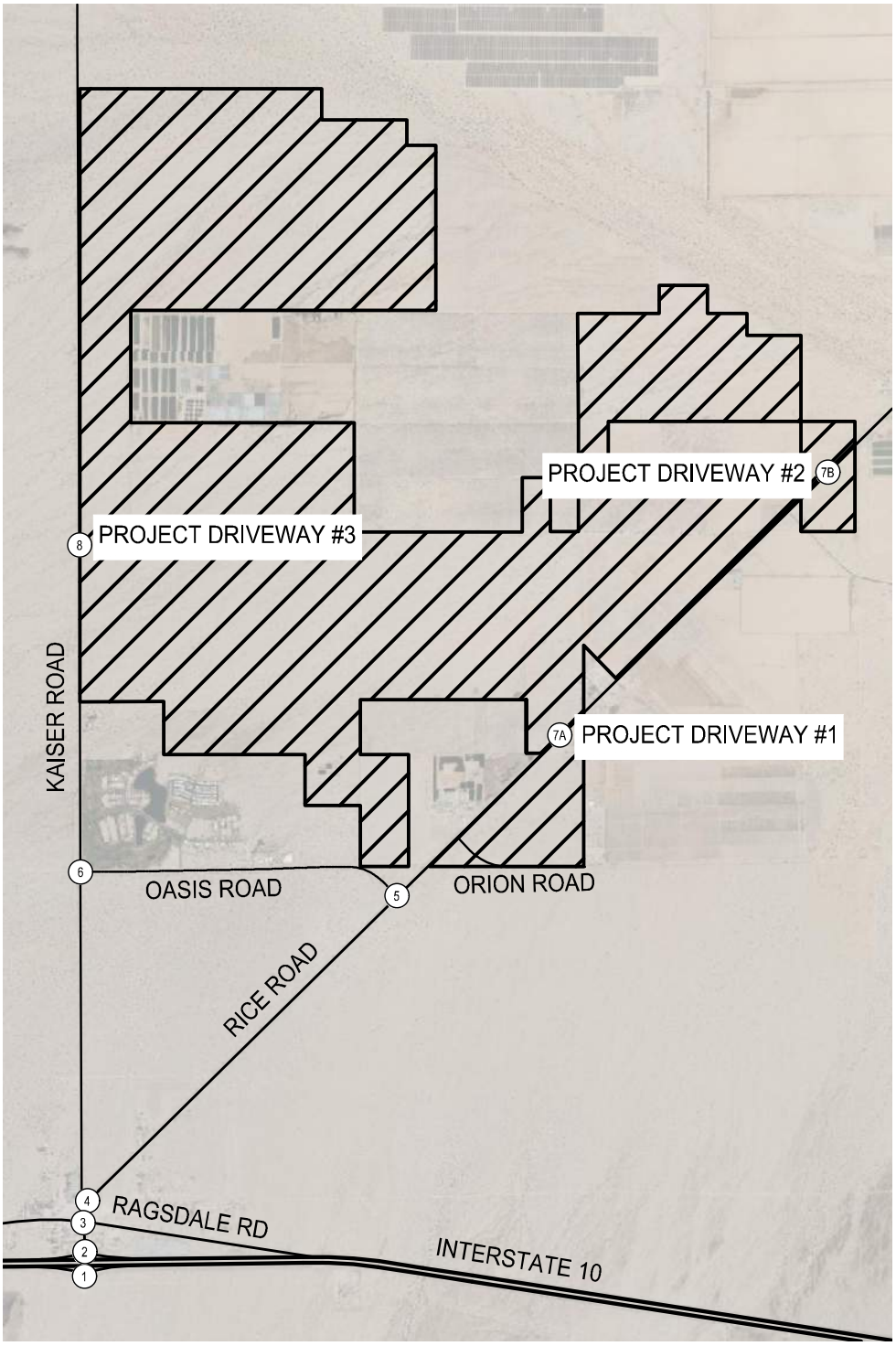
The ambient growth is a general rate of growth in traffic from overall regional growth (assumed to be 3% annually for this study). In addition, operations and maintenance traffic generated by the cumulative projects are provided in the **Appendix 4**.

A. Estimated Operations and Maintenance Traffic Generation of Cumulative Projects

Table 6-1 presents the estimated operations and maintenance traffic generation for the Arica, Victory Pass, Oberon, and Sapphire projects. The cumulative project operations and maintenance trips are shown in **Figure 11**.

Table 6-1: Estimated Operations and Maintenance Traffic Generation of Cumulative Projects

Description	Quantity	ADT	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Arica Solar Project								
Workers	10	20	10	0	10	0	10	10
Delivery Trucks	3	6	2	2	4	1	1	2
Arica Solar Project Total		26	12	2	14	1	11	12
Victory Pass Solar Project								
Workers	10	20	10	0	10	0	10	10
Delivery Trucks	3	6	2	2	4	1	1	2
Victory Pass Solar Project Total		26	12	2	14	1	11	12
Oberon Solar								
Workers	10	20	10	0	10	0	10	10
Maintenance and Deliveries	3	6	2	2	4	1	1	2
Oberon Solar Project Total		26	12	2	14	1	11	12
Sapphire Solar Project								
Workers	10	20	10	0	10	0	10	10
Delivery Trucks	3	6	2	2	4	1	1	2
Sapphire Solar Project Total		26	12	2	14	1	11	12
All Cumulative Projects Total		**104**	**48**	**8**	**56**	**4**	**44**	**48**



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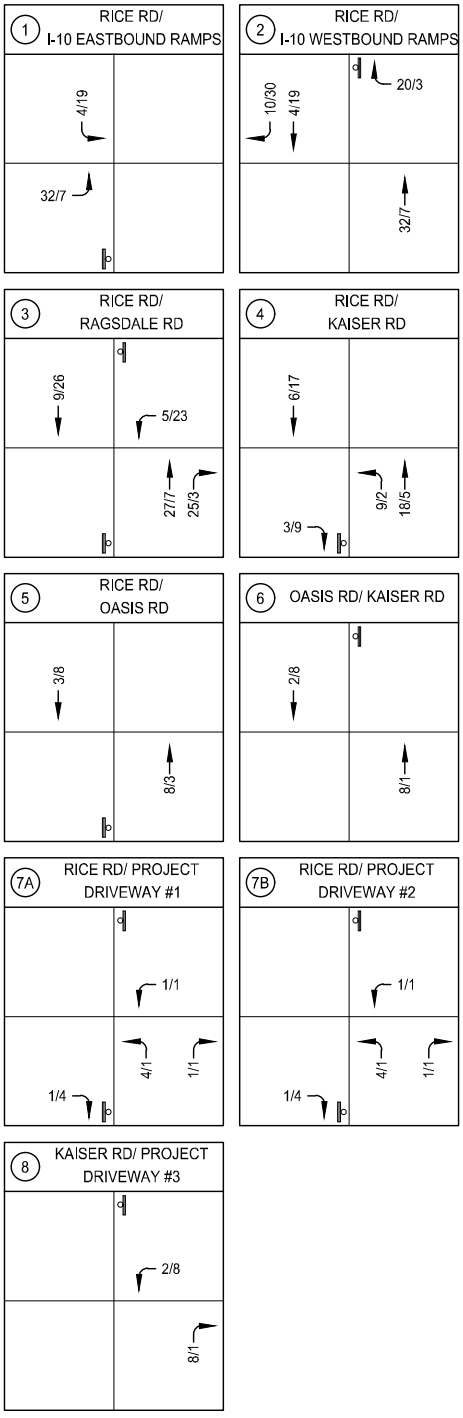

LEGEND

XX/XX - AM/PM CUMULATIVE PROJECT TRIPS

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

CUMULATIVE PROJECT CONSTRUCTION TRIPS

AM PEAK PERIOD - 48 IN / 8 OUT

PM PEAK PERIOD - 4 IN / 44 OUT

DAVID EVANS AND ASSOCIATES INC.

FIGURE 11: CUMULATIVE PROJECTS O&M TRIPS EASLEY RENEWABLE ENERGY PROJECT DESERT CENTER, CA

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B. Opening Year Conditions without Project Traffic Analysis

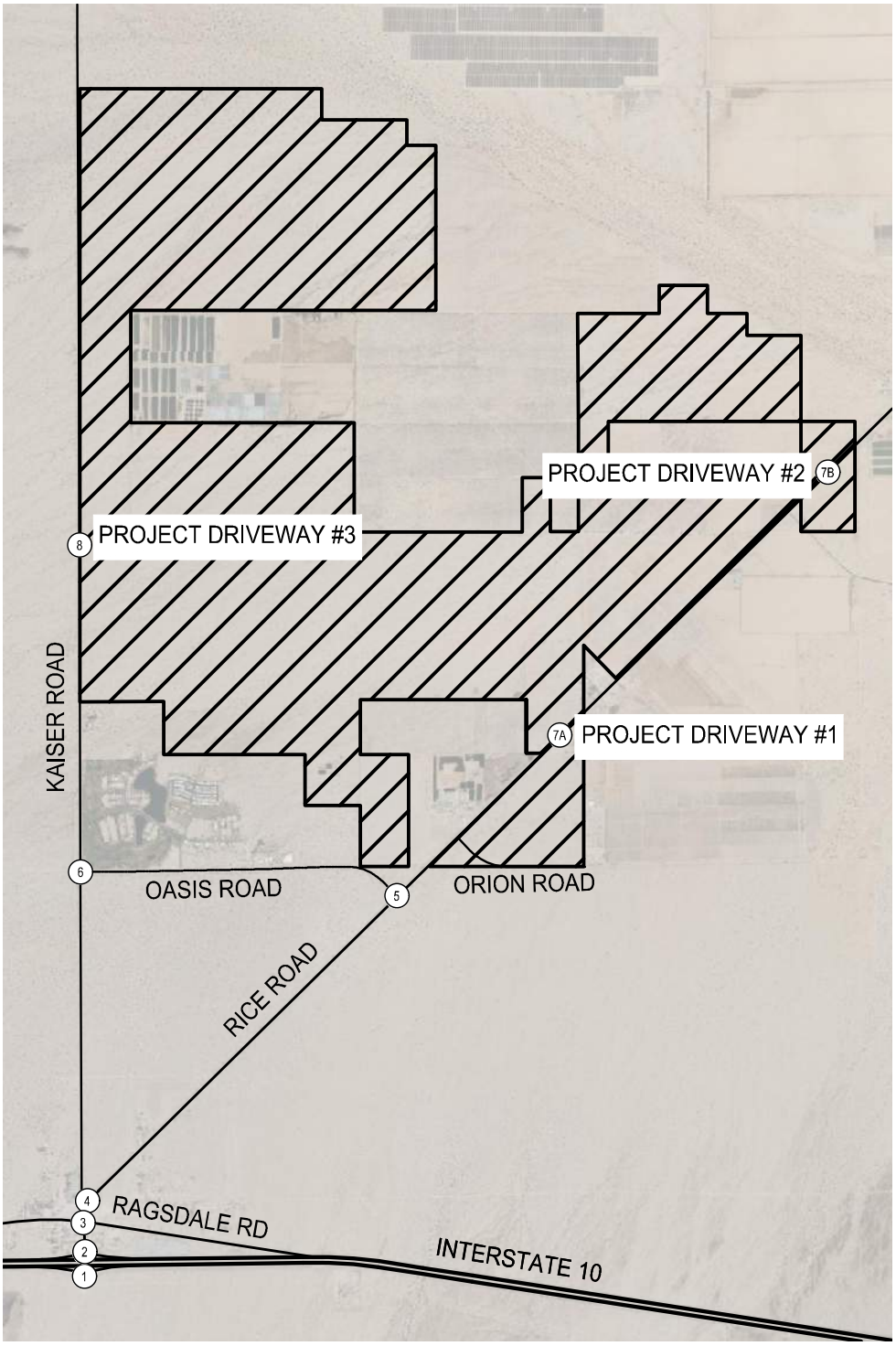
The trip distribution and assignment of the cumulative projects operations and maintenance traffic assumes the same patterns as their construction related traffic. The Opening Year Conditions intersection capacity analysis utilized existing intersection geometrics and the projected AM peak hour and PM peak hour traffic volumes shown in **Figure 12**. **Table 6-2** and **Appendix 2** provide the results of the analysis.

Table 6-2: Opening Year Conditions without Project Intersection Levels of Service

Intersection	Control Type	AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
1. Rice Road (SR 177) / I-10 Eastbound Ramps	SSSC	9.9	A	9.9	B
2. Rice Road (SR 177) / I-10 Westbound Ramps	SSSC	9.6	A	9.6	A
3. Rice Road (SR 177) / Ragsdale Road	SSSC	10.2	B	13.4	B
4. Rice Road (SR 177) / Kaiser Road (County R2)	SSSC	9.0	A	10.1	B
5. Rice Road (SR 177) / Oasis Road	SSSC	9.0	A	9.8	A
6. Oasis Road / Kaiser Road (County R2)	SSSC	Not Applicable (Future Intersections)			
7A. Rice Road (SR 177) / Project Driveway #1	SSSC	Not Applicable (Future Driveways)			
7B. Rice Road (SR 177) / Project Driveway #2	SSSC				
8. Kaiser Road (County R2) / Project Driveway #3	SSSC				

Source: David Evans and Associates, Inc.
Definitions and Abbreviations:
SSSC – Side-street stop-controlled intersection, Delay – seconds per vehicle, LOS – Level of Service

As presented in **Table 6-2***,* under Opening Year Conditions without Project Scenario, the study intersections are anticipated to operate at a LOS B or better in both the AM peak hour and PM peak hour.



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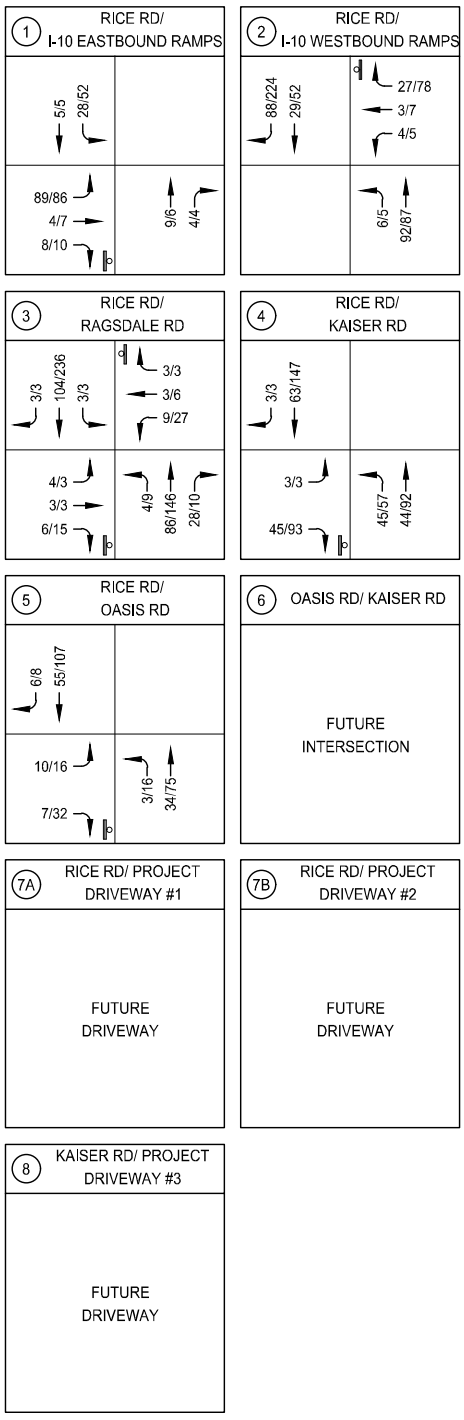

LEGEND

XX/XX - AM/PM TRAFFIC VOLUMES

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

DAVID EVANS AND ASSOCIATES INC.

FIGURE 12: OPENING YEAR CONDITIONS WITHOUT PROJECT TRAFFIC VOLUMES
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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7. OPENING YEAR CONDITIONS WITH PROJECT

The opening year is defined as the period in which the Easley project is fully constructed and in now in full operation. The opening year with project scenario includes the addition of the project's maximum operation and maintenance-related traffic to the opening year without project scenario.

A. Estimated Project Operations and Maintenance Traffic Generation

Trip generation for the proposed project (Easley) was developed for the operations and maintenance phase of the project using information provided by the applicant. **Table 7-1** provides the average daily, AM peak hour, and PM peak hour trips generated for the operation and maintenance phase.

Table 7-1: Easley Renewable Energy Project Operations and Maintenance Trip Generation

Description	Quantity	ADT	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Workers	10	20	10	0	10	0	10	10
Delivery Trucks	3	6	2	2	4	1	1	2
Total		**26**	**12**	**2**	**14**	**1**	**11**	**12**

B. Project Operations and Maintenance Trip Distribution and Assignment

The project's operations and maintenance trip distribution is shown on **Figure 13**, and the resulting project only trips at the study intersections is shown on **Figure 14**.

C. Project Operations and Maintenance Project Traffic Analysis

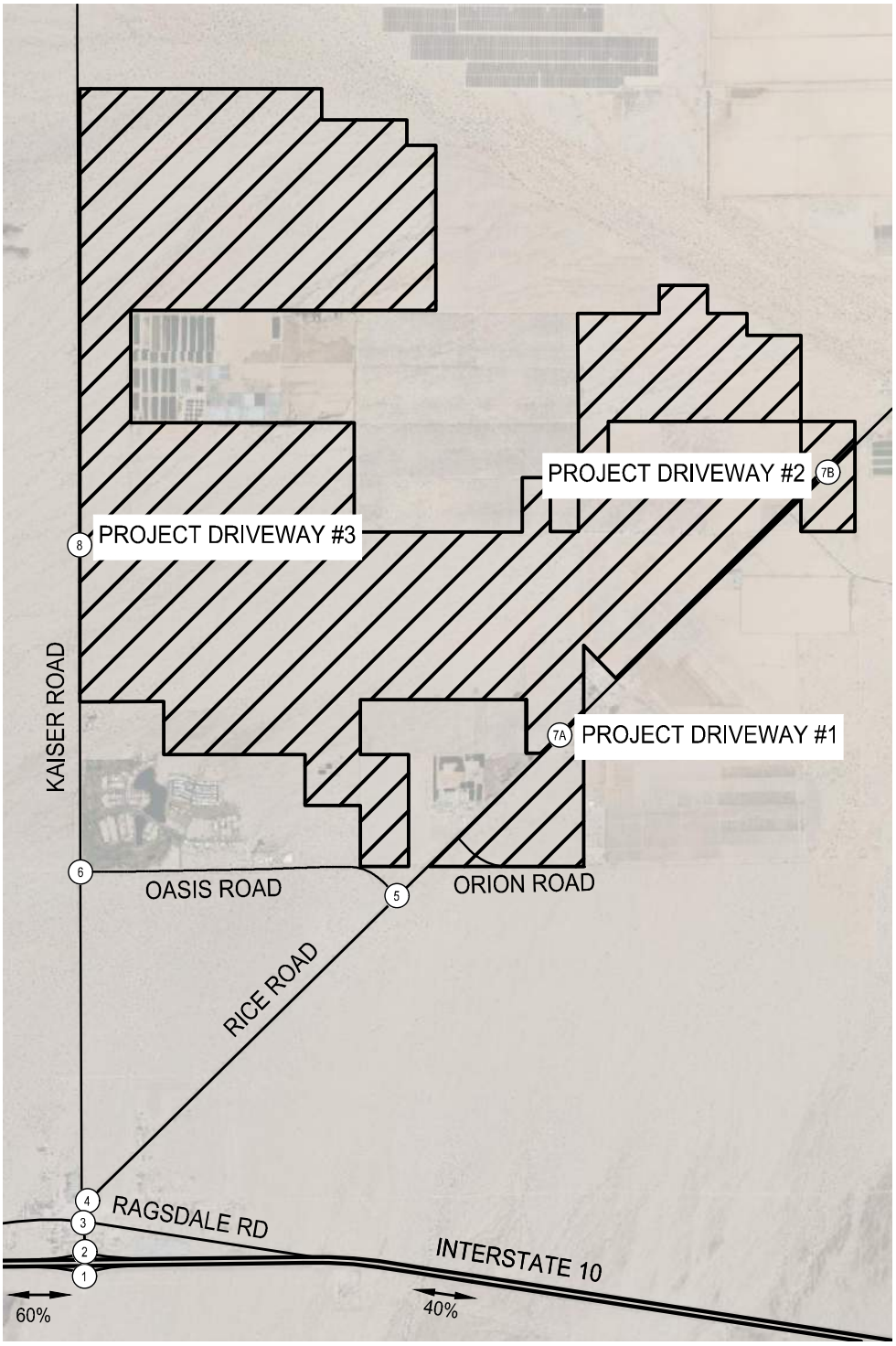
Figure 15 shows the Opening Year Conditions with Project traffic volumes utilized in the capacity analysis. **Table 7-2: Opening Year Conditions with Project Intersection Levels of** Service and **Appendix 2** provide the results of the analysis.

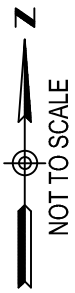
Table 7-2: Opening Year Conditions with Project Intersection Levels of Service

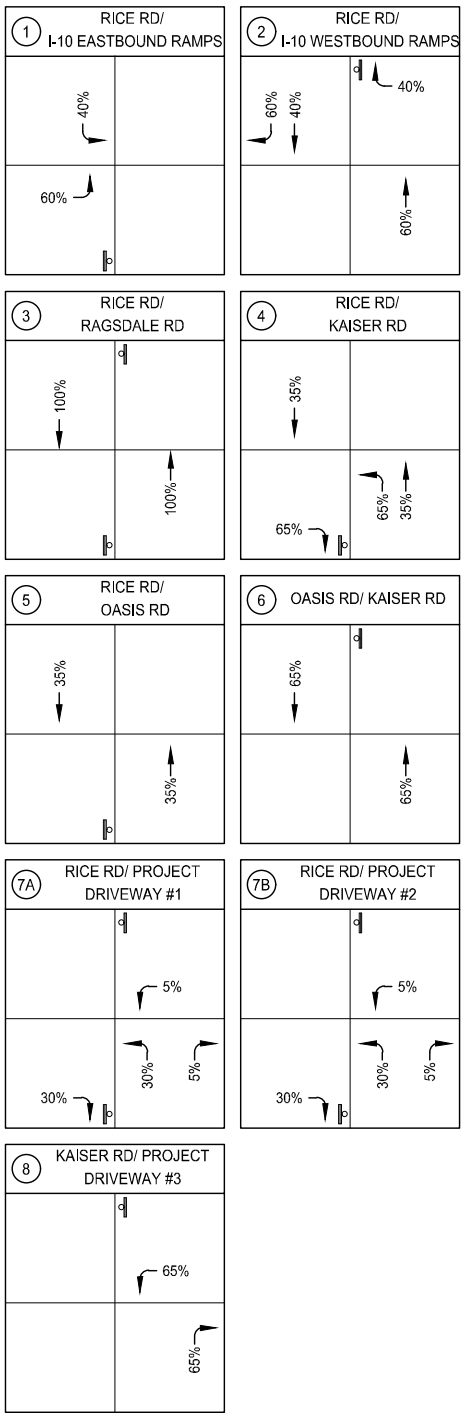
Intersection	Control Type	Opening Year Conditions Traffic Volumes				Opening Year Conditions with Project Traffic Volumes			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Rice Road (SR 177) / I-10 Eastbound Ramps	SSSC	9.9	A	9.9	B	10.0	B	10.0	B
2. Rice Road (SR 177) / I-10 Westbound Ramps	SSSC	9.6	A	9.6	A	9.6	A	9.7	A
3. Rice Road (SR 177) / Ragsdale Road	SSSC	10.2	B	13.4	B	10.4	B	13.7	B
4. Rice Road (SR 177) / Kaiser Road (County R2)	SSSC	9.0	A	10.1	B	9.1	B	10.3	B
5. Rice Road (SR 177) / Oasis Road	SSSC	9.0	A	9.8	A	9.0	A	9.8	A
6. Oasis Road / Kaiser Road (County R2)	SSSC	Not Applicable (Future Intersections)				8.9	A	9.2	A
7A. Rice Road (SR 177) / Project Driveway #1	SSSC	Not Applicable (Future Driveways)				9.3	A	10.3	B
7B. Rice Road (SR 177) / Project Driveway #2"	SSSC					9.3	A	10.3	B
8. Kaiser Road (County R2) / Project Driveway #3	SSSC					9.1	A	9.6	A

Source: David Evans and Associates, Inc.
Definitions and Abbreviations:
SSSC – Side-street stop-controlled intersection, Delay – seconds per vehicle, LOS – Level of Service

As presented in **Table 7-2***,* under Opening Year Conditions with Project Scenario, the study intersections are anticipated to operate at LOS B or better during both the AM peak hour and PM peak hour.







LEGEND

XX% - GENERAL PROJECT TRIP DISTRIBUTION

XX% - SPECIFIC PROJECT TRIP PERCENTAGE

(#) - STUDY INTERSECTIONS

- STOP CONTROLLED INTERSECTION

- SIGNAL CONTROLLED INTERSECTION

DAVID EVANS AND ASSOCIATES INC.

FIGURE 13: PROJECT OPERATION AND MAINTENANCE TRIP DISTRIBUTION
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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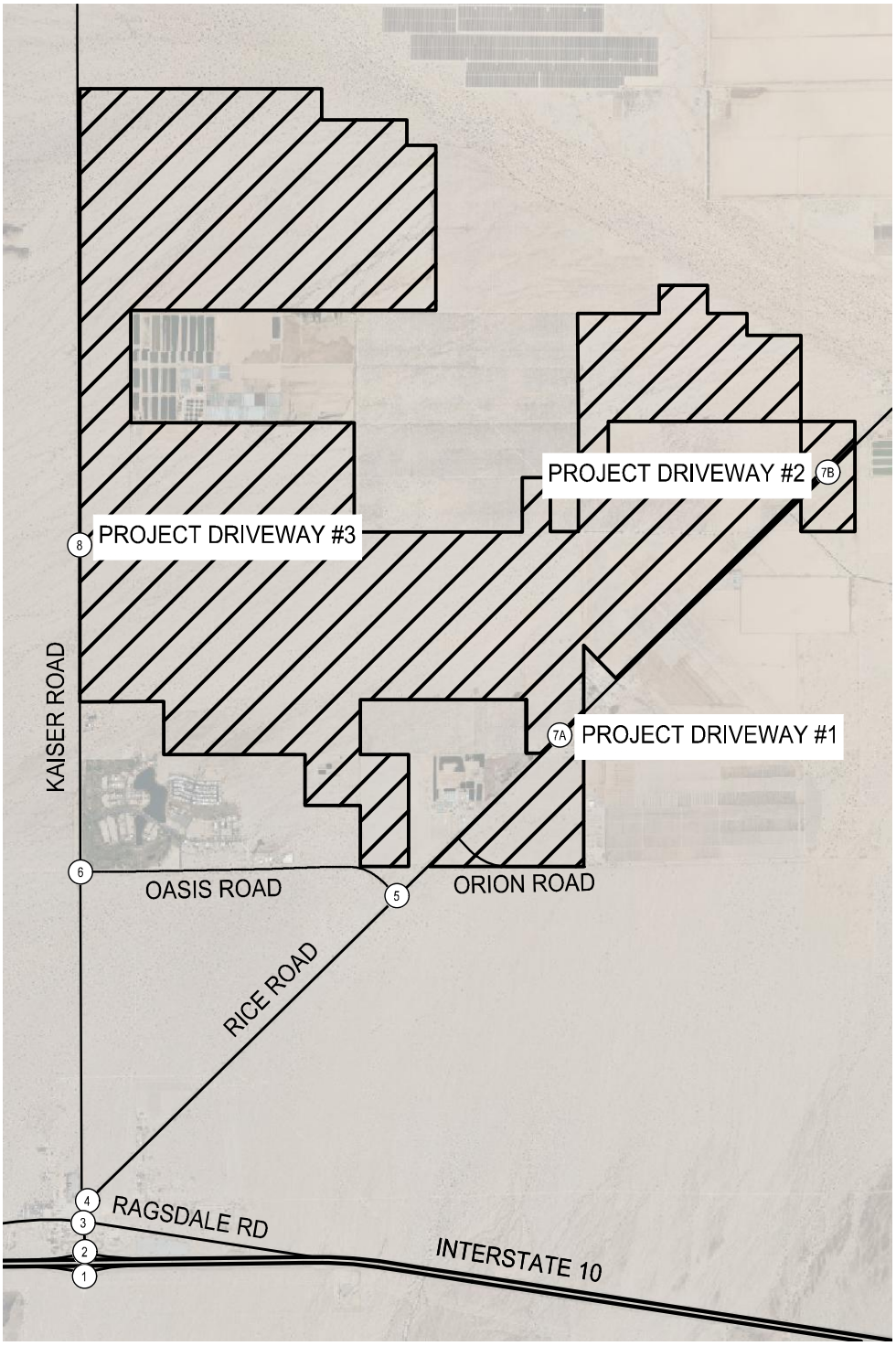
Last Opened: Mar 27, 2023 - 3:03pm by: Tmm



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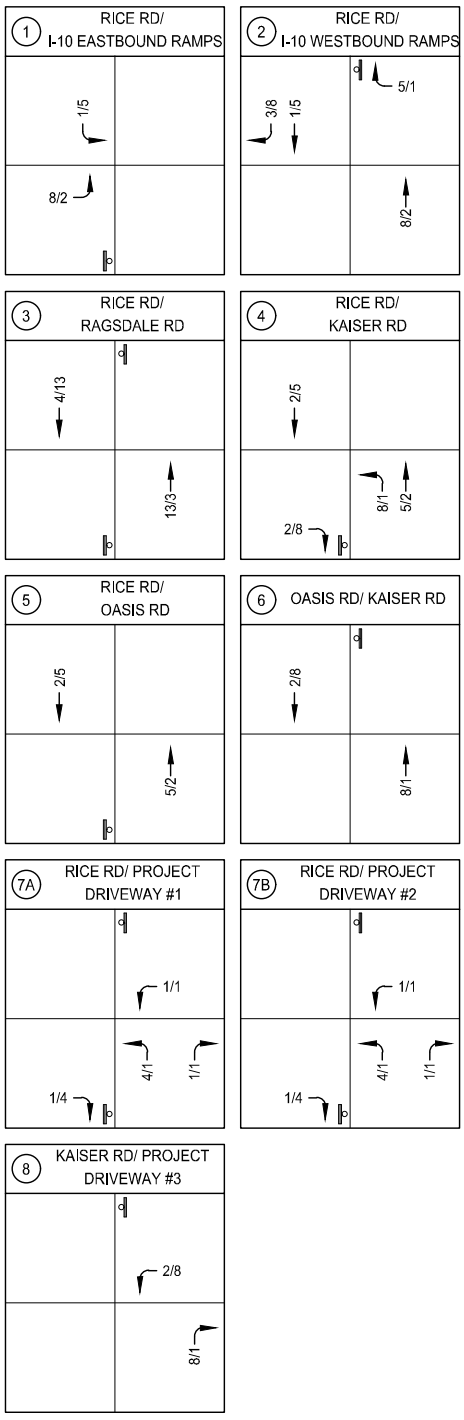

LEGEND

XX/XX - AM/PM PROJECT TRIPS

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

PROJECT OPERATION AND MAINTENANCE TRIPS

AM PEAK PERIOD - 12 IN / 2 OUT
PM PEAK PERIOD - 1 IN / 11 OUT

DAVID EVANS AND ASSOCIATES INC.

FIGURE 14: PROJECT OPERATIONS AND MAINTENANCE TRIPS
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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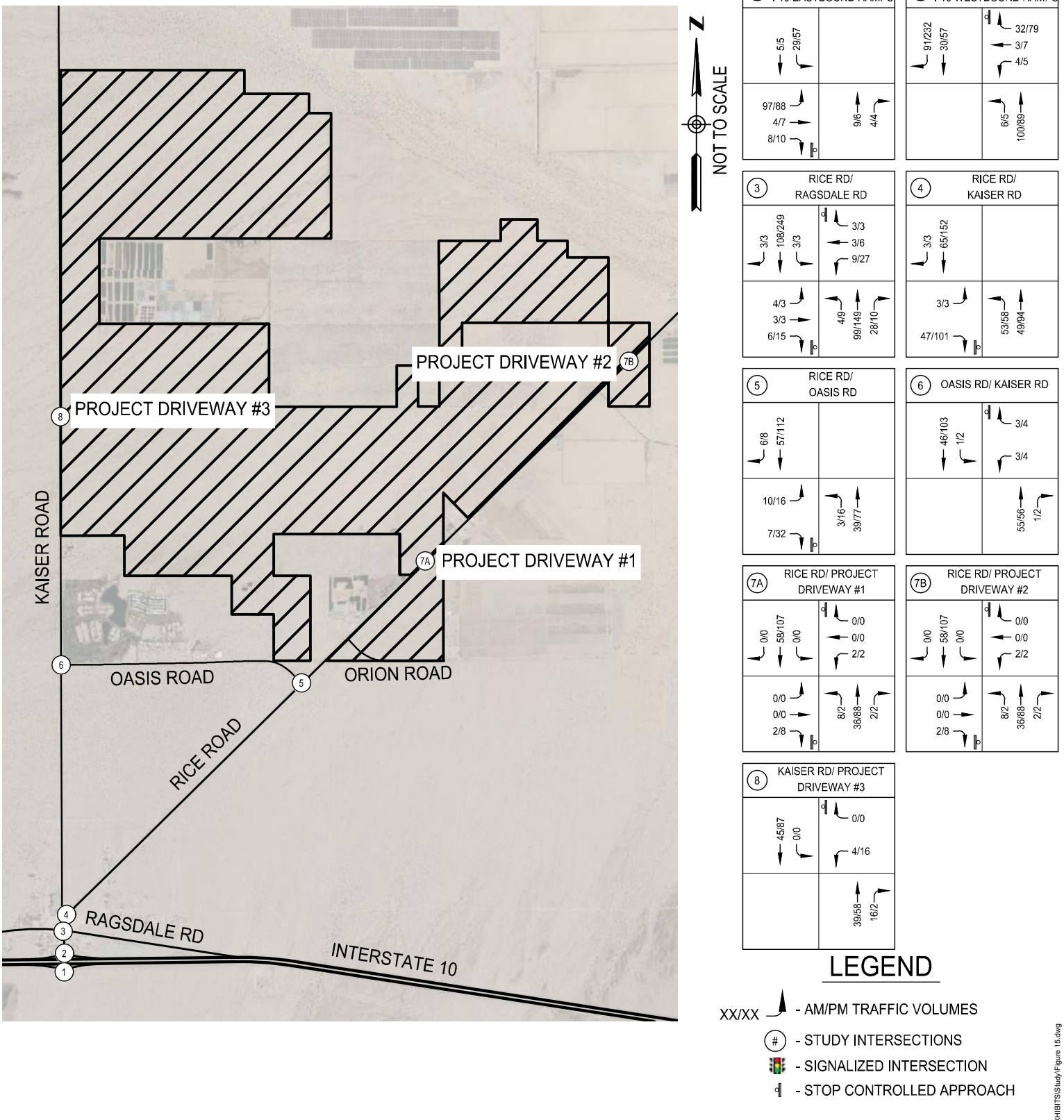

DAVID EVANS AND ASSOCIATES INC.

FIGURE 15: OPENING YEAR WITH PROJECT TRAFFC VOLUMES
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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Last Opened: Mar 27, 2023 - 3:03pm by: Tmm

D. Project Operations and Maintenance Mitigations Measures

Although not required to mitigate level of service impacts, access to the proposed project from Rice Road (SR 177) at the proposed driveway "A" will require general safety related improvements for a two-lane, high speed rural highway.

Improvements required for the Oberon Solar project at the Rice Road (SR 177) at Oberon Solar Project Driveway “A” and “B” have been reviewed and accepted by Caltrans as part of Oberon’s permitting process. Similar improvements are recommended for the Easley project’s proposed access Rice Road (SR 177) at Driveway #1 and Rice Road (SR 177) at Driveway #2.

As such the following outlined recommended improvement are expected to be approved by Caltrans as well.

The recommended access improvements for the project’s Rice Road (SR 177) / north and south of Driveway #1 include:

1. Widen Rice Road (SR 177) north and south of Driveway #1 to accommodate the following deceleration and storage lanes into access driveway:
    a. 460-foot-long northbound deceleration / left turn lane
    b. 460-foot-long southbound deceleration / left turn lane
2. Construct Driveway #1 paved at a width of 26’ both east and west of Rice Road (SR 177).

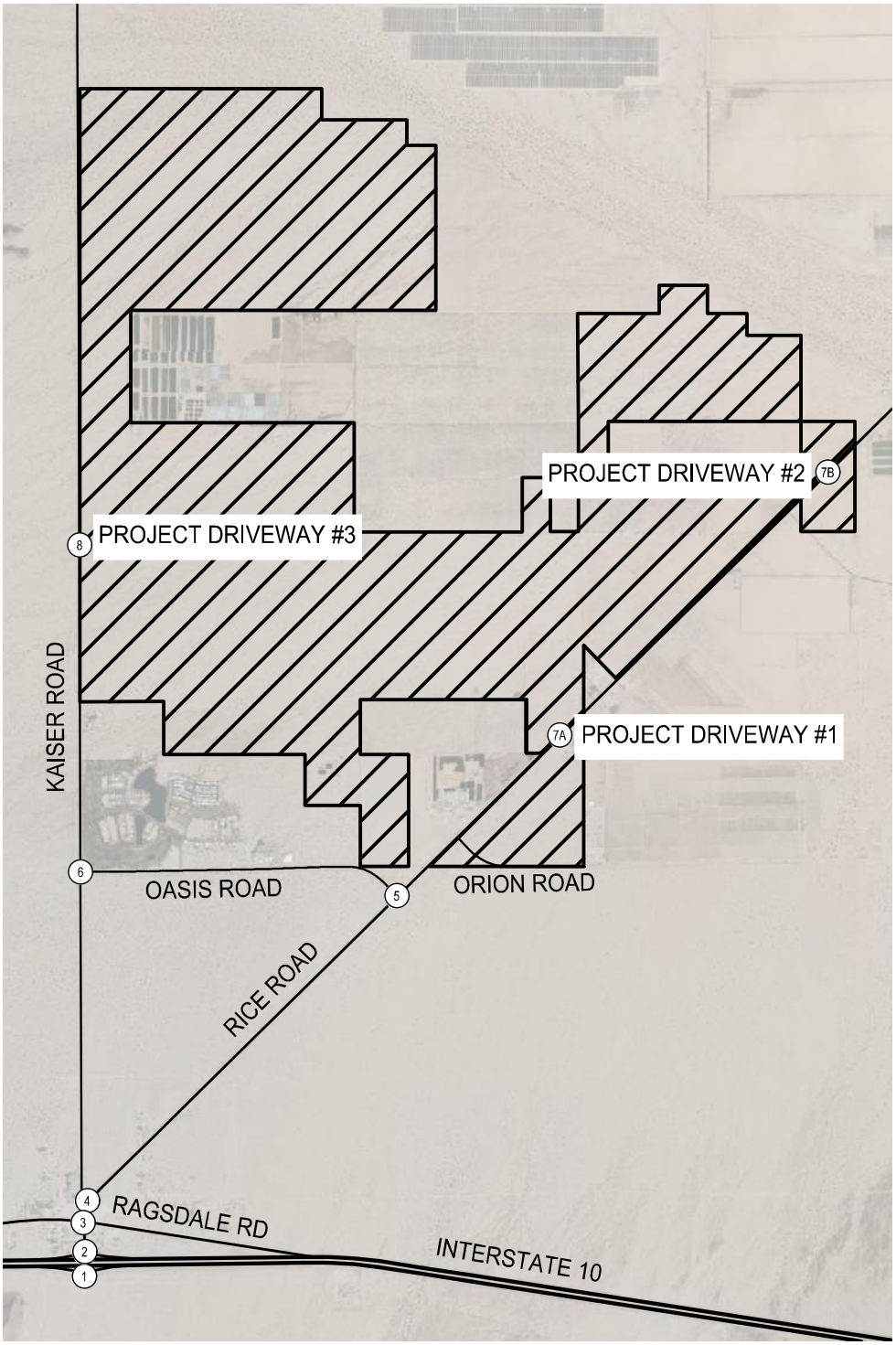
The recommended access improvements for the project’s Rice Road (SR 177) north and south of Driveway #2 include:

1. Widen Rice Road (SR 177) north and south of Driveway #2 to accommodate the following deceleration and storage lanes into access driveway:
    a. 460-foot-long northbound deceleration / left turn lane
    b. 460-foot-long southbound deceleration / left turn lane
2. Construct Driveway #2 paved at a width of 26’ both east and west of Rice Road (SR 177).

The **Table 7-3** presents the mitigated level of service at the Rice Road (SR 177) at Project Driveway #1 and Rice Road (SR 177) at Project Driveway #2 intersections, which will operate at LOS A during both the AM peak hour and PM peak hour. It is important to reiterate that the recommended mitigation measures are for safety improvements and not level of service improvements. **Figure 16** illustrates the mitigated intersection geometrics.

Table 7-3: Opening Year Conditions with Project – With Mitigation Measures

Intersection	Control Type	AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
7A. Rice Road (SR 177) / Project Driveway #1	SSSC	9.3	A	10.3	B
7B. Rice Road (SR 177) / Project Driveway #2	SSSC	9.3	A	10.3	B
Source: David Evans and Associates, Inc. Definitions and Abbreviations: SSSC – Side-street stop-controlled intersection, Delay – seconds per vehicle, LOS – Level of Service					



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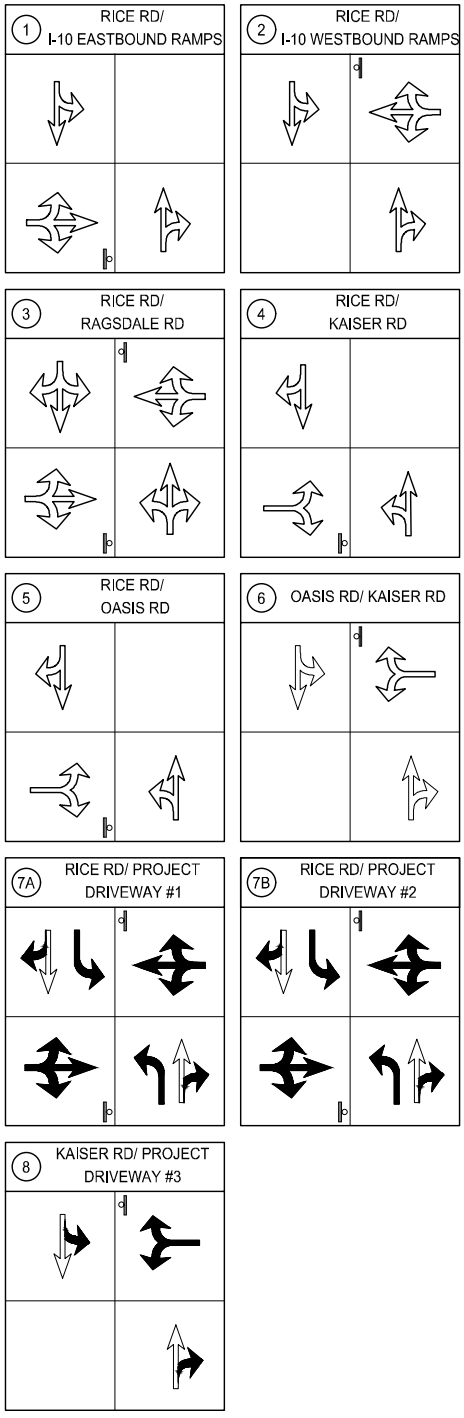
NOT TO SCALE



LEGEND

- EXISTING GEOMETRICS
- PROPOSED GEOMETRICS
- # - STUDY INTERSECTIONS
- SIGNALIZED INTERSECTION
- STOP CONTROLLED APPROACH

Note: Minor reconfigurations of the Project site and driveway locations would not impact the conclusions of this study.

DAVID EVANS AND ASSOCIATES INC.

FIGURE 16: OPENING YEAR WITH PROJECT INTERSECTION GEOMETRICS
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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8. CUMULATIVE YEAR 2045 CONDITIONS WITHOUT PROJECT

The Cumulative Year 2045 Conditions Scenario represents long-term conditions assuming a 20-year planning horizon without traffic generated by the project. The 2040 forecasts are derived from the Western Riverside Council of Governments (WRCOG) regional travel demand model (RIVCOM), provided in the **Appendix 3**. The 2045 forecasts are used to develop annual growth rates which are applied to the 2023 traffic counts and compounded annually for the 22-year period between 2023 and 2045. The cumulative year 2045 forecast traffic volumes are comprised of the forecast model volumes and the operation and maintenance traffic generated by the cumulative projects.

In the Cumulative Year 2045 Conditions Scenario, the Arica, Victory Pass, Oberon, and Sapphire Solar Projects are anticipated to be in operation.

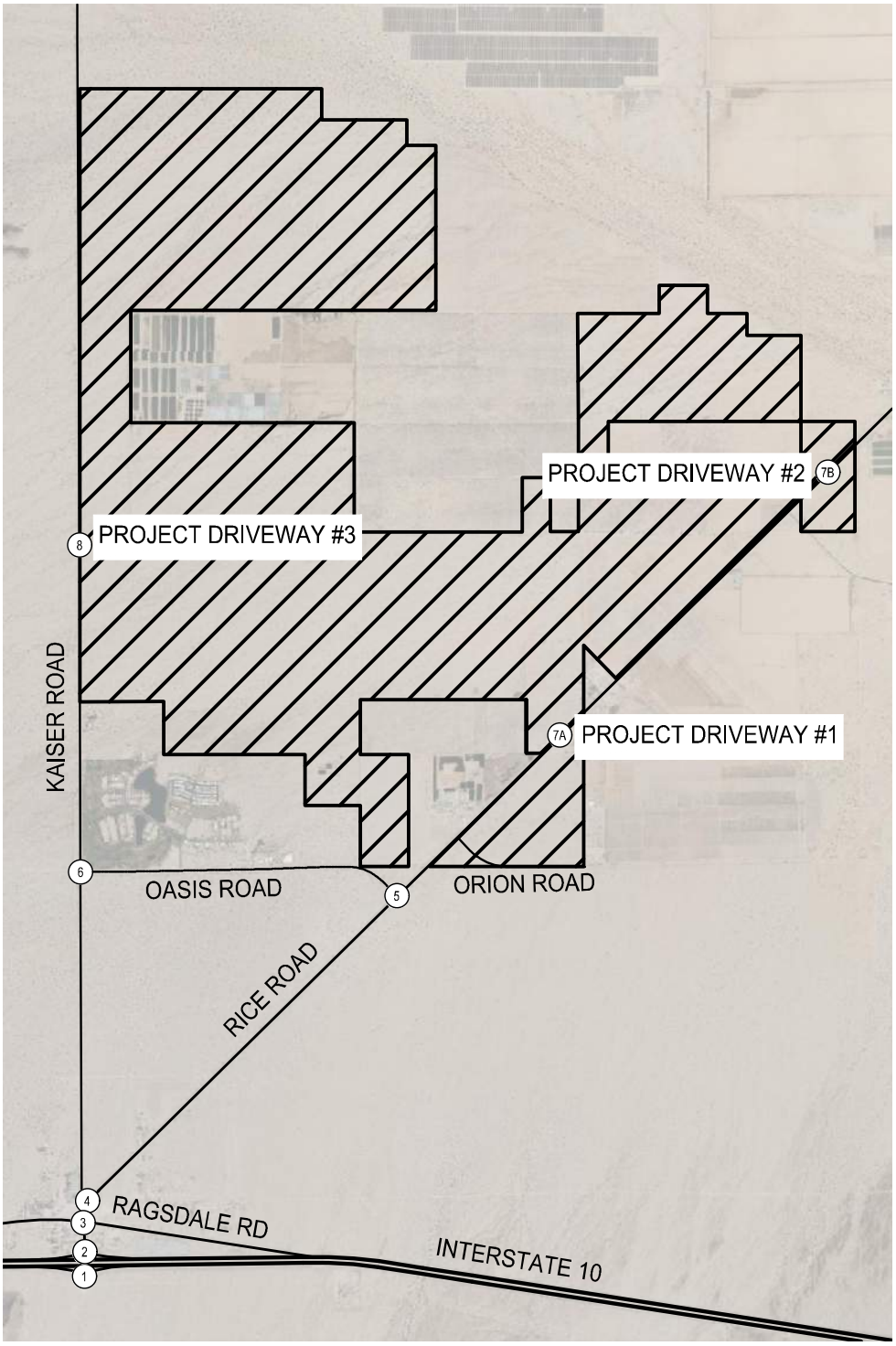
A. Cumulative Year 2045 Conditions without Project Traffic Analysis

The Cumulative Year 2045 Conditions intersection capacity analysis utilized existing intersection geometrics and the projected AM peak hour and PM peak hour traffic volumes shown in **Figure 17**. **Table 8-1** and **Appendix 2** provide the results of the analysis.

Table 8-1: Cumulative Year 2045 Conditions without Project Intersection Levels of Service

Intersection	Control Type	AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
1. Rice Road (SR 177) / I-10 Eastbound Ramps	SSSC	9.8	B	10.2	B
2. Rice Road (SR 177) / I-10 Westbound Ramps	SSSC	9.4	A	9.7	A
3. Rice Road (SR 177) / Ragsdale Road	SSSC	10.1	B	12.6	B
4. Rice Road (SR 177) / Kaiser Road (County R2)	SSSC	8.9	A	9.7	A
5. Rice Road (SR 177) / Oasis Road	SSSC	8.9	A	9.4	A
6. Oasis Road / Kaiser Road (County R2)	SSSC	Not Applicable (Future Intersection)			
7A. Rice Road (SR 177) / Project Driveway #1	SSSC	Not Applicable (Future Driveways)			
7B. Rice Road (SR 177) / Project Driveway #2”	SSSC				
8. Kaiser Road (County R2) / Project Driveway #3	SSSC				
Source: David Evans and Associates, Inc. Definitions and Abbreviations: SSSC – Side-street stop-controlled intersection, Delay – seconds per vehicle, LOS – Level of Service					

As presented in **Table 8-1**, under Cumulative Year 2045 Conditions without Project, the study intersections are anticipated to operate at a LOS B or better in both the AM peak hour and PM peak hour.



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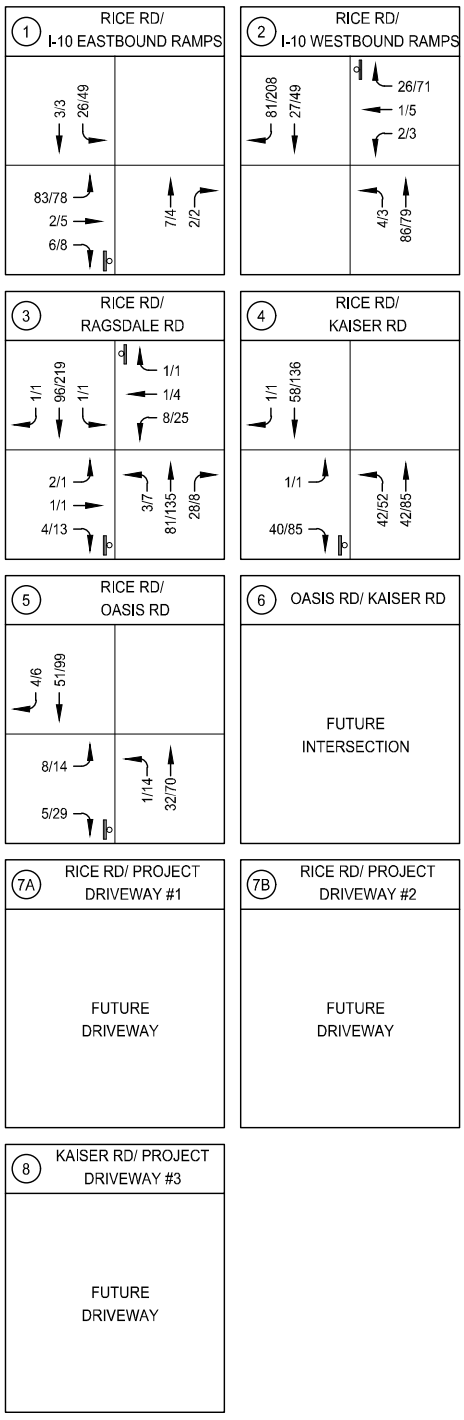

LEGEND

XX/XX - AM/PM TRAFFIC VOLUMES

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

DAVID EVANS AND ASSOCIATES INC.

FIGURE 17: CUMULATIVE YEAR 2045 CONDITIONS WITHOUT PROJECT TRAFFIC VOLUMES EASLEY RENEWABLE ENERGY PROJECT DESERT CENTER, CA

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9. CUMULATIVE YEAR 2045 CONDITIONS WITH PROJECT TRAFFIC VOLUMES

The Cumulative Year 2045 with Project Scenario includes the addition of the project's maximum operation and maintenance-related traffic to the Cumulative Year 2045 Conditions without Project Scenario.

A. Cumulative Year 2045 Conditions with Project Traffic Analysis

The Cumulative Year 2045 Conditions with Project intersection capacity analysis utilized existing intersection geometrics. **Figure 18** shows the Cumulative Year 2045 Conditions with Project traffic volumes. **Table 9-1** and **Appendix 2** provide the results of the analysis.

Table 9-1: Cumulative Year 2045 Conditions with Project Intersection Levels of Service

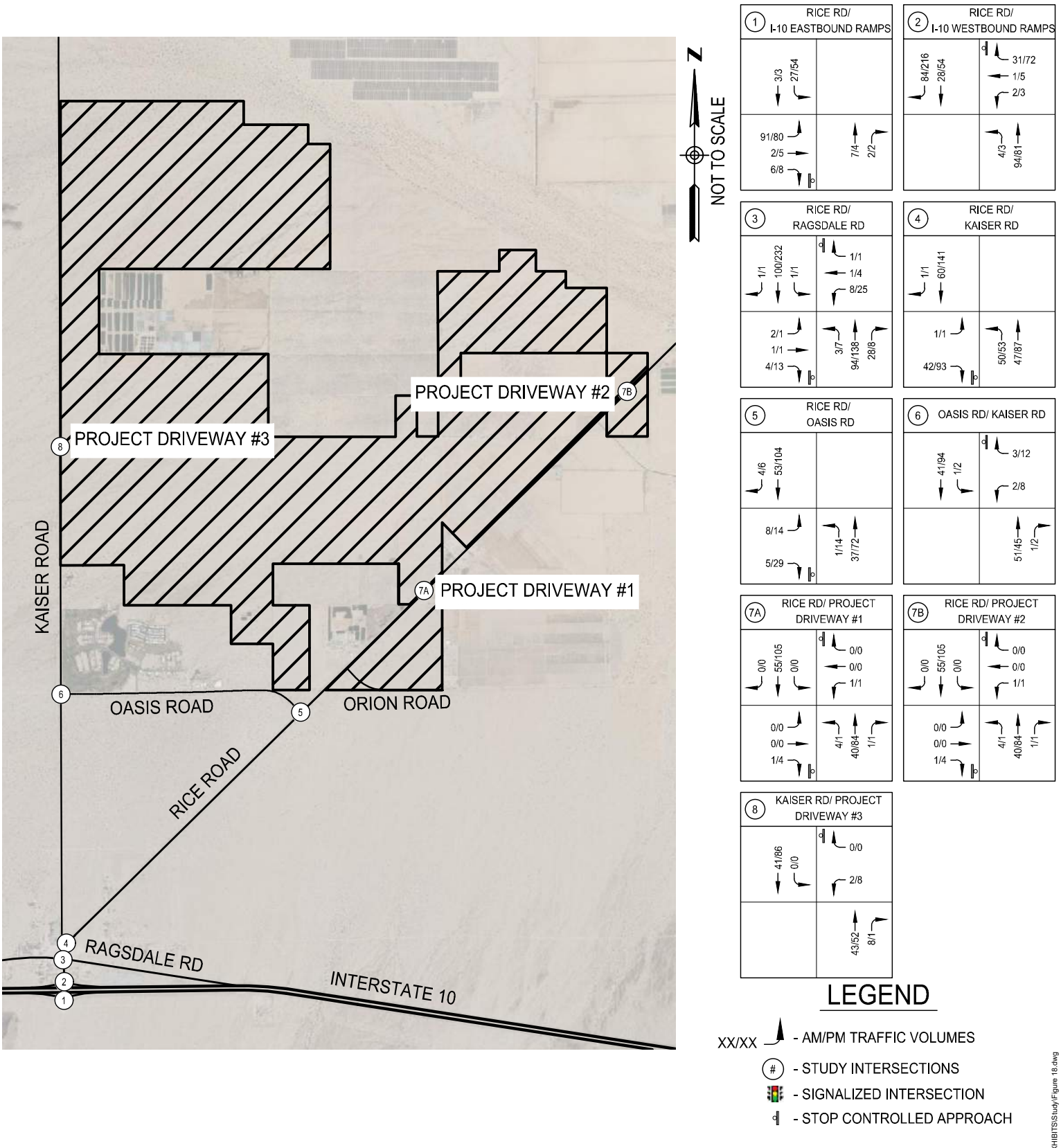
Intersection	Control Type	Cumulative Year 2045 Conditions Traffic Volumes				Cumulative Year 2045 Conditions with Project Traffic Volumes			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Rice Road (SR 177) / I-10 Eastbound Ramps	SSSC	9.8	B	10.2	B	9.9	A	9.9	A
2. Rice Road (SR 177) / I-10 Westbound Ramps	SSSC	9.4	A	9.7	A	9.5	A	9.5	A
3. Rice Road (SR 177) / Ragsdale Road	SSSC	10.1	B	12.6	B	10.2	B	13.0	B
4. Rice Road (SR 177) / Kaiser Road (County R2)	SSSC	8.9	A	9.7	A	8.9	A	10.0	B
5. Rice Road (SR 177) / Oasis Road	SSSC	8.9	A	9.4	A	8.9	A	9.6	A
6. Oasis Road / Kaiser Road (County R2)	SSSC	Not Applicable (Future Intersection)				8.8	A	9.1	A
7A. Rice Road (SR 177) / Project Driveway #1	SSSC	Not Applicable (Future Driveways)				9.2	A	10.2	B
7B. Rice Road (SR 177) / Project Driveway #2	SSSC					9.2	A	10.2	B
8. Kaiser Road (County R2) / Project Driveway #3	SSSC					9.0	A	9.5	A

Source: David Evans and Associates, Inc.
Definitions and Abbreviations:
SSSC – Side-street stop-controlled intersection, Delay – seconds per vehicle, LOS – Level of Service

As presented in **Table 9-1***,* under Cumulative Year 2045 Conditions with Project Scenario, the study intersections are anticipated to operate at a LOS B or better in both the AM peak hour and PM peak hour.

B. Project Operations and Maintenance Mitigations Measures

The safety measures required in Opening Day Conditions with Project will be in place in Cumulative Year 2045 Conditions with Project. No additional improvements are required to improve level of service deficiencies or safety.



DAVID EVANS AND ASSOCIATES INC.

FIGURE 18: CUMULATIVE YEAR 2045 CONDITIONS WITH PROJECT TRAFFIC VOLUMES
EASLEY RENEWABLE ENERGY PROJECT
DESERT CENTER, CA

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The **Table 9-2** presents the mitigated level of service at the Rice Road (SR 177) at Project Driveway #1 and Rice Road (SR 177) at Project Driveway #2 intersections, which will operate at LOS A during both the AM peak hour and PM peak hour. It is important to reiterate that the recommended mitigation measures are for safety improvements and not level of service improvements.

Table 9-2: Cumulative Year 2045 Conditions with Project – With Mitigation Measures

Intersection	Control Type	AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
7A. Rice Road (SR 177) / Project Driveway #1	SSSC	9.2	A	10.1	B
7B. Rice Road (SR 177) / Project Driveway #2	SSSC	9.2	A	10.1	B
Source: David Evans and Associates, Inc. Definitions and Abbreviations: SSSC – Side-street stop-controlled intersection, Delay – seconds per vehicle, LOS – Level of Service					

APPENDICES

Appendix 1. Traffic Counts
Appendix 2. Intersection Capacity Analysis Worksheets
Appendix 3. Riverside County Transportation Model (RIVCOM) Plots
Appendix 4. Cumulative Projects

Appendix 1. Traffic Counts

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: RICE RD
EAST-WEST STREET: I-10 EB RAMPS
JURISDICTION: DESERT CENTER

DATE: 02-15-23

PEAK HOUR: 07:30AM

NORTH LEG

TOTAL: 24

	3	21	Total
	1	4	1st
	1	5	2nd
	0	6	3rd
	1	6	4th
Rt	Thru	Lt	

EAST LEG TOTAL: 0

Rt					
Thru					
Lt					
	1st	2nd	3rd	4th	Total

WEST LEG TOTAL: 59

Total	1st	2nd	3rd	4th	
51	12	10	15	14	Lt
2	1	0	0	1	Thru
6	2	2	1	1	Rt

PEAK HOUR FACTORS

NORTH LEG = 0.86
SOUTH LEG = 0.56
EAST LEG =
WEST LEG = 0.92

ALL LEGS = 0.88

SOUTH LEG

TOTAL: 9

	Lt	Thru	Rt
1st		2	1
2nd		0	0
3rd		3	1
4th		2	0
Total		7	2

HOUR TOTAL: 92

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : I-10 EB RAMPS
BEGINNING TIME : 06:00AM

DESERT CENTER
02-15-23

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
						NORTH LEG						
0	0	4	0	0	0	0	0	0	0	0	0	4
0	1	3	0	0	0	0	0	0	0	0	1	5
0	0	0	0	0	0	0	0	0	0	0	3	3
0	3	4	0	0	0	0	0	0	0	0	0	7
0	1	5	0	0	0	0	0	0	0	0	0	6
0	0	2	0	0	0	0	0	0	0	0	2	4
0	1	2	0	0	0	0	0	0	0	0	2	5
0	1	4	0	0	0	0	0	0	0	0	1	6
0	7	24	0	0	0	0	0	0	0	0	9	40
						SOUTH LEG						
0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	0	1
0	2	0	0	0	0	0	0	0	0	0	0	2
2	1	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	2
1	2	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0
4	7	0	0	0	0	0	0	0	0	0	0	11
						EAST LEG						
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
						WEST LEG						
0	0	5	0	0	0	0	0	0	0	0	0	5
0	0	5	0	0	0	0	0	0	0	0	0	5
1	1	8	0	0	0	0	0	0	0	0	0	10
1	0	4	0	0	0	0	0	0	0	0	2	7
3	0	10	0	0	0	0	0	0	0	0	1	14
0	0	9	0	0	0	0	0	0	0	0	1	10
2	1	9	0	0	0	0	0	0	0	0	3	15
2	0	6	0	0	0	0	0	0	0	0	4	12
9	2	56	0	0	0	0	0	0	0	0	11	78

Prepared by Newport Traffic Studies

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : I-10 EB RAMPS
BEGINNING TIME : 08:00AM

DESERT CENTER
02-15-23

AUTOS RT	AUTOS THRU	AUTOS LT	LARGE 2 AXLE RT	LARGE 2 AXLE THRU	LARGE 2 AXLE LT	3 AXLE RT	3 AXLE THRU	3 AXLE LT	4(+) AXLE RT	4(+) AXLE THRU	4(+) AXLE LT	TOTALS
					NORTH LEG							
0	0	3	0	0	0	0	0	0	0	0	3	6
0	1	5	0	0	1	0	0	0	0	0	0	7
0	2	0	0	0	0	0	0	0	0	0	2	4
0	1	2	0	0	0	0	0	0	0	0	1	4
0	4	10	0	0	1	0	0	0	0	0	6	21
					SOUTH LEG							
1	3	0	0	0	0	0	0	0	0	0	0	4
0	2	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	2
2	6	0	0	0	0	0	0	0	0	0	0	8
					EAST LEG							
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
					WEST LEG							
1	0	10	0	0	1	0	0	0	0	0	4	16
1	1	9	0	0	0	0	0	0	0	0	5	16
0	0	3	0	0	0	0	0	0	0	0	8	11
0	0	3	0	0	1	0	0	0	0	0	5	9
2	1	25	0	0	2	0	0	0	0	0	22	52

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 EB RAMPS

TIME: 06:00AM-07:00AM DATE: 02-15-23

NORTH LEG

	4	15	Total
	0	4	1st
	1	4	2nd
	0	3	3rd
	3	4	4th

Rt Thru Lt

Rt					
Thru					
Lt					
	1st	2nd	3rd	4th	Total

Total	1st	2nd	3rd	4th	
24	5	5	8	6	Lt
1	0	0	1	0	Thru
2	0	0	1	1	Rt

	Lt	Thru	Rt
1st		0	0
2nd		1	0
3rd		2	0
4th		1	2
Total		4	2

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 EB RAMPS

TIME: 07:00AM-08:00AM DATE: 02-15-23

NORTH LEG

	3	18	Total
	1	5	1st
	0	4	2nd
	1	4	3rd
	1	5	4th
Rt	Thru	Lt	

Rt					
Thru					
Lt					
	1st	2nd	3rd	4th	Total

Total	1st	2nd	3rd	4th	
43	11	10	12	10	Lt
1	0	0	1	0	Thru
7	3	0	2	2	Rt

	Lt	Thru	Rt
1st		0	0
2nd		1	1
3rd		2	1
4th		0	0
Total		3	2

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 EB RAMPS

TIME: 08:00AM-09:00AM DATE: 02-15-23

NORTH LEG

	4	17	Total
	0	6	1st
	1	6	2nd
	2	2	3rd
	1	3	4th
Rt	Thru	Lt	

Rt					
Thru					
Lt					
	1st	2nd	3rd	4th	Total

Total	1st	2nd	3rd	4th	
49	15	14	11	9	Lt
1	0	1	0	0	Thru
2	1	1	0	0	Rt

	Lt	Thru	Rt
1st		3	1
2nd		2	0
3rd		0	0
4th		1	1
Total		6	2

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: RICE RD
EAST-WEST STREET: I-10 EB RAMPS
JURISDICTION: DESERT CENTER

DATE: 02-15-23

PEAK HOUR: 03:00PM

NORTH LEG

TOTAL: 26

Rt	Thru	Lt	
	2	24	Total
	0	7	1st
	0	6	2nd
	1	5	3rd
	1	6	4th

EAST LEG TOTAL: 0

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

WEST LEG TOTAL: 84

Total	1st	2nd	3rd	4th	
71	19	16	21	15	Lt
5	0	3	1	1	Thru
8	0	2	1	5	Rt

SOUTH LEG

TOTAL: 6

	Lt	Thru	Rt
1st		1	0
2nd		2	1
3rd		0	0
4th		1	1
Total		4	2

PEAK HOUR FACTORS

NORTH LEG = 0.93
SOUTH LEG = 0.50
EAST LEG =
WEST LEG = 0.91

ALL LEGS = 0.97

HOUR TOTAL: 116

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY
NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : I-10 EB RAMPS
DESERT CENTER
02-15-23
BEGINNING TIME : 03:00PM

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
						NORTH LEG						
0	0	6	0	0	1	0	0	0	0	0	0	7
0	0	5	0	0	1	0	0	0	0	0	0	6
0	1	5	0	0	0	0	0	0	0	0	0	6
0	1	5	0	0	0	0	0	0	0	0	1	7
0	0	7	0	0	0	0	0	0	0	0	1	8
0	2	7	0	0	1	0	0	0	0	0	1	11
0	2	3	0	0	2	0	0	0	0	0	0	7
0	1	3	0	0	1	0	0	0	0	0	1	6
0	7	41	0	0	6	0	0	0	0	0	4	58
						SOUTH LEG						
0	1	0	0	0	0	0	0	0	0	0	0	1
1	2	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	2
2	0	0	0	0	0	0	0	0	0	0	0	2
1	2	0	0	0	0	0	0	0	0	0	0	3
4	2	0	0	0	0	0	0	0	0	0	0	6
2	1	0	0	0	0	0	0	0	0	0	0	3
11	9	0	0	0	0	0	0	0	0	0	0	20
						EAST LEG						
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
						WEST LEG						
0	0	16	0	0	1	0	0	0	0	0	2	19
2	3	14	0	0	0	0	0	0	0	0	2	21
1	1	17	0	0	1	0	0	0	0	0	3	23
5	1	15	0	0	0	0	0	0	0	0	0	21
2	1	5	0	0	1	0	0	0	0	0	5	14
2	0	13	0	0	0	0	0	0	0	0	3	18
2	0	7	0	0	0	0	0	0	0	0	3	12
2	2	18	0	0	0	0	0	0	0	0	0	22
16	8	105	0	0	3	0	0	0	0	0	18	150

Prepared by Newport Traffic Studies

SANBAG CLASSIFICATION SUMMARY
NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : I-10 EB RAMPS
BEGINNING TIME : 05:00PM

DESERT CENTER
02-15-23

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
						NORTH LEG						
0	2	6	0	0	0	0	0	0	0	0	0	8
0	1	5	0	0	0	0	0	0	0	0	1	7
0	0	4	0	0	0	0	0	0	0	0	1	5
0	1	8	0	0	0	0	0	0	0	0	0	9
0	0	4	0	0	0	0	0	0	0	0	0	4
0	1	4	0	0	0	0	0	0	0	0	0	5
0	1	3	0	0	0	0	0	0	0	0	0	4
0	0	1	0	0	0	0	0	0	0	0	0	1
0	6	35	0	0	0	0	0	0	0	0	2	43
						SOUTH LEG						
0	3	0	0	0	0	0	0	0	0	0	0	3
1	3	0	0	0	0	0	0	0	0	0	0	4
4	2	0	0	0	0	0	0	0	0	0	0	6
2	1	0	0	0	0	0	0	0	0	0	0	3
0	1	0	0	0	0	0	0	0	0	0	0	1
2	1	0	0	0	0	0	0	0	0	0	0	3
1	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0
10	11	0	0	0	0	0	0	0	0	0	0	21
						EAST LEG						
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
						WEST LEG						
2	0	12	0	0	0	0	0	1	0	0	2	17
2	2	6	0	0	0	0	0	1	0	0	2	13
0	1	10	0	0	1	0	0	0	0	0	0	12
3	2	11	0	0	2	0	0	0	0	0	0	18
1	1	5	0	0	2	0	0	0	0	0	1	10
0	1	4	0	0	2	0	0	0	0	0	0	7
1	0	8	0	0	1	0	0	0	0	0	1	11
0	1	4	0	0	0	0	0	0	0	0	1	6
9	8	60	0	0	8	0	0	2	0	0	7	94

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 EB RAMPS

TIME: 03:00PM-04:00PM DATE: 02-15-23

NORTH LEG

	2	24	Total
	0	7	1st
	0	6	2nd
	1	5	3rd
	1	6	4th
Rt	Thru	Lt	

Rt					
Thru					
Lt					
	1st	2nd	3rd	4th	Total

Total	1st	2nd	3rd	4th	
71	19	16	21	15	Lt
5	0	3	1	1	Thru
8	0	2	1	5	Rt

	Lt	Thru	Rt
1st		1	0
2nd		2	1
3rd		0	0
4th		1	1
Total		4	2

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 EB RAMPS

TIME: 04:00PM-05:00PM DATE: 02-15-23

NORTH LEG

	5	27	Total
	0	8	1st
	2	9	2nd
	2	5	3rd
	1	5	4th
Rt	Thru	Lt	

Rt					
Thru					
Lt					
	1st	2nd	3rd	4th	Total

Total	1st	2nd	3rd	4th	
55	11	16	10	18	Lt
3	1	0	0	2	Thru
8	2	2	2	2	Rt

	Lt	Thru	Rt
1st		0	2
2nd		2	1
3rd		2	4
4th		1	2
Total		5	9

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 EB RAMPS

TIME: 05:00PM-06:00PM DATE: 02-15-23

NORTH LEG

	4	25	Total
	2	6	1st
	1	6	2nd
	0	5	3rd
	1	8	4th
Rt	Thru	Lt	

Rt					
Thru					
Lt					
	1st	2nd	3rd	4th	Total

Total	1st	2nd	3rd	4th	
48	15	9	11	13	Lt
5	0	2	1	2	Thru
7	2	2	0	3	Rt

	Lt	Thru	Rt
1st		3	0
2nd		3	1
3rd		2	4
4th		1	2
Total		9	7

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 EB RAMPS

TIME: 06:00PM-07:00PM DATE: 02-15-23

NORTH LEG

	2	12	Total
	0	4	1st
	1	4	2nd
	1	3	3rd
	0	1	4th
Rt	Thru	Lt	

Rt					
Thru					
Lt					
	1st	2nd	3rd	4th	Total

Total	1st	2nd	3rd	4th	
29	8	6	10	5	Lt
3	1	1	0	1	Thru
2	1	0	1	0	Rt

	Lt	Thru	Rt
1st		1	0
2nd		1	2
3rd		0	1
4th		0	0
Total		2	3

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: RICE RD
EAST-WEST STREET: I-10 WB RAMPS
JURISDICTION: DESERT CENTER

DATE: 02-15-23

PEAK HOUR: 08:00AM

NORTH LEG

TOTAL: 89

Rt	Thru	Lt	
70	19		Total
15	6		1st
19	6		2nd
16	3		3rd
20	4		4th

EAST LEG TOTAL: 8

	1st	2nd	3rd	4th	Total
Rt	2	2	0	1	5
Thru	0	0	0	1	1
Lt	0	1	1	0	2

WEST LEG TOTAL: 0

Total	1st	2nd	3rd	4th	
					Lt
					Thru
					Rt

PEAK HOUR FACTORS

NORTH LEG = 0.89
SOUTH LEG = 0.76
EAST LEG = 0.67
WEST LEG =

ALL LEGS = 0.86

SOUTH LEG

TOTAL: 55

	Lt	Thru	Rt
1st	2	16	
2nd	1	15	
3rd	0	11	
4th	1	9	
Total	4	51	

HOUR TOTAL: 152

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : I-10 WB RAMPS
BEGINNING TIME : 06:00AM

DESERT CENTER
02-15-23

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
						NORTH LEG						
7	4	0	0	0	0	0	0	0	0	0	0	11
7	4	0	0	0	0	0	0	0	2	1	0	14
11	0	0	0	0	0	0	0	0	3	2	0	16
10	6	0	2	0	0	0	0	0	3	0	0	21
9	6	0	2	0	0	2	0	0	0	0	0	19
8	0	0	3	0	0	1	0	0	0	2	0	14
6	1	0	2	0	0	1	0	0	2	2	0	14
9	0	0	1	0	0	1	0	0	1	1	0	13
67	21	0	10	0	0	5	0	0	11	8	0	122
						SOUTH LEG						
0	4	1	0	0	0	0	0	0	0	0	0	5
0	6	0	0	0	0	0	0	0	0	0	0	6
0	9	1	0	0	0	0	0	0	0	0	0	10
0	3	2	0	0	0	0	0	0	0	2	0	7
0	9	1	0	0	0	0	0	0	0	1	0	11
0	10	0	0	0	0	0	0	0	0	1	0	11
0	11	0	0	0	0	0	0	0	0	3	0	14
0	6	0	0	0	0	0	0	0	0	4	0	10
0	58	5	0	0	0	0	0	0	0	11	0	74
						EAST LEG						
2	1	0	0	0	0	0	0	0	0	0	0	3
0	1	0	0	0	0	0	0	0	0	0	0	1
1	0	1	1	0	0	0	0	0	0	0	0	3
0	2	1	0	0	0	0	0	0	2	0	0	5
0	1	0	0	0	0	0	0	0	2	0	0	3
0	0	2	0	0	0	0	0	0	2	0	0	4
1	0	2	1	0	0	0	0	0	0	0	0	4
1	1	5	1	0	0	0	0	0	1	0	0	9
5	6	11	3	0	0	0	0	0	7	0	0	32
						WEST LEG						
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : I-10 WB RAMPS
BEGINNING TIME : 08:00AM

DESERT CENTER
02-15-23

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
NORTH LEG												
12	3	0	1	0	0	0	0	0	2	3	0	21
16	5	0	1	1	0	0	0	0	2	0	0	25
13	2	0	0	0	0	1	0	0	2	1	0	19
17	3	0	1	0	0	1	0	0	1	1	0	24
58	13	0	3	1	0	2	0	0	7	5	0	89
SOUTH LEG												
0	12	1	0	0	1	0	0	0	0	4	0	18
0	10	1	0	0	0	0	0	0	0	5	0	16
0	3	0	0	0	0	0	0	0	0	8	0	11
0	4	0	0	0	1	0	0	0	0	5	0	10
0	29	2	0	0	2	0	0	0	0	22	0	55
EAST LEG												
2	0	0	0	0	0	0	0	0	0	0	0	2
0	0	1	0	0	0	0	0	0	2	0	0	3
0	0	0	0	0	0	0	0	0	0	0	1	1
1	1	0	0	0	0	0	0	0	0	0	0	2
3	1	1	0	0	0	0	0	0	2	0	1	8
WEST LEG												
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 WB RAMPS

TIME: 06:00AM-07:00AM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
45	17		Total
7	4		1st
9	5		2nd
14	2		3rd
15	6		4th

	1st	2nd	3rd	4th	Total
Rt	2	0	2	2	6
Thru	1	1	0	2	4
Lt	0	0	1	1	2

Total	1st	2nd	3rd	4th	
					Lt
					Thru
					Rt

	Lt	Thru	Rt
1st	1	4	
2nd	0	6	
3rd	1	9	
4th	2	5	
Total	4	24	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 WB RAMPS

TIME: 07:00AM-08:00AM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
48	12		Total
13	6		1st
12	2		2nd
11	3		3rd
12	1		4th

	1st	2nd	3rd	4th	Total
Rt	2	2	2	3	9
Thru	1	0	0	1	2
Lt	0	2	2	5	9

Total	1st	2nd	3rd	4th	
					Lt
					Thru
					Rt

	Lt	Thru	Rt
1st	1	10	
2nd	0	11	
3rd	0	14	
4th	0	10	
Total	1	45	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 WB RAMPS

TIME: 08:00AM-09:00AM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
70	19		Total
15	6		1st
19	6		2nd
16	3		3rd
20	4		4th

	1st	2nd	3rd	4th	Total
Rt	2	2	0	1	5
Thru	0	0	0	1	1
Lt	0	1	1	0	2

Total	1st	2nd	3rd	4th	
					Lt
					Thru
					Rt

	Lt	Thru	Rt
1st	2	16	
2nd	1	15	
3rd	0	11	
4th	1	9	
Total	4	51	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: RICE RD
EAST-WEST STREET: I-10 WB RAMPS
JURISDICTION: DESERT CENTER

DATE: 02-15-23

PEAK HOUR: 03:45PM

NORTH LEG

TOTAL: 207

Rt	Thru	Lt	
177	30		Total
44	7		1st
40	8		2nd
49	11		3rd
44	4		4th

EAST LEG TOTAL: 65

	1st	2nd	3rd	4th	Total
Rt	9	11	21	16	57
Thru	1	2	2	0	5
Lt	0	0	0	3	3

Total	1st	2nd	3rd	4th	
					Lt
					Thru
					Rt

WEST LEG TOTAL: 0

PEAK HOUR FACTORS

NORTH LEG = 0.86
SOUTH LEG = 0.79
EAST LEG = 0.71
WEST LEG =

ALL LEGS = 0.81

	Lt	Thru	Rt
1st	1	15	
2nd	1	10	
3rd	1	17	
4th	0	12	
Total	3	54	

SOUTH LEG

TOTAL: 57

HOUR TOTAL: 329

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : I-10 WB RAMPS
BEGINNING TIME : 03:00PM

DESERT CENTER
02-15-23

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
						NORTH LEG						
21	6	0	0	1	0	0	0	0	3	0	0	31
19	3	0	0	1	0	0	0	0	7	0	0	30
24	5	0	0	0	0	1	0	0	8	0	0	38
30	6	0	1	0	0	1	0	0	12	1	0	51
27	7	0	1	0	0	0	0	0	12	1	0	48
33	9	0	0	1	0	0	0	0	16	1	0	60
35	2	0	1	2	0	0	0	0	8	0	0	48
24	3	0	0	1	0	1	0	0	6	1	0	36
213	41	0	3	6	0	3	0	0	72	4	0	342
						SOUTH LEG						
0	17	0	0	1	0	0	0	0	0	2	0	20
0	16	0	0	0	0	0	0	0	0	2	0	18
0	15	2	0	1	0	0	0	0	0	3	0	21
0	15	1	0	0	0	0	0	0	0	0	0	16
0	4	1	0	1	0	0	0	0	0	5	0	11
0	15	1	0	0	0	0	0	0	0	2	0	18
0	8	0	0	0	0	0	0	0	0	4	0	12
0	18	1	0	0	0	0	0	0	0	0	0	19
0	108	6	0	3	0	0	0	0	0	18	0	135
						EAST LEG						
6	0	0	0	0	0	0	0	0	2	0	0	8
4	1	2	0	0	0	0	0	0	2	0	0	9
10	1	1	1	0	0	0	0	0	0	0	0	13
9	1	0	0	0	0	0	0	0	0	0	0	10
7	2	0	1	0	0	0	0	0	3	0	0	13
19	2	0	0	0	0	0	0	0	2	0	0	23
12	0	3	1	0	0	0	0	0	3	0	0	19
11	1	1	0	0	0	0	0	0	1	0	0	14
78	8	7	3	0	0	0	0	0	13	0	0	109
						WEST LEG						
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0

Prepared by Newport Traffic Studies

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : I-10 WB RAMPS
BEGINNING TIME : 05:00PM

DESERT CENTER
02-15-23

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
NORTH LEG												
27	7	0	0	0	0	1	0	0	3	0	0	38
24	5	0	1	0	0	0	0	0	8	1	0	39
31	4	0	1	0	0	0	0	0	5	1	0	42
17	9	0	1	0	0	0	0	0	10	0	0	37
26	4	0	3	0	0	0	0	0	6	0	0	39
30	3	0	0	0	0	0	0	0	6	0	0	39
27	2	0	2	0	0	1	0	0	5	0	0	37
25	1	0	1	0	0	1	0	0	3	0	0	31
207	35	0	9	0	0	3	0	0	46	2	0	302
SOUTH LEG												
0	15	1	0	0	0	0	0	0	0	2	0	18
0	8	0	0	0	0	0	2	0	0	2	0	12
0	12	0	0	1	0	0	0	0	0	0	0	13
0	10	2	0	2	0	0	0	0	0	0	0	14
0	6	0	0	2	0	0	0	0	0	1	0	9
0	2	3	0	2	0	0	0	0	0	0	0	7
0	5	3	0	1	0	0	0	0	0	1	0	10
0	4	0	0	0	0	0	0	0	0	1	0	5
0	62	9	0	8	0	0	2	0	0	7	0	88
EAST LEG												
12	0	1	0	0	0	1	0	0	1	0	0	15
14	1	1	0	0	0	0	0	0	2	0	0	18
12	0	0	1	0	0	0	0	0	0	0	0	13
18	1	0	1	0	0	0	0	0	0	0	0	20
6	1	0	0	0	0	0	0	0	0	0	0	7
6	3	2	0	0	0	1	0	0	3	0	0	15
3	3	2	0	0	0	0	0	0	2	0	0	10
9	1	0	0	0	0	0	0	0	1	0	0	11
80	10	6	2	0	0	2	0	0	9	0	0	109
WEST LEG												
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 WB RAMPS

TIME: 03:00PM-04:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
127	23		Total
24	7		1st
26	4		2nd
33	5		3rd
44	7		4th

	1st	2nd	3rd	4th	Total
Rt	8	6	11	9	34
Thru	0	1	1	1	3
Lt	0	2	1	0	3

Total	1st	2nd	3rd	4th	
					Lt
					Thru
					Rt

	Lt	Thru	Rt
1st	0	20	
2nd	0	18	
3rd	2	19	
4th	1	15	
Total	3	72	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 WB RAMPS

TIME: 04:00PM-05:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
164	28		Total
40	8		1st
49	11		2nd
44	4		3rd
31	5		4th

	1st	2nd	3rd	4th	Total
Rt	11	21	16	12	60
Thru	2	2	0	1	5
Lt	0	0	3	1	4

Total	1st	2nd	3rd	4th	
					Lt
					Thru
					Rt

	Lt	Thru	Rt
1st	1	10	
2nd	1	17	
3rd	0	12	
4th	1	18	
Total	3	57	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 WB RAMPS

TIME: 05:00PM-06:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
129	27		Total
31	7		1st
33	6		2nd
37	5		3rd
28	9		4th

	1st	2nd	3rd	4th	Total
Rt	14	16	13	19	62
Thru	0	1	0	1	2
Lt	1	1	0	0	2

Total	1st	2nd	3rd	4th	
					Lt
					Thru
					Rt

	Lt	Thru	Rt
1st	1	17	
2nd	0	12	
3rd	0	13	
4th	2	12	
Total	3	54	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: I-10 WB RAMPS

TIME: 06:00PM-07:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
136	10		Total
35	4		1st
36	3		2nd
35	2		3rd
30	1		4th

	1st	2nd	3rd	4th	Total
Rt	6	10	5	10	31
Thru	1	3	3	1	8
Lt	0	2	2	0	4

Total	1st	2nd	3rd	4th	
					Lt
					Thru
					Rt

	Lt	Thru	Rt
1st	0	9	
2nd	3	4	
3rd	3	7	
4th	0	5	
Total	6	25	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: RICE RD
EAST-WEST STREET: RAGSDALE RD
JURISDICTION: DESERT CENTER

DATE: 02-15-23

PEAK HOUR: 08:00AM

NORTH LEG

TOTAL: 83

	83		Total
0	18	0	1st
0	24	0	2nd
0	18	0	3rd
0	23	0	4th
Rt	Thru	Lt	

EAST LEG TOTAL: 4

	1st	2nd	3rd	4th	Total
Rt	0	0	1	0	1
Thru	0	1	0	0	1
Lt	1	0	1	0	2

WEST LEG TOTAL: 6

Total	1st	2nd	3rd	4th	
2	0	1	1	0	Lt
	0	0	0	0	Thru
4	2	1	0	1	Rt

PEAK HOUR FACTORS

NORTH LEG = 0.86
SOUTH LEG = 0.78
EAST LEG = 0.50
WEST LEG = 0.75

ALL LEGS = 0.85

SOUTH LEG

TOTAL: 56

	Lt	Thru	Rt
1st	0	18	0
2nd	1	16	0
3rd	1	9	1
4th	0	10	0
Total	2	53	1

HOUR TOTAL: 149

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : RAGSDALE RD
DESERT CENTER
02-15-23
BEGINNING TIME : 06:00AM

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
						NORTH LEG						
0	11	0	0	0	0	0	0	0	0	0	0	11
0	11	0	0	0	0	0	0	0	0	2	0	13
0	9	0	0	0	0	0	0	0	0	5	0	14
0	14	0	0	2	0	0	0	0	0	3	0	19
0	14	0	0	2	0	0	1	0	0	0	0	17
0	8	0	0	2	0	0	1	0	0	2	0	13
0	7	0	0	1	0	0	1	0	0	2	0	11
0	9	0	0	1	0	0	0	0	0	0	0	10
0	83	0	0	8	0	0	3	0	0	14	0	108
						SOUTH LEG						
0	6	0	0	0	0	0	0	0	0	0	0	6
1	5	0	0	0	0	0	0	0	0	0	0	6
2	8	0	0	1	0	0	0	0	0	0	0	11
0	2	0	0	1	0	0	0	0	0	4	0	7
0	9	0	0	0	0	0	0	0	0	3	0	12
1	9	0	0	0	0	0	0	0	0	3	0	13
1	11	0	0	1	0	0	0	0	0	3	0	16
1	6	0	0	1	0	0	0	0	0	5	0	13
6	56	0	0	4	0	0	0	0	0	18	0	84
						EAST LEG						
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	0	1
1	1	0	0	0	0	0	0	0	0	0	0	2
0	0	1	0	0	0	0	0	0	0	0	0	1
2	2	0	0	0	0	0	0	0	0	0	0	4
3	4	1	0	0	0	0	0	0	0	0	0	8
						WEST LEG						
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	1
1	0	0	0	0	0	0	0	0	1	0	0	2
2	0	0	0	0	0	0	0	0	0	0	0	2
1	0	0	0	0	0	1	0	0	0	0	0	2
0	0	0	1	0	0	0	0	0	0	0	0	1
0	2	1	0	0	0	0	0	0	2	0	0	5
0	2	0	0	0	0	1	0	0	2	0	0	5
4	4	1	1	0	0	2	0	0	6	0	0	18

Prepared by Newport Traffic Studies

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : RAGSDALE RD
BEGINNING TIME : 08:00AM

DESERT CENTER
02-15-23

AUTOS RT	AUTOS THRU	AUTOS LT	LARGE 2 AXLE RT	LARGE 2 AXLE THRU	LARGE 2 AXLE LT	3 AXLE RT	3 AXLE THRU	3 AXLE LT	4(+) AXLE RT	4(+) AXLE THRU	4(+) AXLE LT	TOTALS
					NORTH LEG							
0	14	0	0	1	0	0	0	0	0	3	0	18
0	21	0	0	1	0	0	0	0	0	2	0	24
0	16	0	0	0	0	0	0	0	0	2	0	18
0	20	0	0	1	0	0	1	0	0	1	0	23
0	71	0	0	3	0	0	1	0	0	8	0	83
					SOUTH LEG							
0	14	0	0	0	0	0	0	0	0	4	0	18
0	9	0	0	1	0	0	0	0	0	6	1	17
1	0	0	0	0	0	0	0	0	0	9	1	11
0	5	0	0	0	0	0	0	0	0	5	0	10
1	28	0	0	1	0	0	0	0	0	24	2	56
					EAST LEG							
0	0	1	0	0	0	0	0	0	0	0	0	1
0	1	0	0	0	0	0	0	0	0	0	0	1
1	0	1	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	2	0	0	0	0	0	0	0	0	0	4
					WEST LEG							
0	0	0	0	0	0	0	0	0	2	0	0	2
1	0	1	0	0	0	0	0	0	0	0	0	2
0	0	1	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	1	0	0	1
1	0	2	0	0	0	0	0	0	3	0	0	6

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: RAGSDALE RD

TIME: 06:00AM-07:00AM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
0	57	0	Total
0	11	0	1st
0	13	0	2nd
0	14	0	3rd
0	19	0	4th

	1st	2nd	3rd	4th	Total
Rt	0	0	0	0	0
Thru	0	0	0	0	0
Lt	0	0	0	0	0

Total	1st	2nd	3rd	4th	
0	0	0	0	0	Lt
0	0	0	0	0	Thru
5	0	1	2	2	Rt

	Lt	Thru	Rt
1st	0	6	0
2nd	0	5	1
3rd	0	9	2
4th	0	7	0
Total	0	27	3

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: RAGSDALE RD

TIME: 07:00AM-08:00AM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
0	51	0	Total
0	17	0	1st
0	13	0	2nd
0	11	0	3rd
0	10	0	4th

	1st	2nd	3rd	4th	Total
Rt	0	1	0	2	3
Thru	1	1	0	2	4
Lt	0	0	1	0	1

Total	1st	2nd	3rd	4th	
1	0	0	1	0	Lt
4	0	0	2	2	Thru
8	2	1	2	3	Rt

	Lt	Thru	Rt
1st	0	12	0
2nd	0	12	1
3rd	0	15	1
4th	0	12	1
Total	0	51	3

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: RAGSDALE RD

TIME: 08:00AM-09:00AM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
0	83	0	Total
0	18	0	1st
0	24	0	2nd
0	18	0	3rd
0	23	0	4th

	1st	2nd	3rd	4th	Total
Rt	0	0	1	0	1
Thru	0	1	0	0	1
Lt	1	0	1	0	2

Total	1st	2nd	3rd	4th	
2	0	1	1	0	Lt
0	0	0	0	0	Thru
4	2	1	0	1	Rt

	Lt	Thru	Rt
1st	0	18	0
2nd	1	16	0
3rd	1	9	1
4th	0	10	0
Total	2	53	1

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: RICE RD
EAST-WEST STREET: RAGSDALE RD
JURISDICTION: DESERT CENTER

DATE: 02-15-23

PEAK HOUR: 03:45PM

NORTH LEG

TOTAL: 193

	192	1	Total
0	44	0	1st
0	45	0	2nd
0	59	0	3rd
0	44	1	4th
Rt	Thru	Lt	

EAST LEG TOTAL: 7

Rt	0	0	1	0	1
Thru	0	2	1	1	4
Lt	1	0	0	1	2
	1st	2nd	3rd	4th	Total

Total	1st	2nd	3rd	4th	
1	0	0	0	1	Lt
1	0	1	0	0	Thru
13	6	3	1	3	Rt

WEST LEG TOTAL: 15

PEAK HOUR FACTORS

NORTH LEG = 0.82
SOUTH LEG = 0.73
EAST LEG = 0.88
WEST LEG = 0.63

ALL LEGS = 0.82

	Lt	Thru	Rt
1st	3	19	2
2nd	2	17	2
3rd	2	35	1
4th	0	28	0
Total	7	99	5

TOTAL: 111

SOUTH LEG

HOUR TOTAL: 326

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : RAGSDALE RD

DESERT CENTER
02-15-23

BEGINNING TIME : 03:00PM

AUTOS RT	AUTOS THRU	AUTOS LT	LARGE 2 AXLE RT	LARGE 2 AXLE THRU	LARGE 2 AXLE LT	3 AXLE RT	3 AXLE THRU	3 AXLE LT	4(+) AXLE RT	4(+) AXLE THRU	4(+) AXLE LT	TOTALS
					NORTH LEG							
0	26	0	0	1	0	0	0	0	0	3	0	30
0	20	0	0	1	0	0	0	0	0	4	0	25
0	26	0	0	0	0	0	1	0	0	5	0	32
0	32	0	0	1	0	0	1	0	0	10	0	44
0	33	0	0	0	0	0	0	0	0	12	0	45
0	45	0	0	1	0	0	0	0	0	13	0	59
0	35	1	0	2	0	0	0	0	0	7	0	45
1	26	0	0	1	0	0	0	0	0	7	0	35
1	243	1	0	7	0	0	2	0	0	61	0	315
					SOUTH LEG							
2	18	3	0	1	0	0	0	0	0	4	0	28
1	16	3	0	0	0	0	0	0	0	4	0	24
2	22	1	0	2	0	0	0	0	0	2	1	30
2	19	3	0	0	0	0	0	0	0	0	0	24
2	10	0	0	1	0	0	0	0	0	6	2	21
0	33	1	0	0	0	0	0	0	1	2	1	38
0	21	0	0	1	0	0	0	0	0	6	0	28
0	28	1	0	0	0	0	0	0	0	1	0	30
9	167	12	0	5	0	0	0	0	1	25	4	223
					EAST LEG							
0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	1	2
0	1	2	0	0	0	0	0	0	0	0	0	3
0	0	1	0	0	0	0	0	0	0	0	0	1
0	2	0	0	0	0	0	0	0	0	0	0	2
1	1	0	0	0	0	0	0	0	0	0	0	2
0	1	1	0	0	0	0	0	0	0	0	0	2
0	0	2	0	0	0	0	0	0	0	0	0	2
1	6	6	0	0	0	0	0	0	0	0	1	14
					WEST LEG							
1	1	0	0	0	0	0	0	0	0	0	0	2
2	0	1	0	0	0	0	0	0	2	0	0	5
1	0	0	0	0	0	0	0	0	3	0	0	4
4	0	0	0	0	0	0	0	0	2	0	0	6
2	1	0	1	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	1	0	0	1
1	0	1	1	0	0	0	0	0	1	0	0	4
0	1	2	0	0	0	0	0	0	0	0	0	3
11	3	4	2	0	0	0	0	0	9	0	0	29

Prepared by Newport Traffic Studies

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : RAGSDALE RD

DESERT CENTER
02-15-23

BEGINNING TIME : 05:00PM

AUTOS RT	AUTOS THRU	AUTOS LT	LARGE 2 AXLE RT	LARGE 2 AXLE THRU	LARGE 2 AXLE LT	3 AXLE RT	3 AXLE THRU	3 AXLE LT	4(+) AXLE RT	4(+) AXLE THRU	4(+) AXLE LT	TOTALS
					NORTH LEG							
0	32	0	0	0	0	0	1	0	0	3	0	36
0	29	0	0	1	0	0	0	0	0	8	0	38
1	33	0	0	1	0	0	0	0	0	6	0	41
0	26	0	0	1	0	0	0	0	0	9	0	36
0	29	0	0	3	0	0	0	0	0	6	0	38
0	31	0	0	0	0	0	0	0	0	6	0	37
0	30	0	0	1	0	0	1	0	0	4	0	36
0	26	0	0	1	0	0	1	0	0	3	0	31
1	236	0	0	8	0	0	3	0	0	45	0	293
					SOUTH LEG							
0	29	0	0	0	0	0	0	0	0	2	0	31
0	22	2	0	0	0	0	2	0	0	2	0	28
1	22	1	0	2	0	0	0	0	0	0	0	26
1	27	0	0	3	0	0	0	0	0	0	0	31
0	13	0	0	2	0	0	0	0	0	0	0	15
0	12	0	0	2	0	0	0	0	0	0	0	14
0	10	0	0	1	0	0	0	0	0	0	1	12
0	14	0	0	0	0	0	0	0	0	1	0	15
2	149	3	0	10	0	0	2	0	0	5	1	172
					EAST LEG							
1	0	0	0	0	0	0	0	0	0	0	0	1
0	0	1	0	0	0	0	0	0	0	0	0	1
2	0	1	0	0	0	0	0	0	0	0	0	3
2	1	0	0	0	0	0	0	0	0	0	0	3
0	0	1	0	0	0	0	0	0	0	0	0	1
0	0	1	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
5	1	4	0	0	0	0	0	0	0	0	0	10
					WEST LEG							
2	0	0	0	0	0	0	0	0	0	0	0	2
0	1	1	0	0	0	0	0	0	0	0	0	2
1	2	1	0	0	0	0	0	0	0	0	0	4
0	1	2	0	0	0	0	0	0	1	0	0	4
0	0	1	0	0	0	0	0	0	0	0	0	1
1	0	1	0	0	0	0	0	0	0	0	0	2
0	0	1	1	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0
4	4	7	1	0	0	0	0	0	1	0	0	17

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: RAGSDALE RD

TIME: 03:00PM-04:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
0	131	0	Total
0	30	0	1st
0	25	0	2nd
0	32	0	3rd
0	44	0	4th

	1st	2nd	3rd	4th	Total
Rt	0	0	0	0	0
Thru	0	1	1	0	2
Lt	0	1	2	1	4

Total	1st	2nd	3rd	4th	
1	0	1	0	0	Lt
1	1	0	0	0	Thru
15	1	4	4	6	Rt

	Lt	Thru	Rt
1st	3	23	2
2nd	3	20	1
3rd	2	26	2
4th	3	19	2
Total	11	88	7

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: RAGSDALE RD

TIME: 04:00PM-05:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
1	182	1	Total
0	45	0	1st
0	59	0	2nd
0	44	1	3rd
1	34	0	4th

	1st	2nd	3rd	4th	Total
Rt	0	1	0	0	1
Thru	2	1	1	0	4
Lt	0	0	1	2	3

Total	1st	2nd	3rd	4th	
3	0	0	1	2	Lt
2	1	0	0	1	Thru
7	3	1	3	0	Rt

	Lt	Thru	Rt
1st	2	17	2
2nd	2	35	1
3rd	0	28	0
4th	1	29	0
Total	5	109	3

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: RAGSDALE RD

TIME: 05:00PM-06:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
1	150	0	Total
0	36	0	1st
0	38	0	2nd
1	40	0	3rd
0	36	0	4th

	1st	2nd	3rd	4th	Total
Rt	1	0	2	2	5
Thru	0	0	0	1	1
Lt	0	1	1	0	2

Total	1st	2nd	3rd	4th	
4	0	1	1	2	Lt
4	0	1	2	1	Thru
4	2	0	1	1	Rt

	Lt	Thru	Rt
1st	0	31	0
2nd	2	26	0
3rd	1	24	1
4th	0	30	1
Total	3	111	2

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: RAGSDALE RD

TIME: 06:00PM-07:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
0	142	0	Total
0	38	0	1st
0	37	0	2nd
0	36	0	3rd
0	31	0	4th

	1st	2nd	3rd	4th	Total
Rt	0	0	0	0	0
Thru	0	0	0	0	0
Lt	1	1	0	0	2

Total	1st	2nd	3rd	4th	
3	1	1	1	0	Lt
0	0	0	0	0	Thru
2	0	1	1	0	Rt

	Lt	Thru	Rt
1st	0	15	0
2nd	0	14	0
3rd	1	11	0
4th	0	15	0
Total	1	55	0

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: RICE RD
EAST-WEST STREET: KAISER RD
JURISDICTION: DESERT CENTER

DATE: 02-15-23

PEAK HOUR: 08:00AM

NORTH LEG

TOTAL: 48

	48		Total
0	8		1st
0	13		2nd
0	12		3rd
0	15		4th
Rt	Thru	Lt	

EAST LEG TOTAL: 0

Rt					
Thru					
Lt					
	1st	2nd	3rd	4th	Total

WEST LEG TOTAL: 36

Total	1st	2nd	3rd	4th	
1	1	0	0	0	Lt
					Thru
35	10	11	6	8	Rt

SOUTH LEG

TOTAL: 56

	Lt	Thru	Rt
1st	9	9	
2nd	9	8	
3rd	8	3	
4th	7	3	
Total	33	23	

PEAK HOUR FACTORS

NORTH LEG = 0.80
SOUTH LEG = 0.78
EAST LEG =
WEST LEG = 0.82

ALL LEGS = 0.85

HOUR TOTAL: 140

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : KAISER RD
BEGINNING TIME : 06:00AM

DESERT CENTER
02-15-23

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
						NORTH LEG						
0	11	0	0	0	0	0	0	0	0	0	0	11
0	10	0	0	0	0	0	0	0	0	2	0	12
0	7	0	0	0	0	0	0	0	0	5	0	12
0	13	0	0	2	0	0	0	0	0	2	0	17
0	7	0	0	2	0	0	1	0	0	1	0	11
0	1	0	0	2	0	0	2	0	0	2	0	7
0	4	0	0	1	0	0	0	0	0	2	0	7
0	4	0	0	1	0	0	0	0	0	0	0	5
0	57	0	0	8	0	0	3	0	0	14	0	82
						SOUTH LEG						
0	4	2	0	0	0	0	0	0	0	0	0	6
0	3	2	0	0	0	0	0	0	0	0	0	5
0	4	4	0	1	0	0	0	0	0	0	0	9
0	0	3	0	0	0	0	0	0	0	4	0	7
0	5	4	0	0	0	0	0	0	0	3	0	12
0	2	8	0	0	0	0	0	0	0	2	1	13
0	7	5	0	0	1	0	0	0	0	1	2	16
0	0	9	0	0	0	0	0	0	0	4	1	14
0	25	37	0	1	1	0	0	0	0	14	4	82
						EAST LEG						
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
						WEST LEG						
4	0	0	0	0	0	0	0	0	0	0	0	4
3	0	0	0	0	0	0	0	0	0	0	0	3
7	0	0	0	0	0	0	0	0	0	0	0	7
7	0	0	0	0	0	0	0	0	0	0	0	7
6	0	1	0	0	0	0	0	0	0	0	0	7
6	0	1	0	0	0	0	0	0	0	0	0	7
4	0	0	0	0	0	0	0	0	0	0	0	4
5	0	0	0	0	0	0	0	0	0	0	0	5
42	0	2	0	0	0	0	0	0	0	0	0	44

Prepared by Newport Traffic Studies

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : KAISER RD

DESERT CENTER
02-15-23

BEGINNING TIME : 08:00AM

AUTOS RT	AUTOS THRU	AUTOS LT	LARGE 2 AXLE RT	LARGE 2 AXLE THRU	LARGE 2 AXLE LT	3 AXLE RT	3 AXLE THRU	3 AXLE LT	4(+) AXLE RT	4(+) AXLE THRU	4(+) AXLE LT	TOTALS
					NORTH LEG							
0	5	0	0	1	0	0	0	0	0	2	0	8
0	12	0	0	0	0	0	0	0	0	1	0	13
0	9	0	0	1	0	0	0	0	0	2	0	12
0	13	0	0	0	0	0	1	0	0	1	0	15
0	39	0	0	2	0	0	1	0	0	6	0	48
					SOUTH LEG							
0	5	9	0	0	0	0	0	0	0	4	0	18
0	3	7	0	1	0	0	0	0	0	4	2	17
0	1	7	0	0	0	0	0	0	0	2	1	11
0	0	5	0	0	0	0	0	0	0	3	2	10
0	9	28	0	1	0	0	0	0	0	13	5	56
					EAST LEG							
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
					WEST LEG							
9	0	1	0	0	0	0	0	0	1	0	0	11
9	0	0	1	0	0	0	0	0	1	0	0	11
6	0	0	0	0	0	0	0	0	0	0	0	6
8	0	0	0	0	0	0	0	0	0	0	0	8
32	0	1	1	0	0	0	0	0	2	0	0	36

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: KAISER RD

TIME: 06:00AM-07:00AM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
0	52		Total
0	11		1st
0	12		2nd
0	12		3rd
0	17		4th

	Rt	Thru	Lt
1st			
2nd			
3rd			
4th			
Total			

Total	1st	2nd	3rd	4th	
0	0	0	0	0	Lt
					Thru
21	4	3	7	7	Rt

	Lt	Thru	Rt
1st	2	4	
2nd	2	3	
3rd	4	5	
4th	3	4	
Total	11	16	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: KAISER RD

TIME: 07:00AM-08:00AM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
0	30		Total
0	11		1st
0	7		2nd
0	7		3rd
0	5		4th

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

Total	1st	2nd	3rd	4th	
2	1	1	0	0	Lt
					Thru
21	6	6	4	5	Rt

	Lt	Thru	Rt
1st	4	8	
2nd	9	4	
3rd	8	8	
4th	10	4	
Total	31	24	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: KAISER RD

TIME: 08:00AM-09:00AM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
0	48		Total
0	8		1st
0	13		2nd
0	12		3rd
0	15		4th

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

Total	1st	2nd	3rd	4th	
1	1	0	0	0	Lt
					Thru
35	10	11	6	8	Rt

	Lt	Thru	Rt
1st	9	9	
2nd	9	8	
3rd	8	3	
4th	7	3	
Total	33	23	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: RICE RD
EAST-WEST STREET: KAISER RD
JURISDICTION: DESERT CENTER

DATE: 02-15-23

PEAK HOUR: 04:15PM

NORTH LEG

TOTAL: 106

Rt	Thru	Lt	
	106		Total
0	40		1st
0	28		2nd
0	21		3rd
0	17		4th

EAST LEG TOTAL: 0

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

WEST LEG TOTAL: 70

Total	1st	2nd	3rd	4th	
1	0	1	0	0	Lt
					Thru
69	19	17	14	19	Rt

SOUTH LEG

TOTAL: 129

	Lt	Thru	Rt
1st	14	22	
2nd	10	19	
3rd	13	19	
4th	13	19	
Total	50	79	

PEAK HOUR FACTORS

NORTH LEG = 0.66
SOUTH LEG = 0.90
EAST LEG =
WEST LEG = 0.92

ALL LEGS = 0.80

HOUR TOTAL: 305

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : KAISER RD

DESERT CENTER
02-15-23

BEGINNING TIME : 03:00PM

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
						NORTH LEG						
0	12	0	0	1	0	0	0	0	0	3	0	16
0	1	0	0	1	0	0	0	0	0	4	0	6
0	12	0	0	0	0	0	1	0	0	4	0	17
0	24	0	0	0	0	0	1	0	0	8	0	33
0	21	0	0	0	0	0	0	0	0	8	0	29
0	30	0	0	1	0	0	0	0	0	9	0	40
0	21	0	0	1	0	0	0	0	0	6	0	28
0	13	0	0	1	0	0	0	0	0	7	0	21
0	134	0	0	5	0	0	2	0	0	49	0	190
						SOUTH LEG						
0	8	10	0	1	0	0	0	0	0	4	0	23
0	6	11	0	0	0	0	0	0	0	3	1	21
0	13	9	0	2	0	0	0	0	0	2	0	26
0	8	11	0	0	0	0	0	0	0	0	0	19
0	1	9	0	0	1	0	0	0	0	5	1	17
0	20	14	0	0	0	0	0	0	0	2	0	36
0	14	8	0	1	0	0	0	0	0	4	2	29
0	19	12	0	0	0	0	0	0	0	0	1	32
0	89	84	0	4	1	0	0	0	0	20	5	203
						EAST LEG						
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
						WEST LEG						
14	0	2	0	0	0	0	0	0	0	0	0	16
19	0	0	0	0	0	0	0	0	0	0	0	19
14	0	1	0	0	0	0	0	0	1	0	0	16
8	0	1	1	0	0	0	0	0	2	0	0	12
12	0	1	0	0	0	0	0	0	4	0	0	17
15	0	0	0	0	0	0	0	0	4	0	0	19
15	0	1	1	0	0	0	0	0	1	0	0	18
14	0	0	0	0	0	0	0	0	0	0	0	14
111	0	6	2	0	0	0	0	0	12	0	0	131

Prepared by Newport Traffic Studies

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : KAISER RD
DESERT CENTER
02-15-23
BEGINNING TIME : 05:00PM

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
						NORTH LEG						
0	14	0	0	0	0	0	1	0	0	2	0	17
1	14	0	0	1	0	0	0	0	0	8	0	24
0	15	0	0	0	0	0	0	0	0	5	0	20
0	13	0	0	1	0	0	0	0	0	8	0	22
0	16	0	0	2	0	0	0	0	0	4	0	22
0	17	0	0	0	0	0	0	0	0	6	0	23
0	24	0	0	0	0	0	0	0	0	2	0	26
0	16	0	0	1	0	0	1	0	0	2	0	20
1	129	0	0	5	0	0	2	0	0	37	0	174
						SOUTH LEG						
0	17	13	0	0	0	0	0	0	0	2	0	32
0	13	10	0	0	0	0	2	0	0	2	0	27
0	9	16	0	2	0	0	0	0	0	0	0	27
0	17	11	0	2	1	0	0	0	0	0	0	31
0	8	6	0	2	0	0	0	0	0	0	0	16
0	4	9	0	1	1	0	0	0	0	0	0	15
0	2	9	0	1	0	0	0	0	0	0	0	12
0	10	5	0	0	0	0	0	0	0	0	0	15
0	80	79	0	8	2	0	2	0	0	4	0	175
						EAST LEG						
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
						WEST LEG						
18	0	0	0	0	0	0	0	0	1	0	0	19
15	0	1	0	0	0	0	0	0	0	0	0	16
19	0	1	1	0	0	0	0	0	1	0	0	22
13	0	0	0	0	0	0	0	0	1	0	0	14
13	0	1	1	0	0	0	0	0	2	0	0	17
14	0	0	0	0	0	0	0	0	0	0	0	14
7	0	0	1	0	0	0	0	0	2	0	0	10
9	0	1	0	0	0	1	0	0	1	0	0	12
108	0	4	3	0	0	1	0	0	8	0	0	124

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: KAISER RD

TIME: 03:00PM-04:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
0	72		Total
0	16		1st
0	6		2nd
0	17		3rd
0	33		4th

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

Total	1st	2nd	3rd	4th	
4	2	0	1	1	Lt
					Thru
59	14	19	15	11	Rt

	Lt	Thru	Rt
1st	10	13	
2nd	12	9	
3rd	9	17	
4th	11	8	
Total	42	47	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: KAISER RD

TIME: 04:00PM-05:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
0	118		Total
0	29		1st
0	40		2nd
0	28		3rd
0	21		4th

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

Total	1st	2nd	3rd	4th	
2	1	0	1	0	Lt
					Thru
66	16	19	17	14	Rt

	Lt	Thru	Rt
1st	11	6	
2nd	14	22	
3rd	10	19	
4th	13	19	
Total	48	66	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: KAISER RD

TIME: 05:00PM-06:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
1	82		Total
0	17		1st
1	23		2nd
0	20		3rd
0	22		4th

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

Total	1st	2nd	3rd	4th	
2	0	1	1	0	Lt
					Thru
69	19	15	21	14	Rt

	Lt	Thru	Rt
1st	13	19	
2nd	10	17	
3rd	16	11	
4th	12	19	
Total	51	66	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: KAISER RD

TIME: 06:00PM-07:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
0	91		Total
0	22		1st
0	23		2nd
0	26		3rd
0	20		4th

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

Total	1st	2nd	3rd	4th	
2	1	0	0	1	Lt
					Thru
51	16	14	10	11	Rt

	Lt	Thru	Rt
1st	6	10	
2nd	10	5	
3rd	9	3	
4th	5	10	
Total	30	28	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: RICE RD
EAST-WEST STREET: OASIS RD
JURISDICTION: DESERT CENTER

DATE: 02-15-23

PEAK HOUR: 08:00AM

NORTH LEG

TOTAL: 47

Rt	Thru	Lt	
4	43		Total
0	8		1st
2	11		2nd
2	10		3rd
0	14		4th

EAST LEG TOTAL: 0

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

WEST LEG TOTAL: 13

Total	1st	2nd	3rd	4th	
8	1	1	4	2	Lt
					Thru
5	0	2	2	1	Rt

SOUTH LEG

TOTAL: 24

	Lt	Thru	Rt
1st	0	10	
2nd	1	7	
3rd	0	3	
4th	0	3	
Total	1	23	

PEAK HOUR FACTORS

NORTH LEG = 0.84
SOUTH LEG = 0.60
EAST LEG =
WEST LEG = 0.54

ALL LEGS = 0.88

HOUR TOTAL: 84

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : OASIS RD
BEGINNING TIME : 06:00AM

DESERT CENTER
02-15-23

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
NORTH LEG												
0	11	0	0	0	0	0	0	0	0	0	0	11
0	10	0	0	0	0	0	0	0	0	2	0	12
0	7	0	0	0	0	0	0	0	0	5	0	12
0	12	0	0	2	0	0	0	0	0	2	0	16
0	4	0	0	2	0	0	2	0	0	1	0	9
1	2	0	0	2	0	0	1	0	0	2	0	8
3	4	0	0	1	0	0	0	0	0	2	0	10
2	3	0	0	1	0	0	0	0	0	0	0	6
6	53	0	0	8	0	0	3	0	0	14	0	84
SOUTH LEG												
0	4	0	0	0	0	0	0	0	0	0	0	4
0	3	0	0	0	0	0	0	0	0	0	0	3
0	4	0	0	1	0	0	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	4	0	4
0	5	1	0	0	0	0	0	0	0	3	0	9
0	2	1	0	0	0	0	0	0	0	2	0	5
0	7	0	0	0	0	0	0	0	0	1	0	8
0	0	0	0	0	0	0	0	0	0	4	0	4
0	25	2	0	1	0	0	0	0	0	14	0	42
EAST LEG												
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
WEST LEG												
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	1
2	0	2	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	1
1	0	1	0	0	0	0	0	0	0	0	0	2
4	0	4	0	0	0	0	0	0	0	0	0	8

Prepared by Newport Traffic Studies

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD — DESERT CENTER

EAST-WEST STREET : OASIS RD — 02-15-23

BEGINNING TIME : 08:00AM

AUTOS RT	AUTOS THRU	AUTOS LT	LARGE 2 AXLE RT	LARGE 2 AXLE THRU	LARGE 2 AXLE LT	3 AXLE RT	3 AXLE THRU	3 AXLE LT	4(+) AXLE RT	4(+) AXLE THRU	4(+) AXLE LT	TOTALS
					NORTH LEG							
0	5	0	0	1	0	0	0	0	0	2	0	8
2	10	0	0	0	0	0	0	0	0	1	0	13
2	7	0	0	1	0	0	0	0	0	2	0	12
0	12	0	0	0	0	0	1	0	0	1	0	14
4	34	0	0	2	0	0	1	0	0	6	0	47
					SOUTH LEG							
0	6	0	0	0	0	0	0	0	0	4	0	10
0	2	1	0	1	0	0	0	0	0	4	0	8
0	0	0	0	1	0	0	0	0	0	2	0	3
0	0	0	0	0	0	0	0	0	0	3	0	3
0	8	1	0	2	0	0	0	0	0	13	0	24
					EAST LEG							
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
					WEST LEG							
0	0	1	0	0	0	0	0	0	0	0	0	1
2	0	1	0	0	0	0	0	0	0	0	0	3
2	0	4	0	0	0	0	0	0	0	0	0	6
1	0	2	0	0	0	0	0	0	0	0	0	3
5	0	8	0	0	0	0	0	0	0	0	0	13

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: OASIS RD

TIME: 06:00AM-07:00AM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
0	51		Total
0	11		1st
0	12		2nd
0	12		3rd
0	16		4th

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

Total	1st	2nd	3rd	4th	
0	0	0	0	0	Lt
					Thru
1	0	0	0	1	Rt

	Lt	Thru	Rt
1st	0	4	
2nd	0	3	
3rd	0	5	
4th	0	4	
Total	0	16	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: OASIS RD

TIME: 07:00AM-08:00AM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
6	27		Total
0	9		1st
1	7		2nd
3	7		3rd
2	4		4th

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

Total	1st	2nd	3rd	4th	
4	2	0	1	1	Lt
					Thru
3	2	0	0	1	Rt

	Lt	Thru	Rt
1st	1	8	
2nd	1	4	
3rd	0	8	
4th	0	4	
Total	2	24	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: OASIS RD

TIME: 08:00AM-09:00AM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
4	43		Total
0	8		1st
2	11		2nd
2	10		3rd
0	14		4th

	Rt	Thru	Lt
Rt			
Thru			
Lt			

	1st	2nd	3rd	4th	Total

Total	1st	2nd	3rd	4th	
8	1	1	4	2	Lt
					Thru
5	0	2	2	1	Rt

	Lt	Thru	Rt
1st	0	10	
2nd	1	7	
3rd	0	3	
4th	0	3	
Total	1	23	

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INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: RICE RD
EAST-WEST STREET: OASIS RD
JURISDICTION: DESERT CENTER

DATE: 02-15-23

PEAK HOUR: 04:00PM

NORTH LEG

TOTAL: 95

Rt	Thru	Lt	
6	89		Total
1	24		1st
2	31		2nd
2	19		3rd
1	15		4th

EAST LEG TOTAL: 0

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

WEST LEG TOTAL: 43

Total	1st	2nd	3rd	4th	
14	2	3	3	6	Lt
					Thru
29	5	9	9	6	Rt

PEAK HOUR FACTORS

NORTH LEG = 0.72
SOUTH LEG = 0.77
EAST LEG =
WEST LEG = 0.90

ALL LEGS = 0.77

SOUTH LEG

TOTAL: 68

	Lt	Thru	Rt
1st	3	4	
2nd	3	19	
3rd	4	16	
4th	2	17	
Total	12	56	

HOUR TOTAL: 206

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SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : OASIS RD
DESERT CENTER
02-15-23
BEGINNING TIME : 03:00PM

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
NORTH LEG												
2	8	0	0	1	0	0	0	0	0	3	0	14
1	0	0	0	0	0	0	0	0	0	2	0	3
0	7	0	0	0	0	0	1	0	0	4	0	12
1	21	0	0	0	0	0	1	0	0	7	0	30
1	16	0	0	0	0	0	0	0	0	8	0	25
2	21	0	0	1	0	0	0	0	0	9	0	33
2	12	0	0	1	0	0	0	0	0	6	0	21
1	8	0	0	1	0	0	0	0	0	6	0	16
10	93	0	0	4	0	0	2	0	0	45	0	154
SOUTH LEG												
0	7	3	0	1	0	0	0	0	0	4	0	15
0	1	5	0	0	0	0	0	0	0	3	0	9
0	10	4	0	2	0	0	0	0	0	2	0	18
0	4	5	0	0	0	0	0	0	0	0	0	9
0	0	2	0	0	0	0	0	0	0	4	1	7
0	17	3	0	0	0	0	0	0	0	2	0	22
0	11	4	0	1	0	0	0	0	0	4	0	20
0	17	2	0	0	0	0	0	0	0	0	0	19
0	67	28	0	4	0	0	0	0	0	19	1	119
EAST LEG												
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
WEST LEG												
4	0	2	0	0	0	0	0	0	0	0	0	6
4	0	2	0	0	0	0	0	0	0	0	0	6
5	0	0	0	0	0	0	0	0	0	0	0	5
3	0	2	0	0	0	0	0	0	1	0	0	6
5	0	2	0	0	0	0	0	0	0	0	0	7
9	0	3	0	0	0	0	0	0	0	0	0	12
9	0	3	0	0	0	0	0	0	0	0	0	12
5	0	6	0	0	0	0	0	0	1	0	0	12
44	0	20	0	0	0	0	0	0	2	0	0	66

Prepared by Newport Traffic Studies

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : RICE RD
EAST-WEST STREET : OASIS RD
DESERT CENTER
02-15-23
BEGINNING TIME : 05:00PM

AUTOS			LARGE 2 AXLE			3 AXLE			4(+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
						NORTH LEG						
0	10	0	0	0	0	0	1	0	0	2	0	13
1	11	0	0	1	0	0	0	0	0	7	0	20
1	12	0	0	0	0	0	0	0	0	5	0	18
1	12	0	0	1	0	0	0	0	0	7	0	21
1	11	0	0	2	0	0	0	0	0	4	0	18
1	12	0	0	0	0	0	0	0	0	6	0	19
0	23	0	0	0	0	0	0	0	0	1	0	24
1	13	0	0	1	0	0	1	0	0	2	0	18
6	104	0	0	5	0	0	2	0	0	34	0	151
						SOUTH LEG						
0	13	4	0	0	0	0	0	0	0	2	0	19
0	11	3	0	0	0	0	2	0	0	2	0	18
0	7	3	0	2	0	0	0	0	0	0	0	12
0	13	4	0	2	0	0	0	0	0	0	0	19
0	7	2	0	2	0	0	0	0	0	0	0	11
0	3	1	0	1	0	0	0	0	0	0	0	5
0	1	1	0	1	0	0	0	0	0	0	0	3
0	10	1	0	0	0	0	0	0	0	0	0	11
0	65	19	0	8	0	0	2	0	0	4	0	98
						EAST LEG						
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
						WEST LEG						
4	0	0	0	0	0	0	0	0	0	0	0	4
4	0	1	0	0	0	0	0	0	1	0	0	6
3	0	1	0	0	0	0	0	0	0	0	0	4
1	0	0	0	0	0	0	0	0	1	0	0	2
5	0	2	0	0	0	0	0	0	0	0	0	7
5	0	2	0	0	0	0	0	0	0	0	0	7
1	0	2	0	0	0	0	0	0	1	0	0	4
3	0	0	0	0	0	0	0	0	0	0	0	3
26	0	8	0	0	0	0	0	0	3	0	0	37

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: OASIS RD

TIME: 03:00PM-04:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
4	55		Total
2	12		1st
1	2		2nd
0	12		3rd
1	29		4th

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

Total	1st	2nd	3rd	4th	
6	2	2	0	2	Lt
					Thru
17	4	4	5	4	Rt

	Lt	Thru	Rt
1st	3	12	
2nd	5	4	
3rd	4	14	
4th	5	4	
Total	17	34	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: OASIS RD

TIME: 04:00PM-05:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
6	89		Total
1	24		1st
2	31		2nd
2	19		3rd
1	15		4th

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

Total	1st	2nd	3rd	4th	
14	2	3	3	6	Lt
					Thru
29	5	9	9	6	Rt

	Lt	Thru	Rt
1st	3	4	
2nd	3	19	
3rd	4	16	
4th	2	17	
Total	12	56	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: OASIS RD

TIME: 05:00PM-06:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
3	69		Total
0	13		1st
1	19		2nd
1	17		3rd
1	20		4th

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

Total	1st	2nd	3rd	4th	
2	0	1	1	0	Lt
					Thru
14	4	5	3	2	Rt

	Lt	Thru	Rt
1st	4	15	
2nd	3	15	
3rd	3	9	
4th	4	15	
Total	14	54	

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INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: RICE RD

EAST-WEST STREET: OASIS RD

TIME: 06:00PM-07:00PM DATE: 02-15-23

NORTH LEG

Rt	Thru	Lt	
3	76		Total
1	17		1st
1	18		2nd
0	24		3rd
1	17		4th

	1st	2nd	3rd	4th	Total
Rt					
Thru					
Lt					

Total	1st	2nd	3rd	4th	
6	2	2	2	0	Lt
					Thru
15	5	5	2	3	Rt

	Lt	Thru	Rt
1st	2	9	
2nd	1	4	
3rd	1	2	
4th	1	10	
Total	5	25	

Prepared by NEWPORT TRAFFIC STUDIES

Appendix 2. Intersection Capacity Analysis Worksheets

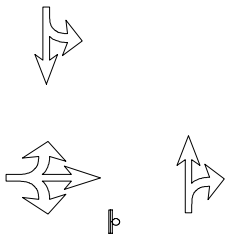
DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : I-10 EB RAMPS
N/S STREET : RICE ROAD (SR 177)
CONDITION : AM PEAK HOUR

INTERSECTION : 1
GROWTH PER YEAR : 3.0%

CONDITION DIAGRAMS



EXISTING GEOMETRICS

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	1			3		5			7		9	11	13
I-10 EB RAMPS													
EBL	51	2	0	53	320	373	4	32	89	8	97	83	91
EBT	2	1	0	3	0	3	1	0	4	0	4	2	2
EBR	6	1	0	7	0	7	1	0	8	0	8	6	6
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
RICE ROAD (SR 177)													
NBL	0	0	0	0	0	0	0	0	0	0	0	0	0
NBT	7	1	117	125	0	125	1	0	9	0	9	7	7
NBR	2	1	0	3	0	3	1	0	4	0	4	2	2
SBL	21	1	0	22	6	28	2	4	28	1	29	26	27
SBT	3	1	3	7	0	7	1	0	5	0	5	3	3
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**92**	**8**	**120**	**220**	**326**	**546**	**11**	**36**	**147**	**9**	**156**	**129**	**138**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	HEAY	3/31/2023	ASPE0000-0004	2 OF 2

E/W STREET : I-10 EB RAMPS
N/S STREET : RICE ROAD (SR 177)
CONDITION : AM PEAK HOUR
PHF : 0.88

NORTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	1	2	0	0	0	0	0	0	0	0	2
0	1	4	0	0	0	0	0	0	0	0	1
0	0	3	0	0	0	0	0	0	0	0	3
0	1	5	0	0	1	0	0	0	0	0	0

SOUTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
1	2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	3	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	0	0	0	0	0	0	0

EAST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0

WEST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
2	1	9	0	0	0	0	0	0	0	0	3
2	0	6	0	0	0	0	0	0	0	0	4
1	0	10	0	0	1	0	0	0	0	0	4
1	1	9	0	0	0	0	0	0	0	0	5

	Truck Volumes	Auto Volumes	Totals	Truck Percentage	Balanced Totals
I-10 EB RAMPS					
EBL	17	34	**51**	**34%**	**51**
EBTH	0	2	**2**	**1%**	**2**
EBR	0	6	**6**	**1%**	**6**
WBL	0	0	**0**	**0%**	**0**
WBTH	0	0	**0**	**0%**	**0**
WBR	0	0	**0**	**0%**	**0**
RICE ROAD (SR 177)					
NBL	0	0	**0**	**0%**	**0**
NBTH	0	7	**7**	**1%**	**7**
NBR	0	2	**2**	**1%**	**2**
SBL	7	14	**21**	**34%**	**21**
SBTH	0	3	**3**	**1%**	**3**
SBR	0	0	**0**	**0%**	**0**

Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	51	2	6	0	0	0	0	7	2	21	3	0
Future Vol, veh/h	51	2	6	0	0	0	0	7	2	21	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	34	1	1	0	0	0	0	1	1	34	1	0
Mvmt Flow	58	2	7	0	0	0	0	8	2	24	3	0

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	60	61	3				-	0	0	10	0	0
Stage 1	51	51	-				-	-	-	-	-	-
Stage 2	9	10	-				-	-	-	-	-	-
Critical Hdwy	6.74	6.51	6.21				-	-	-	4.44	-	-
Critical Hdwy Stg 1	5.74	5.51	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.74	5.51	-				-	-	-	-	-	-
Follow-up Hdwy	3.806	4.009	3.309				-	-	-	2.506	-	-
Pot Cap-1 Maneuver	872	832	1084				0	-	-	1424	-	0
Stage 1	896	854	-				0	-	-	-	-	0
Stage 2	937	889	-				0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	857	0	1084				-	-	-	1424	-	-
Mov Cap-2 Maneuver	857	0	-				-	-	-	-	-	-
Stage 1	896	0	-				-	-	-	-	-	-
Stage 2	921	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0	6.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	876	1424	-
HCM Lane V/C Ratio	-	-	0.077	0.017	-
HCM Control Delay (s)	-	-	9.5	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	3	7	0	0	0	0	125	3	22	7	0
Future Vol, veh/h	53	3	7	0	0	0	0	125	3	22	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	34	1	1	0	0	0	0	1	1	34	1	0
Mvmt Flow	60	3	8	0	0	0	0	142	3	25	8	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	202	203	8	-	0	0	145	0	0
Stage 1	58	58	-	-	-	-	-	-	-
Stage 2	144	145	-	-	-	-	-	-	-
Critical Hdwy	6.74	6.51	6.21	-	-	-	4.44	-	-
Critical Hdwy Stg 1	5.74	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.74	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.806	4.009	3.309	-	-	-	2.506	-	-
Pot Cap-1 Maneuver	720	695	1077	0	-	-	1263	-	0
Stage 1	889	849	-	0	-	-	-	-	0
Stage 2	811	779	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	706	0	1077	-	-	-	1263	-	-
Mov Cap-2 Maneuver	706	0	-	-	-	-	-	-	-
Stage 1	889	0	-	-	-	-	-	-	-
Stage 2	795	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0	6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	736	1263	-
HCM Lane V/C Ratio	-	-	0.097	0.02	-
HCM Control Delay (s)	-	-	10.4	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	13.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	373	3	7	0	0	0	0	125	3	28	7	0
Future Vol, veh/h	373	3	7	0	0	0	0	125	3	28	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	34	1	1	0	0	0	0	1	1	34	1	0
Mvmt Flow	424	3	8	0	0	0	0	142	3	32	8	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	216	217	8	-	0	0	145	0	0
Stage 1	72	72	-	-	-	-	-	-	-
Stage 2	144	145	-	-	-	-	-	-	-
Critical Hdwy	6.74	6.51	6.21	-	-	-	4.44	-	-
Critical Hdwy Stg 1	5.74	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.74	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.806	4.009	3.309	-	-	-	2.506	-	-
Pot Cap-1 Maneuver	706	683	1077	0	-	-	1263	-	0
Stage 1	876	837	-	0	-	-	-	-	0
Stage 2	811	779	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	688	0	1077	-	-	-	1263	-	-
Mov Cap-2 Maneuver	688	0	-	-	-	-	-	-	-
Stage 1	876	0	-	-	-	-	-	-	-
Stage 2	791	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.5	0	6.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	693	1263	-
HCM Lane V/C Ratio	-	-	0.628	0.025	-
HCM Control Delay (s)	-	-	18.5	7.9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	4.5	0.1	-

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	89	4	8	0	0	0	0	9	4	28	5	0
Future Vol, veh/h	89	4	8	0	0	0	0	9	4	28	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	34	1	1	0	0	0	0	1	1	34	1	0
Mvmt Flow	101	5	9	0	0	0	0	10	5	32	6	0

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	83	85	6				-	0	0	15	0	0
Stage 1	70	70	-				-	-	-	-	-	-
Stage 2	13	15	-				-	-	-	-	-	-
Critical Hdwy	6.74	6.51	6.21				-	-	-	4.44	-	-
Critical Hdwy Stg 1	5.74	5.51	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.74	5.51	-				-	-	-	-	-	-
Follow-up Hdwy	3.806	4.009	3.309				-	-	-	2.506	-	-
Pot Cap-1 Maneuver	846	807	1080				0	-	-	1418	-	0
Stage 1	878	839	-				0	-	-	-	-	0
Stage 2	933	885	-				0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	827	0	1080				-	-	-	1418	-	-
Mov Cap-2 Maneuver	827	0	-				-	-	-	-	-	-
Stage 1	878	0	-				-	-	-	-	-	-
Stage 2	912	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0	6.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	843	1418	-
HCM Lane V/C Ratio	-	-	0.136	0.022	-
HCM Control Delay (s)	-	-	9.9	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	97	4	8	0	0	0	0	9	4	29	5	0
Future Vol, veh/h	97	4	8	0	0	0	0	9	4	29	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	34	1	1	0	0	0	0	1	1	34	1	0
Mvmt Flow	110	5	9	0	0	0	0	10	5	33	6	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	85	87	6	-	0	0	15	0	0
Stage 1	72	72	-	-	-	-	-	-	-
Stage 2	13	15	-	-	-	-	-	-	-
Critical Hdwy	6.74	6.51	6.21	-	-	-	4.44	-	-
Critical Hdwy Stg 1	5.74	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.74	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.806	4.009	3.309	-	-	-	2.506	-	-
Pot Cap-1 Maneuver	844	805	1080	0	-	-	1418	-	0
Stage 1	876	837	-	0	-	-	-	-	0
Stage 2	933	885	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	825	0	1080	-	-	-	1418	-	-
Mov Cap-2 Maneuver	825	0	-	-	-	-	-	-	-
Stage 1	876	0	-	-	-	-	-	-	-
Stage 2	912	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0	6.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	840	1418	-
HCM Lane V/C Ratio	-	-	0.147	0.023	-
HCM Control Delay (s)	-	-	10	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	83	2	6	0	0	0	0	7	2	26	3	0
Future Vol, veh/h	83	2	6	0	0	0	0	7	2	26	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	34	1	1	0	0	0	0	1	1	34	1	0
Mvmt Flow	94	2	7	0	0	0	0	8	2	30	3	0

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	72	73	3			-	0	0	10	0	0
Stage 1	63	63	-			-	-	-	-	-	-
Stage 2	9	10	-			-	-	-	-	-	-
Critical Hdwy	6.74	6.51	6.21			-	-	-	4.44	-	-
Critical Hdwy Stg 1	5.74	5.51	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.74	5.51	-			-	-	-	-	-	-
Follow-up Hdwy	3.806	4.009	3.309			-	-	-	2.506	-	-
Pot Cap-1 Maneuver	858	819	1084			0	-	-	1424	-	0
Stage 1	884	844	-			0	-	-	-	-	0
Stage 2	937	889	-			0	-	-	-	-	0
Platoon blocked, %							-	-		-	
Mov Cap-1 Maneuver	840	0	1084			-	-	-	1424	-	-
Mov Cap-2 Maneuver	840	0	-			-	-	-	-	-	-
Stage 1	884	0	-			-	-	-	-	-	-
Stage 2	917	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	0	6.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	853	1424	-
HCM Lane V/C Ratio	-	-	0.121	0.021	-
HCM Control Delay (s)	-	-	9.8	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	91	2	6	0	0	0	0	7	2	27	3	0
Future Vol, veh/h	91	2	6	0	0	0	0	7	2	27	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	34	1	1	0	0	0	0	1	1	34	1	0
Mvmt Flow	103	2	7	0	0	0	0	8	2	31	3	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	74	75	3	-	0	0	10	0	0
Stage 1	65	65	-	-	-	-	-	-	-
Stage 2	9	10	-	-	-	-	-	-	-
Critical Hdwy	6.74	6.51	6.21	-	-	-	4.44	-	-
Critical Hdwy Stg 1	5.74	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.74	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.806	4.009	3.309	-	-	-	2.506	-	-
Pot Cap-1 Maneuver	856	817	1084	0	-	-	1424	-	0
Stage 1	882	843	-	0	-	-	-	-	0
Stage 2	937	889	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	837	0	1084	-	-	-	1424	-	-
Mov Cap-2 Maneuver	837	0	-	-	-	-	-	-	-
Stage 1	882	0	-	-	-	-	-	-	-
Stage 2	916	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0	6.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	849	1424	-
HCM Lane V/C Ratio	-	-	0.133	0.022	-
HCM Control Delay (s)	-	-	9.9	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : I-10 EB RAMPS
N/S STREET : RICE ROAD (SR 177)
CONDITION : PM PEAK HOUR

INTERSECTION : 1
GROWTH PER YEAR : 3.0%

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	2			4		6			6		8	12	14
I-10 EB RAMPS													
EBL	71	3	0	74	8	82	5	7	86	2	88	78	80
EBT	5	1	0	6	0	6	1	0	7	0	7	5	5
EBR	8	1	0	9	0	9	1	0	10	0	10	8	8
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
RICE ROAD (SR 177)													
NBL	0	0	0	0	0	0	0	0	0	0	0	0	0
NBT	4	1	3	8	0	8	1	0	6	0	6	4	4
NBR	2	1	0	3	0	3	1	0	4	0	4	2	2
SBL	30	1	0	31	214	245	2	19	52	5	57	49	54
SBT	3	1	117	121	0	121	1	0	5	0	5	3	3
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**123**	**9**	**120**	**252**	**222**	**474**	**12**	**26**	**170**	**7**	**177**	**149**	**156**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	HEAY	31-Mar-23	ASPE0000-0004	2 OF 2

E/W STREET : I-10 EB RAMPS
N/S STREET : RICE ROAD (SR 177)
CONDITION : PM PEAK HOUR
PHF : 0.97

NORTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	6	0	0	1	0	0	0	0	0	0
0	0	5	0	0	1	0	0	0	0	0	0
0	1	5	0	0	0	0	0	0	0	0	0
0	1	5	0	0	0	0	0	0	0	0	1

SOUTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	1	0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0

EAST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0

WEST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	16	0	0	1	0	0	0	0	0	2
2	3	14	0	0	0	0	0	0	0	0	2
1	1	17	0	0	1	0	0	0	0	0	3
5	1	15	0	0	0	0	0	0	0	0	0

	Truck Volumes	Auto Volumes	Totals	Truck Percentage	Balanced Totals
I-10 EB RAMPS					
EBL	9	62	**71**	**13%**	**71**
EBTH	0	5	**5**	**1%**	**5**
EBR	0	8	**8**	**1%**	**8**
WBL	0	0	**0**	**0%**	**0**
WBTH	0	0	**0**	**0%**	**0**
WBR	0	0	**0**	**0%**	**0**
RICE ROAD (SR 177)					
NBL	0	0	**0**	**0%**	**0**
NBTH	0	4	**4**	**1%**	**4**
NBR	0	2	**2**	**1%**	**2**
SBL	3	21	**24**	**13%**	**30**
SBTH	0	2	**2**	**1%**	**3**
SBR	0	0	**0**	**0%**	**0**

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	71	5	8	0	0	0	0	4	2	30	3	0
Future Vol, veh/h	71	5	8	0	0	0	0	4	2	30	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	13	1	1	0	0	0	0	1	1	13	1	0
Mvmt Flow	73	5	8	0	0	0	0	4	2	31	3	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	70	71	3	-	0	0	6	0	0
Stage 1	65	65	-	-	-	-	-	-	-
Stage 2	5	6	-	-	-	-	-	-	-
Critical Hdwy	6.53	6.51	6.21	-	-	-	4.23	-	-
Critical Hdwy Stg 1	5.53	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.53	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.617	4.009	3.309	-	-	-	2.317	-	-
Pot Cap-1 Maneuver	908	821	1084	0	-	-	1546	-	0
Stage 1	930	843	-	0	-	-	-	-	0
Stage 2	990	893	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	890	0	1084	-	-	-	1546	-	-
Mov Cap-2 Maneuver	890	0	-	-	-	-	-	-	-
Stage 1	930	0	-	-	-	-	-	-	-
Stage 2	970	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0	6.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	906	1546	-
HCM Lane V/C Ratio	-	-	0.096	0.02	-
HCM Control Delay (s)	-	-	9.4	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	6	9	0	0	0	0	8	3	31	121	0
Future Vol, veh/h	74	6	9	0	0	0	0	8	3	31	121	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	13	1	1	0	0	0	0	1	1	13	1	0
Mvmt Flow	76	6	9	0	0	0	0	8	3	32	125	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	199	200	125	-	0	0	11	0	0
Stage 1	189	189	-	-	-	-	-	-	-
Stage 2	10	11	-	-	-	-	-	-	-
Critical Hdwy	6.53	6.51	6.21	-	-	-	4.23	-	-
Critical Hdwy Stg 1	5.53	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.53	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.617	4.009	3.309	-	-	-	2.317	-	-
Pot Cap-1 Maneuver	765	698	928	0	-	-	1539	-	0
Stage 1	817	746	-	0	-	-	-	-	0
Stage 2	985	888	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	748	0	928	-	-	-	1539	-	-
Mov Cap-2 Maneuver	748	0	-	-	-	-	-	-	-
Stage 1	817	0	-	-	-	-	-	-	-
Stage 2	963	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0	1.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	764	1539	-
HCM Lane V/C Ratio	-	-	0.12	0.021	-
HCM Control Delay (s)	-	-	10.4	7.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	82	6	9	0	0	0	0	8	3	245	121	0
Future Vol, veh/h	82	6	9	0	0	0	0	8	3	245	121	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	13	1	1	0	0	0	0	1	1	13	1	0
Mvmt Flow	85	6	9	0	0	0	0	8	3	253	125	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	641	642	125	-	0	0	11	0	0
Stage 1	631	631	-	-	-	-	-	-	-
Stage 2	10	11	-	-	-	-	-	-	-
Critical Hdwy	6.53	6.51	6.21	-	-	-	4.23	-	-
Critical Hdwy Stg 1	5.53	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.53	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.617	4.009	3.309	-	-	-	2.317	-	-
Pot Cap-1 Maneuver	422	394	928	0	-	-	1539	-	0
Stage 1	510	476	-	0	-	-	-	-	0
Stage 2	985	888	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	347	0	928	-	-	-	1539	-	-
Mov Cap-2 Maneuver	347	0	-	-	-	-	-	-	-
Stage 1	510	0	-	-	-	-	-	-	-
Stage 2	811	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.3	0	5.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	370	1539	-
HCM Lane V/C Ratio	-	-	0.27	0.164	-
HCM Control Delay (s)	-	-	18.3	7.8	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.1	0.6	-

Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	86	7	10	0	0	0	0	6	4	52	5	0
Future Vol, veh/h	86	7	10	0	0	0	0	6	4	52	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	13	1	1	0	0	0	0	1	1	13	1	0
Mvmt Flow	89	7	10	0	0	0	0	6	4	54	5	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	121	123	5	-	0	0	10	0	0
Stage 1	113	113	-	-	-	-	-	-	-
Stage 2	8	10	-	-	-	-	-	-	-
Critical Hdwy	6.53	6.51	6.21	-	-	-	4.23	-	-
Critical Hdwy Stg 1	5.53	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.53	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.617	4.009	3.309	-	-	-	2.317	-	-
Pot Cap-1 Maneuver	849	769	1081	0	-	-	1541	-	0
Stage 1	885	804	-	0	-	-	-	-	0
Stage 2	987	889	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	819	0	1081	-	-	-	1541	-	-
Mov Cap-2 Maneuver	819	0	-	-	-	-	-	-	-
Stage 1	885	0	-	-	-	-	-	-	-
Stage 2	952	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0	6.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	840	1541	-
HCM Lane V/C Ratio	-	-	0.126	0.035	-
HCM Control Delay (s)	-	-	9.9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	88	7	10	0	0	0	0	6	4	57	5	0
Future Vol, veh/h	88	7	10	0	0	0	0	6	4	57	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	13	1	1	0	0	0	0	1	1	13	1	0
Mvmt Flow	91	7	10	0	0	0	0	6	4	59	5	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	131	133	5	-	0	0	10	0	0
Stage 1	123	123	-	-	-	-	-	-	-
Stage 2	8	10	-	-	-	-	-	-	-
Critical Hdwy	6.53	6.51	6.21	-	-	-	4.23	-	-
Critical Hdwy Stg 1	5.53	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.53	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.617	4.009	3.309	-	-	-	2.317	-	-
Pot Cap-1 Maneuver	838	760	1081	0	-	-	1541	-	0
Stage 1	876	796	-	0	-	-	-	-	0
Stage 2	987	889	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	806	0	1081	-	-	-	1541	-	-
Mov Cap-2 Maneuver	806	0	-	-	-	-	-	-	-
Stage 1	876	0	-	-	-	-	-	-	-
Stage 2	949	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0	6.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	827	1541	-
HCM Lane V/C Ratio	-	-	0.131	0.038	-
HCM Control Delay (s)	-	-	10	7.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	78	5	8	0	0	0	0	4	2	49	3	0
Future Vol, veh/h	78	5	8	0	0	0	0	4	2	49	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	13	1	1	0	0	0	0	1	1	13	1	0
Mvmt Flow	80	5	8	0	0	0	0	4	2	51	3	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	110	111	3	-	0	0	6	0	0
Stage 1	105	105	-	-	-	-	-	-	-
Stage 2	5	6	-	-	-	-	-	-	-
Critical Hdwy	6.53	6.51	6.21	-	-	-	4.23	-	-
Critical Hdwy Stg 1	5.53	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.53	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.617	4.009	3.309	-	-	-	2.317	-	-
Pot Cap-1 Maneuver	861	781	1084	0	-	-	1546	-	0
Stage 1	893	810	-	0	-	-	-	-	0
Stage 2	990	893	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	833	0	1084	-	-	-	1546	-	-
Mov Cap-2 Maneuver	833	0	-	-	-	-	-	-	-
Stage 1	893	0	-	-	-	-	-	-	-
Stage 2	957	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	0	7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	851	1546	-
HCM Lane V/C Ratio	-	-	0.11	0.033	-
HCM Control Delay (s)	-	-	9.8	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	8.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	80	5	8	0	0	0	0	4	2	54	3	0
Future Vol, veh/h	80	5	8	0	0	0	0	4	2	54	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	13	1	1	0	0	0	0	1	1	13	1	0
Mvmt Flow	82	5	8	0	0	0	0	4	2	56	3	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	120	121	3	-	0	0	6	0	0
Stage 1	115	115	-	-	-	-	-	-	-
Stage 2	5	6	-	-	-	-	-	-	-
Critical Hdwy	6.53	6.51	6.21	-	-	-	4.23	-	-
Critical Hdwy Stg 1	5.53	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.53	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.617	4.009	3.309	-	-	-	2.317	-	-
Pot Cap-1 Maneuver	850	771	1084	0	-	-	1546	-	0
Stage 1	883	802	-	0	-	-	-	-	0
Stage 2	990	893	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	819	0	1084	-	-	-	1546	-	-
Mov Cap-2 Maneuver	819	0	-	-	-	-	-	-	-
Stage 1	883	0	-	-	-	-	-	-	-
Stage 2	954	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0	7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	838	1546	-
HCM Lane V/C Ratio	-	-	0.114	0.036	-
HCM Control Delay (s)	-	-	9.9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

CALCULATION OF FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES (NCHRP 255)

Intersection No.: 1
North/South Street: RICE ROAD (SR 177)
East/West Street: I-10 EB RAMPS

Analysis Condition: YEAR 2045 FUTURE TRAFFIC

A.M. Peak Hour

Approach Direction		Base Year Count	Forecast Future Year Link Volume			Turn Volume	Rounded Volume
South leg	Left	0	Approach	9	Left	0	0
NB	Through	7	Departure	9	Through	7	7
	Right	2			Right	2	2
North leg	Left	21	Approach	25	Left	22	22
SB	Through	3	Departure	58	Through	3	3
	Right	0			Right	0	0
West leg	Left	51	Approach	59	Left	51	51
EB	Through	2	Departure	0	Through	2	2
	Right	6			Right	6	6
East leg	Left	0	Approach	0	Left	0	0
WB	Through	0	Departure	26	Through	0	0
	Right	0			Right	0	0

P.M. Peak Hour

Approach Direction		Base Year Count	Forecast Future Year Link Volume			Turn Volume	Rounded Volume
South leg	Left	0	Approach	6	Left	0	0
NB	Through	4	Departure	11	Through	4	4
	Right	2			Right	2	2
North leg	Left	30	Approach	33	Left	30	30
SB	Through	3	Departure	75	Through	3	3
	Right	0			Right	0	0
West leg	Left	71	Approach	84	Left	71	71
EB	Through	5	Departure	0	Through	5	5
	Right	8			Right	8	8
East leg	Left	0	Approach	0	Left	0	0
WB	Through	0	Departure	37	Through	0	0

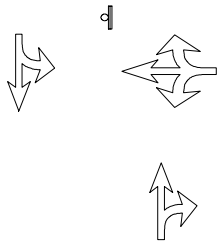
DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : I-10 WB RAMPS
N/S STREET : RICE ROAD (SR 177)
CONDITION : AM PEAK HOUR

INTERSECTION : 2
GROWTH PER YEAR : 3.0%

CONDITION DIAGRAMS



EXISTING GEOMETRICS

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	1			3		5			7		9	11	13
I-10 WB RAMPS													
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	2	1	0	3	0	3	1	0	4	0	4	2	2
WBT	1	1	0	2	0	2	1	0	3	0	3	1	1
WBR	5	1	145	151	214	365	1	20	27	5	32	26	31
RICE ROAD (SR 177)													
NBL	4	1	0	5	0	5	1	0	6	0	6	4	4
NBT	54	2	218	274	320	594	4	32	92	8	100	86	94
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	22	1	5	28	6	34	2	4	29	1	30	27	28
SBR	70	3	10	83	8	91	5	10	88	3	91	81	84
Totals	**158**	**10**	**378**	**546**	**548**	**1,094**	**15**	**66**	**249**	**17**	**266**	**227**	**244**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	HEAY	3/31/2023	ASPE0000-0004	2 OF 2

E/W STREET : I-10 WB RAMPS
N/S STREET : RICE ROAD (SR 177)
CONDITION : AM PEAK HOUR
PHF : 0.86

NORTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
12	3	0	1	0	0	0	0	0	2	3	0
16	5	0	1	1	0	0	0	0	2	0	0
13	2	0	0	0	0	1	0	0	2	1	0
17	3	0	1	0	0	1	0	0	1	1	0

SOUTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	12	1	0	0	1	0	0	0	0	4	0
0	10	1	0	0	0	0	0	0	0	5	0
0	3	0	0	0	0	0	0	0	0	8	0
0	4	0	0	0	1	0	0	0	0	5	0

EAST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
2	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	2	0	0
0	0	0	0	0	0	0	0	0	0	0	1
1	1	0	0	0	0	0	0	0	0	0	0

WEST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0

	Truck Volumes	Auto Volumes	Totals	Truck Percentage	Balanced Totals
I-10 WB RAMPS					
EBL	0	0	**0**	**0%**	**0**
EBTH	0	0	**0**	**0%**	**0**
EBR	0	0	**0**	**0%**	**0**
WBL	1	1	**2**	**50%**	**2**
WBTH	0	1	**1**	**1%**	**1**
WBR	2	3	**5**	**40%**	**5**
RICE ROAD (SR 177)					
NBL	2	2	**4**	**50%**	**4**
NBTH	22	29	**51**	**44%**	**54**
NBR	0	0	**0**	**0%**	**0**
SBL	0	0	**0**	**0%**	**0**
SBTH	6	13	**19**	**32%**	**22**
SBR	12	58	**70**	**18%**	**70**

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	2	1	5	4	54	0	0	22	70
Future Vol, veh/h	0	0	0	2	1	5	4	54	0	0	22	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	2	1	6	5	63	0	0	26	81

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	140	180	63	107	0	-	-	-	0
Stage 1	73	73	-	-	-	-	-	-	-
Stage 2	67	107	-	-	-	-	-	-	-
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-
Pot Cap-1 Maneuver	752	716	905	1232	-	0	0	-	-
Stage 1	841	836	-	-	-	0	0	-	-
Stage 2	847	809	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	749	0	905	1232	-	-	-	-	-
Mov Cap-2 Maneuver	749	0	-	-	-	-	-	-	-
Stage 1	838	0	-	-	-	-	-	-	-
Stage 2	847	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1232	-	854	-	-
HCM Lane V/C Ratio	0.004	-	0.011	-	-
HCM Control Delay (s)	7.9	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	2	151	5	274	0	0	28	83
Future Vol, veh/h	0	0	0	3	2	151	5	274	0	0	28	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	3	2	176	6	319	0	0	33	97

Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	413	461	319	130	0	-	-	-	0
Stage 1	331	331	-	-	-	-	-	-	-
Stage 2	82	130	-	-	-	-	-	-	-
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-
Pot Cap-1 Maneuver	514	499	642	1207	-	0	0	-	-
Stage 1	632	647	-	-	-	0	0	-	-
Stage 2	833	791	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	511	0	642	1207	-	-	-	-	-
Mov Cap-2 Maneuver	511	0	-	-	-	-	-	-	-
Stage 1	628	0	-	-	-	-	-	-	-
Stage 2	833	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1207	-	639	-	-
HCM Lane V/C Ratio	0.005	-	0.284	-	-
HCM Control Delay (s)	8	0	12.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	1.2	-	-

Intersection	
Int Delay, s/veh	38.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	2	365	5	594	0	0	34	91
Future Vol, veh/h	0	0	0	3	2	365	5	594	0	0	34	91
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	3	2	424	6	691	0	0	40	106

Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	796	849	691	146	0	-	-	-	0
Stage 1	703	703	-	-	-	-	-	-	-
Stage 2	93	146	-	-	-	-	-	-	-
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-
Pot Cap-1 Maneuver	297	299	~ 386	1189	-	0	0	-	-
Stage 1	413	442	-	-	-	0	0	-	-
Stage 2	823	778	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	295	0	~ 386	1189	-	-	-	-	-
Mov Cap-2 Maneuver	295	0	-	-	-	-	-	-	-
Stage 1	410	0	-	-	-	-	-	-	-
Stage 2	823	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	114.3	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1189	-	385	-	-
HCM Lane V/C Ratio	0.005	-	1.117	-	-
HCM Control Delay (s)	8	0	114.3	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0	-	15.8	-	-

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

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	4	3	27	6	92	0	0	29	88
Future Vol, veh/h	0	0	0	4	3	27	6	92	0	0	29	88
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	5	3	31	7	107	0	0	34	102

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	206	257	107	136	0	-	-	-	0	
Stage 1	121	121	-	-	-	-	-	-	-	
Stage 2	85	136	-	-	-	-	-	-	-	
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-	
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-	
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-	
Pot Cap-1 Maneuver	686	649	853	1200	-	0	0	-	-	
Stage 1	798	798	-	-	-	0	0	-	-	
Stage 2	830	786	-	-	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	682	0	853	1200	-	-	-	-	-	
Mov Cap-2 Maneuver	682	0	-	-	-	-	-	-	-	
Stage 1	793	0	-	-	-	-	-	-	-	
Stage 2	830	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1200	-	826	-	-
HCM Lane V/C Ratio	0.006	-	0.048	-	-
HCM Control Delay (s)	8	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	4	3	32	6	100	0	0	30	91
Future Vol, veh/h	0	0	0	4	3	32	6	100	0	0	30	91
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	5	3	37	7	116	0	0	35	106

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	218	271	116	141	0	-	-	-	0	
Stage 1	130	130	-	-	-	-	-	-	-	
Stage 2	88	141	-	-	-	-	-	-	-	
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-	
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-	
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-	
Pot Cap-1 Maneuver	675	637	843	1194	-	0	0	-	-	
Stage 1	790	791	-	-	-	0	0	-	-	
Stage 2	828	782	-	-	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	671	0	843	1194	-	-	-	-	-	
Mov Cap-2 Maneuver	671	0	-	-	-	-	-	-	-	
Stage 1	785	0	-	-	-	-	-	-	-	
Stage 2	828	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1194	-	820	-	-
HCM Lane V/C Ratio	0.006	-	0.055	-	-
HCM Control Delay (s)	8	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	2	1	26	4	86	0	0	27	81
Future Vol, veh/h	0	0	0	2	1	26	4	86	0	0	27	81
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	2	1	30	5	100	0	0	31	94

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	188	235	100	125	0	-	-	-	0	
Stage 1	110	110	-	-	-	-	-	-	-	
Stage 2	78	125	-	-	-	-	-	-	-	
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-	
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-	
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-	
Pot Cap-1 Maneuver	703	667	861	1212	-	0	0	-	-	
Stage 1	808	806	-	-	-	0	0	-	-	
Stage 2	837	794	-	-	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	700	0	861	1212	-	-	-	-	-	
Mov Cap-2 Maneuver	700	0	-	-	-	-	-	-	-	
Stage 1	805	0	-	-	-	-	-	-	-	
Stage 2	837	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1212	-	847	-	-
HCM Lane V/C Ratio	0.004	-	0.04	-	-
HCM Control Delay (s)	8	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	2	1	31	4	94	0	0	28	84
Future Vol, veh/h	0	0	0	2	1	31	4	94	0	0	28	84
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	2	1	36	5	109	0	0	33	98

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	201	250	109	131	0	-	-	-	0
Stage 1	119	119	-	-	-	-	-	-	-
Stage 2	82	131	-	-	-	-	-	-	-
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-
Pot Cap-1 Maneuver	691	655	851	1205	-	0	0	-	-
Stage 1	800	799	-	-	-	0	0	-	-
Stage 2	833	790	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	688	0	851	1205	-	-	-	-	-
Mov Cap-2 Maneuver	688	0	-	-	-	-	-	-	-
Stage 1	797	0	-	-	-	-	-	-	-
Stage 2	833	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1205	-	839	-	-
HCM Lane V/C Ratio	0.004	-	0.047	-	-
HCM Control Delay (s)	8	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : I-10 WB RAMPS
N/S STREET : RICE ROAD (SR 177)
CONDITION : PM PEAK HOUR

INTERSECTION : 2
GROWTH PER YEAR : 3.0%

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	2			4		6			6		8	12	14
I-10 WB RAMPS													
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	3	1	0	4	0	4	1	0	5	0	5	3	3
WBT	5	1	0	6	0	6	1	0	7	0	7	5	5
WBR	67	3	4	74	6	80	5	3	78	1	79	71	72
RICE ROAD (SR 177)													
NBL	3	1	0	4	0	4	1	0	5	0	5	3	3
NBT	72	3	8	83	8	91	5	7	87	2	89	79	81
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	30	1	144	175	214	389	2	19	52	5	57	49	54
SBR	177	6	216	399	320	719	11	30	224	8	232	208	216
Totals	**357**	**16**	**372**	**745**	**548**	**1,293**	**26**	**59**	**458**	**16**	**474**	**418**	**434**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	HEAY	31-Mar-23	ASPE0000-0004	2 OF 2

E/W STREET : I-10 WB RAMPS
N/S STREET : RICE ROAD (SR 177)
CONDITION : PM PEAK HOUR
PHF : 0.81

NORTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
30	6	0	1	0	0	1	0	0	12	1	0
27	7	0	1	0	0	0	0	0	12	1	0
33	9	0	0	1	0	0	0	0	16	1	0
35	2	0	1	2	0	0	0	0	8	0	0

SOUTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	15	1	0	0	0	0	0	0	0	0	0
0	4	1	0	1	0	0	0	0	0	5	0
0	15	1	0	0	0	0	0	0	0	2	0
0	8	0	0	0	0	0	0	0	0	4	0

EAST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
9	1	0	0	0	0	0	0	0	0	0	0
7	2	0	1	0	0	0	0	0	3	0	0
19	2	0	0	0	0	0	0	0	2	0	0
12	0	3	1	0	0	0	0	0	3	0	0

WEST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0

	Truck Volumes	Auto Volumes	Totals	Truck Percentage	Balanced Totals
I-10 WB RAMPS					
EBL	0	0	**0**	**0%**	**0**
EBTH	0	0	**0**	**0%**	**0**
EBR	0	0	**0**	**0%**	**0**
WBL	0	3	**3**	**1%**	**3**
WBTH	0	5	**5**	**1%**	**5**
WBR	10	47	**57**	**18%**	**67**
RICE ROAD (SR 177)					
NBL	0	3	**3**	**1%**	**3**
NBTH	12	42	**54**	**23%**	**72**
NBR	0	0	**0**	**0%**	**0**
SBL	0	0	**0**	**0%**	**0**
SBTH	6	24	**30**	**20%**	**30**
SBR	52	125	**177**	**30%**	**177**

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	2	1	5	4	54	0	0	22	70
Future Vol, veh/h	0	0	0	2	1	5	4	54	0	0	22	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	2	1	6	5	63	0	0	26	81

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	140	180	63	107	0	-	-	-	0
Stage 1	73	73	-	-	-	-	-	-	-
Stage 2	67	107	-	-	-	-	-	-	-
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-
Pot Cap-1 Maneuver	752	716	905	1232	-	0	0	-	-
Stage 1	841	836	-	-	-	0	0	-	-
Stage 2	847	809	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	749	0	905	1232	-	-	-	-	-
Mov Cap-2 Maneuver	749	0	-	-	-	-	-	-	-
Stage 1	838	0	-	-	-	-	-	-	-
Stage 2	847	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1232	-	854	-	-
HCM Lane V/C Ratio	0.004	-	0.011	-	-
HCM Control Delay (s)	7.9	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	2	151	5	274	0	0	28	83
Future Vol, veh/h	0	0	0	3	2	151	5	274	0	0	28	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	3	2	176	6	319	0	0	33	97

Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	413	461	319	130	0	-	-	-	0
Stage 1	331	331	-	-	-	-	-	-	-
Stage 2	82	130	-	-	-	-	-	-	-
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-
Pot Cap-1 Maneuver	514	499	642	1207	-	0	0	-	-
Stage 1	632	647	-	-	-	0	0	-	-
Stage 2	833	791	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	511	0	642	1207	-	-	-	-	-
Mov Cap-2 Maneuver	511	0	-	-	-	-	-	-	-
Stage 1	628	0	-	-	-	-	-	-	-
Stage 2	833	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1207	-	639	-	-
HCM Lane V/C Ratio	0.005	-	0.284	-	-
HCM Control Delay (s)	8	0	12.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	1.2	-	-

Intersection	
Int Delay, s/veh	38.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	2	365	5	594	0	0	34	91
Future Vol, veh/h	0	0	0	3	2	365	5	594	0	0	34	91
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	3	2	424	6	691	0	0	40	106

Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	796	849	691	146	0	-	-	-	0
Stage 1	703	703	-	-	-	-	-	-	-
Stage 2	93	146	-	-	-	-	-	-	-
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-
Pot Cap-1 Maneuver	297	299	~ 386	1189	-	0	0	-	-
Stage 1	413	442	-	-	-	0	0	-	-
Stage 2	823	778	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	295	0	~ 386	1189	-	-	-	-	-
Mov Cap-2 Maneuver	295	0	-	-	-	-	-	-	-
Stage 1	410	0	-	-	-	-	-	-	-
Stage 2	823	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	114.3	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1189	-	385	-	-
HCM Lane V/C Ratio	0.005	-	1.117	-	-
HCM Control Delay (s)	8	0	114.3	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0	-	15.8	-	-

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

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	4	3	27	6	92	0	0	29	88
Future Vol, veh/h	0	0	0	4	3	27	6	92	0	0	29	88
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	5	3	31	7	107	0	0	34	102

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	206	257	107	136	0	-	-	-	0	
Stage 1	121	121	-	-	-	-	-	-	-	
Stage 2	85	136	-	-	-	-	-	-	-	
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-	
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-	
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-	
Pot Cap-1 Maneuver	686	649	853	1200	-	0	0	-	-	
Stage 1	798	798	-	-	-	0	0	-	-	
Stage 2	830	786	-	-	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	682	0	853	1200	-	-	-	-	-	
Mov Cap-2 Maneuver	682	0	-	-	-	-	-	-	-	
Stage 1	793	0	-	-	-	-	-	-	-	
Stage 2	830	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1200	-	826	-	-
HCM Lane V/C Ratio	0.006	-	0.048	-	-
HCM Control Delay (s)	8	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	4	3	32	6	100	0	0	30	91
Future Vol, veh/h	0	0	0	4	3	32	6	100	0	0	30	91
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	5	3	37	7	116	0	0	35	106

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	218	271	116	141	0	-	-	-	0	
Stage 1	130	130	-	-	-	-	-	-	-	
Stage 2	88	141	-	-	-	-	-	-	-	
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-	
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-	
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-	
Pot Cap-1 Maneuver	675	637	843	1194	-	0	0	-	-	
Stage 1	790	791	-	-	-	0	0	-	-	
Stage 2	828	782	-	-	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	671	0	843	1194	-	-	-	-	-	
Mov Cap-2 Maneuver	671	0	-	-	-	-	-	-	-	
Stage 1	785	0	-	-	-	-	-	-	-	
Stage 2	828	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1194	-	820	-	-
HCM Lane V/C Ratio	0.006	-	0.055	-	-
HCM Control Delay (s)	8	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	2	1	26	4	86	0	0	27	81
Future Vol, veh/h	0	0	0	2	1	26	4	86	0	0	27	81
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	2	1	30	5	100	0	0	31	94

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	188	235	100	125	0	-	-	-	0	
Stage 1	110	110	-	-	-	-	-	-	-	
Stage 2	78	125	-	-	-	-	-	-	-	
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-	
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-	
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-	
Pot Cap-1 Maneuver	703	667	861	1212	-	0	0	-	-	
Stage 1	808	806	-	-	-	0	0	-	-	
Stage 2	837	794	-	-	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	700	0	861	1212	-	-	-	-	-	
Mov Cap-2 Maneuver	700	0	-	-	-	-	-	-	-	
Stage 1	805	0	-	-	-	-	-	-	-	
Stage 2	837	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1212	-	847	-	-
HCM Lane V/C Ratio	0.004	-	0.04	-	-
HCM Control Delay (s)	8	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	2	1	31	4	94	0	0	28	84
Future Vol, veh/h	0	0	0	2	1	31	4	94	0	0	28	84
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	1	40	50	44	0	0	32	18
Mvmt Flow	0	0	0	2	1	36	5	109	0	0	33	98

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	201	250	109	131	0	-	-	-	0
Stage 1	119	119	-	-	-	-	-	-	-
Stage 2	82	131	-	-	-	-	-	-	-
Critical Hdwy	6.9	6.51	6.6	4.6	-	-	-	-	-
Critical Hdwy Stg 1	5.9	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4.009	3.66	2.65	-	-	-	-	-
Pot Cap-1 Maneuver	691	655	851	1205	-	0	0	-	-
Stage 1	800	799	-	-	-	0	0	-	-
Stage 2	833	790	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	688	0	851	1205	-	-	-	-	-
Mov Cap-2 Maneuver	688	0	-	-	-	-	-	-	-
Stage 1	797	0	-	-	-	-	-	-	-
Stage 2	833	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1205	-	839	-	-
HCM Lane V/C Ratio	0.004	-	0.047	-	-
HCM Control Delay (s)	8	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

CALCULATION OF FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES (NCHRP 255)

Intersection No.: 2
North/South Street: RICE ROAD (SR 177)
East/West Street: I-10 WB RAMPS

Analysis Condition: YEAR 2045 FUTURE TRAFFIC

A.M. Peak Hour

Approach Direction		Base Year Count	Forecast Future Year Link Volume			Turn Volume	Rounded Volume
South leg	Left	4	Approach	58	Left	4	4
NB	Through	54	Departure	25	Through	54	54
	Right	0			Right	0	0
North leg	Left	0	Approach	93	Left	0	0
SB	Through	22	Departure	60	Through	23	23
	Right	70			Right	71	71
West leg	Left	0	Approach	0	Left	0	0
EB	Through	0	Departure	76	Through	0	0
	Right	0			Right	0	0
East leg	Left	2	Approach	9	Left	2	2
WB	Through	1	Departure	0	Through	1	1
	Right	5			Right	6	6

P.M. Peak Hour

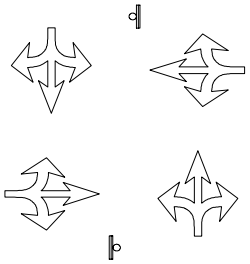
Approach Direction		Base Year Count	Forecast Future Year Link Volume			Turn Volume	Rounded Volume
South leg	Left	3	Approach	75	Left	3	3
NB	Through	72	Departure	33	Through	72	72
	Right	0			Right	0	0
North leg	Left	0	Approach	208	Left	0	0
SB	Through	30	Departure	140	Through	30	30
	Right	177			Right	178	178
West leg	Left	0	Approach	0	Left	0	0
EB	Through	0	Departure	186	Through	0	0
	Right	0			Right	0	0
East leg	Left	3	Approach	75	Left	3	3
WB	Through	5	Departure	0	Through	5	5

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : RAGSDALE RD
N/S STREET : RICE ROAD (SR 177)
CONDITION : AM PEAK HOUR

INTERSECTION : 3
GROWTH PER YEAR : 3.0%

CONDITION DIAGRAMS



EXISTING GEOMETRICS

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	1			3		5			7		9	11	13
RAGSDALE RD													
EBL	2	1	0	3	0	3	1	0	4	0	4	2	2
EBT	1	1	0	2	0	2	1	0	3	0	3	1	1
EBR	4	1	0	5	0	5	1	0	6	0	6	4	4
WBL	2	1	5	8	0	8	1	5	9	0	9	8	8
WBT	1	1	0	2	0	2	1	0	3	0	3	1	1
WBR	1	1	0	2	0	2	1	0	3	0	3	1	1
RICE ROAD (SR 177)													
NBL	2	1	0	3	0	3	1	0	4	0	4	3	3
NBT	53	2	338	393	534	927	4	27	86	13	99	81	94
NBR	1	1	25	27	0	27	1	25	28	0	28	28	28
SBL	1	1	0	2	0	2	1	0	3	0	3	1	1
SBT	86	3	10	99	14	113	6	9	104	4	108	96	100
SBR	1	1	0	2	0	2	1	0	3	0	3	1	1
Totals	**155**	**15**	**378**	**548**	**548**	**1,096**	**20**	**66**	**256**	**17**	**273**	**227**	**244**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	HEAY	3/31/2023	ASPE0000-0004	2 OF 2

E/W STREET : RAGSDALE RD
N/S STREET : RICE ROAD (SR 177)
CONDITION : AM PEAK HOUR
PHF : 0.85

NORTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	14	0	0	1	0	0	0	0	0	3	0
0	21	0	0	1	0	0	0	0	0	2	0
0	16	0	0	0	0	0	0	0	0	2	0
0	20	0	0	1	0	0	1	0	0	1	0

SOUTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	14	0	0	0	0	0	0	0	0	4	0
0	9	0	0	1	0	0	0	0	0	6	1
1	0	0	0	0	0	0	0	0	0	9	1
0	5	0	0	0	0	0	0	0	0	5	0

EAST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	1	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	0
1	0	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0

WEST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	0	0	0	0	0	0	0	2	0	0
1	0	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0

	Truck Volumes	Auto Volumes	Totals	Truck Percentage	Balanced Totals
RAGSDALE RD					
EBL	0	2	**2**	**1%**	**2**
EBTH	0	0	**0**	**0%**	**1**
EBR	3	1	**4**	**75%**	**4**
WBL	0	2	**2**	**1%**	**2**
WBTH	0	1	**1**	**1%**	**1**
WBR	0	1	**1**	**1%**	**1**
RICE ROAD (SR 177)					
NBL	2	0	**2**	**100%**	**2**
NBTH	25	28	**53**	**48%**	**53**
NBR	0	1	**1**	**1%**	**1**
SBL	0	0	**0**	**0%**	**1**
SBTH	12	71	**83**	**15%**	**86**
SBR	0	0	**0**	**0%**	**1**

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	1	4	2	1	1	2	53	1	1	86	1
Future Vol, veh/h	2	1	4	2	1	1	2	53	1	1	86	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	0	75	1	1	1	100	48	1	0	15	0
Mvmt Flow	2	1	5	2	1	1	2	62	1	1	101	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	172	171	102	174	171	63	102	0	0	63	0	0
Stage 1	104	104	-	67	67	-	-	-	-	-	-	-
Stage 2	68	67	-	107	104	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.5	6.95	7.11	6.51	6.21	5.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.975	3.509	4.009	3.309	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	793	726	786	791	724	1004	1050	-	-	1553	-	-
Stage 1	904	813	-	946	841	-	-	-	-	-	-	-
Stage 2	945	843	-	901	811	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	789	724	786	784	722	1004	1050	-	-	1553	-	-
Mov Cap-2 Maneuver	789	724	-	784	722	-	-	-	-	-	-	-
Stage 1	902	812	-	944	839	-	-	-	-	-	-	-
Stage 2	941	841	-	893	810	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	9.5	0.3	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1050	-	-	777	811	1553	-	-
HCM Lane V/C Ratio	0.002	-	-	0.011	0.006	0.001	-	-
HCM Control Delay (s)	8.4	0	-	9.7	9.5	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

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	3	2	5	8	2	2	3	393	27	2	99	2
Future Vol, veh/h	3	2	5	8	2	2	3	393	27	2	99	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	0	75	1	1	1	100	48	1	0	15	0
Mvmt Flow	4	2	6	9	2	2	4	462	32	2	116	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	609	623	117	611	608	478	118	0	0	494	0	0
Stage 1	121	121	-	486	486	-	-	-	-	-	-	-
Stage 2	488	502	-	125	122	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.5	6.95	7.11	6.51	6.21	5.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.975	3.509	4.009	3.309	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	409	405	770	407	412	589	1033	-	-	1080	-	-
Stage 1	886	800	-	565	553	-	-	-	-	-	-	-
Stage 2	563	545	-	881	797	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	403	402	770	400	409	589	1033	-	-	1080	-	-
Mov Cap-2 Maneuver	403	402	-	400	409	-	-	-	-	-	-	-
Stage 1	882	798	-	562	550	-	-	-	-	-	-	-
Stage 2	556	542	-	870	795	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12	13.8	0.1	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1033	-	-	529	424	1080	-	-
HCM Lane V/C Ratio	0.003	-	-	0.022	0.033	0.002	-	-
HCM Control Delay (s)	8.5	0	-	12	13.8	8.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	2	5	8	2	2	3	927	27	2	113	2
Future Vol, veh/h	3	2	5	8	2	2	3	927	27	2	113	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	0	75	1	1	1	100	48	1	0	15	0
Mvmt Flow	4	2	6	9	2	2	4	1091	32	2	133	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1255	1269	134	1257	1254	1107	135	0	0	1123	0	0
Stage 1	138	138	-	1115	1115	-	-	-	-	-	-	-
Stage 2	1117	1131	-	142	139	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.5	6.95	7.11	6.51	6.21	5.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.975	3.509	4.009	3.309	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	149	170	752	149	173	257	1016	-	-	629	-	-
Stage 1	868	786	-	254	285	-	-	-	-	-	-	-
Stage 2	253	281	-	863	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	145	168	752	145	171	257	1016	-	-	629	-	-
Mov Cap-2 Maneuver	145	168	-	145	171	-	-	-	-	-	-	-
Stage 1	858	784	-	251	282	-	-	-	-	-	-	-
Stage 2	246	278	-	851	782	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.8	29.5	0	0.2
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1016	-	-	255	161	629	-	-
HCM Lane V/C Ratio	0.003	-	-	0.046	0.088	0.004	-	-
HCM Control Delay (s)	8.6	0	-	19.8	29.5	10.7	0	-
HCM Lane LOS	A	A	-	C	D	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	3	6	9	3	3	4	86	28	3	104	3
Future Vol, veh/h	4	3	6	9	3	3	4	86	28	3	104	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	0	75	1	1	1	100	48	1	0	15	0
Mvmt Flow	5	4	7	11	4	4	5	101	33	4	122	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	264	276	124	266	262	118	126	0	0	134	0	0
Stage 1	132	132	-	128	128	-	-	-	-	-	-	-
Stage 2	132	144	-	138	134	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.5	6.95	7.11	6.51	6.21	5.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.975	3.509	4.009	3.309	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	691	635	763	689	645	937	1025	-	-	1463	-	-
Stage 1	874	791	-	878	792	-	-	-	-	-	-	-
Stage 2	874	782	-	868	787	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	681	630	763	676	640	937	1025	-	-	1463	-	-
Mov Cap-2 Maneuver	681	630	-	676	640	-	-	-	-	-	-	-
Stage 1	870	789	-	874	788	-	-	-	-	-	-	-
Stage 2	862	778	-	854	785	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	10.2	0.3	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1025	-	-	703	707	1463	-	-
HCM Lane V/C Ratio	0.005	-	-	0.022	0.025	0.002	-	-
HCM Control Delay (s)	8.5	0	-	10.2	10.2	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	3	6	9	3	3	4	99	28	3	108	3
Future Vol, veh/h	4	3	6	9	3	3	4	99	28	3	108	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	0	75	1	1	1	100	48	1	0	15	0
Mvmt Flow	5	4	7	11	4	4	5	116	33	4	127	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	284	296	129	286	282	133	131	0	0	149	0	0
Stage 1	137	137	-	143	143	-	-	-	-	-	-	-
Stage 2	147	159	-	143	139	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.5	6.95	7.11	6.51	6.21	5.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.975	3.509	4.009	3.309	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	670	619	757	668	628	919	1020	-	-	1445	-	-
Stage 1	869	787	-	862	780	-	-	-	-	-	-	-
Stage 2	858	770	-	862	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	661	614	757	655	623	919	1020	-	-	1445	-	-
Mov Cap-2 Maneuver	661	614	-	655	623	-	-	-	-	-	-	-
Stage 1	865	785	-	858	776	-	-	-	-	-	-	-
Stage 2	847	766	-	848	782	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	10.4	0.3	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1020	-	-	689	687	1445	-	-
HCM Lane V/C Ratio	0.005	-	-	0.022	0.026	0.002	-	-
HCM Control Delay (s)	8.5	0	-	10.3	10.4	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

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	2	1	4	8	1	1	3	81	28	1	96	1
Future Vol, veh/h	2	1	4	8	1	1	3	81	28	1	96	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	0	75	1	1	1	100	48	1	0	15	0
Mvmt Flow	2	1	5	9	1	1	4	95	33	1	113	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	237	252	114	239	236	112	114	0	0	128	0	0
Stage 1	116	116	-	120	120	-	-	-	-	-	-	-
Stage 2	121	136	-	119	116	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.5	6.95	7.11	6.51	6.21	5.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.975	3.509	4.009	3.309	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	720	655	773	717	666	944	1037	-	-	1470	-	-
Stage 1	891	803	-	887	798	-	-	-	-	-	-	-
Stage 2	886	788	-	888	802	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	716	652	773	709	663	944	1037	-	-	1470	-	-
Mov Cap-2 Maneuver	716	652	-	709	663	-	-	-	-	-	-	-
Stage 1	887	802	-	883	795	-	-	-	-	-	-	-
Stage 2	880	785	-	880	801	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	10.1	0.2	0.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1037	-	-	737	722	1470	-	-
HCM Lane V/C Ratio	0.003	-	-	0.011	0.016	0.001	-	-
HCM Control Delay (s)	8.5	0	-	9.9	10.1	7.5	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	1	4	8	1	1	3	94	28	1	100	1
Future Vol, veh/h	2	1	4	8	1	1	3	94	28	1	100	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	0	75	1	1	1	100	48	1	0	15	0
Mvmt Flow	2	1	5	9	1	1	4	111	33	1	118	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	258	273	119	260	257	128	119	0	0	144	0	0
Stage 1	121	121	-	136	136	-	-	-	-	-	-	-
Stage 2	137	152	-	124	121	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.5	6.95	7.11	6.51	6.21	5.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.975	3.509	4.009	3.309	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	697	637	768	695	649	925	1032	-	-	1451	-	-
Stage 1	886	800	-	870	786	-	-	-	-	-	-	-
Stage 2	869	775	-	882	798	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	693	634	768	687	646	925	1032	-	-	1451	-	-
Mov Cap-2 Maneuver	693	634	-	687	646	-	-	-	-	-	-	-
Stage 1	882	799	-	867	783	-	-	-	-	-	-	-
Stage 2	863	772	-	874	797	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	10.2	0.2	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1032	-	-	724	701	1451	-	-
HCM Lane V/C Ratio	0.003	-	-	0.011	0.017	0.001	-	-
HCM Control Delay (s)	8.5	0	-	10	10.2	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : RAGSDALE RD
N/S STREET : RICE ROAD (SR 177)
CONDITION : PM PEAK HOUR

INTERSECTION : 3
GROWTH PER YEAR : 3.0%

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	2			4		6			6		8	12	14
RAGSDALE RD													
EBL	1	1	0	2	0	2	1	0	3	0	3	1	1
EBT	1	1	0	2	0	2	1	0	3	0	3	1	1
EBR	13	1	0	14	0	14	1	0	15	0	15	13	13
WBL	2	1	23	26	0	26	1	23	27	0	27	25	25
WBT	4	1	0	5	0	5	1	0	6	0	6	4	4
WBR	1	1	0	2	0	2	1	0	3	0	3	1	1
RICE ROAD (SR 177)													
NBL	7	1	0	8	0	8	1	0	9	0	9	7	7
NBT	127	4	9	140	14	154	8	7	146	3	149	135	138
NBR	5	1	3	9	0	9	1	3	10	0	10	8	8
SBL	1	1	0	2	0	2	1	0	3	0	3	1	1
SBT	192	6	337	535	534	1,069	12	26	236	13	249	219	232
SBR	1	1	0	2	0	2	1	0	3	0	3	1	1
Totals	**355**	**20**	**372**	**747**	**548**	**1,295**	**30**	**59**	**464**	**16**	**480**	**416**	**432**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	HEAY	31-Mar-23	ASPE0000-0004	2 OF 2

E/W STREET : RAGSDALE RD
N/S STREET : RICE ROAD (SR 177)
CONDITION : PM PEAK HOUR
PHF : 0.82

NORTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	32	0	0	1	0	0	1	0	0	10	0
0	33	0	0	0	0	0	0	0	0	12	0
0	45	0	0	1	0	0	0	0	0	13	0
0	35	1	0	2	0	0	0	0	0	7	0

SOUTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
2	19	3	0	0	0	0	0	0	0	0	0
2	10	0	0	1	0	0	0	0	0	6	2
0	33	1	0	0	0	0	0	0	1	2	1
0	21	0	0	1	0	0	0	0	0	6	0

EAST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	1	0	0	0	0	0	0	0	0	0
0	2	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
0	1	1	0	0	0	0	0	0	0	0	0

WEST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
4	0	0	0	0	0	0	0	0	2	0	0
2	1	0	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0
1	0	1	1	0	0	0	0	0	1	0	0

	Truck Volumes	Auto Volumes	Totals	Truck Percentage	Balanced Totals
RAGSDALE RD					
EBL	0	1	**1**	**1%**	**1**
EBTH	0	1	**1**	**1%**	**1**
EBR	6	7	**13**	**47%**	**13**
WBL	0	2	**2**	**1%**	**2**
WBTH	0	4	**4**	**1%**	**4**
WBR	0	1	**1**	**1%**	**1**
RICE ROAD (SR 177)					
NBL	3	4	**7**	**43%**	**7**
NBTH	16	83	**99**	**17%**	**127**
NBR	1	4	**5**	**20%**	**5**
SBL	0	1	**1**	**1%**	**1**
SBTH	47	145	**192**	**25%**	**192**
SBR	0	0	**0**	**0%**	**1**

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	13	2	4	1	7	127	5	1	192	1
Future Vol, veh/h	1	1	13	2	4	1	7	127	5	1	192	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	1	1	47	1	1	1	43	17	20	1	25	0
Mvmt Flow	1	1	16	2	5	1	9	155	6	1	234	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	416	416	235	421	413	158	235	0	0	161	0	0
Stage 1	237	237	-	176	176	-	-	-	-	-	-	-
Stage 2	179	179	-	245	237	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.67	7.11	6.51	6.21	4.53	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.723	3.509	4.009	3.309	2.587	-	-	2.209	-	-
Pot Cap-1 Maneuver	549	529	705	545	531	890	1125	-	-	1424	-	-
Stage 1	768	711	-	828	755	-	-	-	-	-	-	-
Stage 2	825	753	-	761	711	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	540	524	705	528	526	890	1125	-	-	1424	-	-
Mov Cap-2 Maneuver	540	524	-	528	526	-	-	-	-	-	-	-
Stage 1	761	710	-	821	748	-	-	-	-	-	-	-
Stage 2	811	746	-	742	710	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.5	11.5	0.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1125	-	-	676	559	1424	-	-
HCM Lane V/C Ratio	0.008	-	-	0.027	0.015	0.001	-	-
HCM Control Delay (s)	8.2	0	-	10.5	11.5	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	2	14	26	5	2	8	140	9	2	535	2
Future Vol, veh/h	2	2	14	26	5	2	8	140	9	2	535	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	1	1	47	1	1	1	43	17	20	1	25	0
Mvmt Flow	2	2	17	32	6	2	10	171	11	2	652	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	858	859	653	864	855	177	654	0	0	182	0	0
Stage 1	657	657	-	197	197	-	-	-	-	-	-	-
Stage 2	201	202	-	667	658	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.67	7.11	6.51	6.21	4.53	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.723	3.509	4.009	3.309	2.587	-	-	2.209	-	-
Pot Cap-1 Maneuver	278	295	397	276	297	869	766	-	-	1399	-	-
Stage 1	456	463	-	807	740	-	-	-	-	-	-	-
Stage 2	803	736	-	450	463	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	269	290	397	259	292	869	766	-	-	1399	-	-
Mov Cap-2 Maneuver	269	290	-	259	292	-	-	-	-	-	-	-
Stage 1	449	462	-	795	729	-	-	-	-	-	-	-
Stage 2	782	725	-	428	462	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.6	20.3	0.5	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	766	-	-	363	275	1399	-	-
HCM Lane V/C Ratio	0.013	-	-	0.06	0.146	0.002	-	-
HCM Control Delay (s)	9.8	0	-	15.6	20.3	7.6	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.5	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	2	14	26	5	2	8	154	9	2	1069	2
Future Vol, veh/h	2	2	14	26	5	2	8	154	9	2	1069	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	1	1	47	1	1	1	43	17	20	1	25	0
Mvmt Flow	2	2	17	32	6	2	10	188	11	2	1304	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1527	1528	1305	1533	1524	194	1306	0	0	199	0	0
Stage 1	1309	1309	-	214	214	-	-	-	-	-	-	-
Stage 2	218	219	-	1319	1310	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.67	7.11	6.51	6.21	4.53	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.723	3.509	4.009	3.309	2.587	-	-	2.209	-	-
Pot Cap-1 Maneuver	97	118	157	96	119	850	415	-	-	1379	-	-
Stage 1	197	230	-	790	727	-	-	-	-	-	-	-
Stage 2	787	724	-	194	230	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	91	114	157	82	115	850	415	-	-	1379	-	-
Mov Cap-2 Maneuver	91	114	-	82	115	-	-	-	-	-	-	-
Stage 1	192	229	-	769	707	-	-	-	-	-	-	-
Stage 2	757	704	-	170	229	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	35.4	72.8	0.6	0
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	415	-	-	140	91	1379	-	-
HCM Lane V/C Ratio	0.024	-	-	0.157	0.442	0.002	-	-
HCM Control Delay (s)	13.9	0	-	35.4	72.8	7.6	0	-
HCM Lane LOS	B	A	-	E	F	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	1.8	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	3	15	27	6	3	9	146	10	3	236	3
Future Vol, veh/h	3	3	15	27	6	3	9	146	10	3	236	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	1	1	47	1	1	1	43	17	20	1	25	0
Mvmt Flow	4	4	18	33	7	4	11	178	12	4	288	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	510	510	290	515	506	184	292	0	0	190	0	0
Stage 1	298	298	-	206	206	-	-	-	-	-	-	-
Stage 2	212	212	-	309	300	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.67	7.11	6.51	6.21	4.53	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.723	3.509	4.009	3.309	2.587	-	-	2.209	-	-
Pot Cap-1 Maneuver	476	468	654	472	470	861	1068	-	-	1390	-	-
Stage 1	713	669	-	798	733	-	-	-	-	-	-	-
Stage 2	792	729	-	703	667	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	463	461	654	451	463	861	1068	-	-	1390	-	-
Mov Cap-2 Maneuver	463	461	-	451	463	-	-	-	-	-	-	-
Stage 1	704	667	-	788	724	-	-	-	-	-	-	-
Stage 2	771	720	-	678	665	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.4	13.4	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1068	-	-	585	472	1390	-	-
HCM Lane V/C Ratio	0.01	-	-	0.044	0.093	0.003	-	-
HCM Control Delay (s)	8.4	0	-	11.4	13.4	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	3	15	27	6	3	9	149	10	3	249	3
Future Vol, veh/h	3	3	15	27	6	3	9	149	10	3	249	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	1	1	47	1	1	1	43	17	20	1	25	0
Mvmt Flow	4	4	18	33	7	4	11	182	12	4	304	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	530	530	306	535	526	188	308	0	0	194	0	0
Stage 1	314	314	-	210	210	-	-	-	-	-	-	-
Stage 2	216	216	-	325	316	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.67	7.11	6.51	6.21	4.53	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.723	3.509	4.009	3.309	2.587	-	-	2.209	-	-
Pot Cap-1 Maneuver	461	456	640	458	458	857	1053	-	-	1385	-	-
Stage 1	699	658	-	794	730	-	-	-	-	-	-	-
Stage 2	789	726	-	690	657	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	448	449	640	437	451	857	1053	-	-	1385	-	-
Mov Cap-2 Maneuver	448	449	-	437	451	-	-	-	-	-	-	-
Stage 1	691	656	-	784	721	-	-	-	-	-	-	-
Stage 2	768	717	-	665	655	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	13.7	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1053	-	-	570	458	1385	-	-
HCM Lane V/C Ratio	0.01	-	-	0.045	0.096	0.003	-	-
HCM Control Delay (s)	8.5	0	-	11.6	13.7	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	13	25	4	1	7	135	8	1	219	1
Future Vol, veh/h	1	1	13	25	4	1	7	135	8	1	219	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	1	1	47	1	1	1	43	17	20	1	25	0
Mvmt Flow	1	1	16	30	5	1	9	165	10	1	267	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	461	463	268	466	458	170	268	0	0	175	0	0
Stage 1	270	270	-	188	188	-	-	-	-	-	-	-
Stage 2	191	193	-	278	270	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.67	7.11	6.51	6.21	4.53	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.723	3.509	4.009	3.309	2.587	-	-	2.209	-	-
Pot Cap-1 Maneuver	512	498	674	509	501	876	1092	-	-	1407	-	-
Stage 1	738	688	-	816	746	-	-	-	-	-	-	-
Stage 2	813	743	-	731	688	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	504	493	674	492	496	876	1092	-	-	1407	-	-
Mov Cap-2 Maneuver	504	493	-	492	496	-	-	-	-	-	-	-
Stage 1	731	687	-	809	739	-	-	-	-	-	-	-
Stage 2	799	736	-	712	687	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	12.8	0.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1092	-	-	644	500	1407	-	-
HCM Lane V/C Ratio	0.008	-	-	0.028	0.073	0.001	-	-
HCM Control Delay (s)	8.3	0	-	10.8	12.8	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	13	25	4	1	7	138	8	1	232	1
Future Vol, veh/h	1	1	13	25	4	1	7	138	8	1	232	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	1	1	47	1	1	1	43	17	20	1	25	0
Mvmt Flow	1	1	16	30	5	1	9	168	10	1	283	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	480	482	284	485	477	173	284	0	0	178	0	0
Stage 1	286	286	-	191	191	-	-	-	-	-	-	-
Stage 2	194	196	-	294	286	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.67	7.11	6.51	6.21	4.53	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.723	3.509	4.009	3.309	2.587	-	-	2.209	-	-
Pot Cap-1 Maneuver	498	485	659	494	489	873	1076	-	-	1404	-	-
Stage 1	724	677	-	813	744	-	-	-	-	-	-	-
Stage 2	810	740	-	716	677	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	490	480	659	478	484	873	1076	-	-	1404	-	-
Mov Cap-2 Maneuver	490	480	-	478	484	-	-	-	-	-	-	-
Stage 1	717	676	-	806	737	-	-	-	-	-	-	-
Stage 2	796	733	-	697	676	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.9	13	0.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1076	-	-	629	486	1404	-	-
HCM Lane V/C Ratio	0.008	-	-	0.029	0.075	0.001	-	-
HCM Control Delay (s)	8.4	0	-	10.9	13	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

CALCULATION OF FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES (NCHRP 255)

Intersection No.: 3
North/South Street: RICE ROAD (SR 177)
East/West Street: RAGSDALE RD

Analysis Condition: YEAR 2045 FUTURE TRAFFIC

A.M. Peak Hour

Approach Direction		Base Year Count	Forecast Future Year Link Volume			Turn Volume	Rounded Volume
South leg	Left	2	Approach	57	Left	2	3
NB	Through	53	Departure	93	Through	54	54
	Right	1			Right	1	3
North leg	Left	1	Approach	89	Left	1	1
SB	Through	86	Departure	57	Through	87	87
	Right	1			Right	1	1
West leg	Left	2	Approach	7	Left	2	2
EB	Through	1	Departure	4	Through	1	1
	Right	4			Right	4	4
East leg	Left	2	Approach	4	Left	2	3
WB	Through	1	Departure	3	Through	1	1
	Right	1			Right	1	1

P.M. Peak Hour

Approach Direction		Base Year Count	Forecast Future Year Link Volume			Turn Volume	Rounded Volume
South leg	Left	7	Approach	140	Left	7	7
NB	Through	127	Departure	208	Through	128	128
	Right	5			Right	5	5
North leg	Left	1	Approach	195	Left	1	1
SB	Through	192	Departure	130	Through	193	193
	Right	1			Right	1	1
West leg	Left	1	Approach	15	Left	1	1
EB	Through	1	Departure	12	Through	1	1
	Right	13			Right	13	13
East leg	Left	2	Approach	7	Left	2	2
WB	Through	4	Departure	7	Through	4	4

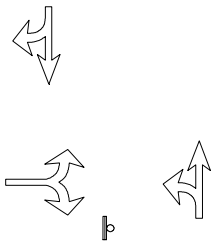
DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : KAISER RD
N/S STREET : RICE ROAD (SR 177)
CONDITION : AM PEAK HOUR

INTERSECTION : 4
GROWTH PER YEAR : 3.0%

CONDITION DIAGRAMS



EXISTING GEOMETRICS

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	1			3		5			7		9	11	13
KAISER RD													
EBL	1	1	0	2	0	2	1	0	3	0	3	1	1
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	37	2	4	43	9	52	3	3	45	2	47	40	42
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
RICE ROAD (SR 177)													
NBL	33	1	211	245	347	592	2	9	45	8	53	42	50
NBT	23	1	127	151	187	338	2	18	44	5	49	42	47
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	51	2	6	59	5	64	4	6	63	2	65	58	60
SBR	1	1	0	2	0	2	1	0	3	0	3	1	1
Totals	**146**	**8**	**348**	**502**	**548**	**1,050**	**13**	**36**	**203**	**17**	**220**	**184**	**201**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	HEAY	3/31/2023	ASPE0000-0004	2 OF 2

E/W STREET : KAISER RD
N/S STREET : RICE ROAD (SR 177)
CONDITION : AM PEAK HOUR
PHF : 0.85

NORTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	5	0	0	1	0	0	0	0	0	2	0
0	12	0	0	0	0	0	0	0	0	1	0
0	9	0	0	1	0	0	0	0	0	2	0
0	13	0	0	0	0	0	1	0	0	1	0

SOUTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	5	9	0	0	0	0	0	0	0	4	0
0	3	7	0	1	0	0	0	0	0	4	2
0	1	7	0	0	0	0	0	0	0	2	1
0	0	5	0	0	0	0	0	0	0	3	2

EAST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0

WEST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
9	0	1	0	0	0	0	0	0	1	0	0
9	0	0	1	0	0	0	0	0	1	0	0
6	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0

	Truck Volumes	Auto Volumes	Totals	Truck Percentage	Balanced Totals
KAISER RD					
EBL	0	1	**1**	**1%**	**1**
EBTH	0	0	**0**	**0%**	**0**
EBR	3	32	**35**	**9%**	**37**
WBL	0	0	**0**	**0%**	**0**
WBTH	0	0	**0**	**0%**	**0**
WBR	0	0	**0**	**0%**	**0**
RICE ROAD (SR 177)					
NBL	5	28	**33**	**16%**	**33**
NBTH	14	9	**23**	**61%**	**23**
NBR	0	0	**0**	**0%**	**0**
SBL	0	0	**0**	**0%**	**0**
SBTH	9	39	**48**	**19%**	**51**
SBR	0	0	**0**	**0%**	**1**

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	37	33	23	51	1
Future Vol, veh/h	1	37	33	23	51	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	9	16	61	19	0
Mvmt Flow	1	44	39	27	60	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	166	61	61	0	-	0
Stage 1	61	-	-	-	-	-
Stage 2	105	-	-	-	-	-
Critical Hdwy	6.41	6.29	4.26	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.381	2.344	-	-	-
Pot Cap-1 Maneuver	827	985	1457	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	922	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	805	985	1457	-	-	-
Mov Cap-2 Maneuver	805	-	-	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	922	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	4.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1457	-	979	-	-
HCM Lane V/C Ratio	0.027	-	0.046	-	-
HCM Control Delay (s)	7.5	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	43	245	151	59	2
Future Vol, veh/h	2	43	245	151	59	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	9	16	61	19	0
Mvmt Flow	2	51	288	178	69	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	824	70	71	0	-	0
Stage 1	70	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Critical Hdwy	6.41	6.29	4.26	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.381	2.344	-	-	-
Pot Cap-1 Maneuver	344	974	1445	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	467	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	268	974	1445	-	-	-
Mov Cap-2 Maneuver	268	-	-	-	-	-
Stage 1	744	-	-	-	-	-
Stage 2	467	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1445	-	872	-	-
HCM Lane V/C Ratio	0.199	-	0.061	-	-
HCM Control Delay (s)	8.1	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.7	-	0.2	-	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	52	592	338	64	2
Future Vol, veh/h	2	52	592	338	64	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	9	16	61	19	0
Mvmt Flow	2	61	696	398	75	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1866	76	77	0	-	0
Stage 1	76	-	-	-	-	-
Stage 2	1790	-	-	-	-	-
Critical Hdwy	6.41	6.29	4.26	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.381	2.344	-	-	-
Pot Cap-1 Maneuver	80	966	1438	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	147	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	30	966	1438	-	-	-
Mov Cap-2 Maneuver	30	-	-	-	-	-
Stage 1	360	-	-	-	-	-
Stage 2	147	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	6.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1438	-	448	-	-
HCM Lane V/C Ratio	0.484	-	0.142	-	-
HCM Control Delay (s)	9.8	0	14.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	2.7	-	0.5	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	45	45	44	63	3
Future Vol, veh/h	3	45	45	44	63	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	9	16	61	19	0
Mvmt Flow	4	53	53	52	74	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	234	76	78	0	-	0
Stage 1	76	-	-	-	-	-
Stage 2	158	-	-	-	-	-
Critical Hdwy	6.41	6.29	4.26	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.381	2.344	-	-	-
Pot Cap-1 Maneuver	756	966	1436	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	873	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	727	966	1436	-	-	-
Mov Cap-2 Maneuver	727	-	-	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	873	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	3.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1436	-	947	-	-
HCM Lane V/C Ratio	0.037	-	0.06	-	-
HCM Control Delay (s)	7.6	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	47	53	49	65	3
Future Vol, veh/h	3	47	53	49	65	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	9	16	61	19	0
Mvmt Flow	4	55	62	58	76	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	260	78	80	0	-	0
Stage 1	78	-	-	-	-	-
Stage 2	182	-	-	-	-	-
Critical Hdwy	6.41	6.29	4.26	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.381	2.344	-	-	-
Pot Cap-1 Maneuver	731	964	1434	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	852	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	698	964	1434	-	-	-
Mov Cap-2 Maneuver	698	-	-	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	852	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1434	-	942	-	-
HCM Lane V/C Ratio	0.043	-	0.062	-	-
HCM Control Delay (s)	7.6	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	40	42	42	58	1
Future Vol, veh/h	1	40	42	42	58	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	9	16	61	19	0
Mvmt Flow	1	47	49	49	68	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	216	69	69	0	-	0
Stage 1	69	-	-	-	-	-
Stage 2	147	-	-	-	-	-
Critical Hdwy	6.41	6.29	4.26	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.381	2.344	-	-	-
Pot Cap-1 Maneuver	774	975	1447	-	-	-
Stage 1	956	-	-	-	-	-
Stage 2	883	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	747	975	1447	-	-	-
Mov Cap-2 Maneuver	747	-	-	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	883	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	3.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1447	-	968	-	-
HCM Lane V/C Ratio	0.034	-	0.05	-	-
HCM Control Delay (s)	7.6	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	42	50	47	60	1
Future Vol, veh/h	1	42	50	47	60	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	9	16	61	19	0
Mvmt Flow	1	49	59	55	71	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	245	72	72	0	-	0
Stage 1	72	-	-	-	-	-
Stage 2	173	-	-	-	-	-
Critical Hdwy	6.41	6.29	4.26	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.381	2.344	-	-	-
Pot Cap-1 Maneuver	746	971	1444	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	860	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	715	971	1444	-	-	-
Mov Cap-2 Maneuver	715	-	-	-	-	-
Stage 1	913	-	-	-	-	-
Stage 2	860	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	3.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1444	-	963	-	-
HCM Lane V/C Ratio	0.041	-	0.053	-	-
HCM Control Delay (s)	7.6	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : KAISER RD
N/S STREET : RICE ROAD (SR 177)
CONDITION : PM PEAK HOUR

INTERSECTION : 4
GROWTH PER YEAR : 3.0%

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	2			4		6			6		8	12	14
KAISER RD													
EBL	1	1	0	2	0	2	1	0	3	0	3	1	1
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	76	3	211	290	347	637	5	9	93	8	101	85	93
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
RICE ROAD (SR 177)													
NBL	50	2	4	56	9	65	3	2	57	1	58	52	53
NBT	79	3	5	87	5	92	5	5	92	2	94	85	87
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	118	4	126	248	187	435	8	17	147	5	152	136	141
SBR	1	1	0	2	0	2	1	0	3	0	3	1	1
Totals	**325**	**14**	**346**	**685**	**548**	**1,233**	**23**	**33**	**395**	**16**	**411**	**360**	**376**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	HEAY	31-Mar-23	ASPE0000-0004	2 OF 2

E/W STREET : KAISER RD
CONDITION : PM PEAK HOUR
N/S STREET : RICE ROAD (SR 177)
PHF : 0.80

NORTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	30	0	0	1	0	0	0	0	0	9	0
0	21	0	0	1	0	0	0	0	0	6	0
0	13	0	0	1	0	0	0	0	0	7	0
0	14	0	0	0	0	0	1	0	0	2	0

SOUTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	20	14	0	0	0	0	0	0	0	2	0
0	14	8	0	1	0	0	0	0	0	4	2
0	19	12	0	0	0	0	0	0	0	0	1
0	17	13	0	0	0	0	0	0	0	2	0

EAST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0

WEST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
15	0	0	0	0	0	0	0	0	4	0	0
15	0	1	1	0	0	0	0	0	1	0	0
14	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	1	0	0

	Truck Volumes	Auto Volumes	Totals	Truck Percentage	Balanced Totals
KAISER RD					
EBL	0	1	**1**	**1%**	**1**
EBTH	0	0	**0**	**0%**	**0**
EBR	7	62	**69**	**11%**	**76**
WBL	0	0	**0**	**0%**	**0**
WBTH	0	0	**0**	**0%**	**0**
WBR	0	0	**0**	**0%**	**0**
RICE ROAD (SR 177)					
NBL	3	47	**50**	**6%**	**50**
NBTH	9	70	**79**	**12%**	**79**
NBR	0	0	**0**	**0%**	**0**
SBL	0	0	**0**	**0%**	**0**
SBTH	28	78	**106**	**27%**	**118**
SBR	0	0	**0**	**0%**	**1**

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	76	50	79	118	1
Future Vol, veh/h	1	76	50	79	118	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	1	11	6	12	27	0
Mvmt Flow	1	95	63	99	148	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	374	149	149	0	-	0
Stage 1	149	-	-	-	-	-
Stage 2	225	-	-	-	-	-
Critical Hdwy	6.41	6.31	4.16	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.399	2.254	-	-	-
Pot Cap-1 Maneuver	629	874	1408	-	-	-
Stage 1	881	-	-	-	-	-
Stage 2	815	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	599	874	1408	-	-	-
Mov Cap-2 Maneuver	599	-	-	-	-	-
Stage 1	840	-	-	-	-	-
Stage 2	815	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1408	-	869	-	-
HCM Lane V/C Ratio	0.044	-	0.111	-	-
HCM Control Delay (s)	7.7	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	290	56	87	248	2
Future Vol, veh/h	2	290	56	87	248	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	1	11	6	12	27	0
Mvmt Flow	3	363	70	109	310	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	561	312	313	0	-	0
Stage 1	312	-	-	-	-	-
Stage 2	249	-	-	-	-	-
Critical Hdwy	6.41	6.31	4.16	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.399	2.254	-	-	-
Pot Cap-1 Maneuver	491	708	1225	-	-	-
Stage 1	744	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	461	708	1225	-	-	-
Mov Cap-2 Maneuver	461	-	-	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	795	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.5	3.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1225	-	705	-	-
HCM Lane V/C Ratio	0.057	-	0.518	-	-
HCM Control Delay (s)	8.1	0	15.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	3	-	-

Intersection	
Int Delay, s/veh	141.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	637	65	92	435	2
Future Vol, veh/h	2	637	65	92	435	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	1	11	6	12	27	0
Mvmt Flow	3	796	81	115	544	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	823	546	547	0	-	0
Stage 1	546	-	-	-	-	-
Stage 2	277	-	-	-	-	-
Critical Hdwy	6.41	6.31	4.16	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.399	2.254	-	-	-
Pot Cap-1 Maneuver	345	~ 521	1003	-	-	-
Stage 1	582	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	315	~ 521	1003	-	-	-
Mov Cap-2 Maneuver	315	-	-	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	772	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	271.6	3.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1003	-	520	-	-
HCM Lane V/C Ratio	0.081	-	1.536	-	-
HCM Control Delay (s)	8.9	0	271.6	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0.3	-	42	-	-

Notes

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

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	93	57	92	147	3
Future Vol, veh/h	3	93	57	92	147	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	1	11	6	12	27	0
Mvmt Flow	4	116	71	115	184	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	443	186	188	0	-	0
Stage 1	186	-	-	-	-	-
Stage 2	257	-	-	-	-	-
Critical Hdwy	6.41	6.31	4.16	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.399	2.254	-	-	-
Pot Cap-1 Maneuver	574	834	1362	-	-	-
Stage 1	848	-	-	-	-	-
Stage 2	788	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	542	834	1362	-	-	-
Mov Cap-2 Maneuver	542	-	-	-	-	-
Stage 1	801	-	-	-	-	-
Stage 2	788	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1362	-	820	-	-
HCM Lane V/C Ratio	0.052	-	0.146	-	-
HCM Control Delay (s)	7.8	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	101	58	94	152	3
Future Vol, veh/h	3	101	58	94	152	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	1	11	6	12	27	0
Mvmt Flow	4	126	73	118	190	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	456	192	194	0	-	0
Stage 1	192	-	-	-	-	-
Stage 2	264	-	-	-	-	-
Critical Hdwy	6.41	6.31	4.16	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.399	2.254	-	-	-
Pot Cap-1 Maneuver	564	827	1355	-	-	-
Stage 1	843	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	531	827	1355	-	-	-
Mov Cap-2 Maneuver	531	-	-	-	-	-
Stage 1	794	-	-	-	-	-
Stage 2	783	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1355	-	814	-	-
HCM Lane V/C Ratio	0.054	-	0.16	-	-
HCM Control Delay (s)	7.8	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	85	52	85	136	1
Future Vol, veh/h	1	85	52	85	136	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	1	11	6	12	27	0
Mvmt Flow	1	106	65	106	170	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	407	171	171	0	-	0
Stage 1	171	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Critical Hdwy	6.41	6.31	4.16	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.399	2.254	-	-	-
Pot Cap-1 Maneuver	602	850	1382	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	806	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	572	850	1382	-	-	-
Mov Cap-2 Maneuver	572	-	-	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	806	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	2.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1382	-	845	-	-
HCM Lane V/C Ratio	0.047	-	0.127	-	-
HCM Control Delay (s)	7.7	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	93	53	87	141	1
Future Vol, veh/h	1	93	53	87	141	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	1	11	6	12	27	0
Mvmt Flow	1	116	66	109	176	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	418	177	177	0	-	0
Stage 1	177	-	-	-	-	-
Stage 2	241	-	-	-	-	-
Critical Hdwy	6.41	6.31	4.16	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.399	2.254	-	-	-
Pot Cap-1 Maneuver	593	843	1375	-	-	-
Stage 1	856	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	563	843	1375	-	-	-
Mov Cap-2 Maneuver	563	-	-	-	-	-
Stage 1	812	-	-	-	-	-
Stage 2	801	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	2.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1375	-	839	-	-
HCM Lane V/C Ratio	0.048	-	0.14	-	-
HCM Control Delay (s)	7.8	0	10	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

CALCULATION OF FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES (NCHRP 255)

Intersection No.: 4
North/South Street: RICE ROAD (SR 177)
East/West Street: KAISER RD

Analysis Condition: YEAR 2045 FUTURE TRAFFIC

A.M. Peak Hour

Approach Direction		Base Year Count	Forecast Future Year Link Volume			Turn Volume	Rounded Volume
South leg	Left	33	Approach	57	Left	33	33
NB	Through	23	Departure	89	Through	24	24
	Right	0			Right	0	0
North leg	Left	0	Approach	53	Left	0	0
SB	Through	51	Departure	25	Through	52	52
	Right	1			Right	1	1
West leg	Left	1	Approach	38	Left	1	1
EB	Through	0	Departure	34	Through	0	0
	Right	37			Right	37	37
East leg	Left	0	Approach	0	Left	0	0
WB	Through	0	Departure	0	Through	0	0
	Right	0			Right	0	0

P.M. Peak Hour

Approach Direction		Base Year Count	Forecast Future Year Link Volume			Turn Volume	Rounded Volume
South leg	Left	50	Approach	130	Left	50	50
NB	Through	79	Departure	195	Through	80	80
	Right	0			Right	0	0
North leg	Left	0	Approach	120	Left	0	0
SB	Through	118	Departure	81	Through	119	119
	Right	1			Right	1	1
West leg	Left	1	Approach	77	Left	1	1
EB	Through	0	Departure	51	Through	0	0
	Right	76			Right	76	76
East leg	Left	0	Approach	0	Left	0	0
WB	Through	0	Departure	0	Through	0	0

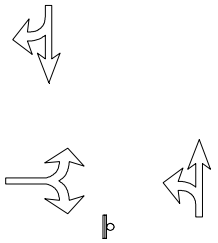
DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : OASIS RD
N/S STREET : RICE ROAD (SR 177)
CONDITION : AM PEAK HOUR

INTERSECTION : 5
GROWTH PER YEAR : 3.0%

CONDITION DIAGRAMS



EXISTING GEOMETRICS

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	1			3		5			7		9	11	13
OASIS RD													
EBL	8	1	0	9	0	9	1	0	10	0	10	8	8
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	5	1	0	6	0	6	1	0	7	0	7	5	5
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
RICE ROAD (SR 177)													
NBL	1	1	0	2	0	2	1	0	3	0	3	1	1
NBT	23	1	117	141	187	328	2	8	34	5	39	32	37
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	47	2	3	52	5	57	3	3	55	2	57	51	53
SBR	4	1	0	5	0	5	1	0	6	0	6	4	4
Totals	**88**	**7**	**120**	**215**	**192**	**407**	**9**	**11**	**115**	**7**	**122**	**101**	**108**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	HEAY	3/31/2023	ASPE0000-0004	2 OF 2

E/W STREET : OASIS RD
N/S STREET : RICE ROAD (SR 177)
CONDITION : AM PEAK HOUR
PHF : 0.88

NORTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	5	0	0	1	0	0	0	0	0	2	0
2	10	0	0	0	0	0	0	0	0	1	0
2	7	0	0	1	0	0	0	0	0	2	0
0	12	0	0	0	0	0	1	0	0	1	0

SOUTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	6	0	0	0	0	0	0	0	0	4	0
0	2	1	0	1	0	0	0	0	0	4	0
0	0	0	0	1	0	0	0	0	0	2	0
0	0	0	0	0	0	0	0	0	0	3	0

EAST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0

WEST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	1	0	0	0	0	0	0	0	0	0
2	0	1	0	0	0	0	0	0	0	0	0
2	0	4	0	0	0	0	0	0	0	0	0
1	0	2	0	0	0	0	0	0	0	0	0

	Truck Volumes	Auto Volumes	Totals	Truck Percentage	Balanced Totals
OASIS RD					
EBL	0	8	**8**	**1%**	**8**
EBTH	0	0	**0**	**0%**	**0**
EBR	0	5	**5**	**1%**	**5**
WBL	0	0	**0**	**0%**	**0**
WBTH	0	0	**0**	**0%**	**0**
WBR	0	0	**0**	**0%**	**0**
RICE ROAD (SR 177)					
NBL	0	1	**1**	**1%**	**1**
NBTH	15	8	**23**	**66%**	**23**
NBR	0	0	**0**	**0%**	**0**
SBL	0	0	**0**	**0%**	**0**
SBTH	9	34	**43**	**21%**	**47**
SBR	0	4	**4**	**1%**	**4**

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	5	1	23	47	4
Future Vol, veh/h	8	5	1	23	47	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	66	21	1
Mvmt Flow	9	6	1	26	53	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	84	56	58	0	-	0
Stage 1	56	-	-	-	-	-
Stage 2	28	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.11	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.209	-	-	-
Pot Cap-1 Maneuver	920	1013	1553	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	997	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	919	1013	1553	-	-	-
Mov Cap-2 Maneuver	919	-	-	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	997	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1553	-	953	-	-
HCM Lane V/C Ratio	0.001	-	0.016	-	-
HCM Control Delay (s)	7.3	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	6	2	141	52	5
Future Vol, veh/h	9	6	2	141	52	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	66	21	1
Mvmt Flow	10	7	2	160	59	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	226	62	65	0	-	0
Stage 1	62	-	-	-	-	-
Stage 2	164	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.11	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.209	-	-	-
Pot Cap-1 Maneuver	764	1006	1544	-	-	-
Stage 1	963	-	-	-	-	-
Stage 2	868	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	763	1006	1544	-	-	-
Mov Cap-2 Maneuver	763	-	-	-	-	-
Stage 1	962	-	-	-	-	-
Stage 2	868	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1544	-	845	-	-
HCM Lane V/C Ratio	0.001	-	0.02	-	-
HCM Control Delay (s)	7.3	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	6	2	328	57	5
Future Vol, veh/h	9	6	2	328	57	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	66	21	1
Mvmt Flow	10	7	2	373	65	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	445	68	71	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	377	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.11	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.209	-	-	-
Pot Cap-1 Maneuver	573	998	1536	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	572	998	1536	-	-	-
Mov Cap-2 Maneuver	572	-	-	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	696	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1536	-	690	-	-
HCM Lane V/C Ratio	0.001	-	0.025	-	-
HCM Control Delay (s)	7.3	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	7	3	34	55	6
Future Vol, veh/h	10	7	3	34	55	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	66	21	1
Mvmt Flow	11	8	3	39	63	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	112	67	70	0	-	0
Stage 1	67	-	-	-	-	-
Stage 2	45	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.11	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.209	-	-	-
Pot Cap-1 Maneuver	887	999	1537	-	-	-
Stage 1	958	-	-	-	-	-
Stage 2	980	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	885	999	1537	-	-	-
Mov Cap-2 Maneuver	885	-	-	-	-	-
Stage 1	956	-	-	-	-	-
Stage 2	980	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1537	-	929	-	-
HCM Lane V/C Ratio	0.002	-	0.021	-	-
HCM Control Delay (s)	7.3	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	7	3	39	57	6
Future Vol, veh/h	10	7	3	39	57	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	66	21	1
Mvmt Flow	11	8	3	44	65	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	119	69	72	0	-	0
Stage 1	69	-	-	-	-	-
Stage 2	50	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.11	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.209	-	-	-
Pot Cap-1 Maneuver	879	997	1534	-	-	-
Stage 1	956	-	-	-	-	-
Stage 2	975	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	877	997	1534	-	-	-
Mov Cap-2 Maneuver	877	-	-	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	975	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1534	-	923	-	-
HCM Lane V/C Ratio	0.002	-	0.021	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	5	1	32	51	4
Future Vol, veh/h	8	5	1	32	51	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	66	21	1
Mvmt Flow	9	6	1	36	58	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	99	61	63	0	-	0
Stage 1	61	-	-	-	-	-
Stage 2	38	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.11	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.209	-	-	-
Pot Cap-1 Maneuver	902	1007	1546	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	987	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	901	1007	1546	-	-	-
Mov Cap-2 Maneuver	901	-	-	-	-	-
Stage 1	963	-	-	-	-	-
Stage 2	987	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1546	-	939	-	-
HCM Lane V/C Ratio	0.001	-	0.016	-	-
HCM Control Delay (s)	7.3	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	5	1	37	53	4
Future Vol, veh/h	8	5	1	37	53	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	66	21	1
Mvmt Flow	9	6	1	42	60	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	107	63	65	0	-	0
Stage 1	63	-	-	-	-	-
Stage 2	44	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.11	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.209	-	-	-
Pot Cap-1 Maneuver	893	1004	1544	-	-	-
Stage 1	962	-	-	-	-	-
Stage 2	981	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	892	1004	1544	-	-	-
Mov Cap-2 Maneuver	892	-	-	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	981	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1544	-	932	-	-
HCM Lane V/C Ratio	0.001	-	0.016	-	-
HCM Control Delay (s)	7.3	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : OASIS RD
N/S STREET : RICE ROAD (SR 177)
CONDITION : PM PEAK HOUR

INTERSECTION : 5
GROWTH PER YEAR : 3.0%

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	2			4		6			6		8	12	14
OASIS RD													
EBL	14	1	0	15	0	15	1	0	16	0	16	14	14
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	29	1	0	30	0	30	2	0	32	0	32	29	29
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
RICE ROAD (SR 177)													
NBL	14	1	0	15	0	15	1	0	16	0	16	14	14
NBT	66	2	3	71	5	76	4	3	75	2	77	70	72
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	90	3	117	210	187	397	6	8	107	5	112	99	104
SBR	6	1	0	7	0	7	1	0	8	0	8	6	6
Totals	**219**	**9**	**120**	**348**	**192**	**540**	**15**	**11**	**254**	**7**	**261**	**232**	**239**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	HEAY	31-Mar-23	ASPE0000-0004	2 OF 2

E/W STREET : OASIS RD
N/S STREET : RICE ROAD (SR 177)
CONDITION : PM PEAK HOUR
PHF : 0.77

NORTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
1	16	0	0	0	0	0	0	0	0	8	0
2	21	0	0	1	0	0	0	0	0	9	0
2	12	0	0	1	0	0	0	0	0	6	0
1	8	0	0	1	0	0	0	0	0	6	0

SOUTH LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	2	0	0	0	0	0	0	0	4	1
0	17	3	0	0	0	0	0	0	0	2	0
0	11	4	0	1	0	0	0	0	0	4	0
0	17	2	0	0	0	0	0	0	0	0	0

EAST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0

WEST LEG											
AUTOS			2 AXLE			3 AXLE			4(+) AXLE		
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
5	0	2	0	0	0	0	0	0	0	0	0
9	0	3	0	0	0	0	0	0	0	0	0
9	0	3	0	0	0	0	0	0	0	0	0
5	0	6	0	0	0	0	0	0	1	0	0

	Truck Volumes	Auto Volumes	Totals	Truck Percentage	Balanced Totals
OASIS RD					
EBL	0	14	**14**	**1%**	**14**
EBTH	0	0	**0**	**0%**	**0**
EBR	1	28	**29**	**4%**	**29**
WBL	0	0	**0**	**0%**	**0**
WBTH	0	0	**0**	**0%**	**0**
WBR	0	0	**0**	**0%**	**0**
RICE ROAD (SR 177)					
NBL	1	11	**12**	**9%**	**14**
NBTH	11	45	**56**	**20%**	**66**
NBR	0	0	**0**	**0%**	**0**
SBL	0	0	**0**	**0%**	**0**
SBTH	32	57	**89**	**36%**	**90**
SBR	0	6	**6**	**1%**	**6**

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	29	14	66	90	6
Future Vol, veh/h	14	29	14	66	90	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	1	4	9	20	36	1
Mvmt Flow	18	38	18	86	117	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	243	121	125	0	-	0
Stage 1	121	-	-	-	-	-
Stage 2	122	-	-	-	-	-
Critical Hdwy	6.41	6.24	4.19	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.336	2.281	-	-	-
Pot Cap-1 Maneuver	748	925	1419	-	-	-
Stage 1	907	-	-	-	-	-
Stage 2	906	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	738	925	1419	-	-	-
Mov Cap-2 Maneuver	738	-	-	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	906	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	1.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1419	-	855	-	-
HCM Lane V/C Ratio	0.013	-	0.065	-	-
HCM Control Delay (s)	7.6	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	30	15	71	210	7
Future Vol, veh/h	15	30	15	71	210	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	1	4	9	20	36	1
Mvmt Flow	19	39	19	92	273	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	408	278	282	0	-	0
Stage 1	278	-	-	-	-	-
Stage 2	130	-	-	-	-	-
Critical Hdwy	6.41	6.24	4.19	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.336	2.281	-	-	-
Pot Cap-1 Maneuver	601	756	1241	-	-	-
Stage 1	771	-	-	-	-	-
Stage 2	898	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	591	756	1241	-	-	-
Mov Cap-2 Maneuver	591	-	-	-	-	-
Stage 1	759	-	-	-	-	-
Stage 2	898	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.7	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1241	-	692	-	-
HCM Lane V/C Ratio	0.016	-	0.084	-	-
HCM Control Delay (s)	7.9	0	10.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	30	15	76	397	7
Future Vol, veh/h	15	30	15	76	397	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	1	4	9	20	36	1
Mvmt Flow	19	39	19	99	516	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	658	521	525	0	-	0
Stage 1	521	-	-	-	-	-
Stage 2	137	-	-	-	-	-
Critical Hdwy	6.41	6.24	4.19	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.336	2.281	-	-	-
Pot Cap-1 Maneuver	431	551	1007	-	-	-
Stage 1	598	-	-	-	-	-
Stage 2	892	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	422	551	1007	-	-	-
Mov Cap-2 Maneuver	422	-	-	-	-	-
Stage 1	586	-	-	-	-	-
Stage 2	892	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.2	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1007	-	500	-	-
HCM Lane V/C Ratio	0.019	-	0.117	-	-
HCM Control Delay (s)	8.6	0	13.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	32	16	75	107	8
Future Vol, veh/h	16	32	16	75	107	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	1	4	9	20	36	1
Mvmt Flow	21	42	21	97	139	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	283	144	149	0	-	0
Stage 1	144	-	-	-	-	-
Stage 2	139	-	-	-	-	-
Critical Hdwy	6.41	6.24	4.19	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.336	2.281	-	-	-
Pot Cap-1 Maneuver	709	898	1391	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	890	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	698	898	1391	-	-	-
Mov Cap-2 Maneuver	698	-	-	-	-	-
Stage 1	872	-	-	-	-	-
Stage 2	890	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	1.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1391	-	820	-	-
HCM Lane V/C Ratio	0.015	-	0.076	-	-
HCM Control Delay (s)	7.6	0	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	32	16	77	112	8
Future Vol, veh/h	16	32	16	77	112	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	1	4	9	20	36	1
Mvmt Flow	21	42	21	100	145	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	292	150	155	0	-	0
Stage 1	150	-	-	-	-	-
Stage 2	142	-	-	-	-	-
Critical Hdwy	6.41	6.24	4.19	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.336	2.281	-	-	-
Pot Cap-1 Maneuver	701	891	1384	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	887	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	690	891	1384	-	-	-
Mov Cap-2 Maneuver	690	-	-	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	887	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	1.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1384	-	812	-	-
HCM Lane V/C Ratio	0.015	-	0.077	-	-
HCM Control Delay (s)	7.6	0	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	29	14	70	99	6
Future Vol, veh/h	14	29	14	70	99	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	1	4	9	20	36	1
Mvmt Flow	18	38	18	91	129	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	260	133	137	0	-	0
Stage 1	133	-	-	-	-	-
Stage 2	127	-	-	-	-	-
Critical Hdwy	6.41	6.24	4.19	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.336	2.281	-	-	-
Pot Cap-1 Maneuver	731	911	1405	-	-	-
Stage 1	896	-	-	-	-	-
Stage 2	901	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	721	911	1405	-	-	-
Mov Cap-2 Maneuver	721	-	-	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	901	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	1.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1405	-	839	-	-
HCM Lane V/C Ratio	0.013	-	0.067	-	-
HCM Control Delay (s)	7.6	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	29	14	72	104	6
Future Vol, veh/h	14	29	14	72	104	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	1	4	9	20	36	1
Mvmt Flow	18	38	18	94	135	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	269	139	143	0	-	0
Stage 1	139	-	-	-	-	-
Stage 2	130	-	-	-	-	-
Critical Hdwy	6.41	6.24	4.19	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.336	2.281	-	-	-
Pot Cap-1 Maneuver	722	904	1398	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	898	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	712	904	1398	-	-	-
Mov Cap-2 Maneuver	712	-	-	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	898	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	1.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1398	-	831	-	-
HCM Lane V/C Ratio	0.013	-	0.067	-	-
HCM Control Delay (s)	7.6	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

CALCULATION OF FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES (NCHRP 255)

Intersection No.: 5
North/South Street: RICE ROAD (SR 177)
East/West Street: OASIS RD

Analysis Condition: YEAR 2045 FUTURE TRAFFIC

A.M. Peak Hour

Approach Direction		Base Year Count	Forecast Future Year Link Volume			Turn Volume	Rounded Volume
South leg	Left	1	Approach	25	Left	1	1
NB	Through	23	Departure	53	Through	24	24
	Right	0			Right	0	0
North leg	Left	0	Approach	52	Left	0	0
SB	Through	47	Departure	32	Through	48	48
	Right	4			Right	4	4
West leg	Left	8	Approach	13	Left	8	8
EB	Through	0	Departure	5	Through	0	0
	Right	5			Right	5	5
East leg	Left	0	Approach	0	Left	0	0
WB	Through	0	Departure	0	Through	0	0
	Right	0			Right	0	0

P.M. Peak Hour

Approach Direction		Base Year Count	Forecast Future Year Link Volume			Turn Volume	Rounded Volume
South leg	Left	14	Approach	81	Left	14	14
NB	Through	66	Departure	120	Through	67	67
	Right	0			Right	0	0
North leg	Left	0	Approach	97	Left	0	0
SB	Through	90	Departure	81	Through	91	91
	Right	6			Right	6	6
West leg	Left	14	Approach	43	Left	14	14
EB	Through	0	Departure	20	Through	0	0
	Right	29			Right	29	29
East leg	Left	0	Approach	0	Left	0	0
WB	Through	0	Departure	0	Through	0	0

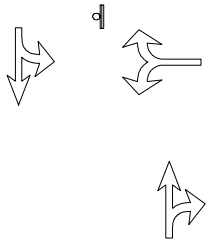
DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : OASIS RD
N/S STREET : KAISER RD
CONDITION : AM PEAK HOUR

INTERSECTION : 6
GROWTH PER YEAR : 3.0%

CONDITION DIAGRAMS



EXISTING GEOMETRICS

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	1			3		5			7		9	11	13
OASIS RD													
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	1	1	0	2	0	2	1	0	3	0	3	2	2
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	1	1	0	2	0	2	1	0	3	0	3	3	3
KAISER RD													
NBL	0	0	0	0	0	0	0	0	0	0	0	0	0
NBT	34	2	210	246	347	593	3	8	47	8	55	43	51
NBR	1	0	0	1	0	1	0	0	1	0	1	1	1
SBL	1	0	0	1	0	1	0	0	1	0	1	1	1
SBT	37	2	3	42	9	51	3	2	44	2	46	39	41
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**75**	**6**	**213**	**294**	**356**	**650**	**8**	**10**	**99**	**10**	**109**	**89**	**99**

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	2	593	1	1	51
Future Vol, veh/h	2	2	593	1	1	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	16	1	1	10
Mvmt Flow	2	2	698	1	1	60

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	761	699	0	0	699	0
Stage 1	699	-	-	-	-	-
Stage 2	62	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	375	442	-	-	902	-
Stage 1	495	-	-	-	-	-
Stage 2	963	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	375	442	-	-	902	-
Mov Cap-2 Maneuver	375	-	-	-	-	-
Stage 1	495	-	-	-	-	-
Stage 2	962	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	406	902	-
HCM Lane V/C Ratio	-	-	0.012	0.001	-
HCM Control Delay (s)	-	-	14	9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	3	55	1	1	46
Future Vol, veh/h	3	3	55	1	1	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	16	1	1	10
Mvmt Flow	4	4	65	1	1	54

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	122	66	0	0	66	0
Stage 1	66	-	-	-	-	-
Stage 2	56	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	876	1001	-	-	1542	-
Stage 1	959	-	-	-	-	-
Stage 2	969	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	875	1001	-	-	1542	-
Mov Cap-2 Maneuver	875	-	-	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	968	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	934	1542	-
HCM Lane V/C Ratio	-	-	0.008	0.001	-
HCM Control Delay (s)	-	-	8.9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	3	51	1	1	41
Future Vol, veh/h	2	3	51	1	1	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	16	1	1	10
Mvmt Flow	2	4	60	1	1	48

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	111	61	0	0	61	0
Stage 1	61	-	-	-	-	-
Stage 2	50	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	888	1007	-	-	1549	-
Stage 1	964	-	-	-	-	-
Stage 2	975	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	887	1007	-	-	1549	-
Mov Cap-2 Maneuver	887	-	-	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	974	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	955	1549	-
HCM Lane V/C Ratio	-	-	0.006	0.001	-
HCM Control Delay (s)	-	-	8.8	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : OASIS RD
N/S STREET : KAISER RD
CONDITION : PM PEAK HOUR

INTERSECTION : 6
GROWTH PER YEAR : 3.0%

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	2			4		6			6		8	12	14
OASIS RD													
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	2	1	0	3	0	3	1	0	4	0	4	8	8
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	2	1	0	3	0	3	1	0	4	0	4	12	12
KAISER RD													
NBL	0	0	0	0	0	0	0	0	0	0	0	0	0
NBT	49	2	3	54	9	63	3	1	55	1	56	44	45
NBR	2	0	0	2	0	2	0	0	2	0	2	2	2
SBL	2	0	0	2	0	2	0	0	2	0	2	2	2
SBT	77	4	210	291	347	638	6	8	95	8	103	86	94
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**134**	**8**	**213**	**355**	**356**	**711**	**11**	**9**	**162**	**9**	**171**	**154**	**163**

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	2	593	1	1	51
Future Vol, veh/h	2	2	593	1	1	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	16	1	1	10
Mvmt Flow	2	2	698	1	1	60

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	761	699	0	0	699	0
Stage 1	699	-	-	-	-	-
Stage 2	62	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	375	442	-	-	902	-
Stage 1	495	-	-	-	-	-
Stage 2	963	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	375	442	-	-	902	-
Mov Cap-2 Maneuver	375	-	-	-	-	-
Stage 1	495	-	-	-	-	-
Stage 2	962	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	406	902	-
HCM Lane V/C Ratio	-	-	0.012	0.001	-
HCM Control Delay (s)	-	-	14	9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	3	55	1	1	46
Future Vol, veh/h	3	3	55	1	1	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	16	1	1	10
Mvmt Flow	4	4	65	1	1	54

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	122	66	0	0	66	0
Stage 1	66	-	-	-	-	-
Stage 2	56	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	876	1001	-	-	1542	-
Stage 1	959	-	-	-	-	-
Stage 2	969	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	875	1001	-	-	1542	-
Mov Cap-2 Maneuver	875	-	-	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	968	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	934	1542	-
HCM Lane V/C Ratio	-	-	0.008	0.001	-
HCM Control Delay (s)	-	-	8.9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	3	51	1	1	41
Future Vol, veh/h	2	3	51	1	1	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	16	1	1	10
Mvmt Flow	2	4	60	1	1	48

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	111	61	0	0	61	0
Stage 1	61	-	-	-	-	-
Stage 2	50	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	888	1007	-	-	1549	-
Stage 1	964	-	-	-	-	-
Stage 2	975	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	887	1007	-	-	1549	-
Mov Cap-2 Maneuver	887	-	-	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	974	-	-	-	-	-

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

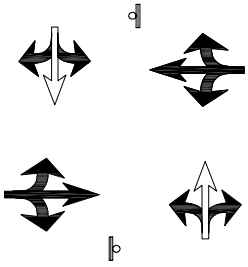
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	955	1549	-
HCM Lane V/C Ratio	-	-	0.006	0.001	-
HCM Control Delay (s)	-	-	8.8	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

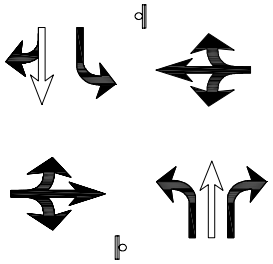
E/W STREET : PROJECT DRIVEWAY 1
N/S STREET : RICE ROAD (SR 177)
CONDITION : AM PEAK HOUR

INTERSECTION : 7A
GROWTH PER YEAR : 3.0%

CONDITION DIAGRAMS



TEMPORARY CONSTRUCTION GEOMETRICS



PROPOSED GEOMETRICS

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	1			3		5			7		9	11	13
PROJECT DRIVEWAY 1													
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	2	2	4	6	0	1	1	1	2	0	1
WBL	0	0	1	1	1	2	0	1	1	1	2	0	1
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
RICE ROAD (SR 177)													
NBL	0	0	97	97	160	257	0	4	4	4	8	0	4
NBT	31	2	0	33	0	33	3	0	36	0	36	40	40
NBR	0	0	17	17	27	44	0	1	1	1	2	0	1
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	51	3	0	54	0	54	4	0	58	0	58	55	55
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**82**	**5**	**117**	**204**	**192**	**396**	**7**	**7**	**101**	**7**	**108**	**95**	**102**

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	0	0	6	2	0	0	257	33	44	0	54	0
Future Vol, veh/h	0	0	6	2	0	0	257	33	44	0	54	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	1	1	1	1	67	1	1	22	1
Mvmt Flow	0	0	7	2	0	0	292	38	50	0	61	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	708	733	61	712	708	63	61	0	0	88	0	0
Stage 1	61	61	-	647	647	-	-	-	-	-	-	-
Stage 2	647	672	-	65	61	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	351	349	1007	349	361	1004	1549	-	-	1514	-	-
Stage 1	953	846	-	461	468	-	-	-	-	-	-	-
Stage 2	461	456	-	948	846	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	297	280	1007	294	289	1004	1549	-	-	1514	-	-
Mov Cap-2 Maneuver	297	280	-	294	289	-	-	-	-	-	-	-
Stage 1	763	846	-	369	375	-	-	-	-	-	-	-
Stage 2	369	365	-	942	846	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.6	17.3	6.1	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1549	-	-	1007	294	1514	-	-
HCM Lane V/C Ratio	0.189	-	-	0.007	0.008	-	-	-
HCM Control Delay (s)	7.9	0	-	8.6	17.3	0	-	-
HCM Lane LOS	A	A	-	A	C	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	0	0	0	-	-

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	0	0	2	2	0	0	8	36	2	0	58	0
Future Vol, veh/h	0	0	2	2	0	0	8	36	2	0	58	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	1	1	1	1	67	1	1	22	1
Mvmt Flow	0	0	2	2	0	0	9	41	2	0	66	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	126	127	66	127	126	42	66	0	0	43	0	0
Stage 1	66	66	-	60	60	-	-	-	-	-	-	-
Stage 2	60	61	-	67	66	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	850	765	1001	849	766	1032	1542	-	-	1572	-	-
Stage 1	947	842	-	954	847	-	-	-	-	-	-	-
Stage 2	954	846	-	946	842	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	846	760	1001	843	761	1032	1542	-	-	1572	-	-
Mov Cap-2 Maneuver	846	760	-	843	761	-	-	-	-	-	-	-
Stage 1	941	842	-	948	842	-	-	-	-	-	-	-
Stage 2	948	841	-	944	842	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.6	9.3	1.3	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1542	-	-	1001	843	1572	-	-
HCM Lane V/C Ratio	0.006	-	-	0.002	0.003	-	-	-
HCM Control Delay (s)	7.3	0	-	8.6	9.3	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

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	0	0	2	2	0	0	8	36	2	0	58	0
Future Vol, veh/h	0	0	2	2	0	0	8	36	2	0	58	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	460	-	460	-	-	460
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	1	1	1	1	67	1	1	22	1
Mvmt Flow	0	0	2	2	0	0	9	41	2	0	66	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	126	127	66	126	125	41	66	0	0	43	0	0
Stage 1	66	66	-	59	59	-	-	-	-	-	-	-
Stage 2	60	61	-	67	66	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	850	765	1001	850	767	1033	1542	-	-	1572	-	-
Stage 1	947	842	-	955	848	-	-	-	-	-	-	-
Stage 2	954	846	-	946	842	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	847	760	1001	844	762	1033	1542	-	-	1572	-	-
Mov Cap-2 Maneuver	847	760	-	844	762	-	-	-	-	-	-	-
Stage 1	941	842	-	949	843	-	-	-	-	-	-	-
Stage 2	948	841	-	944	842	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.6	9.3	1.3	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1542	-	-	1001	844	1572	-	-
HCM Lane V/C Ratio	0.006	-	-	0.002	0.003	-	-	-
HCM Control Delay (s)	7.3	-	-	8.6	9.3	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	1	1	0	0	4	40	1	0	55	0
Future Vol, veh/h	0	0	1	1	0	0	4	40	1	0	55	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	1	1	1	1	67	1	1	22	1
Mvmt Flow	0	0	1	1	0	0	5	45	1	0	63	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	119	119	63	120	119	46	63	0	0	46	0	0
Stage 1	63	63	-	56	56	-	-	-	-	-	-	-
Stage 2	56	56	-	64	63	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	859	773	1004	858	773	1026	1546	-	-	1568	-	-
Stage 1	950	844	-	959	850	-	-	-	-	-	-	-
Stage 2	959	850	-	949	844	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	857	771	1004	855	771	1026	1546	-	-	1568	-	-
Mov Cap-2 Maneuver	857	771	-	855	771	-	-	-	-	-	-	-
Stage 1	947	844	-	956	847	-	-	-	-	-	-	-
Stage 2	956	847	-	948	844	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.6	9.2	0.7	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1546	-	-	1004	855	1568	-	-
HCM Lane V/C Ratio	0.003	-	-	0.001	0.001	-	-	-
HCM Control Delay (s)	7.3	0	-	8.6	9.2	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑	↱		↕	↱
Traffic Vol, veh/h	0	0	1	1	0	0	4	40	1	0	55	0
Future Vol, veh/h	0	0	1	1	0	0	4	40	1	0	55	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	460	-	460	-	-	460
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	1	1	1	1	67	1	1	22	1
Mvmt Flow	0	0	1	1	0	0	5	45	1	0	63	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	119	119	63	119	118	45	63	0	0	46	0	0
Stage 1	63	63	-	55	55	-	-	-	-	-	-	-
Stage 2	56	56	-	64	63	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	859	773	1004	859	774	1028	1546	-	-	1568	-	-
Stage 1	950	844	-	960	851	-	-	-	-	-	-	-
Stage 2	959	850	-	949	844	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	857	771	1004	856	772	1028	1546	-	-	1568	-	-
Mov Cap-2 Maneuver	857	771	-	856	772	-	-	-	-	-	-	-
Stage 1	947	844	-	957	848	-	-	-	-	-	-	-
Stage 2	956	847	-	948	844	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.6	9.2	0.7	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1546	-	-	1004	856	1568	-	-
HCM Lane V/C Ratio	0.003	-	-	0.001	0.001	-	-	-
HCM Control Delay (s)	7.3	-	-	8.6	9.2	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : PROJECT DRIVEWAY 1
N/S STREET : RICE ROAD (SR 177)
CONDITION : PM PEAK HOUR

INTERSECTION : 7A
GROWTH PER YEAR : 3.0%

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	2			4		6			6		8	12	14
PROJECT DRIVEWAY 1													
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	97	97	160	257	0	4	4	4	8	0	4
WBL	0	0	17	17	27	44	0	1	1	1	2	0	1
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
RICE ROAD (SR 177)													
NBL	0	0	2	2	4	6	0	1	1	1	2	0	1
NBT	80	3	0	83	0	83	5	0	88	0	88	84	84
NBR	0	0	1	1	1	2	0	1	1	1	2	0	1
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	96	4	0	100	0	100	7	0	107	0	107	105	105
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**176**	**7**	**117**	**300**	**192**	**492**	**12**	**7**	**202**	**7**	**209**	**189**	**196**

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	257	44	0	0	6	83	2	0	100	0
Future Vol, veh/h	0	0	257	44	0	0	6	83	2	0	100	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	1	1	1	1	1	1	1	21	1	1	37	1
Mvmt Flow	0	0	334	57	0	0	8	108	3	0	130	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	256	257	130	423	256	110	130	0	0	111	0	0
Stage 1	130	130	-	126	126	-	-	-	-	-	-	-
Stage 2	126	127	-	297	130	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	699	649	922	543	650	946	1462	-	-	1485	-	-
Stage 1	876	791	-	880	794	-	-	-	-	-	-	-
Stage 2	880	793	-	714	791	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	696	645	922	345	646	946	1462	-	-	1485	-	-
Mov Cap-2 Maneuver	696	645	-	345	646	-	-	-	-	-	-	-
Stage 1	871	791	-	875	789	-	-	-	-	-	-	-
Stage 2	875	788	-	456	791	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	17.5	0.5	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1462	-	-	922	345	1485	-	-
HCM Lane V/C Ratio	0.005	-	-	0.362	0.166	-	-	-
HCM Control Delay (s)	7.5	0	-	11.1	17.5	0	-	-
HCM Lane LOS	A	A	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.7	0.6	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	8	2	0	0	2	88	2	0	107	0
Future Vol, veh/h	0	0	8	2	0	0	2	88	2	0	107	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	1	1	1	1	1	1	1	21	1	1	37	1
Mvmt Flow	0	0	10	3	0	0	3	114	3	0	139	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	261	262	139	266	261	116	139	0	0	117	0	0
Stage 1	139	139	-	122	122	-	-	-	-	-	-	-
Stage 2	122	123	-	144	139	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	694	645	912	689	645	939	1451	-	-	1478	-	-
Stage 1	866	784	-	885	797	-	-	-	-	-	-	-
Stage 2	885	796	-	861	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	693	644	912	680	644	939	1451	-	-	1478	-	-
Mov Cap-2 Maneuver	693	644	-	680	644	-	-	-	-	-	-	-
Stage 1	864	784	-	883	795	-	-	-	-	-	-	-
Stage 2	883	794	-	851	784	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10.3	0.2	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1451	-	-	912	680	1478	-	-
HCM Lane V/C Ratio	0.002	-	-	0.011	0.004	-	-	-
HCM Control Delay (s)	7.5	0	-	9	10.3	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑	↱		↕	↱
Traffic Vol, veh/h	0	0	8	2	0	0	2	88	2	0	107	0
Future Vol, veh/h	0	0	8	2	0	0	2	88	2	0	107	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	460	-	460	-	-	460
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	1	1	1	1	1	1	1	21	1	1	37	1
Mvmt Flow	0	0	10	3	0	0	3	114	3	0	139	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	261	262	139	264	259	114	139	0	0	117	0	0
Stage 1	139	139	-	120	120	-	-	-	-	-	-	-
Stage 2	122	123	-	144	139	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	694	645	912	691	647	941	1451	-	-	1478	-	-
Stage 1	866	784	-	887	798	-	-	-	-	-	-	-
Stage 2	885	796	-	861	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	693	644	912	682	646	941	1451	-	-	1478	-	-
Mov Cap-2 Maneuver	693	644	-	682	646	-	-	-	-	-	-	-
Stage 1	864	784	-	885	796	-	-	-	-	-	-	-
Stage 2	883	794	-	851	784	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10.3	0.2	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1451	-	-	912	682	1478	-	-
HCM Lane V/C Ratio	0.002	-	-	0.011	0.004	-	-	-
HCM Control Delay (s)	7.5	-	-	9	10.3	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	4	1	0	0	1	84	1	0	105	0
Future Vol, veh/h	0	0	4	1	0	0	1	84	1	0	105	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	1	1	1	1	1	1	1	21	1	1	37	1
Mvmt Flow	0	0	5	1	0	0	1	109	1	0	136	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	248	248	136	251	248	110	136	0	0	110	0	0
Stage 1	136	136	-	112	112	-	-	-	-	-	-	-
Stage 2	112	112	-	139	136	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	708	656	915	704	656	946	1454	-	-	1486	-	-
Stage 1	870	786	-	895	805	-	-	-	-	-	-	-
Stage 2	895	805	-	866	786	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	707	655	915	700	655	946	1454	-	-	1486	-	-
Mov Cap-2 Maneuver	707	655	-	700	655	-	-	-	-	-	-	-
Stage 1	869	786	-	894	804	-	-	-	-	-	-	-
Stage 2	894	804	-	861	786	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10.2	0.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1454	-	-	915	700	1486	-	-
HCM Lane V/C Ratio	0.001	-	-	0.006	0.002	-	-	-
HCM Control Delay (s)	7.5	0	-	9	10.2	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑	↱		↕	↱
Traffic Vol, veh/h	0	0	4	1	0	0	1	84	1	0	105	0
Future Vol, veh/h	0	0	4	1	0	0	1	84	1	0	105	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	460	-	460	-	-	460
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	1	1	1	1	1	1	1	21	1	1	37	1
Mvmt Flow	0	0	5	1	0	0	1	109	1	0	136	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	248	248	136	250	247	109	136	0	0	110	0	0
Stage 1	136	136	-	111	111	-	-	-	-	-	-	-
Stage 2	112	112	-	139	136	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	708	656	915	706	657	947	1454	-	-	1486	-	-
Stage 1	870	786	-	897	805	-	-	-	-	-	-	-
Stage 2	895	805	-	866	786	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	707	655	915	702	656	947	1454	-	-	1486	-	-
Mov Cap-2 Maneuver	707	655	-	702	656	-	-	-	-	-	-	-
Stage 1	869	786	-	896	804	-	-	-	-	-	-	-
Stage 2	894	804	-	861	786	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10.1	0.1	0
HCM LOS	A	B		

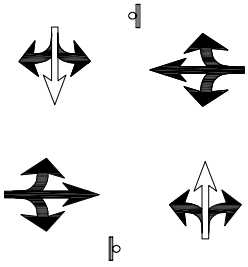
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1454	-	-	915	702	1486	-	-
HCM Lane V/C Ratio	0.001	-	-	0.006	0.002	-	-	-
HCM Control Delay (s)	7.5	-	-	9	10.1	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

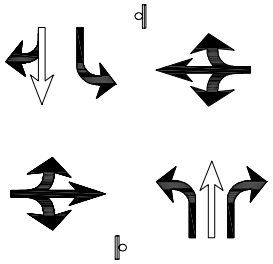
E/W STREET : PROJECT DRIVEWAY 2
N/S STREET : RICE ROAD (SR 177)
CONDITION : AM PEAK HOUR

INTERSECTION : 7B
GROWTH PER YEAR : 3.0%

CONDITION DIAGRAMS



TEMPORARY CONSTRUCTION GEOMETRICS



PROPOSED GEOMETRICS

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	1			3		5			7		9	11	13
PROJECT DRIVEWAY 2													
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	2	2	4	6	0	1	1	1	2	0	1
WBL	0	0	1	1	1	2	0	1	1	1	2	0	1
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
RICE ROAD (SR 177)													
NBL	0	0	97	97	160	257	0	4	4	4	8	0	4
NBT	31	2	0	33	0	33	3	0	36	0	36	40	40
NBR	0	0	17	17	27	44	0	1	1	1	2	0	1
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	51	3	0	54	0	54	4	0	58	0	58	55	55
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**82**	**5**	**117**	**204**	**192**	**396**	**7**	**7**	**101**	**7**	**108**	**95**	**102**

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	0	0	6	2	0	0	257	33	44	0	54	0
Future Vol, veh/h	0	0	6	2	0	0	257	33	44	0	54	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	1	1	1	1	67	1	1	22	1
Mvmt Flow	0	0	7	2	0	0	292	38	50	0	61	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	708	733	61	712	708	63	61	0	0	88	0	0
Stage 1	61	61	-	647	647	-	-	-	-	-	-	-
Stage 2	647	672	-	65	61	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	351	349	1007	349	361	1004	1549	-	-	1514	-	-
Stage 1	953	846	-	461	468	-	-	-	-	-	-	-
Stage 2	461	456	-	948	846	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	297	280	1007	294	289	1004	1549	-	-	1514	-	-
Mov Cap-2 Maneuver	297	280	-	294	289	-	-	-	-	-	-	-
Stage 1	763	846	-	369	375	-	-	-	-	-	-	-
Stage 2	369	365	-	942	846	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.6	17.3	6.1	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1549	-	-	1007	294	1514	-	-
HCM Lane V/C Ratio	0.189	-	-	0.007	0.008	-	-	-
HCM Control Delay (s)	7.9	0	-	8.6	17.3	0	-	-
HCM Lane LOS	A	A	-	A	C	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	0	0	0	-	-

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	0	0	2	2	0	0	8	36	2	0	58	0
Future Vol, veh/h	0	0	2	2	0	0	8	36	2	0	58	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	1	1	1	1	67	1	1	22	1
Mvmt Flow	0	0	2	2	0	0	9	41	2	0	66	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	126	127	66	127	126	42	66	0	0	43	0	0
Stage 1	66	66	-	60	60	-	-	-	-	-	-	-
Stage 2	60	61	-	67	66	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	850	765	1001	849	766	1032	1542	-	-	1572	-	-
Stage 1	947	842	-	954	847	-	-	-	-	-	-	-
Stage 2	954	846	-	946	842	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	846	760	1001	843	761	1032	1542	-	-	1572	-	-
Mov Cap-2 Maneuver	846	760	-	843	761	-	-	-	-	-	-	-
Stage 1	941	842	-	948	842	-	-	-	-	-	-	-
Stage 2	948	841	-	944	842	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.6	9.3	1.3	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1542	-	-	1001	843	1572	-	-
HCM Lane V/C Ratio	0.006	-	-	0.002	0.003	-	-	-
HCM Control Delay (s)	7.3	0	-	8.6	9.3	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

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	0	0	2	2	0	0	8	36	2	0	58	0
Future Vol, veh/h	0	0	2	2	0	0	8	36	2	0	58	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	460	-	460	-	-	460
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	1	1	1	1	67	1	1	22	1
Mvmt Flow	0	0	2	2	0	0	9	41	2	0	66	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	126	127	66	126	125	41	66	0	0	43	0	0
Stage 1	66	66	-	59	59	-	-	-	-	-	-	-
Stage 2	60	61	-	67	66	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	850	765	1001	850	767	1033	1542	-	-	1572	-	-
Stage 1	947	842	-	955	848	-	-	-	-	-	-	-
Stage 2	954	846	-	946	842	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	847	760	1001	844	762	1033	1542	-	-	1572	-	-
Mov Cap-2 Maneuver	847	760	-	844	762	-	-	-	-	-	-	-
Stage 1	941	842	-	949	843	-	-	-	-	-	-	-
Stage 2	948	841	-	944	842	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.6	9.3	1.3	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1542	-	-	1001	844	1572	-	-
HCM Lane V/C Ratio	0.006	-	-	0.002	0.003	-	-	-
HCM Control Delay (s)	7.3	-	-	8.6	9.3	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	1	1	0	0	4	40	1	0	55	0
Future Vol, veh/h	0	0	1	1	0	0	4	40	1	0	55	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	1	1	1	1	67	1	1	22	1
Mvmt Flow	0	0	1	1	0	0	5	45	1	0	63	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	119	119	63	120	119	46	63	0	0	46	0	0
Stage 1	63	63	-	56	56	-	-	-	-	-	-	-
Stage 2	56	56	-	64	63	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	859	773	1004	858	773	1026	1546	-	-	1568	-	-
Stage 1	950	844	-	959	850	-	-	-	-	-	-	-
Stage 2	959	850	-	949	844	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	857	771	1004	855	771	1026	1546	-	-	1568	-	-
Mov Cap-2 Maneuver	857	771	-	855	771	-	-	-	-	-	-	-
Stage 1	947	844	-	956	847	-	-	-	-	-	-	-
Stage 2	956	847	-	948	844	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.6	9.2	0.7	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1546	-	-	1004	855	1568	-	-
HCM Lane V/C Ratio	0.003	-	-	0.001	0.001	-	-	-
HCM Control Delay (s)	7.3	0	-	8.6	9.2	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑	↱		↕	↱
Traffic Vol, veh/h	0	0	1	1	0	0	4	40	1	0	55	0
Future Vol, veh/h	0	0	1	1	0	0	4	40	1	0	55	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	460	-	460	-	-	460
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	1	1	1	1	1	1	1	67	1	1	22	1
Mvmt Flow	0	0	1	1	0	0	5	45	1	0	63	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	119	119	63	119	118	45	63	0	0	46	0	0
Stage 1	63	63	-	55	55	-	-	-	-	-	-	-
Stage 2	56	56	-	64	63	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	859	773	1004	859	774	1028	1546	-	-	1568	-	-
Stage 1	950	844	-	960	851	-	-	-	-	-	-	-
Stage 2	959	850	-	949	844	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	857	771	1004	856	772	1028	1546	-	-	1568	-	-
Mov Cap-2 Maneuver	857	771	-	856	772	-	-	-	-	-	-	-
Stage 1	947	844	-	957	848	-	-	-	-	-	-	-
Stage 2	956	847	-	948	844	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.6	9.2	0.7	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1546	-	-	1004	856	1568	-	-
HCM Lane V/C Ratio	0.003	-	-	0.001	0.001	-	-	-
HCM Control Delay (s)	7.3	-	-	8.6	9.2	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : PROJECT DRIVEWAY 2
N/S STREET : RICE ROAD (SR 177)
CONDITION : PM PEAK HOUR

INTERSECTION : 7B
GROWTH PER YEAR : 3.0%

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	2			4		6			6		8	12	14
PROJECT DRIVEWAY 2													
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	97	97	160	257	0	4	4	4	8	0	4
WBL	0	0	17	17	27	44	0	1	1	1	2	0	1
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
RICE ROAD (SR 177)													
NBL	0	0	2	2	4	6	0	1	1	1	2	0	1
NBT	80	3	0	83	0	83	5	0	88	0	88	84	84
NBR	0	0	1	1	1	2	0	1	1	1	2	0	1
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	96	4	0	100	0	100	7	0	107	0	107	105	105
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**176**	**7**	**117**	**300**	**192**	**492**	**12**	**7**	**202**	**7**	**209**	**189**	**196**

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	257	44	0	0	6	83	2	0	100	0
Future Vol, veh/h	0	0	257	44	0	0	6	83	2	0	100	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	1	1	1	1	1	1	1	21	1	1	37	1
Mvmt Flow	0	0	334	57	0	0	8	108	3	0	130	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	256	257	130	423	256	110	130	0	0	111	0	0
Stage 1	130	130	-	126	126	-	-	-	-	-	-	-
Stage 2	126	127	-	297	130	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	699	649	922	543	650	946	1462	-	-	1485	-	-
Stage 1	876	791	-	880	794	-	-	-	-	-	-	-
Stage 2	880	793	-	714	791	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	696	645	922	345	646	946	1462	-	-	1485	-	-
Mov Cap-2 Maneuver	696	645	-	345	646	-	-	-	-	-	-	-
Stage 1	871	791	-	875	789	-	-	-	-	-	-	-
Stage 2	875	788	-	456	791	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	17.5	0.5	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1462	-	-	922	345	1485	-	-
HCM Lane V/C Ratio	0.005	-	-	0.362	0.166	-	-	-
HCM Control Delay (s)	7.5	0	-	11.1	17.5	0	-	-
HCM Lane LOS	A	A	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.7	0.6	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	8	2	0	0	2	88	2	0	107	0
Future Vol, veh/h	0	0	8	2	0	0	2	88	2	0	107	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	1	1	1	1	1	1	1	21	1	1	37	1
Mvmt Flow	0	0	10	3	0	0	3	114	3	0	139	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	261	262	139	266	261	116	139	0	0	117	0	0
Stage 1	139	139	-	122	122	-	-	-	-	-	-	-
Stage 2	122	123	-	144	139	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	694	645	912	689	645	939	1451	-	-	1478	-	-
Stage 1	866	784	-	885	797	-	-	-	-	-	-	-
Stage 2	885	796	-	861	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	693	644	912	680	644	939	1451	-	-	1478	-	-
Mov Cap-2 Maneuver	693	644	-	680	644	-	-	-	-	-	-	-
Stage 1	864	784	-	883	795	-	-	-	-	-	-	-
Stage 2	883	794	-	851	784	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10.3	0.2	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1451	-	-	912	680	1478	-	-
HCM Lane V/C Ratio	0.002	-	-	0.011	0.004	-	-	-
HCM Control Delay (s)	7.5	0	-	9	10.3	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑	↱		↕	↱
Traffic Vol, veh/h	0	0	8	2	0	0	2	88	2	0	107	0
Future Vol, veh/h	0	0	8	2	0	0	2	88	2	0	107	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	460	-	460	-	-	460
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	1	1	1	1	1	1	1	21	1	1	37	1
Mvmt Flow	0	0	10	3	0	0	3	114	3	0	139	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	261	262	139	264	259	114	139	0	0	117	0	0
Stage 1	139	139	-	120	120	-	-	-	-	-	-	-
Stage 2	122	123	-	144	139	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	694	645	912	691	647	941	1451	-	-	1478	-	-
Stage 1	866	784	-	887	798	-	-	-	-	-	-	-
Stage 2	885	796	-	861	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	693	644	912	682	646	941	1451	-	-	1478	-	-
Mov Cap-2 Maneuver	693	644	-	682	646	-	-	-	-	-	-	-
Stage 1	864	784	-	885	796	-	-	-	-	-	-	-
Stage 2	883	794	-	851	784	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10.3	0.2	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1451	-	-	912	682	1478	-	-
HCM Lane V/C Ratio	0.002	-	-	0.011	0.004	-	-	-
HCM Control Delay (s)	7.5	-	-	9	10.3	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	4	1	0	0	1	84	1	0	105	0
Future Vol, veh/h	0	0	4	1	0	0	1	84	1	0	105	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	1	1	1	1	1	1	1	21	1	1	37	1
Mvmt Flow	0	0	5	1	0	0	1	109	1	0	136	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	248	248	136	251	248	110	136	0	0	110	0	0
Stage 1	136	136	-	112	112	-	-	-	-	-	-	-
Stage 2	112	112	-	139	136	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	708	656	915	704	656	946	1454	-	-	1486	-	-
Stage 1	870	786	-	895	805	-	-	-	-	-	-	-
Stage 2	895	805	-	866	786	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	707	655	915	700	655	946	1454	-	-	1486	-	-
Mov Cap-2 Maneuver	707	655	-	700	655	-	-	-	-	-	-	-
Stage 1	869	786	-	894	804	-	-	-	-	-	-	-
Stage 2	894	804	-	861	786	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10.2	0.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1454	-	-	915	700	1486	-	-
HCM Lane V/C Ratio	0.001	-	-	0.006	0.002	-	-	-
HCM Control Delay (s)	7.5	0	-	9	10.2	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑	↱		↕	↱
Traffic Vol, veh/h	0	0	4	1	0	0	1	84	1	0	105	0
Future Vol, veh/h	0	0	4	1	0	0	1	84	1	0	105	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	460	-	460	-	-	460
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	1	1	1	1	1	1	1	21	1	1	37	1
Mvmt Flow	0	0	5	1	0	0	1	109	1	0	136	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	248	248	136	250	247	109	136	0	0	110	0	0
Stage 1	136	136	-	111	111	-	-	-	-	-	-	-
Stage 2	112	112	-	139	136	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	708	656	915	706	657	947	1454	-	-	1486	-	-
Stage 1	870	786	-	897	805	-	-	-	-	-	-	-
Stage 2	895	805	-	866	786	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	707	655	915	702	656	947	1454	-	-	1486	-	-
Mov Cap-2 Maneuver	707	655	-	702	656	-	-	-	-	-	-	-
Stage 1	869	786	-	896	804	-	-	-	-	-	-	-
Stage 2	894	804	-	861	786	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10.1	0.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1454	-	-	915	702	1486	-	-
HCM Lane V/C Ratio	0.001	-	-	0.006	0.002	-	-	-
HCM Control Delay (s)	7.5	-	-	9	10.1	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

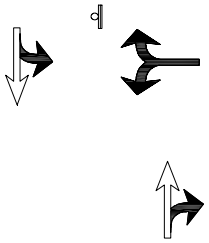
DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : PROJECT DRIVEWAY 3
N/S STREET : KAISER RD
CONDITION : AM PEAK HOUR

INTERSECTION : 8
GROWTH PER YEAR : 3.0%

CONDITION DIAGRAMS



PROPOSED GEOMETRICS

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	1			3		5			7		9	11	13
PROJECT DRIVEWAY 3													
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	3	3	9	12	0	2	2	2	4	0	2
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
KAISER RD													
NBL	0	0	0	0	0	0	0	0	0	0	0	0	0
NBT	34	2	0	36	0	36	3	0	39	0	39	43	43
NBR	0	0	210	210	347	557	0	8	8	8	16	0	8
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	38	3	0	41	0	41	4	0	45	0	45	41	41
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**72**	**5**	**213**	**290**	**356**	**646**	**7**	**10**	**94**	**10**	**104**	**84**	**94**

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	0	36	557	0	41
Future Vol, veh/h	12	0	36	557	0	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	16	1	1	10
Mvmt Flow	14	0	42	655	0	48

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	418	370	0	0	697	0
Stage 1	370	-	-	-	-	-
Stage 2	48	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	593	678	-	-	904	-
Stage 1	701	-	-	-	-	-
Stage 2	977	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	593	678	-	-	904	-
Mov Cap-2 Maneuver	593	-	-	-	-	-
Stage 1	701	-	-	-	-	-
Stage 2	977	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	593	904	-
HCM Lane V/C Ratio	-	-	0.024	-	-
HCM Control Delay (s)	-	-	11.2	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	0	39	16	0	45
Future Vol, veh/h	4	0	39	16	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	16	1	1	10
Mvmt Flow	5	0	46	19	0	53

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	109	56	0	0	65	0
Stage 1	56	-	-	-	-	-
Stage 2	53	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	891	1013	-	-	1544	-
Stage 1	969	-	-	-	-	-
Stage 2	972	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	891	1013	-	-	1544	-
Mov Cap-2 Maneuver	891	-	-	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	972	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	891	1544	-
HCM Lane V/C Ratio	-	-	0.005	-	-
HCM Control Delay (s)	-	-	9.1	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	0	43	8	0	41
Future Vol, veh/h	2	0	43	8	0	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	16	1	1	10
Mvmt Flow	2	0	51	9	0	48

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	104	56	0	0	60	0
Stage 1	56	-	-	-	-	-
Stage 2	48	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	896	1013	-	-	1550	-
Stage 1	969	-	-	-	-	-
Stage 2	977	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	896	1013	-	-	1550	-
Mov Cap-2 Maneuver	896	-	-	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	977	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	896	1550	-
HCM Lane V/C Ratio	-	-	0.003	-	-
HCM Control Delay (s)	-	-	9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	HEAY	31-Mar-23	ASPE0000-0004	1 OF 2

E/W STREET : PROJECT DRIVEWAY 3
N/S STREET : KAISER RD
CONDITION : PM PEAK HOUR

INTERSECTION : 8
GROWTH PER YEAR : 3.0%

TURN MOVEMENTS

Condition	Existing Condition Traffic	Temporary Project Construction Ambient Growth	Other Area Temporary Project Construction Trips	Temporary Project Construction Conditions	Temporary Project Construction Trips	Temporary Project Construction w/Project Conditions	Opening Year Conditions Ambient Growth	Other Area O&M Project Trips	Opening Year Conditions without Project	O&M Project Trips	Opening Year Conditions with Project	Cumulative Year Conditions without Project	Cumulative Year Conditions with Project
	2			4		6			6		8	12	14
PROJECT DRIVEWAY 3													
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	210	210	347	557	0	8	8	8	16	0	8
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
KAISER RD													
NBL	0	0	0	0	0	0	0	0	0	0	0	0	0
NBT	51	3	0	54	0	54	4	0	58	0	58	52	52
NBR	0	0	3	3	9	12	0	1	1	1	2	0	1
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	77	4	0	81	0	81	6	0	87	0	87	86	86
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**128**	**7**	**213**	**348**	**356**	**704**	**10**	**9**	**154**	**9**	**163**	**138**	**147**

Intersection	
Int Delay, s/veh	23.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	557	0	54	12	0	81
Future Vol, veh/h	557	0	54	12	0	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	1	1	6	1	1	27
Mvmt Flow	696	0	68	15	0	101

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	177	76	0	0	83	0
Stage 1	76	-	-	-	-	-
Stage 2	101	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	815	988	-	-	1520	-
Stage 1	950	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	815	988	-	-	1520	-
Mov Cap-2 Maneuver	815	-	-	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	926	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.3	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	815	1520	-
HCM Lane V/C Ratio	-	-	0.854	-	-
HCM Control Delay (s)	-	-	29.3	0	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	10.4	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	0	58	2	0	87
Future Vol, veh/h	16	0	58	2	0	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	1	1	6	1	1	27
Mvmt Flow	20	0	73	3	0	109

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	184	75	0	0	76	0
Stage 1	75	-	-	-	-	-
Stage 2	109	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	808	989	-	-	1529	-
Stage 1	950	-	-	-	-	-
Stage 2	918	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	808	989	-	-	1529	-
Mov Cap-2 Maneuver	808	-	-	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	918	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	808	1529	-
HCM Lane V/C Ratio	-	-	0.025	-	-
HCM Control Delay (s)	-	-	9.6	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	0	52	1	0	86
Future Vol, veh/h	8	0	52	1	0	86
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	1	1	6	1	1	27
Mvmt Flow	10	0	65	1	0	108

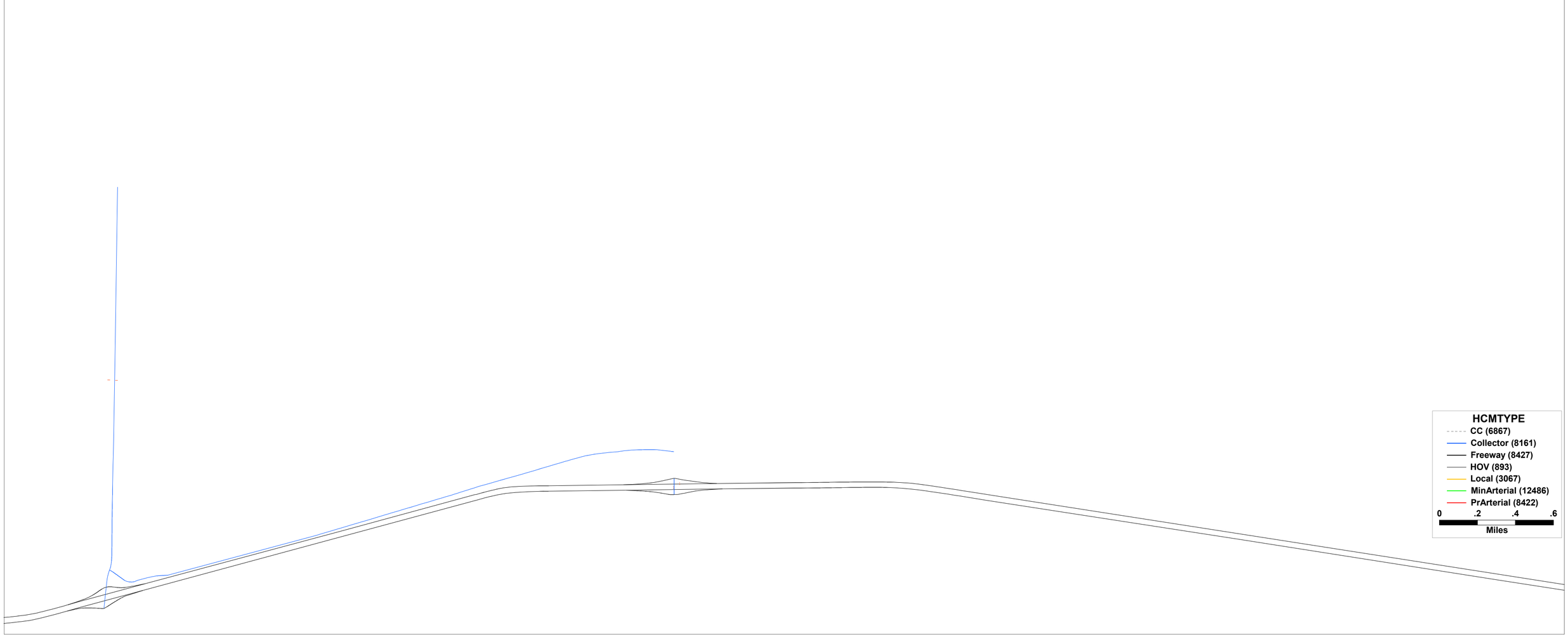
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	174	66	0	0	66	0
Stage 1	66	-	-	-	-	-
Stage 2	108	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	818	1001	-	-	1542	-
Stage 1	959	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	818	1001	-	-	1542	-
Mov Cap-2 Maneuver	818	-	-	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	919	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

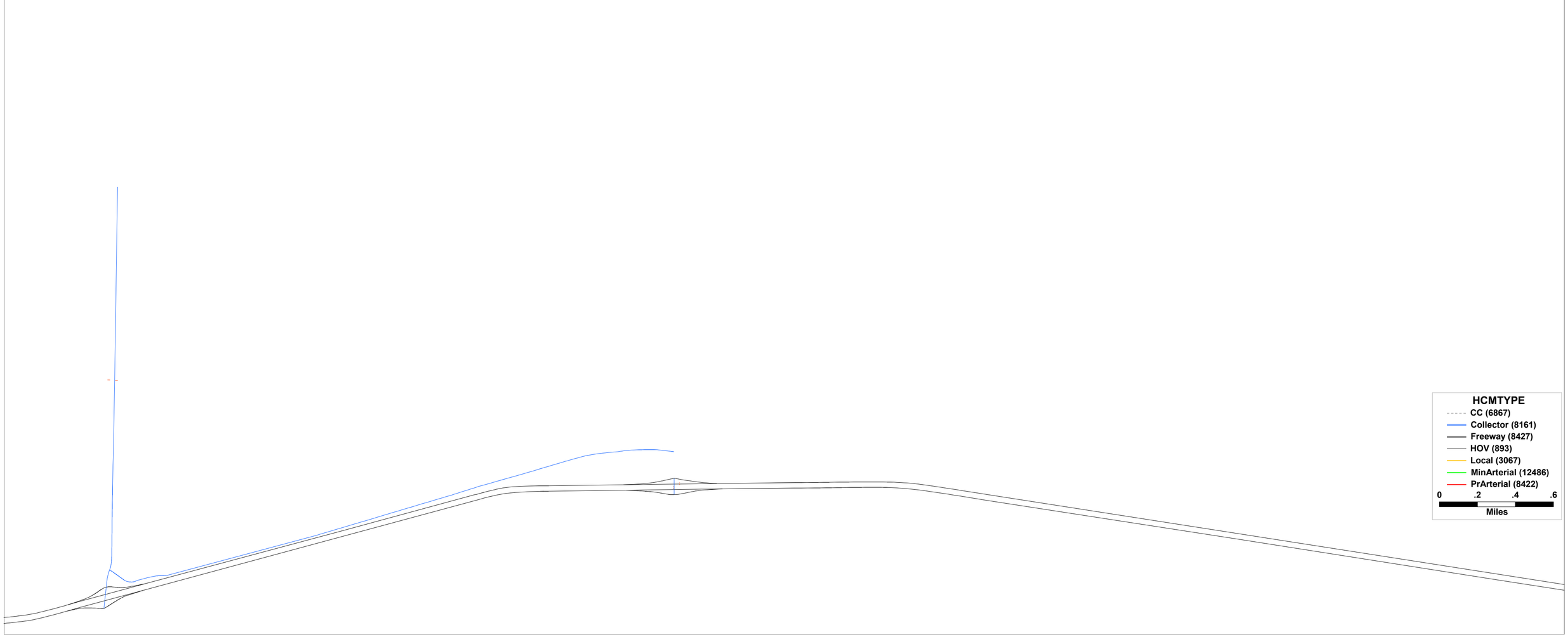
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	818	1542	-
HCM Lane V/C Ratio	-	-	0.012	-	-
HCM Control Delay (s)	-	-	9.5	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Appendix 3. Riverside County Transportation Model (RIVCOM) Plots

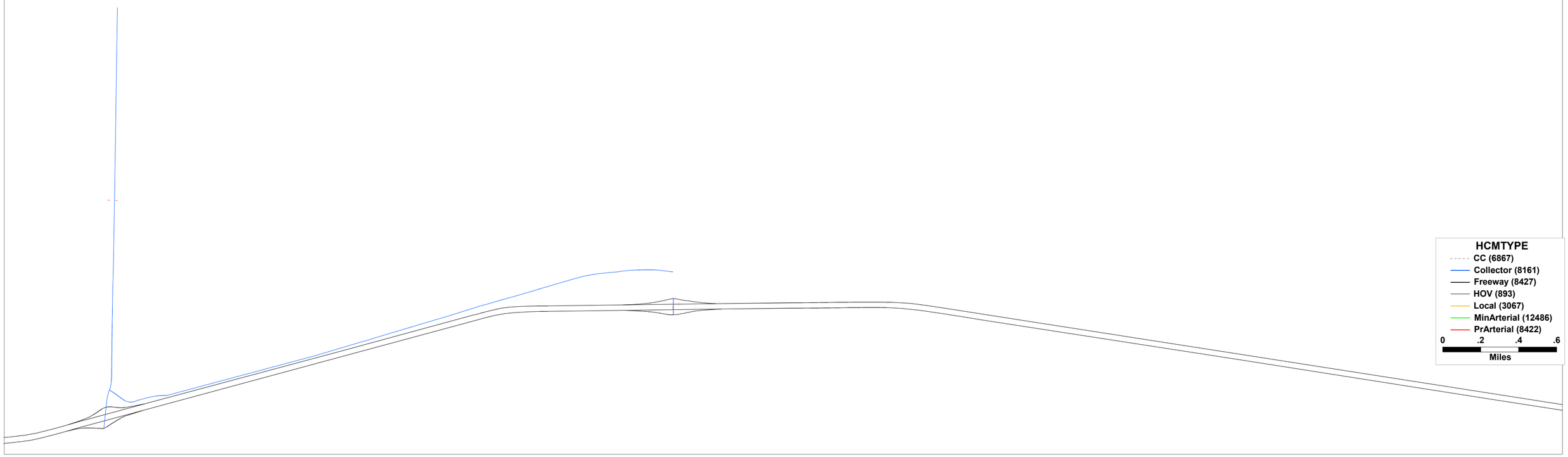
RIVCOM V3 - 2018 AM peak period volumes



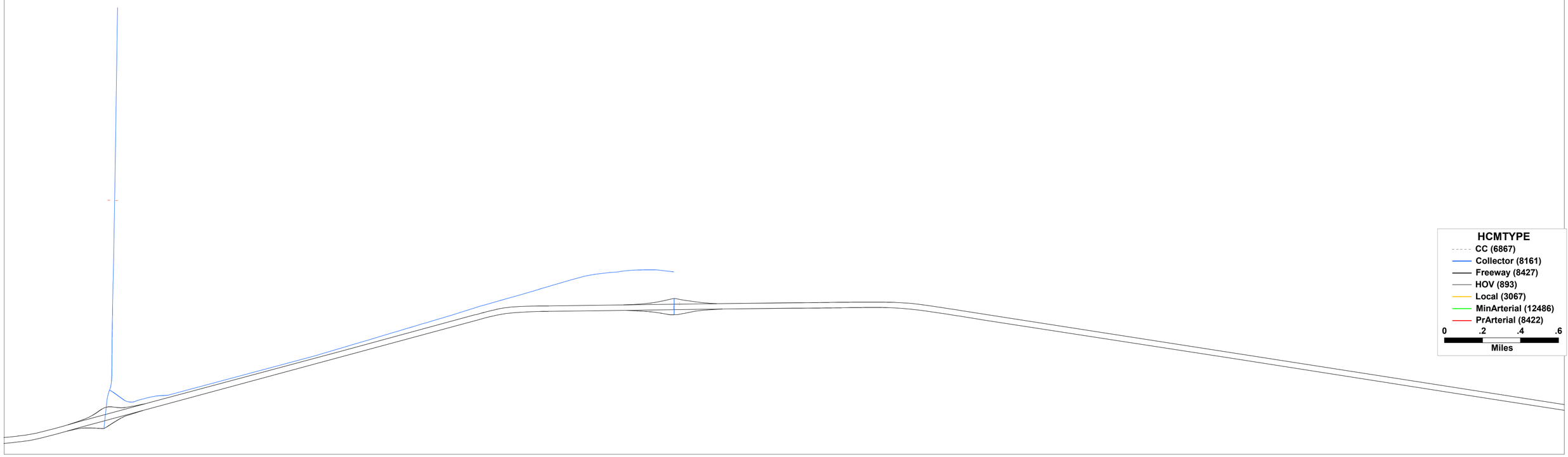
RIVCOM V3 - 2018 PM peak period volumes



RIVCOM V3 - 2045 AM peak period volumes



RIVCOM V3 - 2045 PM peak period volumes



Appendix 4. Cumulative Projects

Cumulative Projects

Desert Center Area Plan. As part of the Riverside County General Plan Update (2015), the County updated the Desert Center Area Plan. The Desert Center Land Use Plan reflects the limited development potential in this region. The Area Plan designates most of the area Open Space-Rural, with some agriculture, rural residential, and other low-density residential and commercial opportunities. The Area Plan notes that future development on the private land should focus on infill and contiguous expansion of the existing communities at Desert Center and Lake Tamarisk but is likely to be limited (Riverside County, 2015a). This information was taken into consideration by the authors when drafting the cumulative analysis, as it indicates limited development on private land.

Tables 3.1-1 and 3.1-2 include the list of cumulative projects in the Desert Center and Blythe region. These projects are shown on Figure 3.1-1.

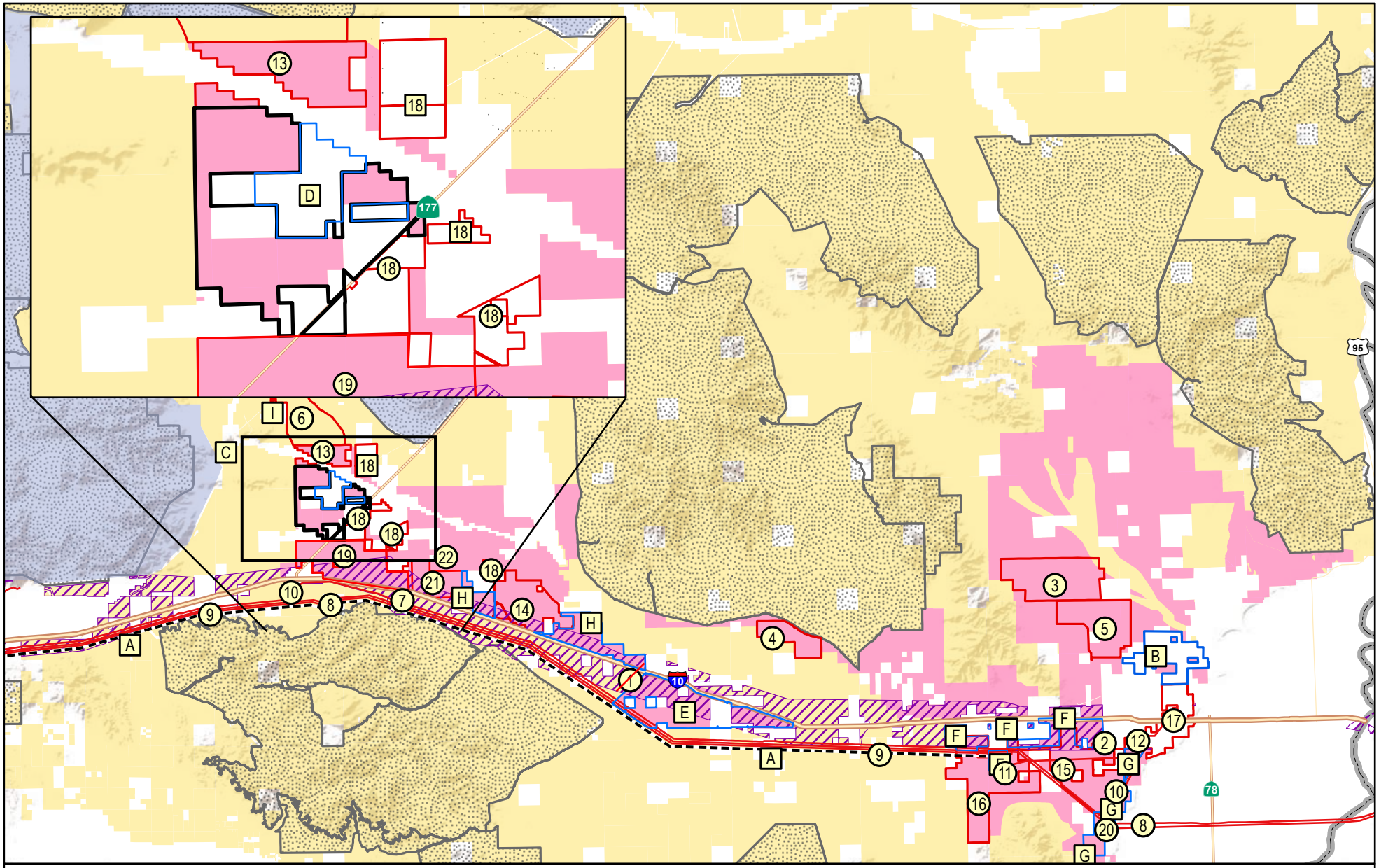


Figure 3.1-1

Cumulative Projects

Tables 3.1-1 Past and Present Projects or Programs in the Project Area

ID	Project Name; Agency ID	Location	Ownership	Status	Acres	Project Description
1	West-wide Section 368 Energy Corridors	Riverside County, parallel to I-10	BLM, DOE, U.S. Forest Service	Approved by BLM & USFS, additional review of Region 1 ongoing	N/A	Designation of corridors on federal land in the 11 western states, including California, for oil, gas, and hydrogen pipelines and electricity transmission and distribution facilities (energy corridors). One of the corridors runs along the southern portion of Riverside County.
2	Blythe PV Project	Blythe	Clearway Energy	Operational	200	21 MW solar PV project located on 200 acres outside of Blythe.
3	McCoy Solar Project	Blythe	NextEra	Operational	8,100	An up to 750 MW solar PV project located primarily on BLM administered land about 13 miles north of Blythe. Includes a 16-mile gen-tie line. 250 MW began operation in June 2016 but it does not have a schedule for the remaining 500 MW.
4	Genesis Solar Energy Project	North of I-10, 25 miles west of Blythe and 27 miles east of Desert Center	NextEra	Operational	1,950	250 MW solar trough project north of the Ford Dry Lake. Project includes six-mile natural gas pipeline and a 5.5-mile gen-tie line to the Blythe Energy Center to Julian Hinds Transmission Line, then east on shared transmission poles to the Colorado River Substation.
5	Blythe Solar Power Project	Blythe	NextEra	Operational	4,100	A 485 MW solar PV project located 2 miles north of I-10 and 8 miles west of the City of Blythe on BLM land. A 230 kV gen-tie line connects the solar energy generating facility to the SCE Colorado River Substation.
6	Desert Sunlight Solar Project	6 miles north of Desert Center	NextEra	Operational	4,400	A 550 MW solar PV project located on BLM land. The project includes a 230 kV transmission line that extends south

project trips will be included in existing counts 2/15/23

ID	Project Name; Agency ID	Location	Ownership	Status	Acres	Project Description
						from the site to interconnect with the Red Bluff Substation
7	SCE Red Bluff Substation	Southeast of Desert Center	SCE	Operational	75	220/500 kV substation to interconnect renewable projects near Desert Center to the Devers–Palo Verde (DPV) transmission line.
8	Devers–Palo Verde No. 1 Transmission Line	Palo Verde, Arizona, to Devers Substation near Palm Springs	SCE	Operational	N/A	Existing 500 kV transmission line parallel to I-10 from Arizona to the SCE Devers Substation, near Palm Springs. DPV1 loops into the SCE Colorado River Substation which is located 10 miles southwest of Blythe.
9	Devers–Colorado River Transmission Line	From Blythe to Devers Substation near Palm Springs	SCE	Operational	N/A	Existing 500 kV transmission line parallel to the I-10 from the SCE Colorado River Substation to the Devers Substation. ROW requires 130 feet on federal, state, and private land.
10	Blythe Energy Project Transmission Line	From Blythe to Julian Hinds Substation	Blythe Energy, LLC	Operational	N/A	Existing 230 kV transmission line.
11	SCE Colorado River Substation	Blythe	SCE	Operational	90	A 500/230 kV substation located east of Blythe. Includes 108-foot-high dead-end structures. Outdoor night lighting is designed to illuminate the switchrack when manually switched on.
12	NRG Blythe II	Blythe	Clearway Energy	Operational	150	20 MW solar PV facility next to Clearway's 21 MW Blythe Project that came online in spring 2017.
13	Desert Harvest Solar Project	North of Desert Center	EDF-RE	Operational	1,208	A 150 MW solar PV project located immediately south of the Desert Sunlight project. The gen-tie route would parallel the existing Desert Sunlight line to interconnect with the existing SCE Red Bluff Substation.
14	Palen Solar Project	East of Desert Center	EDF-RE	Operational	3,400	A 457 MW solar PV and energy storage

project trips will be included in existing counts 2/15/23

ID	Project Name; Agency ID	Location	Ownership	Status	Acres	Project Description
						facility located 11 miles east of Desert Center on BLM-administered land. Includes a 6-mile gen-tie line that connects into SCE Red Bluff Substation.
15	Desert Quartzite Solar Project	South of I-10, 8 miles southwest of Blythe	Desert Quartzite LLC (First Solar)	Approved by BLM in January 2020 and Riverside County in October 2019. Operational in 2023.	3,770	A 300 MW solar PV and 600 MWh energy storage facility with a project substation, access road, and transmission line, all located on BLM land.
16	Crimson Solar Project	South of I-10, 8 miles southwest of Blythe	Sonoran West Solar Holdings, LLC (Recurrent Energy)	Approved by BLM in May 2021 and CDFW in June 2021. Operational.	2,500	A 350 MW solar PV project located on BLM land. The project interconnects to the SCE Colorado River Substation.
17	Blythe Mesa Solar Project	East of Blythe	Blythe Mesa Solar II, LLC	Approved by Riverside County in May 2015. Gen-tie approved by BLM in August 2015, updated ROW approved in August 2020. Under construction.	3,600	A 485 MW solar PV project located outside Blythe on private land. The gen-tie line crosses BLM land to reach the SCE Colorado River Substation.
18	Athos Renewable Energy Project	Desert Center	Soft Bank Energy	Approved by Riverside County and BLM in 2019.	3,400	A solar PV and energy storage facility project located on private land in e County. ne cross public land to reach the SCE Red Bluff Substation.
19	Oberon Renewable Energy Project	Northeast of Desert Center	IP Oberon, LLC	Approved by BLM in January 2022 and RWQCB in December 2021. Under construction with online operation in 2023.	,0005 (application area) 2,600 (available for development)	A 500 MW solar PV and energy storage facility on BLM -administered land. A 0.5-mile 500 kV gen-tie line would connect into SCE Red Bluff Substation.
20	Ten West Link Transmission Line	From the Colorado River Substation in Blythe California west to Tonopah Arizona	Abengoa Transmission & Infrastructure, LLC, and Starwood Energy Group	Approved by BLM in November 2019. Under construction.	N/A	A 500 kV transmission line from Tonopah, Arizona, to Blythe, California. It spans 114 miles, with all but 17 miles of the line in the Arizona counties of Maricopa and La Paz and the remainder in

too far from site to impact study intersections

project trips will be included in existing counts 2/15/23

Will be in operation during Proposed Project construction phase.

project trips will be included in existing counts 2/15/23

ID	Project Name; Agency ID	Location	Ownership	Status	Acres	Project Description
			Global, Inc.			Riverside County, California.
21	Victory Pass Solar Project	4.5 miles east of Desert Center, adjacent to north side of I-10	Clearway Energy Group, LLC	Approved by BLM in December 2021. Under construction.	1,800	A 200 MW of solar energy with up to 200 MW of battery storage on BLM-administered land. A shared overhead 230 kV gen-tie line with Arica Solar Project connects to SCE Red Bluff Substation.
22	Arica Solar Project	Adjacent to north side of Victory Pass project, 5 miles east-northeast of Desert Center	Clearway Energy Group, LLC	Approved by BLM in December 2021. Under construction.	2,000	A 265 MW solar PV project with up to 200 MW of battery storage. A shared overhead 230 kV gen-tie line with Victory Pass Solar Project connects to SCE Red Bluff Substation.

Will be in operation during Proposed Project construction phase.

1 - The data shown on Figure 3.1-1 for the Development Focus Areas, ACECs, and NLCS was taken from the DRECP Final EIS.
Source: RWQCB, 2021.

Tables 3.1-2 Probable Future Projects in the Project Area

ID	Project Name; Agency ID	Location	Ownership	Status	Acres	Project Description
A	Desert Southwest Transmission Line	118 miles primarily parallel to the Devers–Palo Verde 500 kV line	Imperial Irrigation District	Final EIR/EIS prepared in 2005, approved by the BLM in 2006	N/A	Approximately 118-mile 500 kV transmission line from a new substation near the Blythe Energy Project to the existing Devers Substation located 10 miles north of Palm Springs, California.
B	Palo Verde Mesa Solar Project	East of Blythe, near Neighbors Boulevard	Renewable Resources Group	Approved by Riverside County in August 2017	3,250	A 465 MW PV solar plant on 50 parcels totaling 3,250 acres, primarily on agriculture land. Gen-tie line is approximately 11.8 miles to the Colorado River Substation.
C	Eagle Mountain Pumped Storage Project	Eagle Mountain iron ore mine, north of Desert Center	Eagle Crest Energy Company	FERC License issued June 2014. Project approved by BLM in August 2018. On April 12, 2022, FERC issued an	90	1,300 MW pumped storage project designed to store off-peak energy to use during peak hours. The off-peak energy would be used to pump water

will not impact study intersections

ID	Project Name; Agency ID	Location	Ownership	Status	Acres	Project Description
				order granting an extension of project construction deadlines to commence project construction by June 19, 2024, and the extended deadline to complete project construction is June 19, 2027.		to an upper reservoir. The water is released to a lower reservoir through an underground electrical generating facility.
D	Sapphire Solar Project	Adjacent to Easley Project; northeast of Desert Center	EDF-RE	Under review by BLM (CACA 59623) and Riverside County in 2022.	1,140	The project on private would generation 117 MW of solar energy. The gen-tie line would cross BLM-administered land to connect into the Desert Harvest Substation/Red Bluff Substation.
E	Lycan Solar Project	South of I-10, southeast of Desert Center and west of Blythe.	EDF-RE	Under review by BLM in 2022 (CACA 59265).	6,944	The project on BLM-administered land would generate 600 MW of solar PV energy and connect into Red Bluff Substation
F	Calypso I Solar Project	South of I-10, west of Blythe	EDF-RE	Under review by BLM in 2022 (CACA 059319).	3,271	The project on BLM-administered land would generate 300 MW of solar PV energy and connect into the Colorado River Substation.
G	Calypso II Solar Project	South of I-10, southwest of Blythe	EDF-RE	Under review by BLM in 2022 (CACA 059320).	2,133	The project on BLM-administered land would generate 300 MW of solar PV energy and connect into Colorado River Substation.
H	Redonda Solar Project	East of Desert Center	Clearway Energy Group, LLC	Under review by BLM in 2022 (CACA 059387).	3,483	The project on BLM-administered land would generate 250 MW of solar PV energy and connect into Arica and Victory Pass Substation.

Source: RWQCB, 2021.

will not impact study intersections

Potentially be under construction concurrently as the Proposed Project

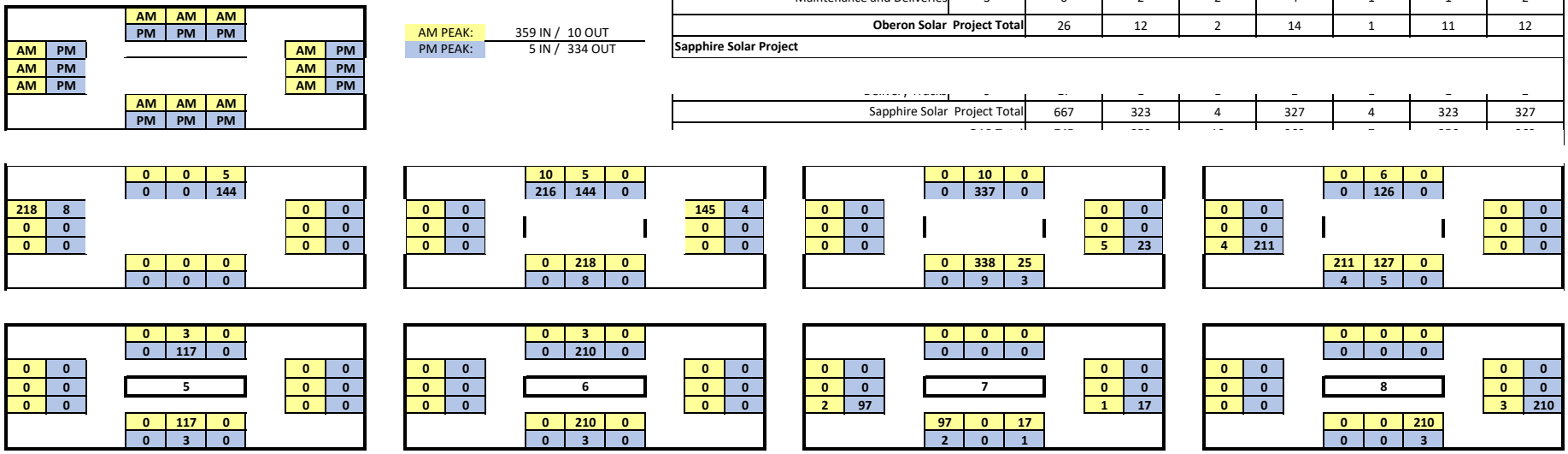
Project is not approved

Description	Quantity	ADT	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Arica Solar Project								
Workers	10	20	10	0	10	0	10	10
Delivery Trucks	3	6	2	2	4	1	1	2
Arica Solar Project Total		26	12	2	14	1	11	12
Victory Pass Solar Project								
Workers	10	20	10	0	10	0	10	10
Delivery Trucks	3	6	2	2	4	1	1	2
Victory Pass Solar Project Total		26	12	2	14	1	11	12
Oberon Solar								
Workers	10	20	10	0	10	0	10	10
Maintenance and Deliveries	3	6	2	2	4	1	1	2
Oberon Solar Project Total		26	12	2	14	1	11	12
Sapphire Solar Project								
Sapphire Solar Project Total		667	323	4	327	4	323	327

Cumulative Projects Construction Trips

AM PEAK: 359 IN / 10 OUT

PM PEAK: 5 IN / 334 OUT



Description	Quantity	ADT	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Arica Solar Project								
Workers	10	20	10	0	10	0	10	10
Delivery Trucks	3	6	2	2	4	1	1	2
Arica Solar Project Total		26	12	2	14	1	11	12
Victory Pass Solar Project								
Workers	10	20	10	0	10	0	10	10
Delivery Trucks	3	6	2	2	4	1	1	2
Victory Pass Solar Project Total		26	12	2	14	1	11	12
Oberon Solar								
Workers	10	20	10	0	10	0	10	10
Maintenance and Deliveries	3	6	2	2	4	1	1	2
Oberon Solar Project Total		26	12	2	14	1	11	12
Sapphire Solar Project								
Sapphire Solar Project Total		26	12	2	14	1	11	12
OAP Total		104	48	8	56	4	44	48

Cumulative Projects O&M Trips

			AM	AM	AM																		
			PM	PM	PM																		
AM	PM						AM	PM															
AM	PM						AM	PM															
AM	PM						AM	PM															
			AM	AM	AM																		
			PM	PM	PM																		

AM PEAK: 48 IN / 8 OUT
PM PEAK: 4 IN / 44 OUT

			0	0	4																		
			0	0	19																		
32	7						0	0															
0	0						0	0															
0	0						0	0															
			0	0	0																		
			0	0	0																		

			10	4	0																		
			30	19	0																		
0	0						20	3															
0	0						0	0															
0	0						0	0															
			0	32	0																		
			0	7	0																		

			0	9	0																		
			0	26	0																		
0	0						0	0															
0	0						0	0															
0	0						5	23															
			0	27	25																		
			0	7	3																		

			0	6	0																		
			0	17	0																		
0	0						0	0															
0	0						0	0															
3	9						0	0															
			9	18	0																		
			2	5	0																		

			0	3	0																		
			0	8	0																		
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