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BEAUMONT STATION PROJECT

BEAUMONT, CALIFORNIA

Prepared by:

DAVID EVANS AND ASSOCIATES INC.

FINAL REPORT
MARCH 7, 2019

DAVID EVANS AND ASSOCIATES INC.

March 7, 2019 Job No. SIRW0000-0002

Mr. Tony Dehbozorgi
Pacific Oil
886 Oak Valley Parkway
Beaumont, CA

RE: DRAFT TRAFFIC IMPACT ANALYSIS – BEAUMONT STATION PROJECT– BEAUMONT, CALIFORNIA

Dear Mr. Dehbozorgi,

David Evans and Associates, Inc. is pleased to submit this Final Traffic Impact Analysis report for the proposed Beaumont Station development project in the City of Beaumont.

The report evaluates potential project-specific traffic impacts and recommends traffic improvements if any impacts are determined to be significant. The report also evaluates the impacts of overall growth in development to determine if the proposed project, cumulatively with other development, contributes to significant impacts. The report has been prepared in coordination with the City of Beaumont Engineering Department who approved the scope of work prior to preparation of this report. The analysis and methods employed in the report comply with California Environmental Quality Act (CEQA) requirements.

We are pleased to have been of assistance to you in processing and obtaining approval for the project. If you have any questions or comments, please feel free to contact me at 760-524-9115.

Respectfully submitted,

David Evans and Associates, Inc.



Robert A. Kilpatrick, P.E., T.E.
Senior Project Manager / Senior Associate

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1 INTRODUCTION

This report identifies the traffic impacts and presents recommendations for access and traffic mitigation for the proposed Beaumont Station Project located at the northwest corner of Oak Valley Parkway and Golf Club Drive in the City of Beaumont. The project, identified as Beaumont Station Project, consists of a Gas Station with eight (8) fuel pumps (16 fueling stations), a 3,500 square foot (sq. ft.) convenience store (including 1,000 sq. ft. quick serve restaurant) with an attached 1,700 sq. ft. drive-thru restaurant, 6,250 sq. ft. retail building, and 2,000 sq. ft restaurant (with drive-thru), on 2.3-acres in the City of Beaumont east of Interstate 10 (I-10) and north of Oak Valley Parkway. The facility will be accessible from driveways on Oak Valley Parkway and Oak Valley Village Circle. *Figure 1* illustrates the vicinity map, and *Figure 2* illustrates the proposed project site plan.

The intent of this Traffic Impact Analysis (TIA) report is to identify and recommend mitigation for significant impacts caused by, or contributed to, by the proposed project under the following study scenarios:

- Existing Conditions
- Existing plus Project Conditions
- Background Conditions (Opening Day)
- Background plus Project Conditions (Opening Day)
- Future Conditions
- Future plus Project Conditions

The Existing Condition analysis is based on traffic counts collected in September 2018 and reflects the current conditions of the project area.

The Existing plus Project Conditions addresses anticipated impacts if the project were completed today. This analysis identifies impacts solely caused by the proposed project and do not consider ambient growth in the project vicinity.

The Background Conditions (Opening Day) addresses impacts due to ambient growth in traffic up to the project buildout year of 2019 within the study area. Applied ambient growth is two percent of the existing traffic volumes annually.

The Background plus Project Conditions (Opening Day) addresses impacts due to ambient growth in traffic up to the project buildout year of 2019 along with the project traffic.

The Future Conditions addresses impacts due to ambient growth and other area projects up to the Buildout Year of 2040 within the study area. The growth in traffic reflecting the year 2040 is two percent annual rate of growth applied to existing traffic (Year 2018) volumes. The application of the two percent annual growth rate to existing traffic (Year 2018) volumes results in a 44% growth in existing traffic (Year 2018) volumes. The Future Conditions Year 2040 considers a trip distribution utilizing existing intersections included in the study area.

The Future plus Project Conditions addresses the ambient growth and other area projects with the development of the project up to the Buildout Year of 2040. The Future Conditions Year 2040 plus Project considers a trip distribution utilizing existing intersections included in the study area.



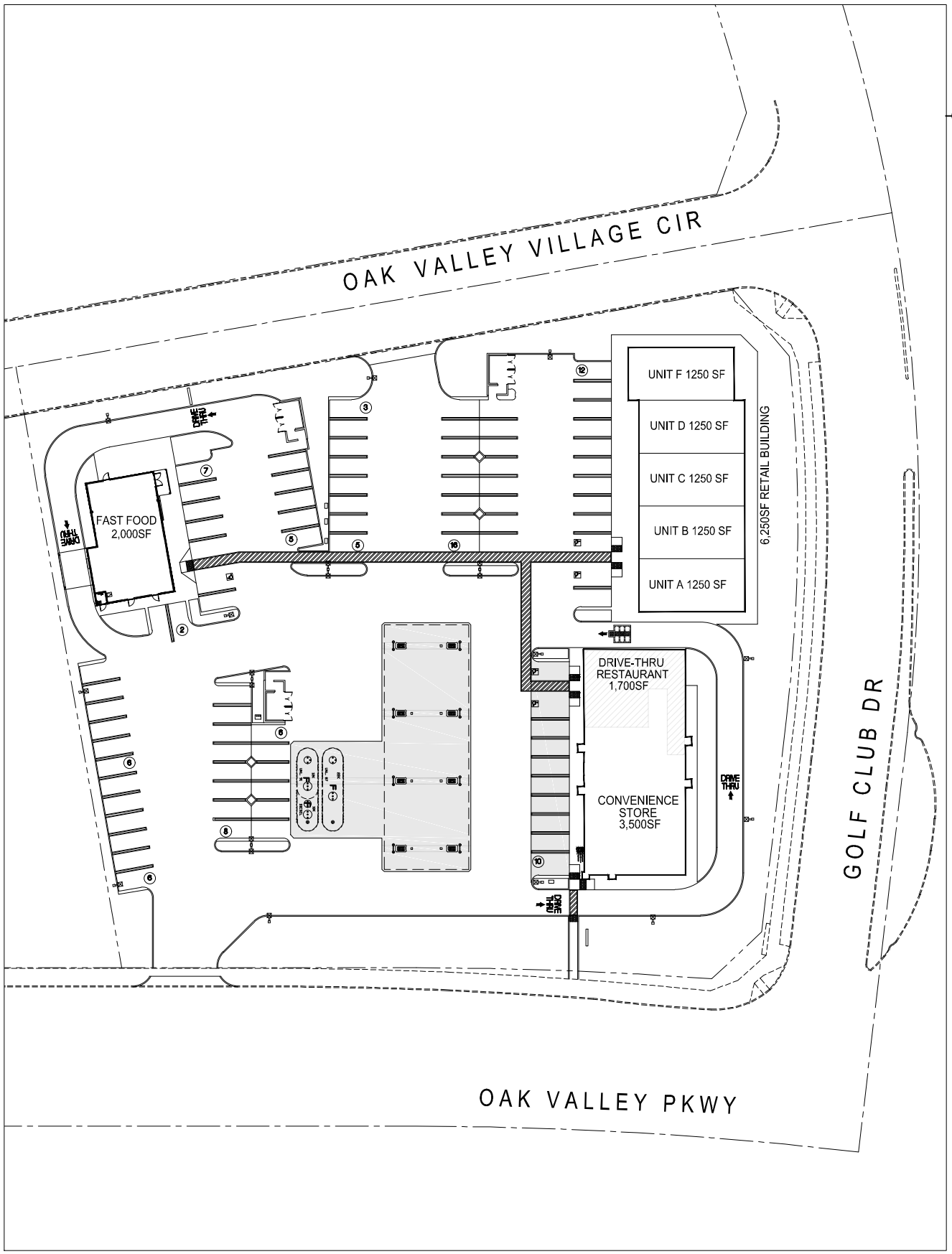
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FIGURE 1: VICINITY MAP
BEAUMONT STATION PROJECT
BEAUMONT, CALIFORNIA

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FIGURE 2: SITE PLAN
BEAUMONT STATION PROJECT
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2 EXISTING CONDITIONS

Currently the project site is vacant and undeveloped land. The proposed project is bounded to the north by Oak Valley Village Cir, to the east by Golf Club Dr, to the west by undeveloped land and I-10 Freeway Westbound Ramps, and to the south by Oak Valley Pkwy.

Local and Major Roadways

Oak Valley Parkway is a major east-west road in the project area. Oak Valley Pkwy provides direct access to the project site. As per the City of Beaumont General Plan Circulation Plan, Oak Valley Pkwy is classified as an urban arterial between I-10 Eastbound Freeway Ramps and Oakview Dr. As per the City of Beaumont Engineering and Traffic Surveys 2012, the posted speed limit on Oak Valley Pkwy is 45 mph from I-10 Freeway to Beaumont Avenue. The posted speed limit within the project area is 45 mph.

Golf Club Drive is primarily a north-south roadway in the project area. As per the City of Beaumont General Plan Circulation Plan, Golf Club Dr is classified as a major roadway between Oak Valley Pkwy and Solera Entrance. The posted speed limit within the project area is 25 mph.

Oak Valley Village Circle is a local roadway in the project area. Oak Valley Village Cir provides direct access to the project site.

I-10 is a major highway (6 lanes; three lanes in both directions) generally running east-west. I-10 provides regional access to the project site through an interchange with Oak Valley Pkwy.

Access to the project is from a driveway (Project Driveway “A”) on Oak Valley Pkwy and a secondary driveway (Project Driveway “B”) on Oak Valley Village Cir, as illustrated in *Figure 2.* The project would potentially impact four (4) existing intersections and two (2) future intersection within the study area:

1. Oak Valley Parkway and I-10 Eastbound Ramps
2. Oak Valley Parkway and I-10 Westbound Ramps
3. Oak Valley Parkway and Golf Club Drive
4. Golf Club Drive and Oak Valley Village Circle
5. Oak Valley Parkway and Project Driveway A (Future Intersection)
6. Oak Valley Village Circle and Project Driveway B (Future Intersection)

The intersection of Oak Valley Parkway and Golf Club Drive is signalized. The intersections of Oak Valley Parkway and I-10 Eastbound Ramps, Oak Valley Parkway and I-10 Westbound Ramps, and Golf Club Drive and Oak Valley Village Circle are all-way or side-street stop controlled.

Existing Traffic Volumes

Figure 3 provides the existing intersection traffic volumes. Newport Traffic Studies (NTS) conducted AM (7:00-9:00 AM) and PM (4:00-6:00 PM) peak period turn movement counts in September 2018.

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Capacity Analysis Methodologies

Intersection capacity analyses were conducted using Synchro software (**1**), which implements the methods of the Highway Capacity Manual, 6th Edition (HCM 6) used in this report. The intersection capacity analyses utilize existing intersection geometrics and existing and forecasted traffic volumes in analyzing AM and PM peak hour intersection operating conditions. The traffic analysis methodology concepts presented in Chapters 19, 20, and 21 of the Highway Capacity Manual (HCM 6) (**2**) were utilized to calculate intersection Level of Service (LOS) based on the average control delay (in seconds per vehicle) of vehicles utilizing intersections. *Table 2-1* provides the HCM 6 LOS thresholds for signalized intersections. *Table 2-2* provides the HCM 6 LOS thresholds for two way stop controlled (TWSC). *Table 2-3* for all way stop controlled (AWSC) intersections.

Signalized Intersections

The analysis determines a LOS that quantitatively describes the operating characteristics of signalized intersections. *Table 2-1* provides LOS thresholds for signalized intersections as provided in the HCM 6 Chapter 19.

Table 2-1: HCM 6 – LOS Criteria for Signalized Intersections

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio[a]	
	≤1.0	>1.0
≤ 10	A	F
> 10 - 20	B	F
> 20 - 35	C	F
> 35 - 55	D	F
> 55 - 80	E	F
> 80	F	F

Note: [a]For approach-based and intersectionwide assessments, LOS is defined solely by control delay.
Source: Highway Capacity Manual 6th Edition, Exhibit 19-8.

Unsignalized Intersections

The LOS for a TWSC intersection is determined by the computed or measured control delay. The LOS is determined for each minor-street movement (or shared movement), as major-street left turns, by using the criteria provided in *Table 2-2* referenced from HCM 6 LOS thresholds for TWSC as provided in the HCM 6 Chapter 20.

Table 2-2: HCM 6 – LOS Criteria for TWSC

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.

1 Trafficware Ltd, version 10.
2 Transportation Research Board, Washington D.C., 2010.

The analysis determines a LOS that quantitatively describes the operating characteristics of AWSC intersections. Table 2-3 provides LOS thresholds for AWSC intersections as provided in the HCM 6 Chapter 21.

Table 2-3: HCM 6 – LOS Criteria for AWSC

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio[a]	
	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: [a]For approach-based and intersectionwide assessments, LOS is defined solely by control delay.
Source: Highway Capacity Manual 6th Edition, Exhibit 21-8.

Impact Criteria and Thresholds

The City of Beaumont General Plan Circulation Element Policy 10 identifies the minimum LOS "D" as its target LOS standard.

Existing Traffic Analysis

The existing intersection capacity analysis uses existing intersection geometrics and existing AM and PM peak hour traffic counts to determine level of service. *Table 2-4* and *Appendix B* provide the results of the analysis. *Figure 4* illustrates the existing intersection geometrics utilized in the capacity analysis.

Table 2-4: Intersection Capacity Analysis – Existing Conditions

	Intersection	AM Peak Hour		PM Pear Hour	
		Delay(1)	LOS(2)	Delay(1)	LOS(2)
1	Oak Valley Pkwy and I-10 EB Ramps (3)	>80	F	60.3	F
	With TUMF Mitigation	15.5	B	13.6	B
2	Oak Valley Pkwy and I-10 WB Ramps (3)	>80	F	>80	F
	With TUMF Mitigation	18.9	B	19.6	B
3	Oak Valley Pkwy and Golf Club Dr	19.2	B	19.2	B
4	Golf Club Dr and Oak Valley Village Cir (3)	10.0	B	9.7	A

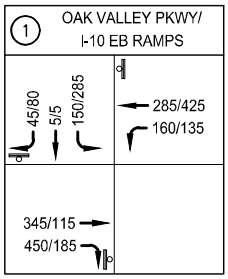
>80 – Intersection Delay reported higher than the LOS F threshold of 80 seconds
(1) Delay – In seconds per vehicle
(2) LOS – Level of Service
(3) Stop controlled intersection

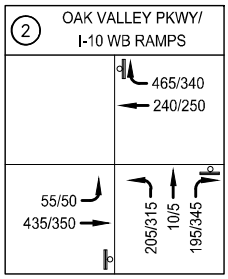
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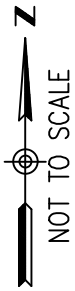
As presented in *Table 2-4,* under Existing Conditions, the intersections of Oak Valley Parkway and I-10 EB Ramps and Oak Valley Parkway and I-10 WB Ramps are currently operating at LOS F. The West Riverside Council of Governments (WRCOG) 2016 Nexus study has identified the Oak Valley Parkway and I-10 Interchange as a new interchange or interchange modification on the Transportation Uniform Mitigation Fee Program (TUMF) as provided in *Appendix C.*

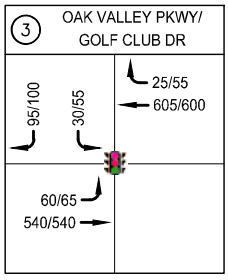
As such the mitigations of signalization and widening to accommodate turn lanes identified for the intersections of Oak Valley Parkway and I-10 EB Ramps and Oak Valley Parkway and I-10 WB Ramps are TUMF funded improvements.

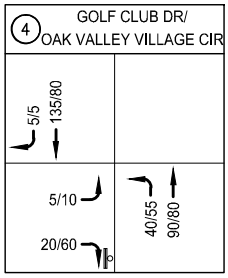


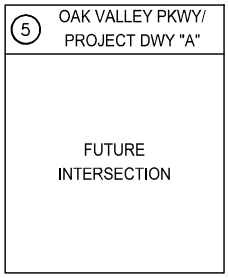


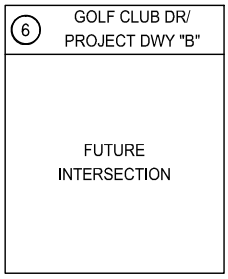












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XX/XX - AM/PM TRAFFIC VOLUME (ROUNDED TO NEARTEST 5

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

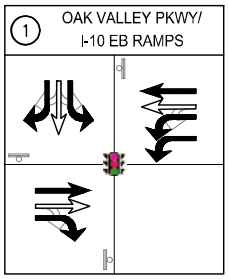
- STOP CONTROLLED APPROACH

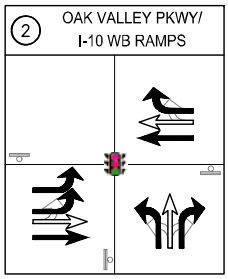
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FIGURE 3: EXISTING TRAFFIC VOLUMES
BEAUMONT STATION PROJECT
BEAUMONT, CALIFORNIA

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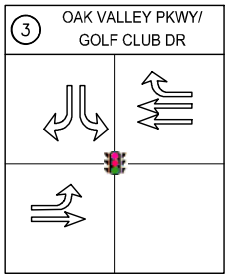


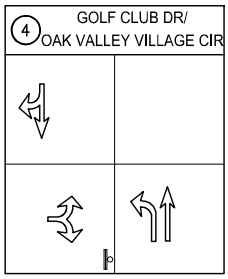


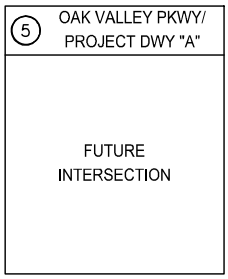


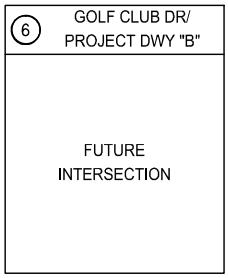
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LEGEND

- EXISTING GEOMETRICS
- TUMF MITIGATION GEOMETRICS
- TO BE REMOVED GEOMETRICS
- (#) - STUDY INTERSECTIONS
- SIGNALIZED INTERSECTION
- STOP CONTROLLED APPROACH

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FIGURE 4: EXISTING GEOMETRICS
BEAUMONT STATION PROJECT
BEAUMONT, CALIFORNIA

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3 EXISTING PLUS PROJECT CONDITIONS

The Existing plus Project Conditions scenario identifies project's impacts if it were built today. This analysis identifies impacts solely caused by the proposed project and do not consider ambient growth in the project vicinity.

Project Trip Generation

To identify potential traffic impacts, trip generation factors are applied to the proposed land uses to estimate project vehicle trips. The generation factors for the Gas Station with Convenience Market (ITE 945), Fast Food with Drive Thru (ITE 934), and Shopping Center (ITE 820) are from the 10th Edition of the Institute of Transportation Engineers trip generation report. An internal trip reduction factor of 10% was applied to all the land uses.

Due to the nature of the land use a Pass-By Trip factor (trips passing by the project on local streets) were applied to the trip generation by land use. The Pass-By Trip factors are from the 10th Edition of the Institute of Transportation Engineers trip generation report.

Table 3-1 summarizes the estimated trip generation for the project site during the AM (7-9 AM) peak and PM (4-6 PM) peak periods. The project is anticipated to generate 2,216 primary daily, 142 primary a.m. peak hour, and 157 primary p.m. peak hour trips

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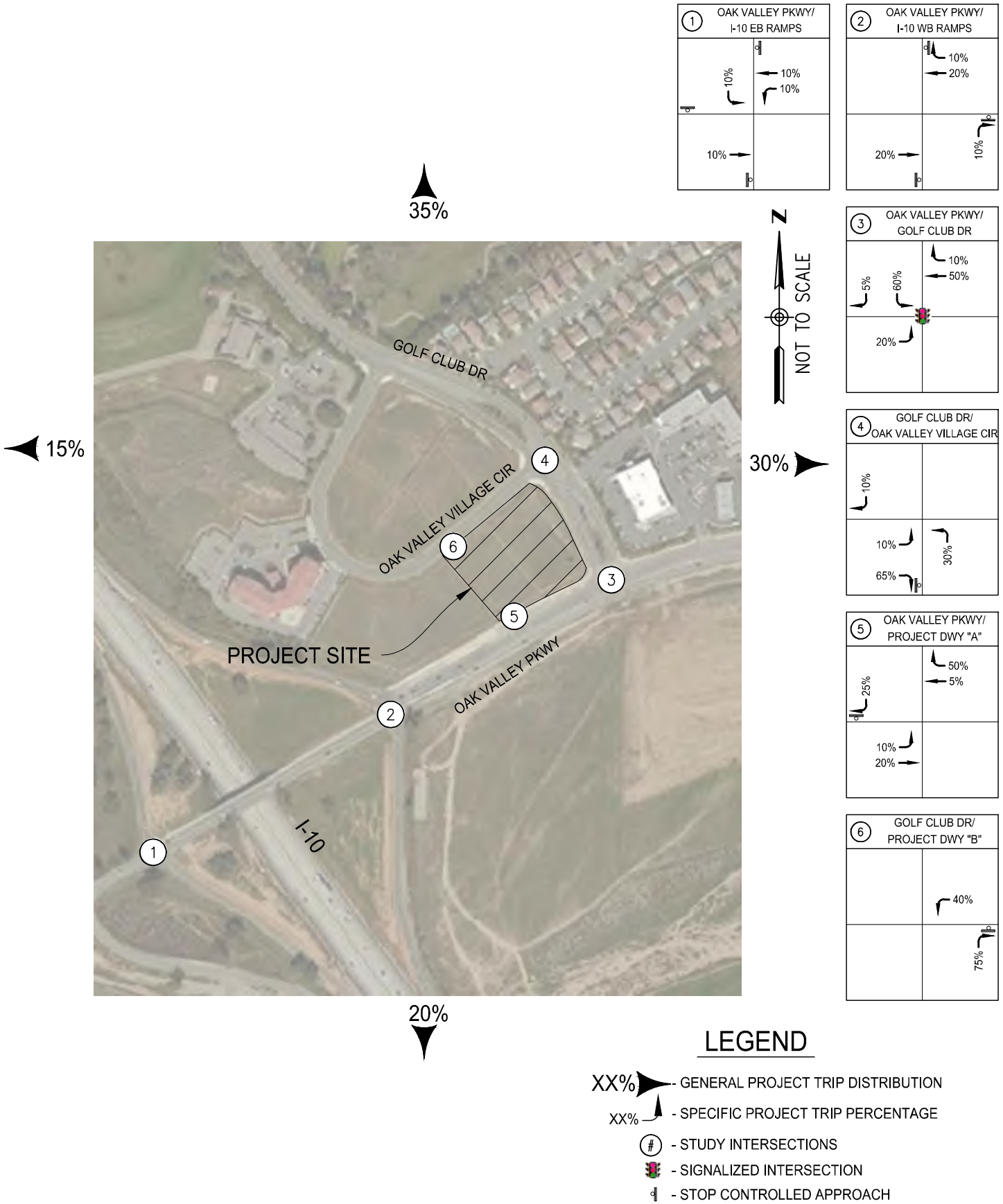
Table 3-1: Project Trip Generation

	Land Use	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
1	**Gas Station with Convenience Store**							
	(ITE 945) Vehicle Fueling Positions	205.36	6.36	6.11	12.47	7.13	6.86	13.99
	16 Fueling Positions	3,286	102	98	200	114	110	224
	Internal Trip Adjustment (10%)	329	10	10	20	11	11	22
	Adjusted Total Trips	2,957	92	88	180	103	99	202
	Pass-By Trips (62%, 56%)	1,745	57	54	111	58	55	113
2	**Fast Food Restaurant with Drive-Through Window**							
	(ITE 934) Per 1,000 Sq. Ft. GLA	470.95	20.50	19.69	40.19	16.99	15.68	32.67
	1,700 Square Feet (Attached to Convenience Store)	801	35	33	68	29	27	56
	Internal Trip Adjustment (10%)	80	4	3	7	3	3	6
	Adjusted Total Trips	721	31	30	61	26	24	50
	Pass-By Trips (49%, 50%)	357	15	15	30	13	12	25
3	**Fast Food Restaurant with Drive-Through Window**							
	(ITE 934) Per 1,000 Sq. Ft. GLA	470.95	20.50	19.69	40.19	16.99	15.68	32.67
	2,000 SF Gross Floor Area (Close to Shopping Center)	942	41	39	80	34	31	65
	Internal Trip Adjustment (10%)	94	4	4	8	3	3	6
	Adjusted Total Trips	848	37	35	72	31	28	59
	Pass-By Trips (49%, 50%)	420	18	17	35	15	14	29
4	**Shopping Center**							
	(ITE 820) Per 1,000 Sq. Ft. GLA	37.75	0.58	0.36	0.94	1.83	1.98	3.81
	6,250 SF Gross Floor Area (Separate Pad)	236	4	2	6	11	12	23
	Internal Trip Adjustment (10%)	24	1	0	1	1	1	2
	Adjusted Total Trips	212	3	2	5	10	11	21
	Pass-By Trips (0%, 34%)	0	0	0	0	4	4	8
	Sub-Total Trips	**5,264**	**182**	**172**	**354**	**188**	**180**	**368**
	Internal Trip Reduction	**526**	**19**	**17**	**36**	**18**	**18**	**36**
	Adjusted Trips	**4,738**	**163**	**155**	**318**	**170**	**162**	**332**
	Pass-By Trips	**2,522**	**90**	**86**	**176**	**90**	**85**	**175**
	Primary Site Trips	**2,216**	**73**	**69**	**142**	**80**	**77**	**157**

Source: "Trip Generation Manual, Institute of Transportation Engineers", 10th Edition

Project Trip Distribution and Assignment

The project trips are distributed by direction and assigned to the local network of streets. *Figure 5* illustrates the distribution of the primary project trips. *Figure 6*, *Figure 7*, and *Figure 8* illustrate the primary project trips, pass-by project trips, and total project trips respectively.

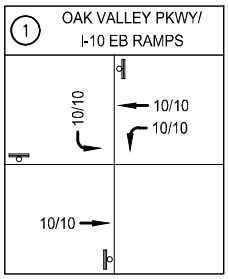


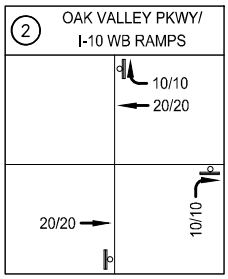
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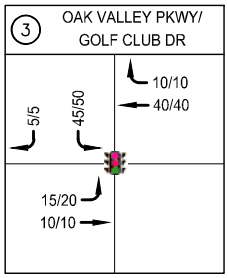
FIGURE 5: PRIMARY PROJECT TRIP DISTRIBUTION
BEAUMONT STATION PROJECT
BEAUMONT, CALIFORNIA

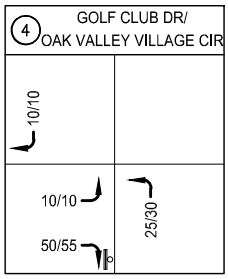
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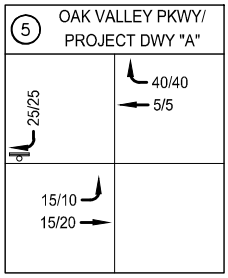


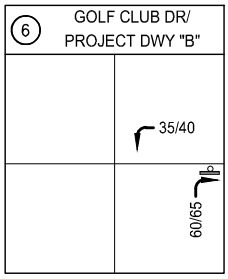


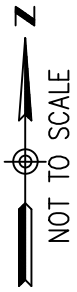












PRIMARY TRIPS

AM PEAK PERIOD - 73 IN / 69 OUT
PM PEAK PERIOD - 80 IN / 77 OUT

LEGEND

XX/XX - AM/PM PROJECT TRIP
(#) - STUDY INTERSECTIONS
- SIGNALIZED INTERSECTION
- STOP CONTROLLED APPROACH

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FIGURE 6: PRIMARY PROJECT TRIPS
BEAUMONT STATION PROJECT
BEAUMONT, CALIFORNIA

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Last Opened: Mar 07, 2019 - 10:27am by: Tim



N

NOT TO SCALE

1 OAK VALLEY PKWY/ I-10 EB RAMPS

2 OAK VALLEY PKWY/ I-10 WB RAMPS

3 OAK VALLEY PKWY/ GOLF CLUB DR
30/65

4 GOLF CLUB DR/ OAK VALLEY VILLAGE CIR
30/65

5 OAK VALLEY PKWY/ PROJECT DWY "A"
65/30
-65/-30
65/30
30/65
-30/-65

6 GOLF CLUB DR/ PROJECT DWY "B"
30/65

PASS-BY PROJECT TRIPS

AM PEAK PERIOD - 90 IN / 86 OUT
PM PEAK PERIOD - 90 IN / 85 OUT

LEGEND

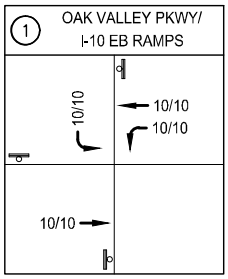
XX/XX - AM/PM PROJECT TRIP
(#) - STUDY INTERSECTIONS
- SIGNALIZED INTERSECTION
- STOP CONTROLLED APPROACH

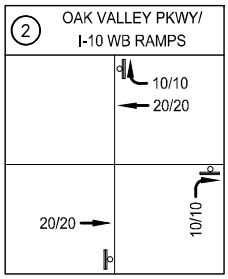
DAVID EVANS AND ASSOCIATES INC.

FIGURE 7: PASS-BY PROJECT TRIPS
BEAUMONT STATION PROJECT
BEAUMONT, CALIFORNIA

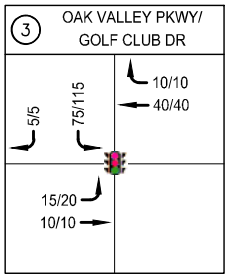
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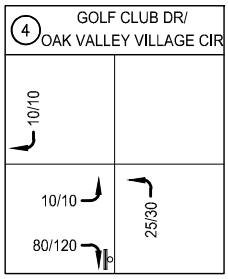


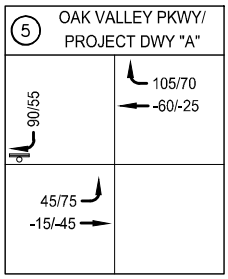


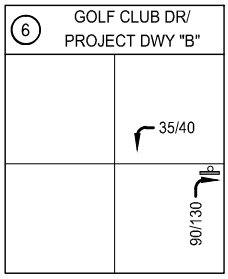












TOTAL PROJECT TRIPS

AM PEAK PERIOD - 163 IN / 155 OUT
PM PEAK PERIOD - 170 IN / 162 OUT

LEGEND

XX/XX - AM/PM PROJECT TRIP
(#) - STUDY INTERSECTIONS
- SIGNALIZED INTERSECTION
- STOP CONTROLLED APPROACH

DAVID EVANS AND ASSOCIATES INC.

FIGURE 8: TOTAL PROJECT TRIPS
BEAUMONT STATION PROJECT
BEAUMONT, CALIFORNIA

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Existing plus Project Traffic Analysis

The intersection capacity analysis of Existing plus Project conditions utilized existing intersection geometrics and the AM and PM peak hour traffic volumes shown in *Figure 9*. *Figure 10* illustrates the existing plus project condition geometrics. *Table 3-2* and *Appendix B* provide the results of the analysis.

Table 3-2: Intersection Capacity Analysis – Existing plus Project Conditions

Intersection		AM Peak Hour		PM Pear Hour	
		Delay(1)	LOS(2)	Delay(1)	LOS(2)
1	Oak Valley Pkwy and I-10 EB Ramps (3) With TUMF Mitigation	>80 16.0	F B	72.1 13.7	F B
2	Oak Valley Pkwy and I-10 WB Ramps (3) With TUMF Mitigation	>80 18.2	F B	>80 22.6	F C
3	Oak Valley Pkwy and Golf Club Dr	19.3	B	19.7	B
4	Golf Club Dr and Oak Valley Village Cir (3)	10.8	B	11.0	B
5	Oak Valley Pkwy and Project Driveway A (3)	14.6	B	16.4	C
6	Oak Valley Village Cir and Project Driveway B (3)	8.8	A	9.5	A

>80 – Intersection Delay reported higher than the LOS F threshold of 80 seconds
(1) Delay – In seconds per vehicle
(2) LOS – Level of Service
(3) Stop controlled intersection

Source: David Evans and Associates, Inc.

As presented in *Table 3-2,* all study intersections under Existing plus Project Conditions continue to operate at an acceptable LOS with the existing geometrics and anticipated TUMF mitigations.

Queuing Analysis

The estimated queue length, available storage length, and proposed storage lengths for the turn pockets are provided in *Table 3-3* each driveway.

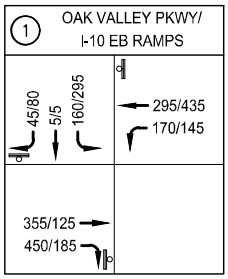
Table 3-3: Queuing Analysis – Existing plus Project Conditions

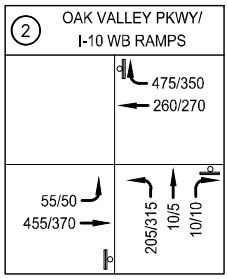
Intersection/Movement			Storage Distance	AM 95th% Queue	PM 95th% Queue
5	Oak Valley Pkwy and Project Driveway A	EBLT		118	132
		WBT		-	17
		WBT		-	-
		WBTR		-	-
		SBR	40	**55**	35
6	Oak Valley Village Cir and Project Driveway B	EBTR		-	-
		WBLT		-	-
		NBR	40	**64**	**64**

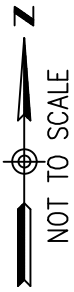
(-) No queue length was reported
95th %– 95th Percentile Queue provided in feet rounded up to the nearest 25', Length of vehicle
Source: **David Evans and Associates, Inc.**

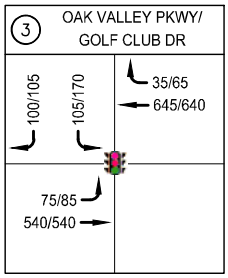
As presented in *Table 3-3* the anticipated maximum queue lengths are provided in bold by intersection for each condition.

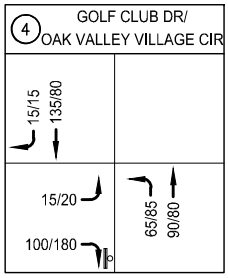


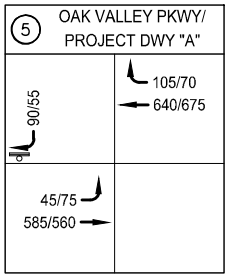


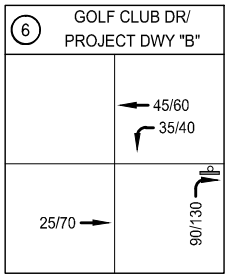












LEGEND

XX/XX - AM/PM TRAFFIC VOLUME (ROUNDED TO NEARTEST 5

(#) - STUDY INTERSECTIONS

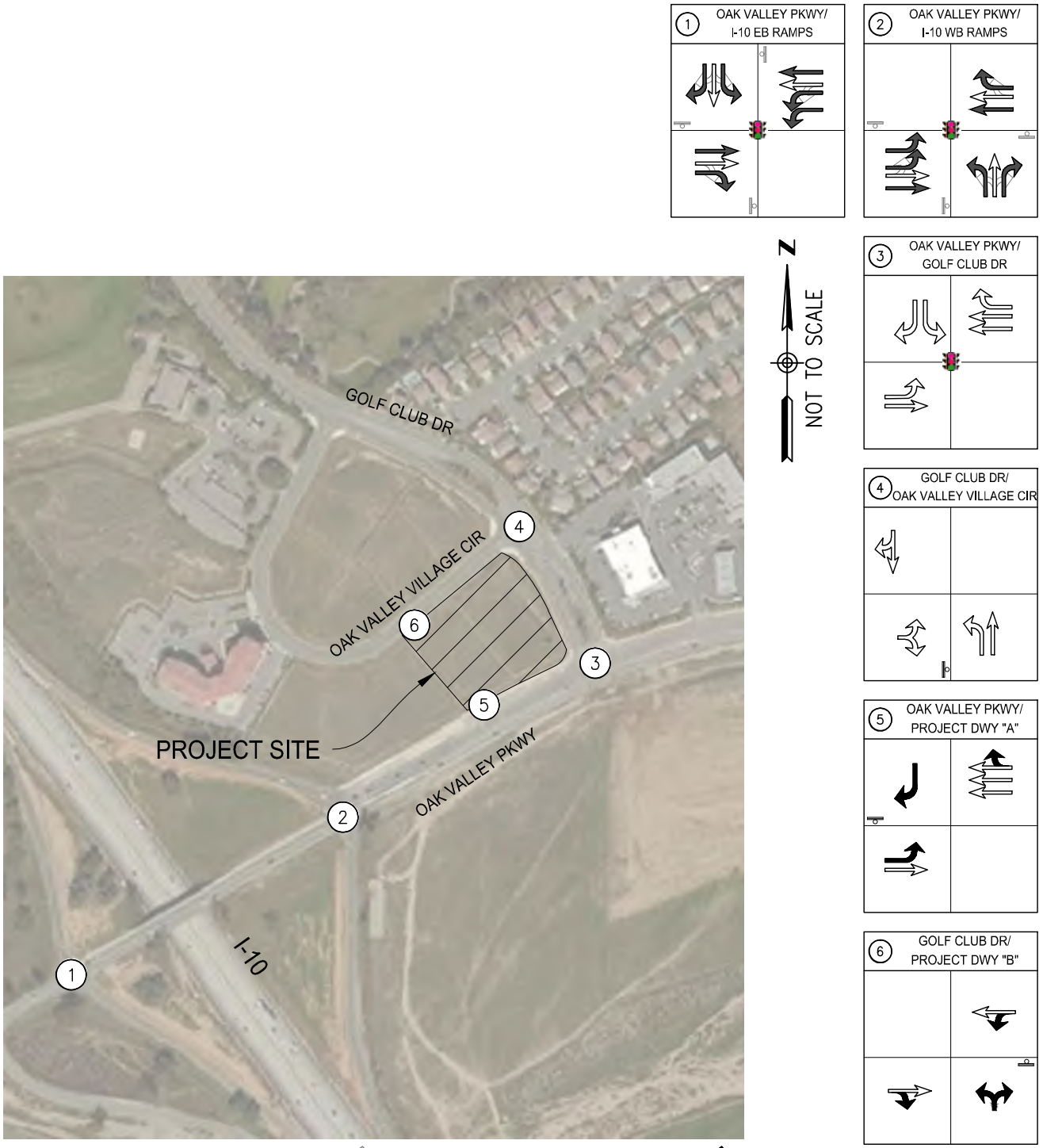
- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

DAVID EVANS AND ASSOCIATES INC.

FIGURE 9: EXISTING PLUS PROJECT TRAFFIC VOLUMES
BEAUMONT STATION PROJECT
BEAUMONT, CALIFORNIA

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FIGURE 10: EXISTING PLUS PROJECT GEOMETRICS
BEAUMONT STATION PROJECT
BEAUMONT, CALIFORNIA

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4 BACKGROUND TRAFFIC CONDITIONS – YEAR 2019

The Background Conditions scenario evaluates impacts due to ambient growth in traffic up to the project buildout year of 2019. Typically, ambient growth in traffic ranges from 1% to 2% annually—the ambient growth in traffic in this report uses a 2% annual rate of growth applied to existing traffic volumes. The Background Conditions does not consider the traffic generated by other projects within the study area.

Background Traffic Analysis

The Background Conditions intersection capacity analysis utilized existing intersection geometrics and the projected AM and PM peak hour traffic shown in *Figure 11*. *Table 4-1* and *Appendix B* provides the results of the analysis.

Table 4-1: Intersection Capacity Analysis – Background Conditions

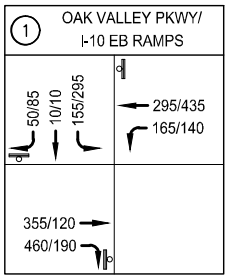
Intersection		AM Peak Hour		PM Pear Hour	
		Delay(1)	LOS(2)	Delay(1)	LOS(2)
1	Oak Valley Pkwy and I-10 EB Ramps (3)	>80	F	71.8	F
	With TUMF Mitigation	15.9	B	13.8	B
2	Oak Valley Pkwy and I-10 WB Ramps (3)	>80	F	>80	F
	With TUMF Mitigation	18.3	B	20.7	C
3	Oak Valley Pkwy and Golf Club Dr	19.3	B	19.4	B
4	Golf Club Dr and Oak Valley Village Cir (3)	10.3	B	10.0	B

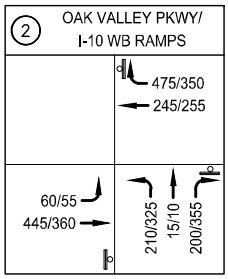
(1) Delay – In seconds per vehicle
(2) LOS – Level of Service
(3) Stop controlled intersection

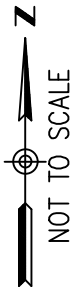
Source: David Evans and Associates, Inc.

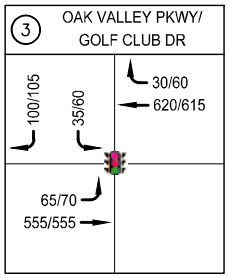
As presented in *Table 4-1,* all study intersections under Background Conditions continue to operate at an acceptable LOS with the existing geometrics and anticipated TUMF mitigations.

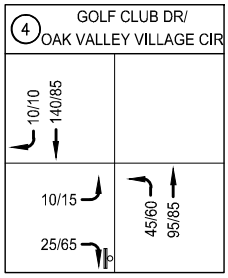


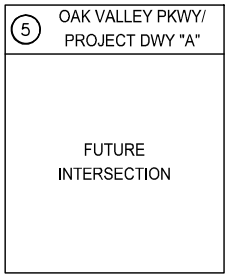


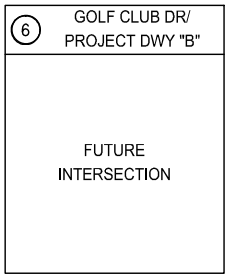












LEGEND

XX/XX — AM/PM TRAFFIC VOLUME (ROUNDED TO NEARTEST 5

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

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FIGURE 11: BACKGROUND TRAFFIC VOLUMES
BEAUMONT STATION PROJECT
BEAUMONT, CALIFORNIA

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Last Opened: Mar 07, 2019 - 10:31am by: Tim

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5 PROJECT CONDITIONS

The proposed project is anticipated to open in the Year 2019. To analyze the project impacts, the inclusion of traffic generated by regional ambient growth and other area projects within the study area is necessary. The project trips were added to the Background Condition volumes to produce the Project Condition volumes.

Project Traffic Analysis

The Project Condition Traffic Volumes are illustrated in *Figure 12.* Intersection capacity analysis for the signalized and un-signalized intersections utilized the existing and project recommended geometrics and the methodologies described in the Capacity Analysis Methodologies. *Table 5-1* represents the LOS for the critical movement.

Table 5-1: Intersection Capacity Analysis – Project Conditions

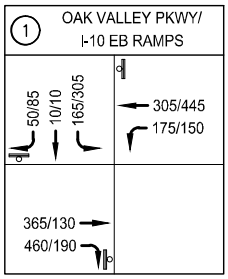
Intersection		AM Peak Hour		PM Pear Hour	
		Delay(1)	LOS(2)	Delay(1)	LOS(2)
1	Oak Valley Pkwy and I-10 EB Ramps (3) With TUMF Mitigation	>80 16.5	F B	>80 13.9	F B
2	Oak Valley Pkwy and I-10 WB Ramps (3) With TUMF Mitigation	>80 18.9	F B	>80 24.2	F C
3	Oak Valley Pkwy and Golf Club Dr	19.4	B	20.0	C
4	Golf Club Dr and Oak Valley Village Cir (3)	11.2	B	11.5	B
5	Oak Valley Pkwy and Project Driveway A (3)	14.9	B	16.9	C
6	Oak Valley Village Cir and Project Driveway B (3)	8.9	A	9.6	A

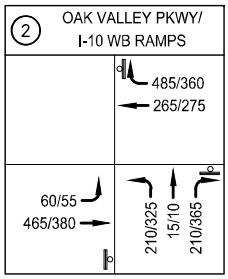
(1) Delay – In seconds per vehicle
(2) LOS – Level of Service
(3) Stop controlled intersection

Source: David Evans and Associates, Inc.

As presented in *Table 5-1,* all study intersections under Project Conditions continue to operate at an acceptable LOS with the existing geometrics and anticipated TUMF mitigations.

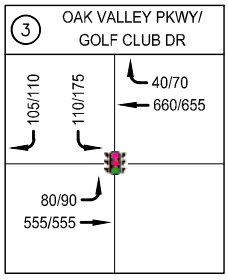


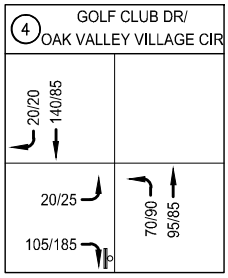


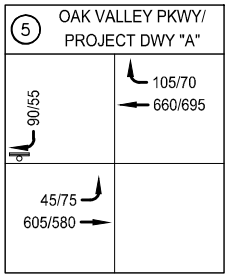


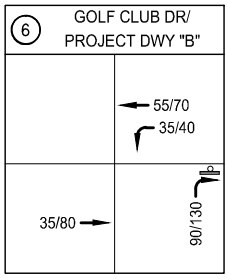


NOT TO SCALE









LEGEND

XX/XX - AM/PM TRAFFIC VOLUME (ROUNDED TO NEARTEST 5

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

DAVID EVANS AND ASSOCIATES INC.

FIGURE 12: PROJECT TRAFFIC VOLUMES
BEAUMONT STATION PROJECT
BEAUMONT, CALIFORNIA

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Last Opened: Mar 07, 2019 - 10:31am by: Tim

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Queuing Analysis

The estimated queue length and available storage length provided in *Table 5-2* each driveway.

Table 5-2: Queuing Analysis –Project Conditions

Intersection/Movement			Storage Distance	AM 95th% Queue	PM 95th% Queue
5	Oak Valley Pkwy and Project Driveway A	EBLT		125	73
		WBT		21	-
		WBT		-	-
		WBTR		24	-
		SBR	40	**64**	42
6	Oak Valley Village Cir and Project Driveway B	EBTR		-	-
		WBLT		10	-
		NBR	40	58	**62**

(-) No queue length was reported
95th %– 95th Percentile Queue provided in feet rounded up to the nearest 25', Length of vehicle
Source: **David Evans and Associates, Inc.**

As presented in *Table 5-2* the anticipated maximum queue lengths are provided in bold by intersection for each condition.

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6 FUTURE YEAR 2040 CONDITIONS

The Future Year 2040 Condition addresses impacts due to ambient growth for the year within the study area. The traffic growth estimates have been calculated using an ambient growth factor. The ambient growth in traffic in this report uses a 2% annual rate of growth applied to existing traffic (Year 2018) volumes. The application of the 2% annual growth rate to existing traffic (Year 2018) volumes results in a 44% growth in existing traffic (Year 2018) volumes.

Future Year 2040 Traffic Analysis

The results of the Future Year 2040 Condition forecasted volumes are illustrated in *Figure 13* and presented in the Turn Movement summary worksheets provided in *Appendix B* of this report. The results of the analysis are shown in *Table 6-1* and provided in *Appendix B*.

Table 6-1: Intersection Capacity Analysis – Background Conditions

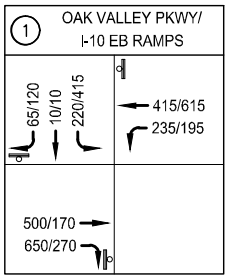
Intersection		AM Peak Hour		PM Pear Hour	
		Delay(1)	LOS(2)	Delay(1)	LOS(2)
1	Oak Valley Pkwy and I-10 EB Ramps (3)	>80	F	>80	F
	With TUMF Mitigation	14.4	B	9.1	A
2	Oak Valley Pkwy and I-10 WB Ramps (3)	>80	F	>80	F
	With TUMF Mitigation	18.1	B	17.1	B
3	Oak Valley Pkwy and Golf Club Dr	20.1	C	20.2	C
4	Golf Club Dr and Oak Valley Village Cir (3)	10.7	B	10.1	B

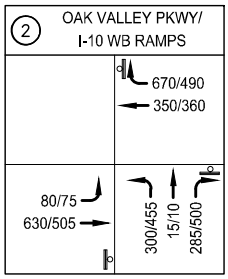
(1) Delay – In seconds per vehicle
(2) LOS – Level of Service
(3) Stop controlled intersection

Source: David Evans and Associates, Inc.

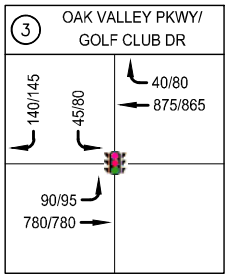
As presented in *Table 6-1,* all study intersections under Future Conditions continue to operate at an acceptable LOS with the existing geometrics and anticipated TUMF mitigations.

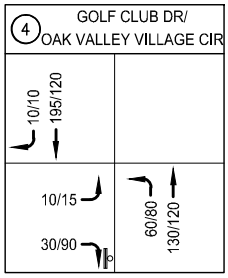


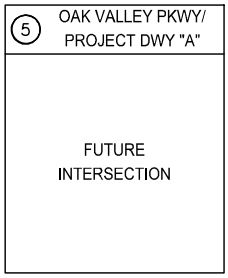


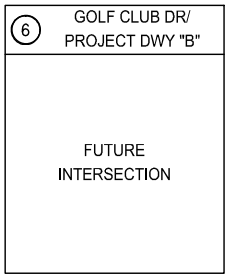












LEGEND

XX/XX — AM/PM TRAFFIC VOLUME (ROUNDED TO NEARTEST 5

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

DAVID EVANS AND ASSOCIATES INC.

FIGURE 13: FUTURE TRAFFIC VOLUMES
BEAUMONT STATION PROJECT
BEAUMONT, CALIFORNIA

Drawing Name: P:\SIS\RW00000002\0409\CAD\TTE\EXHIBITS\Study\Figure 13.dwg
Last Opened: Mar 07, 2019 - 10:32am by: Tim

DAVID EVANS AND ASSOCIATES INC.

Future Year 2040 plus Project Traffic Analysis

Intersection capacity analysis for Future Conditions Year 2040 plus Project Condition was performed using the methodology presented in *Chapter 2.* The results of the analysis are shown in *Table 6-2* and provided in *Appendix B.*

Table 6-2: Intersection Capacity Analysis – Future Year 2040 plus Project Conditions

Intersection		AM Peak Hour		PM Pear Hour	
		Delay(1)	LOS(2)	Delay(1)	LOS(2)
1	Oak Valley Pkwy and I-10 EB Ramps (3) With TUMF Mitigation	>80 22.0	F C	>80 15.7	F B
2	Oak Valley Pkwy and I-10 WB Ramps (3) With TUMF Mitigation	>80 24.9	F C	>80 27.8	F C
3	Oak Valley Pkwy and Golf Club Dr	20.4	C	20.7	C
4	Golf Club Dr and Oak Valley Village Cir (3)	11.6	B	11.3	B
5	Oak Valley Pkwy and Project Driveway A (3)	16.9	C	18.2	C
6	Oak Valley Village Cir and Project Driveway B (3)	8.8	A	9.4	A

(1) Delay – In seconds per vehicle
(2) LOS – Level of Service
(3) Stop controlled intersection

Source: David Evans and Associates, Inc.

As presented in *Table 6-2,* all study intersections under Future plus Project Conditions continue to operate at an acceptable LOS with the existing geometrics and anticipated TUMF mitigations.

Queuing Analysis

The estimated queue length, available storage length, and proposed storage lengths for the turn pockets are provided in *Table 6-3* each driveway.

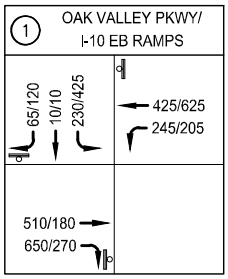
Table 6-3: Queuing Analysis – Future Plus Project Conditions

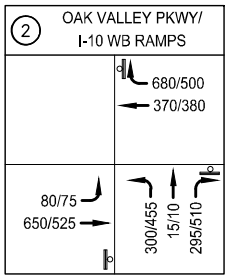
Intersection/Movement			Storage Distance	AM 95th% Queue	PM 95th% Queue
5	Oak Valley Pkwy and Project Driveway A	EBLT		218	233
		WBT		253	48
		WBT		303	27
		WBTR		306	23
		SBR	40	**82**	39
6	Oak Valley Village Cir and Project Driveway B	EBTR		56	-
		WBLT		-	16
		NBR	40	63	**72**

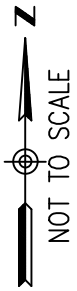
(-) No queue length was reported
95th %– 95th Percentile Queue provided in feet rounded up to the nearest 25', Length of vehicle
Source: **David Evans and Associates, Inc.**

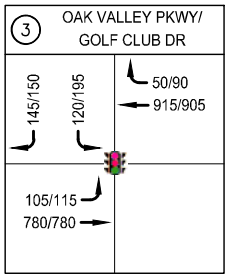
As presented in *Table 6-3* the anticipated maximum queue lengths are provided in bold by intersection for each condition.

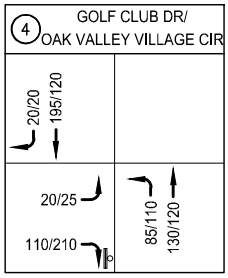


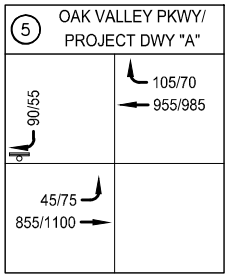


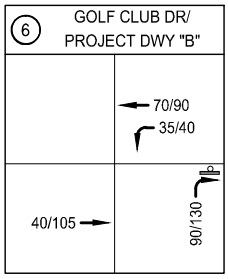












LEGEND

XX/XX - AM/PM TRAFFIC VOLUME (ROUNDED TO NEARTEST 5

(#) - STUDY INTERSECTIONS

- SIGNALIZED INTERSECTION

- STOP CONTROLLED APPROACH

DAVID EVANS AND ASSOCIATES INC.

FIGURE 14: FUTURE PLUS PROJECT TRAFFIC VOLUMES BEAUMONT STATION PROJECT BEAUMONT, CALIFORNIA

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Last Opened: Mar 07, 2019 - 10:32am by: Tim

DAVID EVANS AND ASSOCIATES INC.

7 PROJECT SPECIFIC IMPROVEMENTS AND MITIGATION MEASURES

In summary, the proposed project will have negligible impacts that are specifically caused by the addition of project traffic.

Project Specific Improvements

1. Install curb and gutter along the Project Frontage of Oak Valley Parkway, Golf Club Drive, and Oak Valley Village Circle.

2. Construct the Project Driveway A at Oak Valley Parkway as full access in and right turn only out.

3. Construct the Project Driveway B at Oak Valley Village Circle as full access.

4. Construct a raised curb median along Oak Valley Parkway to restrict left turn exiting Project Driveway A.

DAVID EVANS AND ASSOCIATES INC.

8 APPENDICES

Appendix A: Intersection Capacity Analysis Calculations
Appendix B: Queuing Analysis
Appendix C: Transportation Uniform Mitigation Fee Program TUMF

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Appendix A: : Intersection Capacity Analysis Calculations

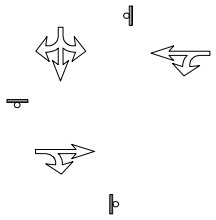
DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	TNM	13-Nov-18	SIRW0000-0002	1 OF 2

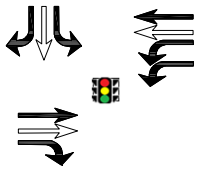
E/W STREET : OAK VALLEY PKWY
N/S STREET : I-10 EB RAMPS
CONDITION : AM PEAK HOUR

INTERSECTION : 1
PROJECTED GROWTH PER YEAR : 2%

CONDITION DIAGRAMS



EXISTING GEOMETRICS



TUMF MITIGATION GEOMETRICS

TURN MOVEMENTS

Condition	Existing Condition	Project Trips	Existing + Project Condition	Ambient Growth	Background Condition	Project Condition	Future Ambient Growth	Future Condition	Future+ Project Condition
Scenario #	1		3		5	7		9	11
OAK VALLEY PKWY									
EB LEFT	0	0	0	0	0	0	0	0	0
EB THRU	345	10	355	10	355	365	155	500	510
EB RIGHT	450	0	450	10	460	460	200	650	650
WB LEFT	160	10	170	5	165	175	75	235	245
WB THRU	285	10	295	10	295	305	130	415	425
WB RIGHT	0	0	0	0	0	0	0	0	0
I-10 EB RAMPS									
NB LEFT	0	0	0	0	0	0	0	0	0
NB THRU	0	0	0	0	0	0	0	0	0
NB RIGHT	0	0	0	0	0	0	0	0	0
SB LEFT	150	10	160	5	155	165	70	220	230
SB THRU	5	0	5	5	10	10	5	10	10
SB RIGHT	45	0	45	5	50	50	20	65	65
TOTALS	**1440**	**40**	**1480**	**50**	**1490**	**1530**	**655**	**2095**	**2135**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET	OF
TURN VOLUME SUMMARY	TNM	13-Nov-18	SIRW0000-0002	2	OF 2

E/W STREET : OAK VALLEY PKWY
N/S STREET : I-10 EB RAMPS
CONDITION : AM PEAK HOUR
PHF : 0.80

NORTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
3	0	3	0	0	0	1	0	0
2	0	1	0	0	2	0	0	0
1	0	0	3	0	1	0	0	0
1	0	1	6	0	1	0	0	0

SOUTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	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

EAST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	2	2	0	2	1	0	3	0
0	2	2	0	3	2	0	0	0
0	0	2	0	2	1	0	2	0
0	0	1	0	1	1	0	2	1

WEST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	1	0	0	1	0	0	1	0
1	1	0	0	1	0	0	1	0
1	4	0	0	2	0	0	1	0
0	2	0	1	0	0	1	0	0

NORTH LEG			SOUTH LEG			EAST LEG			WEST LEG		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
12	0	35	0	0	0	0	63	39	69	64	0
8	0	27	0	0	0	0	102	31	97	70	0
3	0	36	0	0	0	0	56	35	98	73	0
2	0	39	0	0	0	0	45	41	178	119	0

	TRUCK TOTAL	AUTO VOLUMES	TOTALS	ROUNDED TOTALS	TRUCK PERCENTAGE
OAK VALLEY PKWY					
EB LEFT	0	0	**0**	**0**	**0%**
EB THRU	15	326	**341**	**345**	**5%**
EB RIGHT	4	442	**446**	**450**	**5%**
WB LEFT	13	146	**159**	**160**	**10%**
WB THRU	19	266	**285**	**285**	**10%**
WB RIGHT	0	0	**0**	**0**	**0%**
I-10 EB RAMPS					
NB LEFT	0	0	**0**	**0**	**0%**
NB THRU	0	0	**0**	**0**	**0%**
NB RIGHT	0	0	**0**	**0**	**0%**
SB LEFT	9	137	**146**	**150**	**10%**
SB THRU	0	0	**0**	**5**	**0%**
SB RIGHT	17	25	**42**	**45**	**45%**

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: OAK VALLEY PKWY
EAST-WEST STREET: I-10 EB RAMPS
JURISDICTION: BEAUMONT

DATE: 10-17-18

PEAK HOUR: 07:00AM

NORTH LEG

TOTAL: 188

Rt	Thru	Lt	
42		146	Total
16		38	1st
10		30	2nd
7		37	3rd
9		41	4th

EAST LEG TOTAL: 444

	1st	2nd	3rd	4th	Total
Rt					
Thru	70	107	60	48	285
Lt	42	35	38	44	159

Total	1st	2nd	3rd	4th	
					Lt
341	67	73	80	121	Thru
446	69	98	99	180	Rt

WEST LEG TOTAL: 787

PEAK HOUR FACTORS

NORTH LEG = 0.87
SOUTH LEG =
EAST LEG = 0.78
WEST LEG = 0.65

ALL LEGS = 0.80

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

TOTAL: 0

SOUTH LEG

HOUR TOTAL: 1,419

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : OAK VALLEY PKWY
EAST-WEST STREET : I-10 EB RAMPS
BEGINNING TIME : 07:00AM

BEAUMONT
10-17-18

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												
12	0	35	3	0	3	0	0	0	1	0	0	54
8	0	27	2	0	1	0	0	2	0	0	0	40
3	0	36	1	0	0	3	0	1	0	0	0	44
2	0	39	1	0	1	6	0	1	0	0	0	50
8	0	38	0	0	0	1	0	0	1	0	0	48
2	0	26	1	0	0	1	0	0	0	0	0	30
10	0	72	1	0	1	1	0	0	0	0	0	85
5	1	41	0	0	2	0	0	2	0	0	0	51
50	1	314	9	0	8	12	0	6	2	0	0	402
SOUTH 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
EAST LEG												
0	63	39	0	2	2	0	2	1	0	3	0	112
0	102	31	0	2	2	0	3	2	0	0	0	142
0	56	35	0	0	2	0	2	1	0	2	0	98
0	45	41	0	0	1	0	1	1	0	2	1	92
0	70	33	0	0	2	0	2	0	0	0	0	107
0	89	22	0	3	0	0	3	1	0	1	0	119
0	59	42	0	3	2	0	2	0	0	1	0	109
0	101	31	0	2	0	0	3	1	0	2	0	140
0	585	274	0	12	11	0	18	7	0	11	1	919
WEST LEG												
69	64	0	0	1	0	0	1	0	0	1	0	136
97	70	0	1	1	0	0	1	0	0	1	0	171
98	73	0	1	4	0	0	2	0	0	1	0	179
178	119	0	0	2	0	1	0	0	1	0	0	301
68	42	0	0	1	0	1	2	0	1	0	0	115
126	71	0	1	1	0	0	4	0	0	1	0	204
67	32	0	1	2	0	1	0	0	0	1	0	104
60	37	0	0	1	0	1	2	0	0	0	0	101
763	508	0	4	13	0	4	12	0	2	5	0	1311

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY PKWY

EAST-WEST STREET: I-10 EB RAMPS

TIME: 07:00AM-08:00AM DATE: 10-17-18

NORTH LEG

42		146	Total
16		38	1st
10		30	2nd
7		37	3rd
9		41	4th
Rt	Thru	Lt	

Rt					
Thru	70	107	60	48	285
Lt	42	35	38	44	159
	1st	2nd	3rd	4th	Total

Total	1st	2nd	3rd	4th	
					Lt
341	67	73	80	121	Thru
446	69	98	99	180	Rt

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

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY PKWY

EAST-WEST STREET: 1-10 EB RAMPS

TIME: 08:00AM-09:00AM DATE: 10-17-18

NORTH LEG

Rt	Thru	Lt	
31	1	182	Total
10		38	1st
4		26	2nd
12		73	3rd
5	1	45	4th

	1st	2nd	3rd	4th	Total
Rt					
Thru	72	96	65	108	341
Lt	35	23	44	32	134

Total	1st	2nd	3rd	4th	
					Lt
197	45	77	35	40	Thru
327	70	127	69	61	Rt

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

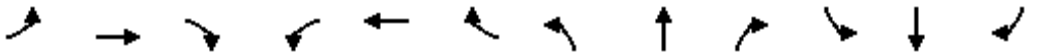
Prepared by NEWPORT TRAFFIC STUDIES

Intersection	
Intersection Delay, s/veh	164.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	345	450	160	285	0	0	0	0	150	5	45
Future Vol, veh/h	0	345	450	160	285	0	0	0	0	150	5	45
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	5	5	10	10	0	0	0	0	10	0	45
Mvmt Flow	0	431	563	200	356	0	0	0	0	188	6	56
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	264	51	18.4
HCM LOS	F	F	C

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	36%	75%
Vol Thru, %	43%	64%	3%
Vol Right, %	57%	0%	23%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	795	445	200
LT Vol	0	160	150
Through Vol	345	285	5
RT Vol	450	0	45
Lane Flow Rate	994	556	250
Geometry Grp	1	1	1
Degree of Util (X)	1.534	0.939	0.493
Departure Headway (Hd)	5.557	6.72	7.937
Convergence, Y/N	Yes	Yes	Yes
Cap	656	545	458
Service Time	3.592	4.72	5.937
HCM Lane V/C Ratio	1.515	1.02	0.546
HCM Control Delay	264	51	18.4
HCM Lane LOS	F	F	C
HCM 95th-tile Q	50.3	11.8	2.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	345	450	160	285	0	0	0	0	150	5	45
Future Volume (veh/h)	0	345	450	160	285	0	0	0	0	150	5	45
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1826	1826	1752	1752	0				1752	1900	1233
Adj Flow Rate, veh/h	0	431	562	200	356	0				188	6	56
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80				0.80	0.80	0.80
Percent Heavy Veh, %	0	5	5	10	10	0				10	0	45
Cap, veh/h	0	1856	828	301	2340	0				245	279	154
Arrive On Green	0.00	0.54	0.54	0.03	0.23	0.00				0.15	0.15	0.15
Sat Flow, veh/h	0	3561	1547	3237	3416	0				1668	1900	1045
Grp Volume(v), veh/h	0	431	562	200	356	0				188	6	56
Grp Sat Flow(s),veh/h/ln	0	1735	1547	1618	1664	0				1668	1900	1045
Q Serve(g_s), s	0.0	4.0	15.9	3.7	5.1	0.0				6.5	0.2	2.9
Cycle Q Clear(g_c), s	0.0	4.0	15.9	3.7	5.1	0.0				6.5	0.2	2.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1856	828	301	2340	0				245	279	154
V/C Ratio(X)	0.00	0.23	0.68	0.67	0.15	0.00				0.77	0.02	0.36
Avail Cap(c_a), veh/h	0	1856	828	405	2340	0				445	507	279
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.94	0.94	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	7.4	10.2	28.2	8.8	0.0				24.6	21.9	23.1
Incr Delay (d2), s/veh	0.0	0.3	4.5	2.4	0.1	0.0				5.0	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.1	4.7	1.4	0.9	0.0				2.8	0.1	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.7	14.6	30.5	8.9	0.0				29.6	21.9	24.5
LnGrp LOS	A	A	B	C	A	A				C	C	C
Approach Vol, veh/h		993			556						250	
Approach Delay, s/veh		11.6			16.7						28.2	
Approach LOS		B			B						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	10.1	36.6		13.3		46.7
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	7.5	23.0		16.0		35.0
Max Q Clear Time (g_c+I1), s	5.7	17.9		8.5		7.1
Green Ext Time (p_c), s	0.1	2.2		0.5		2.2

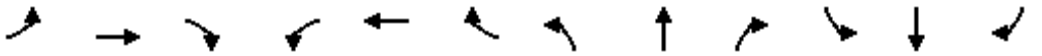
Intersection Summary	
HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Intersection	
Intersection Delay, s/veh	179.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	355	450	170	295	0	0	0	0	160	5	45
Future Vol, veh/h	0	355	450	170	295	0	0	0	0	160	5	45
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	5	5	10	10	0	0	0	0	10	0	45
Mvmt Flow	0	444	563	213	369	0	0	0	0	200	6	56
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	288.4	63.7	19.6
HCM LOS	F	F	C

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	37%	76%
Vol Thru, %	44%	63%	2%
Vol Right, %	56%	0%	21%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	805	465	210
LT Vol	0	170	160
Through Vol	355	295	5
RT Vol	450	0	45
Lane Flow Rate	1006	581	262
Geometry Grp	1	1	1
Degree of Util (X)	1.589	0.993	0.523
Departure Headway (Hd)	5.685	6.859	8.066
Convergence, Y/N	Yes	Yes	Yes
Cap	644	535	452
Service Time	3.724	4.859	6.066
HCM Lane V/C Ratio	1.562	1.086	0.58
HCM Control Delay	288.4	63.7	19.6
HCM Lane LOS	F	F	C
HCM 95th-tile Q	53.3	13.8	3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	355	450	170	295	0	0	0	0	160	5	45
Future Volume (veh/h)	0	355	450	170	295	0	0	0	0	160	5	45
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1826	1826	1752	1752	0				1752	1900	1233
Adj Flow Rate, veh/h	0	444	562	212	369	0				200	6	56
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80				0.80	0.80	0.80
Percent Heavy Veh, %	0	5	5	10	10	0				10	0	45
Cap, veh/h	0	1816	810	314	2315	0				258	293	161
Arrive On Green	0.00	0.52	0.52	0.03	0.23	0.00				0.15	0.15	0.15
Sat Flow, veh/h	0	3561	1547	3237	3416	0				1668	1900	1045
Grp Volume(v), veh/h	0	444	562	212	369	0				200	6	56
Grp Sat Flow(s),veh/h/ln	0	1735	1547	1618	1664	0				1668	1900	1045
Q Serve(g_s), s	0.0	4.2	16.3	3.9	5.3	0.0				6.9	0.2	2.9
Cycle Q Clear(g_c), s	0.0	4.2	16.3	3.9	5.3	0.0				6.9	0.2	2.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1816	810	314	2315	0				258	293	161
V/C Ratio(X)	0.00	0.24	0.69	0.68	0.16	0.00				0.78	0.02	0.35
Avail Cap(c_a), veh/h	0	1816	810	405	2315	0				445	507	279
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.94	0.94	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	7.8	10.7	28.1	9.1	0.0				24.4	21.5	22.7
Incr Delay (d2), s/veh	0.0	0.3	4.9	2.8	0.1	0.0				5.0	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.2	4.9	1.5	1.0	0.0				3.0	0.1	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.1	15.6	30.9	9.2	0.0				29.4	21.5	23.9
LnGrp LOS	A	A	B	C	A	A				C	C	C
Approach Vol, veh/h		1006			581						262	
Approach Delay, s/veh		12.3			17.1						28.0	
Approach LOS		B			B						C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	10.3	35.9		13.8		46.2						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	7.5	23.0		16.0		35.0						
Max Q Clear Time (g_c+I1), s	5.9	18.3		8.9		7.3						
Green Ext Time (p_c), s	0.1	2.1		0.5		2.2						

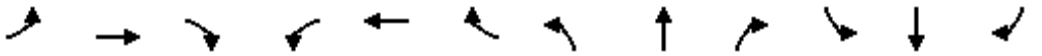
Intersection Summary												
HCM 6th Ctrl Delay			16.0									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	185.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	355	460	165	295	0	0	0	0	155	10	50
Future Vol, veh/h	0	355	460	165	295	0	0	0	0	155	10	50
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	5	5	10	10	0	0	0	0	10	0	45
Mvmt Flow	0	444	575	206	369	0	0	0	0	194	13	63
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	298.5	62	19.9
HCM LOS	F	F	C

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	36%	72%
Vol Thru, %	44%	64%	5%
Vol Right, %	56%	0%	23%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	815	460	215
LT Vol	0	165	155
Through Vol	355	295	10
RT Vol	460	0	50
Lane Flow Rate	1019	575	269
Geometry Grp	1	1	1
Degree of Util (X)	1.612	0.985	0.533
Departure Headway (Hd)	5.698	6.909	8.068
Convergence, Y/N	Yes	Yes	Yes
Cap	642	529	452
Service Time	3.736	4.909	6.068
HCM Lane V/C Ratio	1.587	1.087	0.595
HCM Control Delay	298.5	62	19.9
HCM Lane LOS	F	F	C
HCM 95th-tile Q	54.9	13.4	3.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	355	460	165	295	0	0	0	0	155	10	50
Future Volume (veh/h)	0	355	460	165	295	0	0	0	0	155	10	50
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1826	1826	1752	1752	0				1752	1900	1233
Adj Flow Rate, veh/h	0	444	575	206	369	0				194	12	62
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80				0.80	0.80	0.80
Percent Heavy Veh, %	0	5	5	10	10	0				10	0	45
Cap, veh/h	0	1833	818	307	2324	0				253	288	158
Arrive On Green	0.00	0.53	0.53	0.03	0.23	0.00				0.15	0.15	0.15
Sat Flow, veh/h	0	3561	1547	3237	3416	0				1668	1900	1045
Grp Volume(v), veh/h	0	444	575	206	369	0				194	12	62
Grp Sat Flow(s),veh/h/ln	0	1735	1547	1618	1664	0				1668	1900	1045
Q Serve(g_s), s	0.0	4.2	16.7	3.8	5.3	0.0				6.7	0.3	3.2
Cycle Q Clear(g_c), s	0.0	4.2	16.7	3.8	5.3	0.0				6.7	0.3	3.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1833	818	307	2324	0				253	288	158
V/C Ratio(X)	0.00	0.24	0.70	0.67	0.16	0.00				0.77	0.04	0.39
Avail Cap(c_a), veh/h	0	1833	818	405	2324	0				445	507	279
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.94	0.94	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	7.7	10.6	28.1	9.0	0.0				24.4	21.7	23.0
Incr Delay (d2), s/veh	0.0	0.3	5.0	2.5	0.1	0.0				4.8	0.1	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.2	5.1	1.5	1.0	0.0				2.9	0.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.0	15.6	30.7	9.1	0.0				29.3	21.8	24.5
LnGrp LOS	A	A	B	C	A	A				C	C	C
Approach Vol, veh/h		1019			575						268	
Approach Delay, s/veh		12.3			16.9						27.8	
Approach LOS		B			B						C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	10.2	36.2		13.6		46.4						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	7.5	23.0		16.0		35.0						
Max Q Clear Time (g_c+I1), s	5.8	18.7		8.7		7.3						
Green Ext Time (p_c), s	0.1	2.0		0.5		2.2						

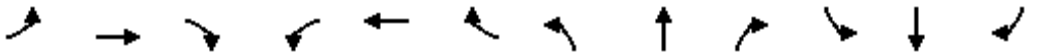
Intersection Summary												
HCM 6th Ctrl Delay			15.9									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	193.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	365	460	175	305	0	0	0	0	165	10	50
Future Vol, veh/h	0	365	460	175	305	0	0	0	0	165	10	50
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	5	5	10	10	0	0	0	0	10	0	45
Mvmt Flow	0	456	575	219	381	0	0	0	0	206	13	63
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	311.1	71.6	20.8
HCM LOS	F	F	C

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	36%	73%
Vol Thru, %	44%	64%	4%
Vol Right, %	56%	0%	22%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	825	480	225
LT Vol	0	175	165
Through Vol	365	305	10
RT Vol	460	0	50
Lane Flow Rate	1031	600	281
Geometry Grp	1	1	1
Degree of Util (X)	1.64	1.021	0.553
Departure Headway (Hd)	5.826	6.993	8.143
Convergence, Y/N	Yes	Yes	Yes
Cap	629	522	447
Service Time	3.826	4.993	6.143
HCM Lane V/C Ratio	1.639	1.149	0.629
HCM Control Delay	311.1	71.6	20.8
HCM Lane LOS	F	F	C
HCM 95th-tile Q	56.2	14.7	3.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	365	460	175	305	0	0	0	0	165	10	50
Future Volume (veh/h)	0	365	460	175	305	0	0	0	0	165	10	50
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1826	1826	1752	1752	0				1752	1900	1233
Adj Flow Rate, veh/h	0	456	575	219	381	0				206	12	62
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80				0.80	0.80	0.80
Percent Heavy Veh, %	0	5	5	10	10	0				10	0	45
Cap, veh/h	0	1793	800	322	2300	0				265	302	166
Arrive On Green	0.00	0.52	0.52	0.03	0.23	0.00				0.16	0.16	0.16
Sat Flow, veh/h	0	3561	1547	3237	3416	0				1668	1900	1045
Grp Volume(v), veh/h	0	456	575	219	381	0				206	12	62
Grp Sat Flow(s),veh/h/ln	0	1735	1547	1618	1664	0				1668	1900	1045
Q Serve(g_s), s	0.0	4.4	17.1	4.0	5.5	0.0				7.1	0.3	3.2
Cycle Q Clear(g_c), s	0.0	4.4	17.1	4.0	5.5	0.0				7.1	0.3	3.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1793	800	322	2300	0				265	302	166
V/C Ratio(X)	0.00	0.25	0.72	0.68	0.17	0.00				0.78	0.04	0.37
Avail Cap(c_a), veh/h	0	1793	800	405	2300	0				445	507	279
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.94	0.94	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.1	11.2	28.1	9.3	0.0				24.2	21.4	22.6
Incr Delay (d2), s/veh	0.0	0.3	5.5	3.1	0.1	0.0				4.9	0.1	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.3	5.3	1.6	1.1	0.0				3.0	0.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.4	16.7	31.2	9.4	0.0				29.1	21.4	23.9
LnGrp LOS	A	A	B	C	A	A				C	C	C
Approach Vol, veh/h		1031			600						280	
Approach Delay, s/veh		13.0			17.4						27.6	
Approach LOS		B			B						C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	10.5	35.5		14.0		46.0						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	7.5	23.0		16.0		35.0						
Max Q Clear Time (g_c+I1), s	6.0	19.1		9.1		7.5						
Green Ext Time (p_c), s	0.1	1.8		0.5		2.3						

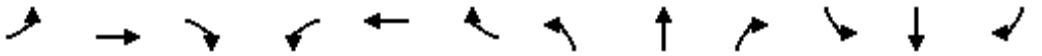
Intersection Summary												
HCM 6th Ctrl Delay			16.5									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	289
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	500	650	235	415	0	0	0	0	220	10	65
Future Vol, veh/h	0	500	650	235	415	0	0	0	0	220	10	65
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	5	5	10	10	0	0	0	0	10	0	45
Mvmt Flow	0	526	684	247	437	0	0	0	0	232	11	68
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	446.3	130.8	24.7
HCM LOS	F	F	C

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	36%	75%
Vol Thru, %	43%	64%	3%
Vol Right, %	57%	0%	22%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	1150	650	295
LT Vol	0	235	220
Through Vol	500	415	10
RT Vol	650	0	65
Lane Flow Rate	1211	684	311
Geometry Grp	1	1	1
Degree of Util (X)	1.944	1.193	0.62
Departure Headway (Hd)	6.171	7.506	8.637
Convergence, Y/N	Yes	Yes	Yes
Cap	605	493	422
Service Time	4.171	5.506	6.637
HCM Lane V/C Ratio	2.002	1.387	0.737
HCM Control Delay	446.3	130.8	24.7
HCM Lane LOS	F	F	C
HCM 95th-tile Q	74.5	21.5	4.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	500	650	235	415	0	0	0	0	220	10	65
Future Volume (veh/h)	0	500	650	235	415	0	0	0	0	220	10	65
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1826	1826	1752	1752	0				1752	1900	1233
Adj Flow Rate, veh/h	0	526	684	247	437	0				232	11	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	5	5	10	10	0				10	0	45
Cap, veh/h	0	2024	903	667	1942	0				445	507	279
Arrive On Green	0.00	0.58	0.58	0.19	0.19	0.00				0.27	0.27	0.27
Sat Flow, veh/h	0	3561	1547	839	3416	0				1668	1900	1045
Grp Volume(v), veh/h	0	526	684	247	437	0				232	11	68
Grp Sat Flow(s),veh/h/ln	0	1735	1547	420	1664	0				1668	1900	1045
Q Serve(g_s), s	0.0	4.5	19.8	16.3	6.6	0.0				7.1	0.3	3.1
Cycle Q Clear(g_c), s	0.0	4.5	19.8	20.7	6.6	0.0				7.1	0.3	3.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2024	903	667	1942	0				445	507	279
V/C Ratio(X)	0.00	0.26	0.76	0.37	0.23	0.00				0.52	0.02	0.24
Avail Cap(c_a), veh/h	0	2024	903	667	1942	0				445	507	279
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.85	0.85	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	6.1	9.3	20.5	12.8	0.0				18.7	16.2	17.3
Incr Delay (d2), s/veh	0.0	0.3	5.9	1.3	0.2	0.0				4.3	0.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.1	5.6	1.9	2.0	0.0				3.1	0.1	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.5	15.3	21.9	13.0	0.0				23.1	16.3	19.3
LnGrp LOS	A	A	B	C	B	A				C	B	B
Approach Vol, veh/h		1210			684						311	
Approach Delay, s/veh		11.4			16.2						22.0	
Approach LOS		B			B						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		39.5		20.5		39.5						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		23.0		16.0		35.0						
Max Q Clear Time (g_c+I1), s		21.8		9.1		22.7						
Green Ext Time (p_c), s		0.7		0.6		5.1						

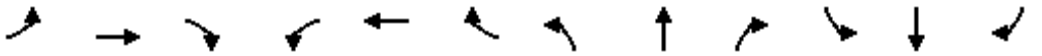
Intersection Summary												
HCM 6th Ctrl Delay			14.4									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	301.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	510	650	245	425	0	0	0	0	230	10	65
Future Vol, veh/h	0	510	650	245	425	0	0	0	0	230	10	65
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	5	5	10	10	0	0	0	0	10	0	45
Mvmt Flow	0	537	684	258	447	0	0	0	0	242	11	68
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	462.2	149.2	26
HCM LOS	F	F	D

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	37%	75%
Vol Thru, %	44%	63%	3%
Vol Right, %	56%	0%	21%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	1160	670	305
LT Vol	0	245	230
Through Vol	510	425	10
RT Vol	650	0	65
Lane Flow Rate	1221	705	321
Geometry Grp	1	1	1
Degree of Util (X)	1.979	1.24	0.641
Departure Headway (Hd)	6.278	7.605	8.712
Convergence, Y/N	Yes	Yes	Yes
Cap	586	487	417
Service Time	4.278	5.605	6.712
HCM Lane V/C Ratio	2.084	1.448	0.77
HCM Control Delay	462.2	149.2	26
HCM Lane LOS	F	F	D
HCM 95th-tile Q	75.8	23.5	4.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	510	650	245	425	0	0	0	0	230	10	65
Future Volume (veh/h)	0	510	650	245	425	0	0	0	0	230	10	65
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1826	1826	1752	1752	0				1752	1900	1233
Adj Flow Rate, veh/h	0	537	684	258	447	0				242	11	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	5	5	10	10	0				10	0	45
Cap, veh/h	0	1675	747	362	2229	0				301	343	189
Arrive On Green	0.00	0.48	0.48	0.04	0.22	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	3561	1547	3237	3416	0				1668	1900	1045
Grp Volume(v), veh/h	0	537	684	258	447	0				242	11	68
Grp Sat Flow(s),veh/h/ln	0	1735	1547	1618	1664	0				1668	1900	1045
Q Serve(g_s), s	0.0	5.7	24.6	4.7	6.6	0.0				8.3	0.3	3.4
Cycle Q Clear(g_c), s	0.0	5.7	24.6	4.7	6.6	0.0				8.3	0.3	3.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1675	747	362	2229	0				301	343	189
V/C Ratio(X)	0.00	0.32	0.92	0.71	0.20	0.00				0.80	0.03	0.36
Avail Cap(c_a), veh/h	0	1675	747	405	2229	0				445	507	279
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.89	0.89	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.5	14.4	27.9	10.3	0.0				23.6	20.3	21.6
Incr Delay (d2), s/veh	0.0	0.5	17.8	4.6	0.2	0.0				6.5	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.7	9.9	2.0	1.6	0.0				3.7	0.1	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.0	32.2	32.5	10.5	0.0				30.1	20.3	22.7
LnGrp LOS	A	B	C	C	B	A				C	C	C
Approach Vol, veh/h		1221			705						321	
Approach Delay, s/veh		22.4			18.5						28.2	
Approach LOS		C			B						C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	11.2	33.5		15.3		44.7						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	7.5	23.0		16.0		35.0						
Max Q Clear Time (g_c+I1), s	6.7	26.6		10.3		8.6						
Green Ext Time (p_c), s	0.1	0.0		0.5		2.8						

Intersection Summary												
HCM 6th Ctrl Delay			22.0									
HCM 6th LOS			C									

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	TNM	13-Nov-18	SIRW0000-0002	1 OF 2

E/W STREET : OAK VALLEY PKWY
N/S STREET : I-10 EB RAMPS
CONDITION : PM PEAK HOUR

INTERSECTION : 1
PROJECTED GROWTH PER YEAR : 2%

TURN MOVEMENTS

Condition	Existing Condition	Project Trips	Existing + Project Condition	Ambient Growth	Background Condition	Project Condition	Future Ambient Growth	Future Condition	Future+ Project Condition
Scenario #	2		4		6	8		10	12
OAK VALLEY PKWY									
EB LEFT	0	0	0	0	0	0	0	0	0
EB THRU	115	10	125	5	120	130	55	170	180
EB RIGHT	185	0	185	5	190	190	85	270	270
WB LEFT	135	10	145	5	140	150	60	195	205
WB THRU	425	10	435	10	435	445	190	615	625
WB RIGHT	0	0	0	0	0	0	0	0	0
I-10 EB RAMPS									
NB LEFT	0	0	0	0	0	0	0	0	0
NB THRU	0	0	0	0	0	0	0	0	0
NB RIGHT	0	0	0	0	0	0	0	0	0
SB LEFT	285	10	295	10	295	305	130	415	425
SB THRU	5	0	5	5	10	10	5	10	10
SB RIGHT	80	0	80	5	85	85	40	120	120
TOTALS	**1230**	**40**	**1270**	**45**	**1275**	**1315**	**565**	**1795**	**1835**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET	OF
TURN VOLUME SUMMARY	TNM	13-Nov-18	SIRW0000-0002	2	OF 2

E/W STREET : OAK VALLEY PKWY
N/S STREET : I-10 EB RAMPS
CONDITION : PM PEAK HOUR
PHF : 0.87

NORTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
1	0	3	0	0	1	0	0	0
1	0	1	0	0	0	0	0	1
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0

SOUTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	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

EAST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	2	2	0	2	1	0	2	1
0	5	1	0	0	2	0	0	0
0	0	0	0	0	0	0	1	0
0	1	1	0	0	3	0	1	1

WEST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	3	0	0	1	0	0	1	0
1	3	0	0	2	0	0	1	0
0	1	0	0	1	0	0	0	0
0	1	0	2	0	0	0	0	0

NORTH LEG			SOUTH LEG			EAST LEG			WEST LEG		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
24	0	65	0	0	0	0	109	29	53	19	0
15	0	65	0	0	0	0	67	35	43	27	0
18	0	73	0	0	0	0	163	28	35	28	0
18	0	72	0	0	0	0	69	31	49	26	0

	TRUCK TOTAL	AUTO VOLUMES	TOTALS	ROUNDED TOTALS	TRUCK PERCENTAGE
OAK VALLEY PKWY					
EB LEFT	0	0	**0**	**0**	**0%**
EB THRU	14	100	**114**	**115**	**15%**
EB RIGHT	3	180	**183**	**185**	**5%**
WB LEFT	12	123	**135**	**135**	**10%**
WB THRU	14	408	**422**	**425**	**5%**
WB RIGHT	0	0	**0**	**0**	**0%**
I-10 EB RAMPS					
NB LEFT	0	0	**0**	**0**	**0%**
NB THRU	0	0	**0**	**0**	**0%**
NB RIGHT	0	0	**0**	**0**	**0%**
SB LEFT	6	275	**281**	**285**	**5%**
SB THRU	0	0	**0**	**5**	**0%**
SB RIGHT	5	75	**80**	**80**	**10%**

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: OAK VALLEY PKWY
EAST-WEST STREET: 1-10 EB RAMPS
JURISDICTION: BEAUMONT

DATE: 10-17-18

PEAK HOUR: 04:00PM

NORTH LEG

TOTAL: 361

80		281	Total
25		69	1st
16		67	2nd
19		73	3rd
20		72	4th
Rt	Thru	Lt	

EAST LEG TOTAL: 557

	1st	2nd	3rd	4th	Total
Rt					
Thru	115	72	164	71	422
Lt	33	38	28	36	135

Total	1st	2nd	3rd	4th	
					Lt
114	24	33	30	27	Thru
183	53	44	35	51	Rt

WEST LEG TOTAL: 297

PEAK HOUR FACTORS

NORTH LEG = 0.96
SOUTH LEG =
EAST LEG = 0.73
WEST LEG = 0.95

ALL LEGS = 0.87

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

SOUTH LEG

TOTAL: 0

HOUR TOTAL: 1,215

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : OAK VALLEY PKWY
EAST-WEST STREET : 1-10 EB RAMPS
BEAUMONT
10-17-18
BEGINNING TIME : 04:00PM

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												
24	0	65	1	0	3	0	0	1	0	0	0	94
15	0	65	1	0	1	0	0	0	0	0	1	83
18	0	73	1	0	0	0	0	0	0	0	0	92
18	0	72	2	0	0	0	0	0	0	0	0	92
22	0	62	0	0	0	0	0	0	0	0	1	85
23	0	82	0	0	0	0	0	0	0	0	0	105
31	0	78	0	0	0	0	0	0	0	0	0	109
22	0	60	0	0	0	0	0	0	0	0	0	82
173	0	557	5	0	4	0	0	1	0	0	2	742
SOUTH 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
EAST LEG												
0	109	29	0	2	2	0	2	1	0	2	1	148
0	67	35	0	5	1	0	0	2	0	0	0	110
0	163	28	0	0	0	0	0	0	0	1	0	192
0	69	31	0	1	1	0	0	3	0	1	1	107
0	82	21	0	2	0	0	1	2	0	0	0	108
0	66	24	0	0	0	0	0	0	0	2	0	92
0	70	31	0	2	1	0	0	1	0	1	1	107
0	64	32	0	0	0	0	2	0	0	0	0	98
0	690	231	0	12	5	0	5	9	0	7	3	962
WEST LEG												
53	19	0	0	3	0	0	1	0	0	1	0	77
43	27	0	1	3	0	0	2	0	0	1	0	77
35	28	0	0	1	0	0	1	0	0	0	0	65
49	26	0	0	1	0	2	0	0	0	0	0	78
54	33	0	0	1	0	0	0	0	0	0	0	88
57	41	0	0	1	0	0	2	0	0	0	0	101
67	44	0	0	0	0	0	2	0	0	0	0	113
38	30	0	0	0	0	0	0	0	0	0	0	68
396	248	0	1	10	0	2	8	0	0	2	0	667

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY PKWY

EAST-WEST STREET: 1-10 EB RAMPS

TIME: 04:00PM-05:00PM DATE: 10-17-18

NORTH LEG

Rt	Thru	Lt	
80		281	Total
25		69	1st
16		67	2nd
19		73	3rd
20		72	4th

	1st	2nd	3rd	4th	Total
Rt					
Thru	115	72	164	71	422
Lt	33	38	28	36	135

Total	1st	2nd	3rd	4th	
					Lt
114	24	33	30	27	Thru
183	53	44	35	51	Rt

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

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY PKWY

EAST-WEST STREET: 1-10 EB RAMPS

TIME: 05:00PM-06:00PM DATE: 10-17-18

NORTH LEG

Rt	Thru	Lt	
98		283	Total
22		63	1st
23		82	2nd
31		78	3rd
22		60	4th

	1st	2nd	3rd	4th	Total
Rt					
Thru	85	68	73	66	292
Lt	23	24	34	32	113

Total	1st	2nd	3rd	4th	
					Lt
154	34	44	46	30	Thru
216	54	57	67	38	Rt

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

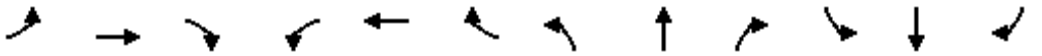
Prepared by NEWPORT TRAFFIC STUDIES

Intersection	
Intersection Delay, s/veh	60.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	115	185	135	425	0	0	0	0	285	5	80
Future Vol, veh/h	0	115	185	135	425	0	0	0	0	285	5	80
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	0	15	5	10	5	0	0	0	0	5	0	10
Mvmt Flow	0	132	213	155	489	0	0	0	0	328	6	92
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	19.4	101.9	30.4
HCM LOS	C	F	D

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	24%	77%
Vol Thru, %	38%	76%	1%
Vol Right, %	62%	0%	22%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	300	560	370
LT Vol	0	135	285
Through Vol	115	425	5
RT Vol	185	0	80
Lane Flow Rate	345	644	425
Geometry Grp	1	1	1
Degree of Util (X)	0.608	1.128	0.781
Departure Headway (Hd)	6.637	6.309	6.934
Convergence, Y/N	Yes	Yes	Yes
Cap	548	573	527
Service Time	4.637	4.372	4.934
HCM Lane V/C Ratio	0.63	1.124	0.806
HCM Control Delay	19.4	101.9	30.4
HCM Lane LOS	C	F	D
HCM 95th-tile Q	4	20.6	7.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	115	185	135	425	0	0	0	0	285	5	80
Future Volume (veh/h)	0	115	185	135	425	0	0	0	0	285	5	80
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1678	1826	1752	1826	0				1826	1900	1752
Adj Flow Rate, veh/h	0	132	213	155	489	0				328	6	92
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	0	15	5	10	5	0				5	0	10
Cap, veh/h	0	877	426	875	2153	0				399	436	341
Arrive On Green	0.00	0.28	0.28	0.54	1.00	0.00				0.23	0.23	0.23
Sat Flow, veh/h	0	3272	1547	3237	3561	0				1739	1900	1485
Grp Volume(v), veh/h	0	132	213	155	489	0				328	6	92
Grp Sat Flow(s),veh/h/ln	0	1594	1547	1618	1735	0				1739	1900	1485
Q Serve(g_s), s	0.0	1.9	6.9	1.5	0.0	0.0				10.7	0.1	3.1
Cycle Q Clear(g_c), s	0.0	1.9	6.9	1.5	0.0	0.0				10.7	0.1	3.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	877	426	875	2153	0				399	436	341
V/C Ratio(X)	0.00	0.15	0.50	0.18	0.23	0.00				0.82	0.01	0.27
Avail Cap(c_a), veh/h	0	877	426	875	2153	0				652	713	557
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.86	0.86	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.4	18.3	10.4	0.0	0.0				21.9	17.9	19.0
Incr Delay (d2), s/veh	0.0	0.4	4.2	0.1	0.2	0.0				4.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	2.6	0.4	0.1	0.0				4.6	0.1	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	16.8	22.4	10.5	0.2	0.0				26.3	17.9	19.4
LnGrp LOS	A	B	C	B	A	A				C	B	B
Approach Vol, veh/h		345			644						426	
Approach Delay, s/veh		20.3			2.7						24.7	
Approach LOS		C			A						C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	20.7	21.0		18.3		41.7						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	7.5	16.5		22.5		28.5						
Max Q Clear Time (g_c+I1), s	3.5	8.9		12.7		2.0						
Green Ext Time (p_c), s	0.2	0.9		1.0		3.0						

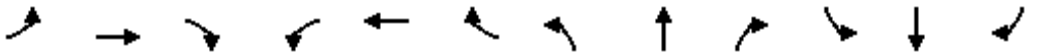
Intersection Summary												
HCM 6th Ctrl Delay			13.6									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	72.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	125	185	145	435	0	0	0	0	295	5	80
Future Vol, veh/h	0	125	185	145	435	0	0	0	0	295	5	80
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	0	15	5	10	5	0	0	0	0	5	0	10
Mvmt Flow	0	144	213	167	500	0	0	0	0	339	6	92
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	20.9	124.6	33.7
HCM LOS	C	F	D

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	25%	78%
Vol Thru, %	40%	75%	1%
Vol Right, %	60%	0%	21%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	310	580	380
LT Vol	0	145	295
Through Vol	125	435	5
RT Vol	185	0	80
Lane Flow Rate	356	667	437
Geometry Grp	1	1	1
Degree of Util (X)	0.637	1.189	0.81
Departure Headway (Hd)	6.792	6.418	7.066
Convergence, Y/N	Yes	Yes	Yes
Cap	534	567	515
Service Time	4.792	4.473	5.066
HCM Lane V/C Ratio	0.667	1.176	0.849
HCM Control Delay	20.9	124.6	33.7
HCM Lane LOS	C	F	D
HCM 95th-tile Q	4.4	23.6	7.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	125	185	145	435	0	0	0	0	295	5	80
Future Volume (veh/h)	0	125	185	145	435	0	0	0	0	295	5	80
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1678	1826	1752	1826	0				1826	1900	1752
Adj Flow Rate, veh/h	0	144	213	167	500	0				339	6	92
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	0	15	5	10	5	0				5	0	10
Cap, veh/h	0	877	426	855	2131	0				410	448	350
Arrive On Green	0.00	0.28	0.28	0.53	1.00	0.00				0.24	0.24	0.24
Sat Flow, veh/h	0	3272	1547	3237	3561	0				1739	1900	1485
Grp Volume(v), veh/h	0	144	213	167	500	0				339	6	92
Grp Sat Flow(s),veh/h/ln	0	1594	1547	1618	1735	0				1739	1900	1485
Q Serve(g_s), s	0.0	2.1	6.9	1.6	0.0	0.0				11.1	0.1	3.0
Cycle Q Clear(g_c), s	0.0	2.1	6.9	1.6	0.0	0.0				11.1	0.1	3.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	877	426	855	2131	0				410	448	350
V/C Ratio(X)	0.00	0.16	0.50	0.20	0.23	0.00				0.83	0.01	0.26
Avail Cap(c_a), veh/h	0	877	426	855	2131	0				652	713	557
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.86	0.86	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.5	18.3	10.8	0.0	0.0				21.8	17.6	18.7
Incr Delay (d2), s/veh	0.0	0.4	4.2	0.1	0.2	0.0				4.9	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	2.6	0.5	0.1	0.0				4.8	0.1	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	16.9	22.4	10.9	0.2	0.0				26.6	17.6	19.1
LnGrp LOS	A	B	C	B	A	A				C	B	B
Approach Vol, veh/h		357			667						437	
Approach Delay, s/veh		20.2			2.9						24.9	
Approach LOS		C			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.4	21.0		18.6		41.4
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	7.5	16.5		22.5		28.5
Max Q Clear Time (g_c+I1), s	3.6	8.9		13.1		2.0
Green Ext Time (p_c), s	0.2	0.9		1.0		3.1

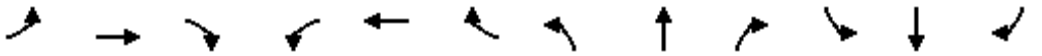
Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Intersection	
Intersection Delay, s/veh	71.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	120	190	140	435	0	0	0	0	295	10	85
Future Vol, veh/h	0	120	190	140	435	0	0	0	0	295	10	85
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	0	15	5	10	5	0	0	0	0	5	0	10
Mvmt Flow	0	138	218	161	500	0	0	0	0	339	11	98
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	21.2	123.7	35.5
HCM LOS	C	F	E

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	24%	76%
Vol Thru, %	39%	76%	3%
Vol Right, %	61%	0%	22%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	310	575	390
LT Vol	0	140	295
Through Vol	120	435	10
RT Vol	190	0	85
Lane Flow Rate	356	661	448
Geometry Grp	1	1	1
Degree of Util (X)	0.64	1.186	0.827
Departure Headway (Hd)	6.821	6.462	7.056
Convergence, Y/N	Yes	Yes	Yes
Cap	534	562	516
Service Time	4.821	4.514	5.056
HCM Lane V/C Ratio	0.667	1.176	0.868
HCM Control Delay	21.2	123.7	35.5
HCM Lane LOS	C	F	E
HCM 95th-tile Q	4.5	23.4	8.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	120	190	140	435	0	0	0	0	295	10	85
Future Volume (veh/h)	0	120	190	140	435	0	0	0	0	295	10	85
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1678	1826	1752	1826	0				1826	1900	1752
Adj Flow Rate, veh/h	0	138	218	161	500	0				339	11	98
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	0	15	5	10	5	0				5	0	10
Cap, veh/h	0	877	426	854	2129	0				411	449	351
Arrive On Green	0.00	0.28	0.28	0.53	1.00	0.00				0.24	0.24	0.24
Sat Flow, veh/h	0	3272	1547	3237	3561	0				1739	1900	1485
Grp Volume(v), veh/h	0	138	218	161	500	0				339	11	98
Grp Sat Flow(s),veh/h/ln	0	1594	1547	1618	1735	0				1739	1900	1485
Q Serve(g_s), s	0.0	2.0	7.1	1.6	0.0	0.0				11.1	0.3	3.2
Cycle Q Clear(g_c), s	0.0	2.0	7.1	1.6	0.0	0.0				11.1	0.3	3.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	877	426	854	2129	0				411	449	351
V/C Ratio(X)	0.00	0.16	0.51	0.19	0.23	0.00				0.83	0.02	0.28
Avail Cap(c_a), veh/h	0	877	426	854	2129	0				652	713	557
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.85	0.85	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.5	18.4	10.8	0.0	0.0				21.7	17.6	18.7
Incr Delay (d2), s/veh	0.0	0.4	4.4	0.1	0.2	0.0				4.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	2.7	0.5	0.1	0.0				4.8	0.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	16.9	22.7	10.9	0.2	0.0				26.5	17.6	19.2
LnGrp LOS	A	B	C	B	A	A				C	B	B
Approach Vol, veh/h		356			661						448	
Approach Delay, s/veh		20.4			2.8						24.7	
Approach LOS		C			A						C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	20.3	21.0		18.7		41.3						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	7.5	16.5		22.5		28.5						
Max Q Clear Time (g_c+I1), s	3.6	9.1		13.1		2.0						
Green Ext Time (p_c), s	0.2	0.9		1.1		3.1						

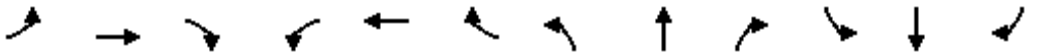
Intersection Summary												
HCM 6th Ctrl Delay			13.8									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	84.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	130	190	150	445	0	0	0	0	305	10	85
Future Vol, veh/h	0	130	190	150	445	0	0	0	0	305	10	85
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	0	15	5	10	5	0	0	0	0	5	0	10
Mvmt Flow	0	149	218	172	511	0	0	0	0	351	11	98
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	23	148.4	38.5
HCM LOS	C	F	E

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	25%	76%
Vol Thru, %	41%	75%	3%
Vol Right, %	59%	0%	21%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	320	595	400
LT Vol	0	150	305
Through Vol	130	445	10
RT Vol	190	0	85
Lane Flow Rate	368	684	460
Geometry Grp	1	1	1
Degree of Util (X)	0.67	1.249	0.848
Departure Headway (Hd)	6.96	6.576	7.189
Convergence, Y/N	Yes	Yes	Yes
Cap	522	554	506
Service Time	4.96	4.599	5.189
HCM Lane V/C Ratio	0.705	1.235	0.909
HCM Control Delay	23	148.4	38.5
HCM Lane LOS	C	F	E
HCM 95th-tile Q	4.9	26.6	8.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	130	190	150	445	0	0	0	0	305	10	85
Future Volume (veh/h)	0	130	190	150	445	0	0	0	0	305	10	85
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1678	1826	1752	1826	0				1826	1900	1752
Adj Flow Rate, veh/h	0	149	218	172	511	0				351	11	98
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	0	15	5	10	5	0				5	0	10
Cap, veh/h	0	877	426	832	2106	0				423	462	361
Arrive On Green	0.00	0.28	0.28	0.51	1.00	0.00				0.24	0.24	0.24
Sat Flow, veh/h	0	3272	1547	3237	3561	0				1739	1900	1485
Grp Volume(v), veh/h	0	149	218	172	511	0				351	11	98
Grp Sat Flow(s),veh/h/ln	0	1594	1547	1618	1735	0				1739	1900	1485
Q Serve(g_s), s	0.0	2.1	7.1	1.7	0.0	0.0				11.5	0.3	3.2
Cycle Q Clear(g_c), s	0.0	2.1	7.1	1.7	0.0	0.0				11.5	0.3	3.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	877	426	832	2106	0				423	462	361
V/C Ratio(X)	0.00	0.17	0.51	0.21	0.24	0.00				0.83	0.02	0.27
Avail Cap(c_a), veh/h	0	877	426	832	2106	0				652	713	557
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.85	0.85	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.5	18.4	11.3	0.0	0.0				21.5	17.3	18.4
Incr Delay (d2), s/veh	0.0	0.4	4.4	0.1	0.2	0.0				5.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	2.7	0.5	0.1	0.0				5.0	0.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	17.0	22.7	11.4	0.2	0.0				26.9	17.3	18.8
LnGrp LOS	A	B	C	B	A	A				C	B	B
Approach Vol, veh/h		367			683						460	
Approach Delay, s/veh		20.4			3.0						25.0	
Approach LOS		C			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.9	21.0		19.1		40.9
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	7.5	16.5		22.5		28.5
Max Q Clear Time (g_c+I1), s	3.7	9.1		13.5		2.0
Green Ext Time (p_c), s	0.2	0.9		1.1		3.2

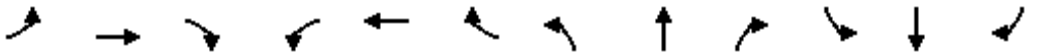
Intersection Summary			
HCM 6th Ctrl Delay			13.9
HCM 6th LOS			B

Intersection	
Intersection Delay, s/veh	192.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	170	270	195	615	0	0	0	0	415	10	120
Future Vol, veh/h	0	170	270	195	615	0	0	0	0	415	10	120
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	15	5	10	5	0	0	0	0	5	0	10
Mvmt Flow	0	179	284	205	647	0	0	0	0	437	11	126
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	46.8	331.7	103.3
HCM LOS	E	F	F

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	24%	76%
Vol Thru, %	39%	76%	2%
Vol Right, %	61%	0%	22%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	440	810	545
LT Vol	0	195	415
Through Vol	170	615	10
RT Vol	270	0	120
Lane Flow Rate	463	853	574
Geometry Grp	1	1	1
Degree of Util (X)	0.878	1.675	1.109
Departure Headway (Hd)	8.156	7.46	7.99
Convergence, Y/N	Yes	Yes	Yes
Cap	449	495	459
Service Time	6.156	5.46	5.99
HCM Lane V/C Ratio	1.031	1.723	1.251
HCM Control Delay	46.8	331.7	103.3
HCM Lane LOS	E	F	F
HCM 95th-tile Q	9.2	47.1	17.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	170	270	195	615	0	0	0	0	415	10	120
Future Volume (veh/h)	0	170	270	195	615	0	0	0	0	415	10	120
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1678	1826	1752	1826	0				1826	1900	1752
Adj Flow Rate, veh/h	0	179	284	205	647	0				437	11	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	15	5	10	5	0				5	0	10
Cap, veh/h	0	1514	735	989	1648	0				652	712	557
Arrive On Green	0.00	0.47	0.47	0.95	0.95	0.00				0.38	0.38	0.38
Sat Flow, veh/h	0	3272	1547	1688	3561	0				1739	1900	1485
Grp Volume(v), veh/h	0	179	284	205	647	0				437	11	126
Grp Sat Flow(s),veh/h/ln	0	1594	1547	844	1735	0				1739	1900	1485
Q Serve(g_s), s	0.0	1.9	7.1	1.1	0.9	0.0				12.6	0.2	3.5
Cycle Q Clear(g_c), s	0.0	1.9	7.1	3.0	0.9	0.0				12.6	0.2	3.5
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1514	735	989	1648	0				652	713	557
V/C Ratio(X)	0.00	0.12	0.39	0.21	0.39	0.00				0.67	0.02	0.23
Avail Cap(c_a), veh/h	0	1514	735	989	1648	0				652	713	557
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.84	0.84	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.8	10.1	1.0	0.8	0.0				15.7	11.8	12.8
Incr Delay (d2), s/veh	0.0	0.2	1.5	0.4	0.6	0.0				5.4	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.5	2.1	0.1	0.3	0.0				5.5	0.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.9	11.7	1.4	1.4	0.0				21.1	11.8	13.7
LnGrp LOS	A	A	B	A	A	A				C	B	B
Approach Vol, veh/h		463			852						574	
Approach Delay, s/veh		10.6			1.4						19.3	
Approach LOS		B			A						B	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		33.0		27.0		33.0						
Change Period (Y+Rc), s		4.5		4.5		4.5						
Max Green Setting (Gmax), s		16.5		22.5		28.5						
Max Q Clear Time (g_c+I1), s		9.1		14.6		5.0						
Green Ext Time (p_c), s		1.2		1.3		5.7						

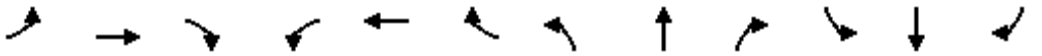
Intersection Summary	
HCM 6th Ctrl Delay	9.1
HCM 6th LOS	A

Intersection	
Intersection Delay, s/veh	202.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	180	270	205	625	0	0	0	0	425	10	120
Future Vol, veh/h	0	180	270	205	625	0	0	0	0	425	10	120
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	15	5	10	5	0	0	0	0	5	0	10
Mvmt Flow	0	189	284	216	658	0	0	0	0	447	11	126
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	52.1	344.3	112.4
HCM LOS	F	F	F

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	25%	77%
Vol Thru, %	40%	75%	2%
Vol Right, %	60%	0%	22%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	450	830	555
LT Vol	0	205	425
Through Vol	180	625	10
RT Vol	270	0	120
Lane Flow Rate	474	874	584
Geometry Grp	1	1	1
Degree of Util (X)	0.907	1.703	1.135
Departure Headway (Hd)	8.272	7.56	8.054
Convergence, Y/N	Yes	Yes	Yes
Cap	441	489	456
Service Time	6.272	5.56	6.054
HCM Lane V/C Ratio	1.075	1.787	1.281
HCM Control Delay	52.1	344.3	112.4
HCM Lane LOS	F	F	F
HCM 95th-tile Q	9.9	48.2	18.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	180	270	205	625	0	0	0	0	425	10	120
Future Volume (veh/h)	0	180	270	205	625	0	0	0	0	425	10	120
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1678	1826	1752	1826	0				1826	1900	1752
Adj Flow Rate, veh/h	0	189	284	216	658	0				447	11	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	15	5	10	5	0				5	0	10
Cap, veh/h	0	877	426	660	1922	0				515	562	439
Arrive On Green	0.00	0.28	0.28	0.41	1.00	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3272	1547	3237	3561	0				1739	1900	1485
Grp Volume(v), veh/h	0	189	284	216	658	0				447	11	126
Grp Sat Flow(s),veh/h/ln	0	1594	1547	1618	1735	0				1739	1900	1485
Q Serve(g_s), s	0.0	2.7	9.8	2.7	0.0	0.0				14.6	0.2	3.9
Cycle Q Clear(g_c), s	0.0	2.7	9.8	2.7	0.0	0.0				14.6	0.2	3.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	877	426	660	1922	0				515	562	439
V/C Ratio(X)	0.00	0.22	0.67	0.33	0.34	0.00				0.87	0.02	0.29
Avail Cap(c_a), veh/h	0	877	426	660	1922	0				652	713	557
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.81	0.81	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.8	19.3	14.9	0.0	0.0				20.0	15.0	16.2
Incr Delay (d2), s/veh	0.0	0.6	8.1	0.2	0.4	0.0				10.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	3.9	0.8	0.1	0.0				6.9	0.1	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	17.3	27.4	15.2	0.4	0.0				30.0	15.0	16.6
LnGrp LOS	A	B	C	B	A	A				C	B	B
Approach Vol, veh/h		473			874						584	
Approach Delay, s/veh		23.4			4.0						26.9	
Approach LOS		C			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.7	21.0		22.3		37.7
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	7.5	16.5		22.5		28.5
Max Q Clear Time (g_c+I1), s	4.7	11.8		16.6		2.0
Green Ext Time (p_c), s	0.2	0.9		1.1		4.3

Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

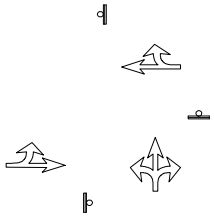
DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	TNM	13-Nov-18	SIRW0000-0002	1 OF 2

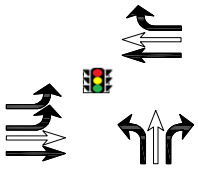
E/W STREET : OAK VALLEY PKWY
N/S STREET : I-10 WB RAMPS
CONDITION : AM PEAK HOUR

INTERSECTION : 2
PROJECTED GROWTH PER YEAR : 2%

CONDITION DIAGRAMS



EXISTING GEOMETRICS



TUMF MITIGATION GEOMETRICS

TURN MOVEMENTS

Condition	Existing Condition	Project Trips	Existing + Project Condition	Ambient Growth	Background Condition	Project Condition	Future Ambient Growth	Future Condition	Future+ Project Condition
Scenario #	1		3		5	7		9	11
OAK VALLEY PKWY									
EB LEFT	55	0	55	5	60	60	25	80	80
EB THRU	435	20	455	10	445	465	195	630	650
EB RIGHT	0	0	0	0	0	0	0	0	0
WB LEFT	0	0	0	0	0	0	0	0	0
WB THRU	240	20	260	5	245	265	110	350	370
WB RIGHT	465	10	475	10	475	485	205	670	680
I-10 WB RAMPS									
NB LEFT	205	0	205	5	210	210	95	300	300
NB THRU	10	0	10	5	15	15	5	15	15
NB RIGHT	195	10	205	5	200	210	90	285	295
SB LEFT	0	0	0	0	0	0	0	0	0
SB THRU	0	0	0	0	0	0	0	0	0
SB RIGHT	0	0	0	0	0	0	0	0	0
TOTALS	**1605**	**60**	**1665**	**45**	**1650**	**1710**	**725**	**2330**	**2390**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	TNM	13-Nov-18	SIRW0000-0002	2 OF 2

E/W STREET : OAK VALLEY PKWY
N/S STREET : I-10 WB RAMPS
CONDITION : AM PEAK HOUR
PHF : 0.78

NORTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	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

SOUTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
1	0	3	0	0	2	0	0	2
1	0	2	1	0	1	1	0	0
1	0	0	0	0	0	0	0	1
0	0	1	0	0	1	0	0	0

EAST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	1	0	0	1	0	0	1	0
0	4	0	0	1	0	1	0	0
0	0	0	0	0	0	0	0	0
0	1	0	0	2	0	0	2	0

WEST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	3	3	0	1	1	0	1	0
0	1	3	0	2	0	0	1	1
0	0	1	0	1	0	0	0	0
0	1	0	0	0	0	0	0	0

NORTH LEG			SOUTH LEG			EAST LEG			WEST LEG		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	0	0	51	0	45	99	58	0	0	91	5
0	0	0	69	3	74	193	59	0	0	81	14
0	0	0	45	0	48	90	50	0	0	101	10
0	0	0	24	5	22	80	60	0	0	147	16

	TRUCK TOTAL	AUTO VOLUMES	TOTALS	ROUNDED TOTALS	TRUCK PERCENTAGE
OAK VALLEY PKWY					
EB LEFT	9	45	**54**	**55**	**20%**
EB THRU	11	420	**431**	**435**	**5%**
EB RIGHT	0	0	**0**	**0**	**0%**
WB LEFT	0	0	**0**	**0**	**0%**
WB THRU	13	227	**240**	**240**	**10%**
WB RIGHT	1	462	**463**	**465**	**5%**
I-10 WB RAMPS					
NB LEFT	13	189	**202**	**205**	**10%**
NB THRU	0	8	**8**	**10**	**5%**
NB RIGHT	5	189	**194**	**195**	**5%**
SB LEFT	0	0	**0**	**0**	**0%**
SB THRU	0	0	**0**	**0**	**0%**
SB RIGHT	0	0	**0**	**0**	**0%**

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: OAK VALLEY PKWY
EAST-WEST STREET: I-10 WB RAMPS
JURISDICTION: BEAUMONT

DATE: 10-17-18

PEAK HOUR: 07:00AM

NORTH LEG

TOTAL: 0

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

EAST LEG TOTAL: 703

	1st	2nd	3rd	4th	Total
Rt	99	194	90	80	463
Thru	61	64	50	65	240
Lt					

Total	1st	2nd	3rd	4th	
54	9	18	11	16	Lt
431	96	85	102	148	Thru
					Rt

WEST LEG TOTAL: 485

PEAK HOUR FACTORS

NORTH LEG =
SOUTH LEG = 0.66
EAST LEG = 0.68
WEST LEG = 0.74

ALL LEGS = 0.78

	Lt	Thru	Rt
1st	52	0	52
2nd	77	3	72
3rd	49	0	46
4th	24	5	24
Total	202	8	194

TOTAL: 404

SOUTH LEG

HOUR TOTAL: 1,592

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : OAK VALLEY PKWY — BEAUMONT

EAST-WEST STREET : I-10 WB RAMPS — 10-17-18

BEGINNING TIME : 07:00AM

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	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH LEG												
51	0	45	1	0	3	0	0	2	0	0	2	104
69	3	74	1	0	2	1	0	1	1	0	0	152
45	0	48	1	0	0	0	0	0	0	0	1	95
24	5	22	0	0	1	0	0	1	0	0	0	53
42	0	30	0	0	0	0	0	2	0	0	0	74
37	0	39	0	0	0	0	0	0	0	0	2	78
32	0	33	0	0	2	0	0	0	0	0	0	67
32	0	56	0	0	0	0	0	0	0	0	0	88
332	8	347	3	0	8	1	0	6	1	0	5	711
EAST LEG												
99	58	0	0	1	0	0	1	0	0	1	0	160
193	59	0	0	4	0	0	1	0	1	0	0	258
90	50	0	0	0	0	0	0	0	0	0	0	140
80	60	0	0	1	0	0	2	0	0	2	0	145
47	61	0	0	2	0	0	1	0	1	0	0	112
85	98	0	0	0	0	0	0	0	1	0	0	184
51	49	0	0	1	0	0	2	0	1	2	0	106
120	92	0	0	0	0	0	2	0	0	0	0	214
765	527	0	0	9	0	0	9	0	4	5	0	1319
WEST LEG												
0	91	5	0	3	3	0	1	1	0	1	0	105
0	81	14	0	1	3	0	2	0	0	1	1	103
0	101	10	0	0	1	0	1	0	0	0	0	113
0	147	16	0	1	0	0	0	0	0	0	0	164
0	65	19	0	1	0	0	0	0	0	1	0	86
0	87	8	0	0	1	0	0	2	0	0	0	98
0	94	10	0	0	0	0	1	1	0	0	0	106
0	66	22	0	0	0	0	0	0	0	0	0	88
0	732	104	0	6	8	0	5	4	0	3	1	863

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY PKWY

EAST-WEST STREET: I-10 WB RAMPS

TIME: 07:00AM-08:00AM DATE: 10-17-18

NORTH LEG

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

	1st	2nd	3rd	4th	Total
Rt	99	194	90	80	463
Thru	61	64	50	65	240
Lt					

Total	1st	2nd	3rd	4th	
54	9	18	11	16	Lt
431	96	85	102	148	Thru
					Rt

	Lt	Thru	Rt
1st	52	0	52
2nd	77	3	72
3rd	49	0	46
4th	24	5	24
Total	202	8	194

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY PKWY

EAST-WEST STREET: I-10 WB RAMPS

TIME: 08:00AM-09:00AM DATE: 10-17-18

NORTH LEG

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

	1st	2nd	3rd	4th	Total
Rt	48	86	52	120	306
Thru	64	98	54	94	310
Lt					

Total	1st	2nd	3rd	4th	
63	19	11	11	22	Lt
315	67	87	95	66	Thru
					Rt

	Lt	Thru	Rt
1st	32		42
2nd	41		37
3rd	35		32
4th	56		32
Total	164		143

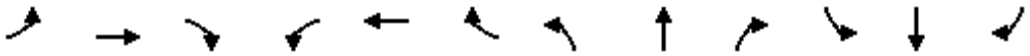
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Intersection	
Intersection Delay, s/veh	109.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	435	0	0	240	465	205	10	195	0	0	0
Future Vol, veh/h	55	435	0	0	240	465	205	10	195	0	0	0
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	20	5	0	0	10	5	10	5	5	0	0	0
Mvmt Flow	71	558	0	0	308	596	263	13	250	0	0	0
Number of Lanes	0	1	0	0	1	1	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	173.9	86	71.2
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	50%	11%	0%	0%
Vol Thru, %	2%	89%	100%	0%
Vol Right, %	48%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	410	490	240	465
LT Vol	205	55	0	0
Through Vol	10	435	240	0
RT Vol	195	0	0	465
Lane Flow Rate	526	628	308	596
Geometry Grp	2	5	7	7
Degree of Util (X)	1.009	1.301	0.664	1.156
Departure Headway (Hd)	7.557	7.722	8.335	7.521
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	484	477	437	489
Service Time	5.557	5.722	6.035	5.221
HCM Lane V/C Ratio	1.087	1.317	0.705	1.219
HCM Control Delay	71.2	173.9	26	117
HCM Lane LOS	F	F	D	F
HCM 95th-tile Q	13.7	26.2	4.7	19.8



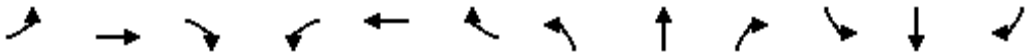
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	435	0	0	240	465	205	10	195	0	0	0
Future Volume (veh/h)	55	435	0	0	240	465	205	10	195	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1604	1826	0	0	1752	1826	1752	1826	1826			
Adj Flow Rate, veh/h	71	558	0	0	308	596	263	13	250			
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78			
Percent Heavy Veh, %	20	5	0	0	10	5	10	5	5			
Cap, veh/h	171	1179	0	0	1707	794	341	373	316			
Arrive On Green	0.02	0.21	0.00	0.00	0.51	0.51	0.20	0.20	0.20			
Sat Flow, veh/h	2963	1826	0	0	3416	1547	1668	1826	1547			
Grp Volume(v), veh/h	71	558	0	0	308	596	263	13	250			
Grp Sat Flow(s),veh/h/ln	1481	1826	0	0	1664	1547	1668	1826	1547			
Q Serve(g_s), s	1.4	16.0	0.0	0.0	3.0	18.3	8.9	0.3	9.2			
Cycle Q Clear(g_c), s	1.4	16.0	0.0	0.0	3.0	18.3	8.9	0.3	9.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	171	1179	0	0	1707	794	341	373	316			
V/C Ratio(X)	0.41	0.47	0.00	0.00	0.18	0.75	0.77	0.03	0.79			
Avail Cap(c_a), veh/h	247	1179	0	0	1707	794	487	533	451			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.94	0.94	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	28.4	14.7	0.0	0.0	7.8	11.6	22.5	19.1	22.7			
Incr Delay (d2), s/veh	1.5	1.3	0.0	0.0	0.2	6.5	4.8	0.0	6.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.5	7.8	0.0	0.0	0.8	5.9	3.8	0.1	3.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	16.0	0.0	0.0	8.1	18.1	27.3	19.2	28.7			
LnGrp LOS	C	B	A	A	A	B	C	B	C			
Approach Vol, veh/h		629			904			526				
Approach Delay, s/veh		17.5			14.7			27.8				
Approach LOS		B			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		43.2			8.0	35.3		16.8				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		33.5			5.0	24.0		17.5				
Max Q Clear Time (g_c+I1), s		18.0			3.4	20.3		11.2				
Green Ext Time (p_c), s		2.9			0.0	1.5		1.1				
Intersection Summary												
HCM 6th Ctrl Delay			18.9									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	120.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	455	0	0	260	475	205	10	205	0	0	0
Future Vol, veh/h	55	455	0	0	260	475	205	10	205	0	0	0
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	20	5	0	0	10	5	10	5	5	0	0	0
Mvmt Flow	71	583	0	0	333	609	263	13	263	0	0	0
Number of Lanes	0	1	0	0	1	1	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	195.7	92.6	78.5
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	49%	11%	0%	0%
Vol Thru, %	2%	89%	100%	0%
Vol Right, %	49%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	420	510	260	475
LT Vol	205	55	0	0
Through Vol	10	455	260	0
RT Vol	205	0	0	475
Lane Flow Rate	538	654	333	609
Geometry Grp	2	5	7	7
Degree of Util (X)	1.035	1.354	0.719	1.181
Departure Headway (Hd)	7.612	7.783	8.48	7.664
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	479	471	430	481
Service Time	5.612	5.783	6.18	5.364
HCM Lane V/C Ratio	1.123	1.389	0.774	1.266
HCM Control Delay	78.5	195.7	30.1	126.8
HCM Lane LOS	F	F	D	F
HCM 95th-tile Q	14.6	28.7	5.6	20.7



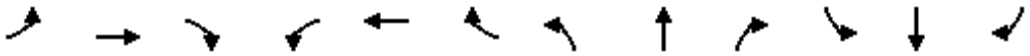
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	455	0	0	260	475	205	10	205	0	0	0
Future Volume (veh/h)	55	455	0	0	260	475	205	10	205	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1604	1826	0	0	1752	1826	1752	1826	1826			
Adj Flow Rate, veh/h	71	583	0	0	333	609	263	13	263			
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78			
Percent Heavy Veh, %	20	5	0	0	10	5	10	5	5			
Cap, veh/h	171	2213	0	0	1681	782	354	387	328			
Arrive On Green	0.02	0.21	0.00	0.00	0.51	0.51	0.21	0.21	0.21			
Sat Flow, veh/h	2963	3561	0	0	3416	1547	1668	1826	1547			
Grp Volume(v), veh/h	71	583	0	0	333	609	263	13	263			
Grp Sat Flow(s),veh/h/ln	1481	1735	0	0	1664	1547	1668	1826	1547			
Q Serve(g_s), s	1.4	8.4	0.0	0.0	3.3	19.3	8.8	0.3	9.7			
Cycle Q Clear(g_c), s	1.4	8.4	0.0	0.0	3.3	19.3	8.8	0.3	9.7			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	171	2213	0	0	1681	782	354	387	328			
V/C Ratio(X)	0.41	0.26	0.00	0.00	0.20	0.78	0.74	0.03	0.80			
Avail Cap(c_a), veh/h	247	2213	0	0	1681	782	487	533	451			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.94	0.94	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	28.4	11.9	0.0	0.0	8.2	12.1	22.1	18.8	22.4			
Incr Delay (d2), s/veh	1.5	0.3	0.0	0.0	0.3	7.5	4.0	0.0	7.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.5	2.6	0.0	0.0	0.9	6.3	3.7	0.1	4.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	12.2	0.0	0.0	8.4	19.7	26.1	18.8	29.5			
LnGrp LOS	C	B	A	A	A	B	C	B	C			
Approach Vol, veh/h		654			942			539				
Approach Delay, s/veh		14.1			15.7			27.6				
Approach LOS		B			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		42.8			8.0	34.8		17.2				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		33.5			5.0	24.0		17.5				
Max Q Clear Time (g_c+I1), s		10.4			3.4	21.3		11.7				
Green Ext Time (p_c), s		3.6			0.0	1.3		1.0				
Intersection Summary												
HCM 6th Ctrl Delay			18.2									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	118.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	445	0	0	245	475	210	15	200	0	0	0
Future Vol, veh/h	60	445	0	0	245	475	210	15	200	0	0	0
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	20	5	0	0	10	5	10	5	5	0	0	0
Mvmt Flow	77	571	0	0	314	609	269	19	256	0	0	0
Number of Lanes	0	1	0	0	1	1	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	184	92.9	82.5
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	49%	12%	0%	0%
Vol Thru, %	4%	88%	100%	0%
Vol Right, %	47%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	425	505	245	475
LT Vol	210	60	0	0
Through Vol	15	445	245	0
RT Vol	200	0	0	475
Lane Flow Rate	545	647	314	609
Geometry Grp	2	5	7	7
Degree of Util (X)	1.049	1.325	0.678	1.181
Departure Headway (Hd)	7.596	7.83	8.484	7.668
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	479	473	430	481
Service Time	5.596	5.83	6.184	5.368
HCM Lane V/C Ratio	1.138	1.368	0.73	1.266
HCM Control Delay	82.5	184	27.3	126.8
HCM Lane LOS	F	F	D	F
HCM 95th-tile Q	15.2	27.1	4.9	20.7



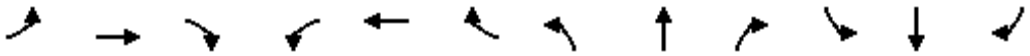
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	445	0	0	245	475	210	15	200	0	0	0
Future Volume (veh/h)	60	445	0	0	245	475	210	15	200	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1604	1826	0	0	1752	1826	1752	1826	1826			
Adj Flow Rate, veh/h	77	571	0	0	314	609	269	19	256			
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78			
Percent Heavy Veh, %	20	5	0	0	10	5	10	5	5			
Cap, veh/h	178	2226	0	0	1685	784	348	381	322			
Arrive On Green	0.02	0.21	0.00	0.00	0.51	0.51	0.21	0.21	0.21			
Sat Flow, veh/h	2963	3561	0	0	3416	1547	1668	1826	1547			
Grp Volume(v), veh/h	77	571	0	0	314	609	269	19	256			
Grp Sat Flow(s),veh/h/ln	1481	1735	0	0	1664	1547	1668	1826	1547			
Q Serve(g_s), s	1.5	8.2	0.0	0.0	3.1	19.2	9.1	0.5	9.4			
Cycle Q Clear(g_c), s	1.5	8.2	0.0	0.0	3.1	19.2	9.1	0.5	9.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	178	2226	0	0	1685	784	348	381	322			
V/C Ratio(X)	0.43	0.26	0.00	0.00	0.19	0.78	0.77	0.05	0.79			
Avail Cap(c_a), veh/h	247	2226	0	0	1685	784	487	533	451			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.94	0.94	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	28.4	11.7	0.0	0.0	8.1	12.1	22.4	19.0	22.5			
Incr Delay (d2), s/veh	1.5	0.3	0.0	0.0	0.2	7.5	5.0	0.1	6.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.5	2.5	0.0	0.0	0.9	6.3	3.9	0.2	3.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	12.0	0.0	0.0	8.3	19.5	27.5	19.1	29.0			
LnGrp LOS	C	B	A	A	A	B	C	B	C			
Approach Vol, veh/h		648			923			544				
Approach Delay, s/veh		14.1			15.7			27.9				
Approach LOS		B			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		43.0			8.1	34.9		17.0				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		33.5			5.0	24.0		17.5				
Max Q Clear Time (g_c+I1), s		10.2			3.5	21.2		11.4				
Green Ext Time (p_c), s		3.5			0.0	1.2		1.1				
Intersection Summary												
HCM 6th Ctrl Delay			18.3									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	132.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	465	0	0	265	485	210	15	210	0	0	0
Future Vol, veh/h	60	465	0	0	265	485	210	15	210	0	0	0
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	20	5	0	0	10	5	10	5	5	0	0	0
Mvmt Flow	77	596	0	0	340	622	269	19	269	0	0	0
Number of Lanes	0	1	0	0	1	1	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	213.1	99.7	90.8
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	48%	11%	0%	0%
Vol Thru, %	3%	89%	100%	0%
Vol Right, %	48%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	435	525	265	485
LT Vol	210	60	0	0
Through Vol	15	465	265	0
RT Vol	210	0	0	485
Lane Flow Rate	558	673	340	622
Geometry Grp	2	5	7	7
Degree of Util (X)	1.075	1.395	0.733	1.206
Departure Headway (Hd)	7.671	7.889	8.653	7.836
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	480	464	421	466
Service Time	5.671	5.889	6.353	5.536
HCM Lane V/C Ratio	1.163	1.45	0.808	1.335
HCM Control Delay	90.8	213.1	31.7	136.9
HCM Lane LOS	F	F	D	F
HCM 95th-tile Q	16.1	30.4	5.8	21.5



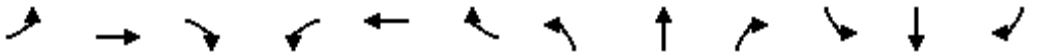
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	465	0	0	265	485	210	15	210	0	0	0
Future Volume (veh/h)	60	465	0	0	265	485	210	15	210	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1604	1826	0	0	1752	1826	1752	1826	1826			
Adj Flow Rate, veh/h	77	596	0	0	340	622	269	19	269			
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78			
Percent Heavy Veh, %	20	5	0	0	10	5	10	5	5			
Cap, veh/h	178	2200	0	0	1660	772	360	394	334			
Arrive On Green	0.02	0.21	0.00	0.00	0.50	0.50	0.22	0.22	0.22			
Sat Flow, veh/h	2963	3561	0	0	3416	1547	1668	1826	1547			
Grp Volume(v), veh/h	77	596	0	0	340	622	269	19	269			
Grp Sat Flow(s),veh/h/ln	1481	1735	0	0	1664	1547	1668	1826	1547			
Q Serve(g_s), s	1.5	8.6	0.0	0.0	3.4	20.2	9.0	0.5	9.9			
Cycle Q Clear(g_c), s	1.5	8.6	0.0	0.0	3.4	20.2	9.0	0.5	9.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	178	2200	0	0	1660	772	360	394	334			
V/C Ratio(X)	0.43	0.27	0.00	0.00	0.20	0.81	0.75	0.05	0.80			
Avail Cap(c_a), veh/h	247	2200	0	0	1660	772	487	533	451			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.93	0.93	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	28.4	12.1	0.0	0.0	8.4	12.6	22.0	18.6	22.3			
Incr Delay (d2), s/veh	1.5	0.3	0.0	0.0	0.3	8.8	4.2	0.0	7.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.5	2.7	0.0	0.0	1.0	6.9	3.8	0.2	4.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	12.4	0.0	0.0	8.7	21.4	26.2	18.7	29.8			
LnGrp LOS	C	B	A	A	A	C	C	B	C			
Approach Vol, veh/h		673			962			557				
Approach Delay, s/veh		14.4			16.9			27.7				
Approach LOS		B			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		42.5			8.1	34.4		17.5				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		33.5			5.0	24.0		17.5				
Max Q Clear Time (g_c+I1), s		10.6			3.5	22.2		11.9				
Green Ext Time (p_c), s		3.7			0.0	0.9		1.1				
Intersection Summary												
HCM 6th Ctrl Delay			18.9									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	186.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	80	630	0	0	350	670	300	15	285	0	0	0
Future Vol, veh/h	80	630	0	0	350	670	300	15	285	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	20	5	0	0	10	5	10	5	5	0	0	0
Mvmt Flow	84	663	0	0	368	705	316	16	300	0	0	0
Number of Lanes	0	1	0	0	1	1	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	279.4	147.6	144.3
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	50%	11%	0%	0%
Vol Thru, %	3%	89%	100%	0%
Vol Right, %	47%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	600	710	350	670
LT Vol	300	80	0	0
Through Vol	15	630	350	0
RT Vol	285	0	0	670
Lane Flow Rate	632	747	368	705
Geometry Grp	2	5	7	7
Degree of Util (X)	1.224	1.548	0.795	1.368
Departure Headway (Hd)	7.892	8.285	9.32	8.499
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	467	448	391	437
Service Time	5.892	6.285	7.02	6.199
HCM Lane V/C Ratio	1.353	1.667	0.941	1.613
HCM Control Delay	144.3	279.4	39.8	203.9
HCM Lane LOS	F	F	E	F
HCM 95th-tile Q	22.2	36.6	6.9	27.4



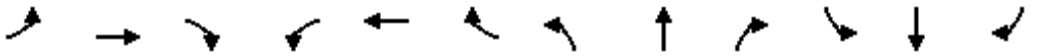
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	630	0	0	350	670	300	15	285	0	0	0
Future Volume (veh/h)	80	630	0	0	350	670	300	15	285	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1604	1826	0	0	1752	1826	1752	1826	1826			
Adj Flow Rate, veh/h	84	663	0	0	368	705	316	16	300			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	20	5	0	0	10	5	10	5	5			
Cap, veh/h	626	1937	0	0	978	864	487	533	451			
Arrive On Green	0.18	0.18	0.00	0.00	0.56	0.56	0.29	0.29	0.29			
Sat Flow, veh/h	875	3561	0	0	1752	1547	1668	1826	1547			
Grp Volume(v), veh/h	84	663	0	0	368	705	316	16	300			
Grp Sat Flow(s),veh/h/ln	437	1735	0	0	1752	1547	1668	1826	1547			
Q Serve(g_s), s	5.1	10.0	0.0	0.0	7.0	22.2	9.9	0.4	10.2			
Cycle Q Clear(g_c), s	12.1	10.0	0.0	0.0	7.0	22.2	9.9	0.4	10.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	626	1937	0	0	978	864	487	533	451			
V/C Ratio(X)	0.13	0.34	0.00	0.00	0.38	0.82	0.65	0.03	0.66			
Avail Cap(c_a), veh/h	626	1937	0	0	978	864	487	533	451			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.95	0.95	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	18.9	14.9	0.0	0.0	7.4	10.7	18.6	15.2	18.7			
Incr Delay (d2), s/veh	0.4	0.5	0.0	0.0	1.1	8.4	6.6	0.1	7.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.6	3.7	0.0	0.0	2.1	6.9	4.4	0.2	4.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.3	15.3	0.0	0.0	8.5	19.1	25.1	15.3	26.2			
LnGrp LOS	B	B	A	A	A	B	C	B	C			
Approach Vol, veh/h		747			1073			632				
Approach Delay, s/veh		15.8			15.5			25.4				
Approach LOS		B			B			C				
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		38.0				38.0		22.0				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		33.5				24.0		17.5				
Max Q Clear Time (g_c+I1), s		14.1				24.2		12.2				
Green Ext Time (p_c), s		5.3				0.0		1.2				
Intersection Summary												
HCM 6th Ctrl Delay			18.1									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	197.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	80	650	0	0	370	680	300	15	295	0	0	0
Future Vol, veh/h	80	650	0	0	370	680	300	15	295	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	20	5	0	0	10	5	10	5	5	0	0	0
Mvmt Flow	84	684	0	0	389	716	316	16	311	0	0	0
Number of Lanes	0	1	0	0	1	1	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	298	153.9	152.1
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	49%	11%	0%	0%
Vol Thru, %	2%	89%	100%	0%
Vol Right, %	48%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	610	730	370	680
LT Vol	300	80	0	0
Through Vol	15	650	370	0
RT Vol	295	0	0	680
Lane Flow Rate	642	768	389	716
Geometry Grp	2	5	7	7
Degree of Util (X)	1.244	1.591	0.84	1.388
Departure Headway (Hd)	7.926	8.316	9.445	8.622
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	462	446	386	429
Service Time	5.926	6.316	7.145	6.322
HCM Lane V/C Ratio	1.39	1.722	1.008	1.669
HCM Control Delay	152.1	298	45.9	212.7
HCM Lane LOS	F	F	E	F
HCM 95th-tile Q	23	38.7	7.8	28



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	650	0	0	370	680	300	15	295	0	0	0
Future Volume (veh/h)	80	650	0	0	370	680	300	15	295	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1604	1826	0	0	1752	1826	1752	1826	1826			
Adj Flow Rate, veh/h	84	684	0	0	389	716	316	16	311			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	20	5	0	0	10	5	10	5	5			
Cap, veh/h	186	2113	0	0	1569	729	402	440	373			
Arrive On Green	0.02	0.20	0.00	0.00	0.63	0.63	0.24	0.24	0.24			
Sat Flow, veh/h	2963	3561	0	0	3416	1547	1668	1826	1547			
Grp Volume(v), veh/h	84	684	0	0	389	716	316	16	311			
Grp Sat Flow(s),veh/h/ln	1481	1735	0	0	1664	1547	1668	1826	1547			
Q Serve(g_s), s	1.7	10.1	0.0	0.0	3.1	26.9	10.6	0.4	11.5			
Cycle Q Clear(g_c), s	1.7	10.1	0.0	0.0	3.1	26.9	10.6	0.4	11.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	186	2113	0	0	1569	729	402	440	373			
V/C Ratio(X)	0.45	0.32	0.00	0.00	0.25	0.98	0.79	0.04	0.83			
Avail Cap(c_a), veh/h	247	2113	0	0	1569	729	487	533	451			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.33	1.33	1.00	1.00	1.00			
Upstream Filter(I)	0.89	0.89	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	28.4	13.4	0.0	0.0	6.5	10.9	21.3	17.4	21.6			
Incr Delay (d2), s/veh	1.5	0.4	0.0	0.0	0.4	29.1	6.9	0.0	10.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.6	3.6	0.0	0.0	0.9	9.8	4.7	0.2	5.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	13.8	0.0	0.0	6.9	40.1	28.3	17.5	32.5			
LnGrp LOS	C	B	A	A	A	D	C	B	C			
Approach Vol, veh/h		768			1105			643				
Approach Delay, s/veh		15.5			28.4			30.1				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		41.0			8.3	32.8		19.0				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		33.5			5.0	24.0		17.5				
Max Q Clear Time (g_c+I1), s		12.1			3.7	28.9		13.5				
Green Ext Time (p_c), s		4.3			0.0	0.0		1.0				
Intersection Summary												
HCM 6th Ctrl Delay			24.9									
HCM 6th LOS			C									

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	TNM	13-Nov-18	SIRW0000-0002	1 OF 2

E/W STREET : OAK VALLEY PKWY
N/S STREET : I-10 WB RAMPS
CONDITION : PM PEAK HOUR

INTERSECTION : 2
PROJECTED GROWTH PER YEAR : 2%

TURN MOVEMENTS

Condition	Existing Condition	Project Trips	Existing + Project Condition	Ambient Growth	Background Condition	Project Condition	Future Ambient Growth	Future Condition	Future+ Project Condition
Scenario #	1		3		5	7		9	11
OAK VALLEY PKWY									
EB LEFT	50	0	50	5	55	55	25	75	75
EB THRU	350	20	370	10	360	380	155	505	525
EB RIGHT	0	0	0	0	0	0	0	0	0
WB LEFT	0	0	0	0	0	0	0	0	0
WB THRU	250	20	270	5	255	275	110	360	380
WB RIGHT	340	10	350	10	350	360	150	490	500
I-10 WB RAMPS									
NB LEFT	315	0	315	10	325	325	140	455	455
NB THRU	5	0	5	5	10	10	5	10	10
NB RIGHT	345	10	355	10	355	365	155	500	510
SB LEFT	0	0	0	0	0	0	0	0	0
SB THRU	0	0	0	0	0	0	0	0	0
SB RIGHT	0	0	0	0	0	0	0	0	0
TOTALS	**1655**	**60**	**1715**	**55**	**1710**	**1770**	**740**	**2395**	**2455**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	TNM	13-Nov-18	SIRW0000-0002	2 OF 2

E/W STREET : OAK VALLEY PKWY
N/S STREET : I-10 WB RAMPS
CONDITION : PM PEAK HOUR
PHF : 0.73

NORTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	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

SOUTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
1	0	3	0	0	2	0	0	3
2	0	2	0	0	4	0	0	0
0	0	0	0	0	1	0	0	2
1	0	0	0	0	1	0	0	2

EAST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	1	0	0	1	0	0	0	0
0	2	0	1	1	0	2	0	0
1	2	0	0	2	0	1	0	0
0	1	0	1	1	0	1	1	0

WEST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	2	2	0	1	0	0	0	1
0	2	1	0	3	0	0	0	1
0	2	1	0	2	1	0	1	0
0	0	3	0	1	0	0	0	0

NORTH LEG			SOUTH LEG			EAST LEG			WEST LEG		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	0	0	66	1	95	92	42	0	0	81	9
0	0	0	57	3	50	52	55	0	0	87	5
0	0	0	123	1	104	125	94	0	0	76	20
0	0	0	92	0	45	61	45	0	0	92	3

	TRUCK TOTAL	AUTO VOLUMES	TOTALS	ROUNDED TOTALS	TRUCK PERCENTAGE
OAK VALLEY PKWY					
EB LEFT	10	37	**47**	**50**	**25%**
EB THRU	14	336	**350**	**350**	**5%**
EB RIGHT	0	0	**0**	**0**	**0%**
WB LEFT	0	0	**0**	**0**	**0%**
WB THRU	12	236	**248**	**250**	**5%**
WB RIGHT	7	330	**337**	**340**	**5%**
I-10 WB RAMPS					
NB LEFT	20	294	**314**	**315**	**10%**
NB THRU	0	5	**5**	**5**	**5%**
NB RIGHT	4	338	**342**	**345**	**5%**
SB LEFT	0	0	**0**	**0**	**0%**
SB THRU	0	0	**0**	**0**	**0%**
SB RIGHT	0	0	**0**	**0**	**0%**

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: OAK VALLEY PKWY
EAST-WEST STREET: I-10 WB RAMPS
JURISDICTION: BEAUMONT

DATE: 10-17-18

PEAK HOUR: 04:00PM

NORTH LEG

TOTAL: 0

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

EAST LEG TOTAL: 585

	1st	2nd	3rd	4th	Total
Rt	92	55	127	63	337
Thru	44	58	98	48	248
Lt					

Total	1st	2nd	3rd	4th	
47	12	7	22	6	Lt
350	84	92	81	93	Thru
					Rt

WEST LEG TOTAL: 397

PEAK HOUR FACTORS

NORTH LEG =
SOUTH LEG = 0.72
EAST LEG = 0.65
WEST LEG = 0.96

ALL LEGS = 0.73

	Lt	Thru	Rt
1st	103	1	67
2nd	56	3	59
3rd	107	1	123
4th	48		93
Total	314	5	342

SOUTH LEG

TOTAL: 661

HOUR TOTAL: 1,643

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : OAK VALLEY PKWY
EAST-WEST STREET : I-10 WB RAMPS
BEGINNING TIME : 04:00PM

BEAUMONT
10-17-18

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	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH LEG												
66	1	95	1	0	3	0	0	2	0	0	3	171
57	3	50	2	0	2	0	0	4	0	0	0	118
123	1	104	0	0	0	0	0	1	0	0	2	231
92	0	45	1	0	0	0	0	1	0	0	2	141
60	1	50	1	0	1	1	0	2	0	0	0	116
61	2	37	1	0	1	0	0	1	0	0	1	104
119	1	58	0	0	1	1	0	1	0	0	1	182
57	0	51	1	0	1	2	0	0	0	0	1	113
635	9	490	7	0	9	4	0	12	0	0	10	1176
EAST LEG												
92	42	0	0	1	0	0	1	0	0	0	0	136
52	55	0	0	2	0	1	1	0	2	0	0	113
125	94	0	1	2	0	0	2	0	1	0	0	225
61	45	0	0	1	0	1	1	0	1	1	0	111
74	56	0	1	1	0	0	0	0	1	0	0	133
64	44	0	0	2	0	0	3	0	3	0	0	116
52	38	0	0	4	0	0	1	0	0	0	0	95
59	40	0	0	1	0	0	3	0	1	1	0	105
579	414	0	2	14	0	2	12	0	9	2	0	1034
WEST LEG												
0	81	9	0	2	2	0	1	0	0	0	1	96
0	87	5	0	2	1	0	3	0	0	0	1	99
0	76	20	0	2	1	0	2	1	0	1	0	103
0	92	3	0	0	3	0	1	0	0	0	0	99
0	77	15	0	1	0	0	2	0	0	0	0	95
0	112	7	0	0	1	0	1	3	0	1	0	125
0	108	15	0	2	1	0	0	0	0	1	0	127
0	83	2	0	0	2	0	1	3	0	0	0	91
0	716	76	0	9	11	0	11	7	0	3	2	835

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY PKWY

EAST-WEST STREET: I-10 WB RAMPS

TIME: 04:00PM-05:00PM DATE: 10-17-18

NORTH LEG

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

	1st	2nd	3rd	4th	Total
Rt	92	55	127	63	337
Thru	44	58	98	48	248
Lt					

Total	1st	2nd	3rd	4th	
47	12	7	22	6	Lt
350	84	92	81	93	Thru
					Rt

	Lt	Thru	Rt
1st	103	1	67
2nd	56	3	59
3rd	107	1	123
4th	48		93
Total	314	5	342

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY PKWY

EAST-WEST STREET: I-10 WB RAMPS

TIME: 05:00PM-06:00PM DATE: 10-17-18

NORTH LEG

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

	1st	2nd	3rd	4th	Total
Rt	76	67	52	60	255
Thru	57	49	43	45	194
Lt					

Total	1st	2nd	3rd	4th	
49	15	11	16	7	Lt
389	80	114	111	84	Thru
					Rt

	Lt	Thru	Rt
1st	53	1	62
2nd	40	2	62
3rd	61	1	120
4th	53		60
Total	207	4	304

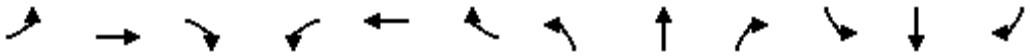
Prepared by NEWPORT TRAFFIC STUDIES

Intersection	
Intersection Delay, s/veh	188.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	350	0	0	250	340	315	5	345	0	0	0
Future Vol, veh/h	50	350	0	0	250	340	315	5	345	0	0	0
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles, %	25	5	0	0	5	5	10	5	5	0	0	0
Mvmt Flow	68	479	0	0	342	466	432	7	473	0	0	0
Number of Lanes	0	1	0	0	1	1	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	118.4	47.2	356.8
HCM LOS	F	E	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	47%	12%	0%	0%
Vol Thru, %	1%	88%	100%	0%
Vol Right, %	52%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	665	400	250	340
LT Vol	315	50	0	0
Through Vol	5	350	250	0
RT Vol	345	0	0	340
Lane Flow Rate	911	548	342	466
Geometry Grp	2	5	7	7
Degree of Util (X)	1.734	1.134	0.731	0.903
Departure Headway (Hd)	7.219	9.481	10.073	9.336
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	510	389	363	391
Service Time	5.219	7.481	7.773	7.036
HCM Lane V/C Ratio	1.786	1.409	0.942	1.192
HCM Control Delay	356.8	118.4	35.8	55.6
HCM Lane LOS	F	F	E	F
HCM 95th-tile Q	52	16.3	5.6	9.3



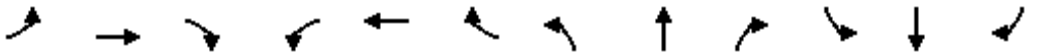
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	350	0	0	250	340	315	5	345	0	0	0
Future Volume (veh/h)	50	350	0	0	250	340	315	5	345	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1530	1826	0	0	1826	1826	1752	1826	1826			
Adj Flow Rate, veh/h	68	479	0	0	342	466	432	7	473			
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73			
Percent Heavy Veh, %	25	5	0	0	5	5	10	5	5			
Cap, veh/h	160	1747	0	0	1291	576	578	633	536			
Arrive On Green	0.11	1.00	0.00	0.00	0.37	0.37	0.35	0.35	0.35			
Sat Flow, veh/h	2826	3561	0	0	3561	1547	1668	1826	1547			
Grp Volume(v), veh/h	68	479	0	0	342	466	432	7	473			
Grp Sat Flow(s),veh/h/ln	1413	1735	0	0	1735	1547	1668	1826	1547			
Q Serve(g_s), s	1.3	0.0	0.0	0.0	4.1	16.2	13.7	0.2	17.3			
Cycle Q Clear(g_c), s	1.3	0.0	0.0	0.0	4.1	16.2	13.7	0.2	17.3			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	160	1747	0	0	1291	576	578	633	536			
V/C Ratio(X)	0.43	0.27	0.00	0.00	0.26	0.81	0.75	0.01	0.88			
Avail Cap(c_a), veh/h	235	1747	0	0	1291	576	653	715	606			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.92	0.92	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	25.7	0.0	0.0	0.0	13.1	16.9	17.3	12.9	18.5			
Incr Delay (d2), s/veh	1.7	0.4	0.0	0.0	0.5	11.7	4.2	0.0	13.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.0	0.0	1.4	6.5	5.5	0.1	7.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	0.4	0.0	0.0	13.6	28.6	21.5	12.9	31.7			
LnGrp LOS	C	A	A	A	B	C	C	B	C			
Approach Vol, veh/h		547			808			912				
Approach Delay, s/veh		3.7			22.3			26.7				
Approach LOS		A			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		34.7			7.9	26.8		25.3				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		27.5			5.0	18.0		23.5				
Max Q Clear Time (g_c+I1), s		2.0			3.3	18.2		19.3				
Green Ext Time (p_c), s		2.9			0.0	0.0		1.5				
Intersection Summary												
HCM 6th Ctrl Delay			19.6									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	199.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	370	0	0	270	350	315	5	355	0	0	0
Future Vol, veh/h	50	370	0	0	270	350	315	5	355	0	0	0
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles, %	25	5	0	0	5	5	10	5	5	0	0	0
Mvmt Flow	68	507	0	0	370	479	432	7	486	0	0	0
Number of Lanes	0	1	0	0	1	1	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	140.6	53.2	371.1
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	47%	12%	0%	0%
Vol Thru, %	1%	88%	100%	0%
Vol Right, %	53%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	675	420	270	350
LT Vol	315	50	0	0
Through Vol	5	370	270	0
RT Vol	355	0	0	350
Lane Flow Rate	925	575	370	479
Geometry Grp	2	5	7	7
Degree of Util (X)	1.766	1.195	0.789	0.93
Departure Headway (Hd)	7.306	9.577	10.275	9.536
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	509	385	355	384
Service Time	5.306	7.577	7.975	7.236
HCM Lane V/C Ratio	1.817	1.494	1.042	1.247
HCM Control Delay	371.1	140.6	42.3	61.6
HCM Lane LOS	F	F	E	F
HCM 95th-tile Q	53.3	18.3	6.6	9.9



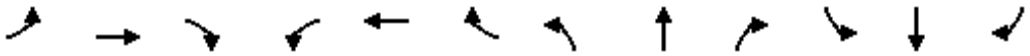
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	370	0	0	270	350	315	5	355	0	0	0
Future Volume (veh/h)	50	370	0	0	270	350	315	5	355	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1530	1826	0	0	1826	1826	1752	1826	1826			
Adj Flow Rate, veh/h	68	507	0	0	370	479	432	7	486			
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73			
Percent Heavy Veh, %	25	5	0	0	5	5	10	5	5			
Cap, veh/h	160	1724	0	0	1268	566	589	645	546			
Arrive On Green	0.11	0.99	0.00	0.00	0.12	0.12	0.35	0.35	0.35			
Sat Flow, veh/h	2826	3561	0	0	3561	1547	1668	1826	1547			
Grp Volume(v), veh/h	68	507	0	0	370	479	432	7	486			
Grp Sat Flow(s),veh/h/ln	1413	1735	0	0	1735	1547	1668	1826	1547			
Q Serve(g_s), s	1.3	0.1	0.0	0.0	5.8	18.2	13.6	0.1	17.8			
Cycle Q Clear(g_c), s	1.3	0.1	0.0	0.0	5.8	18.2	13.6	0.1	17.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	160	1724	0	0	1268	566	589	645	546			
V/C Ratio(X)	0.43	0.29	0.00	0.00	0.29	0.85	0.73	0.01	0.89			
Avail Cap(c_a), veh/h	235	1724	0	0	1268	566	653	715	606			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	0.92	0.92	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	25.7	0.1	0.0	0.0	19.3	24.7	16.9	12.6	18.3			
Incr Delay (d2), s/veh	1.7	0.4	0.0	0.0	0.6	14.5	3.8	0.0	14.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.0	0.0	2.2	9.5	5.4	0.1	7.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	0.5	0.0	0.0	19.9	39.3	20.8	12.6	32.6			
LnGrp LOS	C	A	A	A	B	D	C	B	C			
Approach Vol, veh/h		575			849			925				
Approach Delay, s/veh		3.7			30.8			26.9				
Approach LOS		A			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		34.3			7.9	26.4		25.7				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		27.5			5.0	18.0		23.5				
Max Q Clear Time (g_c+I1), s		2.1			3.3	20.2		19.8				
Green Ext Time (p_c), s		3.1			0.0	0.0		1.4				
Intersection Summary												
HCM 6th Ctrl Delay			22.6									
HCM 6th LOS			C									

Intersection	
Intersection Delay, s/veh	207.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	360	0	0	255	350	325	10	355	0	0	0
Future Vol, veh/h	55	360	0	0	255	350	325	10	355	0	0	0
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles, %	25	5	0	0	5	5	10	5	5	0	0	0
Mvmt Flow	75	493	0	0	349	479	445	14	486	0	0	0
Number of Lanes	0	1	0	0	1	1	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	135.5	51.8	388.2
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	47%	13%	0%	0%
Vol Thru, %	1%	87%	100%	0%
Vol Right, %	51%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	690	415	255	350
LT Vol	325	55	0	0
Through Vol	10	360	255	0
RT Vol	355	0	0	350
Lane Flow Rate	945	568	349	479
Geometry Grp	2	5	7	7
Degree of Util (X)	1.805	1.18	0.745	0.93
Departure Headway (Hd)	7.291	9.67	10.358	9.619
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	510	381	353	384
Service Time	5.291	7.67	8.058	7.319
HCM Lane V/C Ratio	1.853	1.491	0.989	1.247
HCM Control Delay	388.2	135.5	37.9	61.9
HCM Lane LOS	F	F	E	F
HCM 95th-tile Q	55.7	17.7	5.8	9.9



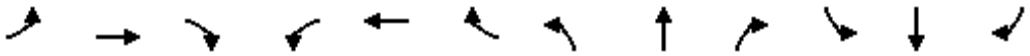
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	360	0	0	255	350	325	10	355	0	0	0
Future Volume (veh/h)	55	360	0	0	255	350	325	10	355	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1530	1826	0	0	1826	1826	1752	1826	1826			
Adj Flow Rate, veh/h	75	493	0	0	349	479	445	14	486			
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73			
Percent Heavy Veh, %	25	5	0	0	5	5	10	5	5			
Cap, veh/h	168	1723	0	0	1256	560	590	645	547			
Arrive On Green	0.12	0.99	0.00	0.00	0.36	0.36	0.35	0.35	0.35			
Sat Flow, veh/h	2826	3561	0	0	3561	1547	1668	1826	1547			
Grp Volume(v), veh/h	75	493	0	0	349	479	445	14	486			
Grp Sat Flow(s),veh/h/ln	1413	1735	0	0	1735	1547	1668	1826	1547			
Q Serve(g_s), s	1.5	0.1	0.0	0.0	4.3	17.2	14.1	0.3	17.8			
Cycle Q Clear(g_c), s	1.5	0.1	0.0	0.0	4.3	17.2	14.1	0.3	17.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	168	1723	0	0	1256	560	590	645	547			
V/C Ratio(X)	0.45	0.29	0.00	0.00	0.28	0.85	0.75	0.02	0.89			
Avail Cap(c_a), veh/h	235	1723	0	0	1256	560	653	715	606			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.91	0.91	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	25.5	0.1	0.0	0.0	13.6	17.7	17.1	12.6	18.3			
Incr Delay (d2), s/veh	1.7	0.4	0.0	0.0	0.6	15.3	4.5	0.0	14.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.0	0.0	1.5	7.3	5.7	0.1	7.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	0.5	0.0	0.0	14.1	33.0	21.6	12.7	32.4			
LnGrp LOS	C	A	A	A	B	C	C	B	C			
Approach Vol, veh/h		568			828			945				
Approach Delay, s/veh		4.0			25.0			27.0				
Approach LOS		A			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		34.3			8.1	26.2		25.7				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		27.5			5.0	18.0		23.5				
Max Q Clear Time (g_c+I1), s		2.1			3.5	19.2		19.8				
Green Ext Time (p_c), s		3.0			0.0	0.0		1.4				
Intersection Summary												
HCM 6th Ctrl Delay			20.7									
HCM 6th LOS			C									

Intersection	
Intersection Delay, s/veh	218.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	380	0	0	275	360	325	10	365	0	0	0
Future Vol, veh/h	55	380	0	0	275	360	325	10	365	0	0	0
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles, %	25	5	0	0	5	5	10	5	5	0	0	0
Mvmt Flow	75	521	0	0	377	493	445	14	500	0	0	0
Number of Lanes	0	1	0	0	1	1	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	158.2	58.3	402.1
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	46%	13%	0%	0%
Vol Thru, %	1%	87%	100%	0%
Vol Right, %	52%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	700	435	275	360
LT Vol	325	55	0	0
Through Vol	10	380	275	0
RT Vol	365	0	0	360
Lane Flow Rate	959	596	377	493
Geometry Grp	2	5	7	7
Degree of Util (X)	1.836	1.24	0.804	0.956
Departure Headway (Hd)	7.375	9.76	10.559	9.819
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	499	375	347	375
Service Time	5.375	7.76	8.259	7.519
HCM Lane V/C Ratio	1.922	1.589	1.086	1.315
HCM Control Delay	402.1	158.2	45.1	68.4
HCM Lane LOS	F	F	E	F
HCM 95th-tile Q	56.9	19.7	6.8	10.5



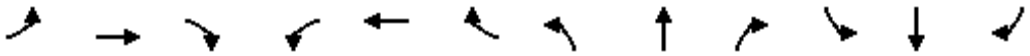
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	380	0	0	275	360	325	10	365	0	0	0
Future Volume (veh/h)	55	380	0	0	275	360	325	10	365	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1530	1826	0	0	1826	1826	1752	1826	1826			
Adj Flow Rate, veh/h	75	521	0	0	377	493	445	14	500			
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73			
Percent Heavy Veh, %	25	5	0	0	5	5	10	5	5			
Cap, veh/h	168	1699	0	0	1233	550	601	658	557			
Arrive On Green	0.12	0.98	0.00	0.00	0.12	0.12	0.36	0.36	0.36			
Sat Flow, veh/h	2826	3561	0	0	3561	1547	1668	1826	1547			
Grp Volume(v), veh/h	75	521	0	0	377	493	445	14	500			
Grp Sat Flow(s),veh/h/ln	1413	1735	0	0	1735	1547	1668	1826	1547			
Q Serve(g_s), s	1.5	0.3	0.0	0.0	6.0	18.9	14.0	0.3	18.3			
Cycle Q Clear(g_c), s	1.5	0.3	0.0	0.0	6.0	18.9	14.0	0.3	18.3			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	168	1699	0	0	1233	550	601	658	557			
V/C Ratio(X)	0.45	0.31	0.00	0.00	0.31	0.90	0.74	0.02	0.90			
Avail Cap(c_a), veh/h	235	1699	0	0	1233	550	653	715	606			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	0.91	0.91	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	25.5	0.3	0.0	0.0	19.7	25.4	16.7	12.4	18.1			
Incr Delay (d2), s/veh	1.7	0.4	0.0	0.0	0.6	19.9	4.1	0.0	15.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.5	0.2	0.0	0.0	2.3	10.5	5.5	0.1	8.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	0.7	0.0	0.0	20.3	45.3	20.9	12.4	33.5			
LnGrp LOS	C	A	A	A	C	D	C	B	C			
Approach Vol, veh/h		596			870			959				
Approach Delay, s/veh		4.1			34.5			27.3				
Approach LOS		A			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		33.9			8.1	25.8		26.1				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		27.5			5.0	18.0		23.5				
Max Q Clear Time (g_c+I1), s		2.3			3.5	20.9		20.3				
Green Ext Time (p_c), s		3.2			0.0	0.0		1.3				
Intersection Summary												
HCM 6th Ctrl Delay			24.2									
HCM 6th LOS			C									

Intersection	
Intersection Delay, s/veh	247.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	505	0	0	360	490	455	10	500	0	0	0
Future Vol, veh/h	75	505	0	0	360	490	455	10	500	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	25	5	0	0	5	5	10	5	5	0	0	0
Mvmt Flow	79	532	0	0	379	516	479	11	526	0	0	0
Number of Lanes	0	1	0	0	1	1	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	171.9	66.5	453.2
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	47%	13%	0%	0%
Vol Thru, %	1%	87%	100%	0%
Vol Right, %	52%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	965	580	360	490
LT Vol	455	75	0	0
Through Vol	10	505	360	0
RT Vol	500	0	0	490
Lane Flow Rate	1016	611	379	516
Geometry Grp	2	5	7	7
Degree of Util (X)	1.952	1.275	0.809	1
Departure Headway (Hd)	7.293	9.801	10.963	10.22
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	508	379	333	361
Service Time	5.293	7.801	8.663	7.92
HCM Lane V/C Ratio	2	1.612	1.138	1.429
HCM Control Delay	453.2	171.9	47.1	80.7
HCM Lane LOS	F	F	E	F
HCM 95th-tile Q	64.4	21	6.8	11.5



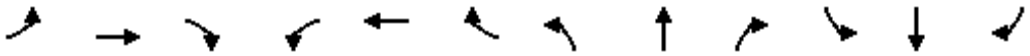
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	505	0	0	360	490	455	10	500	0	0	0
Future Volume (veh/h)	75	505	0	0	360	490	455	10	500	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1530	1826	0	0	1826	1826	1752	1826	1826			
Adj Flow Rate, veh/h	79	532	0	0	379	516	479	11	526			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	25	5	0	0	5	5	10	5	5			
Cap, veh/h	627	1590	0	0	1590	709	653	715	606			
Arrive On Green	0.92	0.92	0.00	0.00	0.46	0.46	0.39	0.39	0.39			
Sat Flow, veh/h	986	3561	0	0	3561	1547	1668	1826	1547			
Grp Volume(v), veh/h	79	532	0	0	379	516	479	11	526			
Grp Sat Flow(s),veh/h/ln	493	1735	0	0	1735	1547	1668	1826	1547			
Q Serve(g_s), s	1.2	1.1	0.0	0.0	4.0	16.3	14.7	0.2	18.8			
Cycle Q Clear(g_c), s	5.2	1.1	0.0	0.0	4.0	16.3	14.7	0.2	18.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	627	1590	0	0	1590	709	653	715	606			
V/C Ratio(X)	0.13	0.33	0.00	0.00	0.24	0.73	0.73	0.02	0.87			
Avail Cap(c_a), veh/h	627	1590	0	0	1590	709	653	715	606			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.85	0.85	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	2.1	1.4	0.0	0.0	9.9	13.2	15.6	11.2	16.8			
Incr Delay (d2), s/veh	0.4	0.5	0.0	0.0	0.4	6.4	7.1	0.0	15.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.1	0.3	0.0	0.0	1.2	5.5	6.3	0.1	8.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.4	1.9	0.0	0.0	10.2	19.6	22.7	11.2	32.3			
LnGrp LOS	A	A	A	A	B	B	C	B	C			
Approach Vol, veh/h		611			895			1016				
Approach Delay, s/veh		2.0			15.7			27.6				
Approach LOS		A			B			C				
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		32.0				32.0		28.0				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		27.5				18.0		23.5				
Max Q Clear Time (g_c+I1), s		7.2				18.3		20.8				
Green Ext Time (p_c), s		4.2				0.0		1.2				
Intersection Summary												
HCM 6th Ctrl Delay			17.1									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	257.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	525	0	0	380	500	455	10	510	0	0	0
Future Vol, veh/h	75	525	0	0	380	500	455	10	510	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	25	5	0	0	5	5	10	5	5	0	0	0
Mvmt Flow	79	553	0	0	400	526	479	11	537	0	0	0
Number of Lanes	0	1	0	0	1	1	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	191.3	72.8	463.9
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	47%	12%	0%	0%
Vol Thru, %	1%	88%	100%	0%
Vol Right, %	52%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	975	600	380	500
LT Vol	455	75	0	0
Through Vol	10	525	380	0
RT Vol	510	0	0	500
Lane Flow Rate	1026	632	400	526
Geometry Grp	2	5	7	7
Degree of Util (X)	1.975	1.321	0.854	1.021
Departure Headway (Hd)	7.492	10.12	11.121	10.377
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	493	366	328	353
Service Time	5.492	8.12	8.821	8.077
HCM Lane V/C Ratio	2.081	1.727	1.22	1.49
HCM Control Delay	463.9	191.3	54.1	87
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	64.1	22.2	7.6	12



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	525	0	0	380	500	455	10	510	0	0	0
Future Volume (veh/h)	75	525	0	0	380	500	455	10	510	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1530	1826	0	0	1826	1826	1752	1826	1826			
Adj Flow Rate, veh/h	79	553	0	0	400	526	479	11	537			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	25	5	0	0	5	5	10	5	5			
Cap, veh/h	172	1640	0	0	1168	521	629	689	584			
Arrive On Green	0.12	0.95	0.00	0.00	0.34	0.34	0.38	0.38	0.38			
Sat Flow, veh/h	2826	3561	0	0	3561	1547	1668	1826	1547			
Grp Volume(v), veh/h	79	553	0	0	400	526	479	11	537			
Grp Sat Flow(s),veh/h/ln	1413	1735	0	0	1735	1547	1668	1826	1547			
Q Serve(g_s), s	1.6	0.8	0.0	0.0	5.2	20.2	15.0	0.2	19.9			
Cycle Q Clear(g_c), s	1.6	0.8	0.0	0.0	5.2	20.2	15.0	0.2	19.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	172	1640	0	0	1168	521	629	689	584			
V/C Ratio(X)	0.46	0.34	0.00	0.00	0.34	1.01	0.76	0.02	0.92			
Avail Cap(c_a), veh/h	235	1640	0	0	1168	521	653	715	606			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.81	0.81	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	25.4	0.9	0.0	0.0	14.9	19.9	16.3	11.7	17.8			
Incr Delay (d2), s/veh	1.5	0.5	0.0	0.0	0.8	41.8	5.1	0.0	19.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.5	0.3	0.0	0.0	1.8	11.9	6.1	0.1	9.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	1.3	0.0	0.0	15.7	61.7	21.4	11.7	36.8			
LnGrp LOS	C	A	A	A	B	F	C	B	D			
Approach Vol, veh/h		632			926			1027				
Approach Delay, s/veh		4.5			41.9			29.4				
Approach LOS		A			D			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		32.9			8.2	24.7		27.1				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		27.5			5.0	18.0		23.5				
Max Q Clear Time (g_c+I1), s		2.8			3.6	22.2		21.9				
Green Ext Time (p_c), s		3.5			0.0	0.0		0.8				
Intersection Summary												
HCM 6th Ctrl Delay			27.8									
HCM 6th LOS			C									

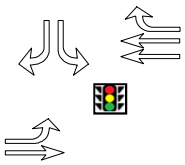
DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	TNM	13-Nov-18	SIRW0000-0002	1 OF 2

E/W STREET : OAK VALLEY PKWY
N/S STREET : GOLF CLUB DRIVE
CONDITION : AM PEAK HOUR

INTERSECTION : 3
PROJECTED GROWTH PER YEAR : 2%

CONDITION DIAGRAMS



EXISTING GEOMETRICS **CUMULATIVE GEOMETRICS**

TURN MOVEMENTS

Condition	Existing Condition	Project Trips	Existing + Project Condition	Ambient Growth	Background Condition	Project Condition	Future Ambient Growth	Future Condition	Future+ Project Condition
Scenario #	1		3		5	7		9	11
OAK VALLEY PKWY									
EB LEFT	60	15	75	5	65	80	30	90	105
EB THRU	540	0	540	15	555	555	240	780	780
EB RIGHT	0	0	0	0	0	0	0	0	0
WB LEFT	0	0	0	0	0	0	0	0	0
WB THRU	605	40	645	15	620	660	270	875	915
WB RIGHT	25	10	35	5	30	40	15	40	50
GOLF CLUB DRIVE									
NB LEFT	0	0	0	0	0	0	0	0	0
NB THRU	0	0	0	0	0	0	0	0	0
NB RIGHT	0	0	0	0	0	0	0	0	0
SB LEFT	30	75	105	5	35	110	15	45	120
SB THRU	0	0	0	0	0	0	0	0	0
SB RIGHT	95	5	100	5	100	105	45	140	145
TOTALS	**1355**	**145**	**1500**	**50**	**1405**	**1550**	**615**	**1970**	**2115**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	TNM	13-Nov-18	SIRW0000-0002	2 OF 2

E/W STREET : OAK VALLEY PKWY
N/S STREET : GOLF CLUB DRIVE
CONDITION : AM PEAK HOUR
PHF : 0.83

NORTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
1	0	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1
3	0	0	0	0	1	2	0	0
0	0	0	0	0	0	0	0	0

SOUTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	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

EAST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
1	1	0	1	0	0	0	3	0
1	2	0	0	0	0	0	2	0
1	0	0	0	1	0	0	2	0
0	3	0	0	0	0	1	3	0

WEST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	2	1	0	0	0	0	0	0
0	1	0	0	3	0	0	2	1
0	2	0	0	0	0	0	1	0
0	0	0	0	1	0	0	3	0

NORTH LEG			SOUTH LEG			EAST LEG			WEST LEG		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
7	0	3	0	0	0	1	142	0	0	124	8
34	0	5	0	0	0	4	205	0	0	133	13
21	0	8	0	0	0	8	128	0	0	126	16
25	0	11	0	0	0	5	112	0	0	140	20

	TRUCK TOTAL	AUTO VOLUMES	TOTALS	ROUNDED TOTALS	TRUCK PERCENTAGE
OAK VALLEY PKWY					
EB LEFT	2	57	**59**	**60**	**5%**
EB THRU	15	523	**538**	**540**	**5%**
EB RIGHT	0	0	**0**	**0**	**0%**
WB LEFT	0	0	**0**	**0**	**0%**
WB THRU	17	587	**604**	**605**	**5%**
WB RIGHT	5	18	**23**	**25**	**25%**
GOLF CLUB DRIVE					
NB LEFT	0	0	**0**	**0**	**0%**
NB THRU	0	0	**0**	**0**	**0%**
NB RIGHT	0	0	**0**	**0**	**0%**
SB LEFT	3	27	**30**	**30**	**10%**
SB THRU	0	0	**0**	**0**	**0%**
SB RIGHT	6	87	**93**	**95**	**10%**

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: OAK VALLEY PKWY
EAST-WEST STREET: GOLF CLUB DR
JURISDICTION: BEAUMONT

DATE: 10-16-18

PEAK HOUR: 08:00AM

NORTH LEG

TOTAL: 123

Rt	Thru	Lt	
93		30	Total
8		4	1st
34		6	2nd
26		9	3rd
25		11	4th

EAST LEG TOTAL: 627

	1st	2nd	3rd	4th	Total
Rt	3	5	9	6	23
Thru	146	209	131	118	604
Lt					

WEST LEG TOTAL: 597

Total	1st	2nd	3rd	4th	
59	9	14	16	20	Lt
538	126	139	129	144	Thru
					Rt

PEAK HOUR FACTORS

NORTH LEG = 0.77
SOUTH LEG =
EAST LEG = 0.73
WEST LEG = 0.91

ALL LEGS = 0.83

SOUTH LEG

TOTAL: 0

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

HOUR TOTAL: 1,347

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : OAK VALLEY PKWY

EAST-WEST STREET : GOLF CLUB DR

BEAUMONT

10-16-18

BEGINNING TIME : 07:00AM

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												
27	0	15	0	0	0	0	0	1	0	0	0	43
12	0	13	2	0	0	1	0	0	1	0	0	29
21	0	9	0	0	1	0	0	0	0	0	0	31
15	0	8	0	0	0	0	0	0	0	0	0	23
7	0	3	1	0	1	0	0	0	0	0	0	12
34	0	5	0	0	0	0	0	0	0	0	1	40
21	0	8	3	0	0	0	0	1	2	0	0	35
25	0	11	0	0	0	0	0	0	0	0	0	36
162	0	72	6	0	2	1	0	2	3	0	1	249
SOUTH 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
EAST LEG												
8	112	0	0	1	0	1	1	0	0	2	0	125
11	92	0	2	0	0	0	0	0	1	5	0	111
18	88	0	0	2	0	0	1	0	0	2	0	111
12	95	0	0	3	0	0	2	0	0	0	0	112
1	142	0	1	1	0	1	0	0	0	3	0	149
4	205	0	1	2	0	0	0	0	0	2	0	214
8	128	0	1	0	0	0	1	0	0	2	0	140
5	112	0	0	3	0	0	0	0	1	3	0	124
67	974	0	5	12	0	2	5	0	2	19	0	1086
WEST LEG												
0	101	29	0	1	0	0	0	0	0	1	0	132
0	133	23	0	2	2	0	0	1	0	1	0	162
0	199	5	0	1	0	0	1	0	0	0	0	206
0	141	10	0	0	1	0	0	0	0	4	0	156
0	124	8	0	2	1	0	0	0	0	0	0	135
0	133	13	0	1	0	0	3	0	0	2	1	153
0	126	16	0	2	0	0	0	0	0	1	0	145
0	140	20	0	0	0	0	1	0	0	3	0	164
0	1097	124	0	9	4	0	5	1	0	12	1	1253

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY PKWY

EAST-WEST STREET: GOLF CLUB DR

TIME: 07:00AM-08:00AM DATE: 10-16-18

NORTH LEG

79		47	Total
27		16	1st
16		13	2nd
21		10	3rd
15		8	4th
Rt	Thru	Lt	

Rt	9	14	18	12	53
Thru	116	97	93	100	406
Lt					
	1st	2nd	3rd	4th	Total

Total	1st	2nd	3rd	4th	
71	29	26	5	11	Lt
585	103	136	201	145	Thru
					Rt

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

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY PKWY

EAST-WEST STREET: GOLF CLUB DR

TIME: 08:00AM-09:00AM DATE: 10-16-18

NORTH LEG

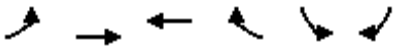
Rt	Thru	Lt	
93		30	Total
8		4	1st
34		6	2nd
26		9	3rd
25		11	4th

	1st	2nd	3rd	4th	Total
Rt	3	5	9	6	23
Thru	146	209	131	118	604
Lt					

Total	1st	2nd	3rd	4th	
59	9	14	16	20	Lt
538	126	139	129	144	Thru
					Rt

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

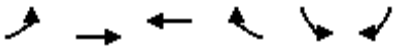
Prepared by NEWPORT TRAFFIC STUDIES



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	60	540	605	25	30	95
Future Volume (veh/h)	60	540	605	25	30	95
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1822	1822
Adj Flow Rate, veh/h	72	651	729	30	36	114
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	5	5	5	5	10	10
Cap, veh/h	105	753	1326	54	736	655
Arrive On Green	0.06	0.41	0.27	0.27	0.42	0.42
Sat Flow, veh/h	1739	1826	5076	201	1735	1544
Grp Volume(v), veh/h	72	651	493	266	36	114
Grp Sat Flow(s),veh/h/ln	1739	1826	1662	1790	1735	1544
Q Serve(g_s), s	2.2	17.9	7.0	7.0	0.7	2.5
Cycle Q Clear(g_c), s	2.2	17.9	7.0	7.0	0.7	2.5
Prop In Lane	1.00			0.11	1.00	1.00
Lane Grp Cap(c), veh/h	105	753	897	483	736	655
V/C Ratio(X)	0.68	0.86	0.55	0.55	0.05	0.17
Avail Cap(c_a), veh/h	212	979	1106	595	736	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	14.8	17.2	17.2	9.3	9.9
Incr Delay (d2), s/veh	7.5	6.5	0.5	1.0	0.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	6.9	2.3	2.5	0.3	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.8	21.3	17.7	18.2	9.4	10.4
LnGrp LOS	C	C	B	B	A	B
Approach Vol, veh/h		723	759		150	
Approach Delay, s/veh		22.4	17.9		10.2	
Approach LOS		C	B		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	27.2	27.8	7.8	19.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	29.5	16.5	6.7	18.3
Max Q Clear Time (g_c+I1), s	19.9	4.5	4.2	9.0
Green Ext Time (p_c), s	2.8	0.3	0.0	3.0

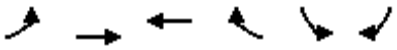
Intersection Summary	
HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	75	540	645	35	105	100
Future Volume (veh/h)	75	540	645	35	105	100
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1822	1822
Adj Flow Rate, veh/h	90	651	777	42	127	120
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	5	5	5	5	10	10
Cap, veh/h	118	753	1272	68	736	655
Arrive On Green	0.07	0.41	0.26	0.26	0.42	0.42
Sat Flow, veh/h	1739	1826	5006	261	1735	1544
Grp Volume(v), veh/h	90	651	533	286	127	120
Grp Sat Flow(s),veh/h/ln	1739	1826	1662	1779	1735	1544
Q Serve(g_s), s	2.8	17.9	7.7	7.8	2.5	2.7
Cycle Q Clear(g_c), s	2.8	17.9	7.7	7.8	2.5	2.7
Prop In Lane	1.00			0.15	1.00	1.00
Lane Grp Cap(c), veh/h	118	753	873	467	736	655
V/C Ratio(X)	0.76	0.86	0.61	0.61	0.17	0.18
Avail Cap(c_a), veh/h	212	979	1106	592	736	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	14.8	17.8	17.8	9.8	9.9
Incr Delay (d2), s/veh	9.7	6.5	0.7	1.3	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	6.9	2.5	2.8	0.9	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.9	21.3	18.5	19.1	10.4	10.5
LnGrp LOS	C	C	B	B	B	B
Approach Vol, veh/h		741	819		247	
Approach Delay, s/veh		22.9	18.7		10.4	
Approach LOS		C	B		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		27.2		27.8	8.2	18.9
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		29.5		16.5	6.7	18.3
Max Q Clear Time (g_c+I1), s		19.9		4.7	4.8	9.8
Green Ext Time (p_c), s		2.8		0.6	0.0	3.1

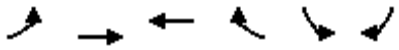
Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	65	555	620	30	35	100
Future Volume (veh/h)	65	555	620	30	35	100
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1822	1822
Adj Flow Rate, veh/h	78	669	747	36	42	120
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	5	5	5	5	10	10
Cap, veh/h	110	770	1347	65	720	641
Arrive On Green	0.06	0.42	0.28	0.28	0.41	0.41
Sat Flow, veh/h	1739	1826	5037	234	1735	1544
Grp Volume(v), veh/h	78	669	509	274	42	120
Grp Sat Flow(s),veh/h/ln	1739	1826	1662	1784	1735	1544
Q Serve(g_s), s	2.4	18.4	7.2	7.2	0.8	2.7
Cycle Q Clear(g_c), s	2.4	18.4	7.2	7.2	0.8	2.7
Prop In Lane	1.00			0.13	1.00	1.00
Lane Grp Cap(c), veh/h	110	770	918	493	720	641
V/C Ratio(X)	0.71	0.87	0.55	0.56	0.06	0.19
Avail Cap(c_a), veh/h	212	979	1106	594	720	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	14.5	17.0	17.0	9.6	10.2
Incr Delay (d2), s/veh	8.1	7.0	0.5	1.0	0.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	7.1	2.3	2.6	0.3	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.4	21.5	17.5	18.0	9.8	10.9
LnGrp LOS	C	C	B	B	A	B
Approach Vol, veh/h		747	783		162	
Approach Delay, s/veh		22.8	17.7		10.6	
Approach LOS		C	B		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		27.7		27.3	8.0	19.7
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		29.5		16.5	6.7	18.3
Max Q Clear Time (g_c+I1), s		20.4		4.7	4.4	9.2
Green Ext Time (p_c), s		2.8		0.4	0.0	3.1

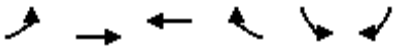
Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	555	660	40	110	105
Future Volume (veh/h)	80	555	660	40	110	105
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1822	1822
Adj Flow Rate, veh/h	96	669	795	48	133	127
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	5	5	5	5	10	10
Cap, veh/h	122	770	1295	78	720	641
Arrive On Green	0.07	0.42	0.27	0.27	0.41	0.41
Sat Flow, veh/h	1739	1826	4972	289	1735	1544
Grp Volume(v), veh/h	96	669	549	294	133	127
Grp Sat Flow(s),veh/h/ln	1739	1826	1662	1774	1735	1544
Q Serve(g_s), s	3.0	18.4	7.9	8.0	2.7	2.9
Cycle Q Clear(g_c), s	3.0	18.4	7.9	8.0	2.7	2.9
Prop In Lane	1.00			0.16	1.00	1.00
Lane Grp Cap(c), veh/h	122	770	895	478	720	641
V/C Ratio(X)	0.79	0.87	0.61	0.62	0.18	0.20
Avail Cap(c_a), veh/h	212	979	1106	590	720	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	14.5	17.6	17.6	10.2	10.3
Incr Delay (d2), s/veh	10.6	7.0	0.7	1.3	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	7.1	2.6	2.9	1.0	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.8	21.5	18.3	18.9	10.8	11.0
LnGrp LOS	D	C	B	B	B	B
Approach Vol, veh/h		765	843		260	
Approach Delay, s/veh		23.3	18.5		10.9	
Approach LOS		C	B		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	27.7	27.3	8.4	19.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	29.5	16.5	6.7	18.3
Max Q Clear Time (g_c+I1), s	20.4	4.9	5.0	10.0
Green Ext Time (p_c), s	2.8	0.6	0.0	3.2

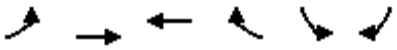
Intersection Summary	
HCM 6th Ctrl Delay	19.4
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	90	780	875	40	45	140
Future Volume (veh/h)	90	780	875	40	45	140
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1822	1822
Adj Flow Rate, veh/h	95	821	921	42	47	147
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	5	10	10
Cap, veh/h	121	897	1662	76	598	532
Arrive On Green	0.07	0.49	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1739	1826	5051	222	1735	1544
Grp Volume(v), veh/h	95	821	626	337	47	147
Grp Sat Flow(s),veh/h/ln	1739	1826	1662	1786	1735	1544
Q Serve(g_s), s	3.0	22.8	8.4	8.4	1.0	3.8
Cycle Q Clear(g_c), s	3.0	22.8	8.4	8.4	1.0	3.8
Prop In Lane	1.00			0.12	1.00	1.00
Lane Grp Cap(c), veh/h	121	897	1130	607	598	532
V/C Ratio(X)	0.78	0.91	0.55	0.56	0.08	0.28
Avail Cap(c_a), veh/h	212	979	1130	607	598	532
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	12.9	14.8	14.8	12.1	13.0
Incr Delay (d2), s/veh	10.6	12.2	0.6	1.1	0.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	9.3	2.6	2.9	0.4	3.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.7	25.1	15.3	15.9	12.4	14.3
LnGrp LOS	D	C	B	B	B	B
Approach Vol, veh/h		916	963		194	
Approach Delay, s/veh		26.2	15.5		13.9	
Approach LOS		C	B		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		31.5		23.5	8.3	23.2
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		29.5		16.5	6.7	18.3
Max Q Clear Time (g_c+I1), s		24.8		5.8	5.0	10.4
Green Ext Time (p_c), s		2.2		0.4	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	105	780	915	50	120	145
Future Volume (veh/h)	105	780	915	50	120	145
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1822	1822
Adj Flow Rate, veh/h	111	821	963	53	126	153
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	5	10	10
Cap, veh/h	141	897	1588	87	598	532
Arrive On Green	0.08	0.49	0.33	0.33	0.34	0.34
Sat Flow, veh/h	1739	1826	5000	266	1735	1544
Grp Volume(v), veh/h	111	821	661	355	126	153
Grp Sat Flow(s),veh/h/ln	1739	1826	1662	1778	1735	1544
Q Serve(g_s), s	3.4	22.8	9.2	9.2	2.8	4.0
Cycle Q Clear(g_c), s	3.4	22.8	9.2	9.2	2.8	4.0
Prop In Lane	1.00			0.15	1.00	1.00
Lane Grp Cap(c), veh/h	141	897	1092	584	598	532
V/C Ratio(X)	0.79	0.91	0.61	0.61	0.21	0.29
Avail Cap(c_a), veh/h	212	979	1106	592	598	532
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	12.9	15.5	15.5	12.7	13.1
Incr Delay (d2), s/veh	10.7	12.2	0.9	1.8	0.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	9.3	2.9	3.3	1.1	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.5	25.1	16.4	17.2	13.5	14.5
LnGrp LOS	D	C	B	B	B	B
Approach Vol, veh/h		932	1016		279	
Approach Delay, s/veh		26.3	16.7		14.0	
Approach LOS		C	B		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		31.5		23.5	9.0	22.6
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		29.5		16.5	6.7	18.3
Max Q Clear Time (g_c+I1), s		24.8		6.0	5.4	11.2
Green Ext Time (p_c), s		2.2		0.7	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	TNM	13-Nov-18	SIRW0000-0002	1 OF 2

E/W STREET : OAK VALLEY PKWY
N/S STREET : GOLF CLUB DRIVE
CONDITION : PM PEAK HOUR

INTERSECTION : 3
PROJECTED GROWTH PER YEAR : 2%

TURN MOVEMENTS

Condition	Existing Condition	Project Trips	Existing + Project Condition	Ambient Growth	Background Condition	Project Condition	Future Ambient Growth	Future Condition	Future+ Project Condition
Scenario #	2		4		6	8		10	12
OAK VALLEY PKWY									
EB LEFT	65	20	85	5	70	90	30	95	115
EB THRU	540	0	540	15	555	555	240	780	780
EB RIGHT	0	0	0	0	0	0	0	0	0
WB LEFT	0	0	0	0	0	0	0	0	0
WB THRU	600	40	640	15	615	655	265	865	905
WB RIGHT	55	10	65	5	60	70	25	80	90
GOLF CLUB DRIVE									
NB LEFT	0	0	0	0	0	0	0	0	0
NB THRU	0	0	0	0	0	0	0	0	0
NB RIGHT	0	0	0	0	0	0	0	0	0
SB LEFT	55	115	170	5	60	175	25	80	195
SB THRU	0	0	0	0	0	0	0	0	0
SB RIGHT	100	5	105	5	105	110	45	145	150
TOTALS	**1415**	**190**	**1605**	**50**	**1465**	**1655**	**630**	**2045**	**2235**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	TNM	13-Nov-18	SIRW0000-0002	2 OF 2

E/W STREET : OAK VALLEY PKWY
CONDITION : PM PEAK HOUR
N/S STREET : GOLF CLUB DRIVE
PHF : 0.77

NORTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	0	1	0	0	0	0	0	0
1	0	0	1	0	0	1	0	0
1	0	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

SOUTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	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

EAST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
1	2	0	1	0	0	0	0	0
0	1	0	0	0	0	0	1	0
1	1	0	2	1	0	0	0	0
1	0	0	0	0	0	0	0	0

WEST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	2	1	0	0	0	0	0	0
0	0	0	0	0	0	0	1	0
0	2	0	0	1	0	0	0	0
0	1	1	0	0	0	0	0	0

NORTH LEG			SOUTH LEG			EAST LEG			WEST LEG		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
22	0	15	0	0	0	8	184	0	0	91	19
13	0	10	0	0	0	10	131	0	0	138	6
14	0	8	0	0	0	16	104	0	0	121	14
45	0	17	0	0	0	15	174	0	0	182	24

	TRUCK TOTAL	AUTO VOLUMES	TOTALS	ROUNDED TOTALS	TRUCK PERCENTAGE
OAK VALLEY PKWY					
EB LEFT	2	63	**65**	**65**	**5%**
EB THRU	7	532	**539**	**540**	**5%**
EB RIGHT	0	0	**0**	**0**	**0%**
WB LEFT	0	0	**0**	**0**	**0%**
WB THRU	6	593	**599**	**600**	**5%**
WB RIGHT	6	49	**55**	**55**	**15%**
GOLF CLUB DRIVE					
NB LEFT	0	0	**0**	**0**	**0%**
NB THRU	0	0	**0**	**0**	**0%**
NB RIGHT	0	0	**0**	**0**	**0%**
SB LEFT	2	50	**52**	**55**	**5%**
SB THRU	0	0	**0**	**0**	**0%**
SB RIGHT	4	94	**98**	**100**	**5%**

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: OAK VALLEY PKWY
EAST-WEST STREET: GOLF CLUB DR
JURISDICTION: BEAUMONT

DATE: 10-16-18

PEAK HOUR: 04:45PM

NORTH LEG

TOTAL: 150

Rt	Thru	Lt	
98		52	Total
22		16	1st
16		10	2nd
15		9	3rd
45		17	4th

EAST LEG TOTAL: 654

	1st	2nd	3rd	4th	Total
Rt	10	10	19	16	55
Thru	186	133	106	174	599
Lt					

WEST LEG TOTAL: 604

Total	1st	2nd	3rd	4th	
65	20	6	14	25	Lt
539	93	139	124	183	Thru
					Rt

PEAK HOUR FACTORS

NORTH LEG = 0.60
SOUTH LEG =
EAST LEG = 0.83
WEST LEG = 0.73

ALL LEGS = 0.77

SOUTH LEG

TOTAL: 0

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

HOUR TOTAL: 1,408

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : OAK VALLEY PKWY
EAST-WEST STREET : GOLF CLUB DR
BEGINNING TIME : 04:00PM

BEAUMONT
10-16-18

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												
26	0	13	0	0	0	1	0	0	0	0	1	41
30	0	18	1	0	1	0	0	1	0	0	0	51
24	0	20	0	0	0	0	0	0	1	0	0	45
22	0	15	0	0	1	0	0	0	0	0	0	38
13	0	10	1	0	0	1	0	0	1	0	0	26
14	0	8	1	0	1	0	0	0	0	0	0	24
45	0	17	0	0	0	0	0	0	0	0	0	62
21	0	12	0	0	0	0	0	0	0	0	0	33
195	0	113	3	0	3	2	0	1	2	0	1	320
SOUTH 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
EAST LEG												
9	88	0	1	0	0	0	0	0	0	3	0	101
14	140	0	0	1	0	0	1	0	0	0	0	156
21	109	0	0	0	0	0	1	0	0	1	0	132
8	184	0	1	2	0	1	0	0	0	0	0	196
10	131	0	0	1	0	0	0	0	0	1	0	143
16	104	0	1	1	0	2	1	0	0	0	0	125
15	174	0	1	0	0	0	0	0	0	0	0	190
23	99	0	0	0	0	0	0	0	0	0	0	122
116	1029	0	4	5	0	3	3	0	0	5	0	1165
WEST LEG												
0	92	21	0	1	1	0	1	0	0	2	0	118
0	107	26	0	1	0	0	0	0	0	0	0	134
0	127	17	0	0	1	0	2	0	0	0	1	148
0	91	19	0	2	1	0	0	0	0	0	0	113
0	138	6	0	0	0	0	0	0	0	1	0	145
0	121	14	0	2	0	0	1	0	0	0	0	138
0	182	24	0	1	1	0	0	0	0	0	0	208
0	163	17	0	1	0	0	2	0	0	0	0	183
0	1021	144	0	8	4	0	6	0	0	3	1	1187

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY PKWY

EAST-WEST STREET: GOLF CLUB DR

TIME: 04:00PM-05:00PM DATE: 10-16-18

NORTH LEG

105		70	Total
27		14	1st
31		20	2nd
25		20	3rd
22		16	4th
Rt	Thru	Lt	

Rt	10	14	21	10	55
Thru	91	142	111	186	530
Lt					
	1st	2nd	3rd	4th	Total

Total	1st	2nd	3rd	4th	
87	22	26	19	20	Lt
426	96	108	129	93	Thru
					Rt

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

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY PKWY

EAST-WEST STREET: GOLF CLUB DR

TIME: 05:00PM-06:00PM DATE: 10-16-18

NORTH LEG

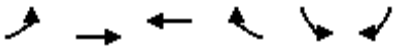
97		48	Total
16		10	1st
15		9	2nd
45		17	3rd
21		12	4th
Rt	Thru	Lt	

Rt	10	19	16	23	68
Thru	133	106	174	99	512
Lt					
	1st	2nd	3rd	4th	Total

Total	1st	2nd	3rd	4th	
62	6	14	25	17	Lt
612	139	124	183	166	Thru
					Rt

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

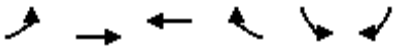
Prepared by NEWPORT TRAFFIC STUDIES



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	65	540	600	55	55	100
Future Volume (veh/h)	65	540	600	55	55	100
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1899	1899
Adj Flow Rate, veh/h	84	701	779	71	71	130
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Percent Heavy Veh, %	5	5	5	5	5	5
Cap, veh/h	114	798	1347	122	722	642
Arrive On Green	0.07	0.44	0.29	0.29	0.40	0.40
Sat Flow, veh/h	1739	1826	4816	422	1809	1609
Grp Volume(v), veh/h	84	701	555	295	71	130
Grp Sat Flow(s),veh/h/ln	1739	1826	1662	1750	1809	1609
Q Serve(g_s), s	2.6	19.3	7.8	7.9	1.4	2.9
Cycle Q Clear(g_c), s	2.6	19.3	7.8	7.9	1.4	2.9
Prop In Lane	1.00			0.24	1.00	1.00
Lane Grp Cap(c), veh/h	114	798	963	507	722	642
V/C Ratio(X)	0.74	0.88	0.58	0.58	0.10	0.20
Avail Cap(c_a), veh/h	212	979	1106	582	722	642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	14.1	16.7	16.7	10.3	10.8
Incr Delay (d2), s/veh	8.8	7.9	0.6	1.1	0.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	7.5	2.5	2.7	0.5	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.0	22.0	17.2	17.8	10.6	11.5
LnGrp LOS	C	C	B	B	B	B
Approach Vol, veh/h		785	850		201	
Approach Delay, s/veh		23.3	17.4		11.2	
Approach LOS		C	B		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		28.5		26.5	8.1	20.4
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		29.5		16.5	6.7	18.3
Max Q Clear Time (g_c+I1), s		21.3		4.9	4.6	9.9
Green Ext Time (p_c), s		2.8		0.5	0.0	3.2

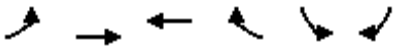
Intersection Summary	
HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	85	540	640	65	170	105
Future Volume (veh/h)	85	540	640	65	170	105
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1899	1899
Adj Flow Rate, veh/h	110	701	831	84	221	136
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Percent Heavy Veh, %	5	5	5	5	5	5
Cap, veh/h	140	798	1265	127	722	642
Arrive On Green	0.08	0.44	0.27	0.27	0.40	0.40
Sat Flow, veh/h	1739	1826	4767	463	1809	1609
Grp Volume(v), veh/h	110	701	599	316	221	136
Grp Sat Flow(s),veh/h/ln	1739	1826	1662	1743	1809	1609
Q Serve(g_s), s	3.4	19.3	8.8	8.8	4.6	3.1
Cycle Q Clear(g_c), s	3.4	19.3	8.8	8.8	4.6	3.1
Prop In Lane	1.00			0.27	1.00	1.00
Lane Grp Cap(c), veh/h	140	798	913	479	722	642
V/C Ratio(X)	0.79	0.88	0.66	0.66	0.31	0.21
Avail Cap(c_a), veh/h	212	979	1106	580	722	642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	14.1	17.6	17.7	11.3	10.8
Incr Delay (d2), s/veh	10.5	7.9	1.0	2.1	1.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	7.5	2.9	3.2	1.9	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.3	22.0	18.7	19.7	12.4	11.6
LnGrp LOS	D	C	B	B	B	B
Approach Vol, veh/h		811	915		357	
Approach Delay, s/veh		23.8	19.0		12.1	
Approach LOS		C	B		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		28.5		26.5	8.9	19.6
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		29.5		16.5	6.7	18.3
Max Q Clear Time (g_c+I1), s		21.3		6.6	5.4	10.8
Green Ext Time (p_c), s		2.8		0.8	0.0	3.2

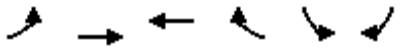
Intersection Summary	
HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	555	615	60	60	105
Future Volume (veh/h)	70	555	615	60	60	105
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1899	1899
Adj Flow Rate, veh/h	91	721	799	78	78	136
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Percent Heavy Veh, %	5	5	5	5	5	5
Cap, veh/h	119	816	1371	133	704	627
Arrive On Green	0.07	0.45	0.30	0.30	0.39	0.39
Sat Flow, veh/h	1739	1826	4784	449	1809	1609
Grp Volume(v), veh/h	91	721	574	303	78	136
Grp Sat Flow(s),veh/h/ln	1739	1826	1662	1745	1809	1609
Q Serve(g_s), s	2.8	19.9	8.1	8.1	1.5	3.1
Cycle Q Clear(g_c), s	2.8	19.9	8.1	8.1	1.5	3.1
Prop In Lane	1.00			0.26	1.00	1.00
Lane Grp Cap(c), veh/h	119	816	986	518	704	627
V/C Ratio(X)	0.77	0.88	0.58	0.59	0.11	0.22
Avail Cap(c_a), veh/h	212	979	1106	581	704	627
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	13.9	16.4	16.5	10.7	11.2
Incr Delay (d2), s/veh	9.8	8.5	0.6	1.2	0.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	7.8	2.6	2.8	0.6	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.0	22.4	17.1	17.7	11.0	12.0
LnGrp LOS	D	C	B	B	B	B
Approach Vol, veh/h		812	877		214	
Approach Delay, s/veh		23.8	17.3		11.6	
Approach LOS		C	B		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	29.1	25.9	8.3	20.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	29.5	16.5	6.7	18.3
Max Q Clear Time (g_c+I1), s	21.9	5.1	4.8	10.1
Green Ext Time (p_c), s	2.7	0.5	0.0	3.3

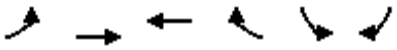
Intersection Summary	
HCM 6th Ctrl Delay	19.4
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	90	555	655	70	175	110
Future Volume (veh/h)	90	555	655	70	175	110
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1899	1899
Adj Flow Rate, veh/h	117	721	851	91	227	143
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Percent Heavy Veh, %	5	5	5	5	5	5
Cap, veh/h	149	816	1278	136	704	627
Arrive On Green	0.09	0.45	0.28	0.28	0.39	0.39
Sat Flow, veh/h	1739	1826	4739	487	1809	1609
Grp Volume(v), veh/h	117	721	617	325	227	143
Grp Sat Flow(s),veh/h/ln	1739	1826	1662	1738	1809	1609
Q Serve(g_s), s	3.6	19.9	9.0	9.1	4.8	3.3
Cycle Q Clear(g_c), s	3.6	19.9	9.0	9.1	4.8	3.3
Prop In Lane	1.00			0.28	1.00	1.00
Lane Grp Cap(c), veh/h	149	816	929	486	704	627
V/C Ratio(X)	0.79	0.88	0.66	0.67	0.32	0.23
Avail Cap(c_a), veh/h	212	979	1106	578	704	627
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	13.9	17.5	17.6	11.7	11.2
Incr Delay (d2), s/veh	11.8	8.5	1.2	2.3	1.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	7.8	3.0	3.3	2.0	3.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.5	22.4	18.7	19.9	12.9	12.1
LnGrp LOS	D	C	B	B	B	B
Approach Vol, veh/h		838	942		370	
Approach Delay, s/veh		24.3	19.1		12.6	
Approach LOS		C	B		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		29.1		25.9	9.2	19.9
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		29.5		16.5	6.7	18.3
Max Q Clear Time (g_c+I1), s		21.9		6.8	5.6	11.1
Green Ext Time (p_c), s		2.7		0.9	0.0	3.2

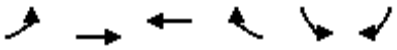
Intersection Summary	
HCM 6th Ctrl Delay	20.0
HCM 6th LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	95	780	865	80	80	145
Future Volume (veh/h)	95	780	865	80	80	145
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1899	1899
Adj Flow Rate, veh/h	100	821	911	84	84	153
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	5	5	5
Cap, veh/h	127	897	1563	144	624	555
Arrive On Green	0.07	0.49	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1739	1826	4809	427	1809	1609
Grp Volume(v), veh/h	100	821	651	344	84	153
Grp Sat Flow(s),veh/h/ln	1739	1826	1662	1749	1809	1609
Q Serve(g_s), s	3.1	22.8	8.9	8.9	1.8	3.8
Cycle Q Clear(g_c), s	3.1	22.8	8.9	8.9	1.8	3.8
Prop In Lane	1.00			0.24	1.00	1.00
Lane Grp Cap(c), veh/h	127	897	1118	589	624	555
V/C Ratio(X)	0.79	0.91	0.58	0.58	0.13	0.28
Avail Cap(c_a), veh/h	212	979	1118	589	624	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	12.9	15.1	15.1	12.4	13.0
Incr Delay (d2), s/veh	10.2	12.2	0.8	1.5	0.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	9.3	2.8	3.1	0.7	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.2	25.1	15.8	16.6	12.8	14.3
LnGrp LOS	D	C	B	B	B	B
Approach Vol, veh/h		921	995		237	
Approach Delay, s/veh		26.2	16.1		13.8	
Approach LOS		C	B		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		31.5		23.5	8.5	23.0
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		29.5		16.5	6.7	18.3
Max Q Clear Time (g_c+I1), s		24.8		5.8	5.1	10.9
Green Ext Time (p_c), s		2.2		0.5	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	20.2
HCM 6th LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	115	780	905	90	195	150
Future Volume (veh/h)	115	780	905	90	195	150
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1899	1899
Adj Flow Rate, veh/h	121	821	953	95	205	158
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	5	5	5
Cap, veh/h	154	897	1481	147	624	555
Arrive On Green	0.09	0.49	0.32	0.32	0.34	0.34
Sat Flow, veh/h	1739	1826	4773	458	1809	1609
Grp Volume(v), veh/h	121	821	687	361	205	158
Grp Sat Flow(s),veh/h/ln	1739	1826	1662	1743	1809	1609
Q Serve(g_s), s	3.7	22.8	9.7	9.8	4.6	3.9
Cycle Q Clear(g_c), s	3.7	22.8	9.7	9.8	4.6	3.9
Prop In Lane	1.00			0.26	1.00	1.00
Lane Grp Cap(c), veh/h	154	897	1068	560	624	555
V/C Ratio(X)	0.79	0.91	0.64	0.65	0.33	0.28
Avail Cap(c_a), veh/h	212	979	1106	580	624	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	12.9	16.0	16.0	13.3	13.1
Incr Delay (d2), s/veh	12.5	12.2	1.2	2.4	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	9.3	3.1	3.5	1.9	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.1	25.1	17.2	18.3	14.7	14.4
LnGrp LOS	D	C	B	B	B	B
Approach Vol, veh/h		942	1048		363	
Approach Delay, s/veh		26.6	17.6		14.6	
Approach LOS		C	B		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	31.5	23.5	9.4	22.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	29.5	16.5	6.7	18.3
Max Q Clear Time (g_c+I1), s	24.8	6.6	5.7	11.8
Green Ext Time (p_c), s	2.2	0.9	0.0	3.3

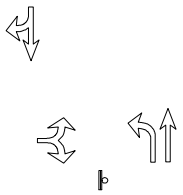
Intersection Summary	
HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	TNM	13-Nov-18	SIRW0000-0002	1 OF 2

E/W STREET : OAK VALLEY VILLAGE CIR
N/S STREET : GOLF CLUB DRIVE
CONDITION : AM PEAK HOUR

INTERSECTION : 4
PROJECTED GROWTH PER YEAR : 2%

CONDITION DIAGRAMS



EXISTING GEOMETRICS **CUMULATIVE GEOMETRICS**

TURN MOVEMENTS

Condition	Existing Condition	Project Trips	Existing + Project Condition	Ambient Growth	Background Condition	Project Condition	Future Ambient Growth	Future Condition	Future+ Project Condition
Scenario #	1		3		5	7		9	11
OAK VALLEY VILLAGE CIR									
EB LEFT	5	10	15	5	10	20	5	10	20
EB THRU	0	0	0	0	0	0	0	0	0
EB RIGHT	20	80	100	5	25	105	10	30	110
WB LEFT	0	0	0	0	0	0	0	0	0
WB THRU	0	0	0	0	0	0	0	0	0
WB RIGHT	0	0	0	0	0	0	0	0	0
GOLF CLUB DRIVE									
NB LEFT	40	25	65	5	45	70	20	60	85
NB THRU	90	0	90	5	95	95	40	130	130
NB RIGHT	0	0	0	0	0	0	0	0	0
SB LEFT	0	0	0	0	0	0	0	0	0
SB THRU	135	0	135	5	140	140	60	195	195
SB RIGHT	5	10	15	5	10	20	5	10	20
TOTALS	**295**	**125**	**420**	**30**	**325**	**450**	**140**	**435**	**560**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	TNM	13-Nov-18	SIRW0000-0002	2 OF 2

E/W STREET : OAK VALLEY VILLAGE CIR
N/S STREET : GOLF CLUB DRIVE
CONDITION : AM PEAK HOUR
PHF : 0.85

NORTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1	0
0	2	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

SOUTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	1	1	0	1	0	0	0	0
0	1	0	0	0	0	0	0	1
0	1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1

EAST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	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

WEST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
1	0	0	1	0	0	2	0	0
0	0	0	0	0	0	0	0	0

NORTH LEG			SOUTH LEG			EAST LEG			WEST LEG		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	30	0	0	14	13	0	0	0	4	0	1
2	39	0	0	25	10	0	0	0	3	0	1
0	34	0	0	28	3	0	0	0	0	0	2
1	28	0	0	16	9	0	0	0	4	0	0

	TRUCK TOTAL	AUTO VOLUMES	TOTALS	ROUNDED TOTALS	TRUCK PERCENTAGE
OAK VALLEY VILLAGE CIR					
EB LEFT	0	4	**4**	**5**	**5%**
EB THRU	0	0	**0**	**0**	**0%**
EB RIGHT	5	11	**16**	**20**	**35%**
WB LEFT	0	0	**0**	**0**	**0%**
WB THRU	0	0	**0**	**0**	**0%**
WB RIGHT	0	0	**0**	**0**	**0%**
GOLF CLUB DRIVE					
NB LEFT	3	35	**38**	**40**	**10%**
NB THRU	4	83	**87**	**90**	**5%**
NB RIGHT	0	0	**0**	**0**	**0%**
SB LEFT	0	0	**0**	**0**	**0%**
SB THRU	4	131	**135**	**135**	**5%**
SB RIGHT	0	3	**3**	**5**	**5%**

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: OAK VALLEY VILLAGE
EAST-WEST STREET: GOLF CLUB DR
JURISDICTION: BEAUMONT

DATE: 10-16-18

PEAK HOUR: 08:00AM

NORTH LEG

TOTAL: 138

Rt	Thru	Lt	
3	135		Total
0	31		1st
2	40		2nd
0	36		3rd
1	28		4th

EAST LEG TOTAL: 0

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

WEST LEG TOTAL: 20

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

SOUTH LEG

TOTAL: 125

	Lt	Thru	Rt
1st	14	16	
2nd	11	26	
3rd	3	29	
4th	10	16	
Total	38	87	

PEAK HOUR FACTORS

NORTH LEG = 0.82
SOUTH LEG = 0.84
EAST LEG =
WEST LEG = 0.83

ALL LEGS = 0.85

HOUR TOTAL: 283

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : OAK VALLEY VILLAGE

EAST-WEST STREET : GOLF CLUB DR

BEAUMONT

10-16-18

BEGINNING TIME : 07:00AM

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	7	0	0	0	0	0	1	0	0	0	0	8
0	30	0	0	1	0	0	1	0	0	1	0	33
3	29	0	0	1	0	0	0	0	0	0	0	33
1	25	0	0	0	0	0	0	0	0	0	0	26
0	30	0	0	1	0	0	0	0	0	0	0	31
2	39	0	0	0	0	0	0	0	0	1	0	42
0	34	0	0	2	0	0	0	0	0	0	0	36
1	28	0	0	0	0	0	0	0	0	0	0	29
7	222	0	0	5	0	0	2	0	0	2	0	238
SOUTH LEG												
0	10	3	0	0	0	0	0	1	0	0	0	14
0	10	5	0	3	1	0	1	0	0	1	0	21
0	17	5	0	0	0	0	0	0	0	0	0	22
0	15	8	0	0	1	0	0	0	0	0	0	24
0	14	13	0	1	1	0	1	0	0	0	0	30
0	25	10	0	1	0	0	0	0	0	0	1	37
0	28	3	0	1	0	0	0	0	0	0	0	32
0	16	9	0	0	0	0	0	0	0	0	1	26
0	135	56	0	6	3	0	2	1	0	1	2	206
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
1	0	0	1	0	0	0	0	0	0	0	0	2
0	0	2	0	0	0	0	0	0	0	0	0	2
4	0	0	0	0	0	0	0	0	0	0	0	4
4	0	1	1	0	0	0	0	0	0	0	0	6
3	0	1	0	0	0	0	0	0	0	0	0	4
0	0	2	1	0	0	1	0	0	2	0	0	6
4	0	0	0	0	0	0	0	0	0	0	0	4
16	0	6	3	0	0	1	0	0	2	0	0	28

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY VILLAGE

EAST-WEST STREET: GOLF CLUB DR

TIME: 07:00AM-08:00AM DATE: 10-16-18

NORTH LEG

Rt	Thru	Lt	
4	96		Total
0	8		1st
0	33		2nd
3	30		3rd
1	25		4th

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

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

	Lt	Thru	Rt
1st	4	10	
2nd	6	15	
3rd	5	17	
4th	9	15	
Total	24	57	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY VILLAGE

EAST-WEST STREET: GOLF CLUB DR

TIME: 08:00AM-09:00AM DATE: 10-16-18

NORTH LEG

Rt	Thru	Lt	
3	135		Total
0	31		1st
2	40		2nd
0	36		3rd
1	28		4th

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

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

	Lt	Thru	Rt
1st	14	16	
2nd	11	26	
3rd	3	29	
4th	10	16	
Total	38	87	

Prepared by NEWPORT TRAFFIC STUDIES

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	20	40	90	135	5
Future Vol, veh/h	5	20	40	90	135	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	-	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	5	35	10	5	5	5
Mvmt Flow	6	24	47	106	159	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	362	162	165	0	-	0
Stage 1	162	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.45	6.55	4.2	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.615	2.29	-	-	-
Pot Cap-1 Maneuver	631	804	1366	-	-	-
Stage 1	860	-	-	-	-	-
Stage 2	827	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	610	804	1366	-	-	-
Mov Cap-2 Maneuver	610	-	-	-	-	-
Stage 1	831	-	-	-	-	-
Stage 2	827	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	2.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1366	-	756	-	-
HCM Lane V/C Ratio	0.034	-	0.039	-	-
HCM Control Delay (s)	7.7	-	10	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	100	65	90	135	15
Future Vol, veh/h	15	100	65	90	135	15
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	-	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	5	35	10	5	5	5
Mvmt Flow	18	118	76	106	159	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	426	168	177	0	-	0
Stage 1	168	-	-	-	-	-
Stage 2	258	-	-	-	-	-
Critical Hdwy	6.45	6.55	4.2	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.615	2.29	-	-	-
Pot Cap-1 Maneuver	580	797	1352	-	-	-
Stage 1	854	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	548	797	1352	-	-	-
Mov Cap-2 Maneuver	548	-	-	-	-	-
Stage 1	806	-	-	-	-	-
Stage 2	778	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	3.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1352	-	752	-	-
HCM Lane V/C Ratio	0.057	-	0.18	-	-
HCM Control Delay (s)	7.8	-	10.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.7	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	25	45	95	140	10
Future Vol, veh/h	10	25	45	95	140	10
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	-	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	5	35	10	5	5	5
Mvmt Flow	12	29	53	112	165	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	389	171	177	0	-	0
Stage 1	171	-	-	-	-	-
Stage 2	218	-	-	-	-	-
Critical Hdwy	6.45	6.55	4.2	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.615	2.29	-	-	-
Pot Cap-1 Maneuver	609	794	1352	-	-	-
Stage 1	852	-	-	-	-	-
Stage 2	811	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	585	794	1352	-	-	-
Mov Cap-2 Maneuver	585	-	-	-	-	-
Stage 1	819	-	-	-	-	-
Stage 2	811	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	2.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1352	-	720	-	-
HCM Lane V/C Ratio	0.039	-	0.057	-	-
HCM Control Delay (s)	7.8	-	10.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	105	70	95	140	20
Future Vol, veh/h	20	105	70	95	140	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	5	35	10	5	5	5
Mvmt Flow	24	124	82	112	165	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	453	177	189	0	-	0
Stage 1	177	-	-	-	-	-
Stage 2	276	-	-	-	-	-
Critical Hdwy	6.45	6.55	4.2	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.615	2.29	-	-	-
Pot Cap-1 Maneuver	559	788	1338	-	-	-
Stage 1	846	-	-	-	-	-
Stage 2	764	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	525	788	1338	-	-	-
Mov Cap-2 Maneuver	525	-	-	-	-	-
Stage 1	794	-	-	-	-	-
Stage 2	764	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	3.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1338	-	730	-	-
HCM Lane V/C Ratio	0.062	-	0.201	-	-
HCM Control Delay (s)	7.9	-	11.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.7	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	30	60	130	195	10
Future Vol, veh/h	10	30	60	130	195	10
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	-	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	35	10	5	5	5
Mvmt Flow	11	32	63	137	205	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	474	211	216	0	-	0
Stage 1	211	-	-	-	-	-
Stage 2	263	-	-	-	-	-
Critical Hdwy	6.45	6.55	4.2	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.615	2.29	-	-	-
Pot Cap-1 Maneuver	544	753	1308	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	774	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	518	753	1308	-	-	-
Mov Cap-2 Maneuver	518	-	-	-	-	-
Stage 1	778	-	-	-	-	-
Stage 2	774	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.7	2.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1308	-	676	-	-
HCM Lane V/C Ratio	0.048	-	0.062	-	-
HCM Control Delay (s)	7.9	-	10.7	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	110	85	130	195	20
Future Vol, veh/h	20	110	85	130	195	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	35	10	5	5	5
Mvmt Flow	21	116	89	137	205	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	531	216	226	0	-	0
Stage 1	216	-	-	-	-	-
Stage 2	315	-	-	-	-	-
Critical Hdwy	6.45	6.55	4.2	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.615	2.29	-	-	-
Pot Cap-1 Maneuver	504	748	1297	-	-	-
Stage 1	813	-	-	-	-	-
Stage 2	733	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	469	748	1297	-	-	-
Mov Cap-2 Maneuver	469	-	-	-	-	-
Stage 1	757	-	-	-	-	-
Stage 2	733	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	3.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1297	-	685	-	-
HCM Lane V/C Ratio	0.069	-	0.2	-	-
HCM Control Delay (s)	8	-	11.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.7	-	-

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	TNM	13-Nov-18	SIRW0000-0002	1 OF 2

E/W STREET : OAK VALLEY VILLAGE CIR
N/S STREET : GOLF CLUB DRIVE
CONDITION : PM PEAK HOUR

INTERSECTION : 4
PROJECTED GROWTH PER YEAR : 2%

TURN MOVEMENTS

Condition	Existing Condition	Project Trips	Existing + Project Condition	Ambient Growth	Background Condition	Project Condition	Future Ambient Growth	Future Condition	Future+ Project Condition
Scenario #	2		4		6	8		10	12
OAK VALLEY VILLAGE CIR									
EB LEFT	10	10	20	5	15	25	5	15	25
EB THRU	0	0	0	0	0	0	0	0	0
EB RIGHT	60	120	180	5	65	185	30	90	210
WB LEFT	0	0	0	0	0	0	0	0	0
WB THRU	0	0	0	0	0	0	0	0	0
WB RIGHT	0	0	0	0	0	0	0	0	0
GOLF CLUB DRIVE									
NB LEFT	55	30	85	5	60	90	25	80	110
NB THRU	80	0	80	5	85	85	40	120	120
NB RIGHT	0	0	0	0	0	0	0	0	0
SB LEFT	0	0	0	0	0	0	0	0	0
SB THRU	80	0	80	5	85	85	40	120	120
SB RIGHT	5	10	15	5	10	20	5	10	20
TOTALS	**290**	**170**	**460**	**30**	**320**	**490**	**145**	**435**	**605**

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN VOLUME SUMMARY	TNM	13-Nov-18	SIRW0000-0002	2 OF 2

E/W STREET : OAK VALLEY VILLAGE CIR
N/S STREET : GOLF CLUB DRIVE
CONDITION : PM PEAK HOUR
PHF : 0.77

NORTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	0	0	0	0	0	0	1	0
0	1	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

SOUTH LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	1	0	0	1	0	0	0	1
0	1	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	2	0	0	0

EAST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	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

WEST LEG

LARGE 2 AXLE			LARGE 3 AXLE			LARGE 4(+) AXLE		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
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
2	0	0	0	0	0	1	0	0

NORTH LEG			SOUTH LEG			EAST LEG			WEST LEG		
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT
0	28	0	0	17	15	0	0	0	22	0	5
0	14	0	0	22	8	0	0	0	13	0	2
0	19	0	0	14	16	0	0	0	14	0	3
1	16	0	0	22	7	0	0	0	6	0	0

	TRUCK TOTAL	AUTO VOLUMES	TOTALS	ROUNDED TOTALS	TRUCK PERCENTAGE
OAK VALLEY VILLAGE CIR					
EB LEFT	0	10	**10**	**10**	**5%**
EB THRU	0	0	**0**	**0**	**0%**
EB RIGHT	4	55	**59**	**60**	**10%**
WB LEFT	0	0	**0**	**0**	**0%**
WB THRU	0	0	**0**	**0**	**0%**
WB RIGHT	0	0	**0**	**0**	**0%**
GOLF CLUB DRIVE					
NB LEFT	5	46	**51**	**55**	**10%**
NB THRU	3	75	**78**	**80**	**5%**
NB RIGHT	0	0	**0**	**0**	**0%**
SB LEFT	0	0	**0**	**0**	**0%**
SB THRU	3	77	**80**	**80**	**5%**
SB RIGHT	0	1	**1**	**5**	**5%**

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: OAK VALLEY VILLAGE
EAST-WEST STREET: GOLF CLUB DR
JURISDICTION: BEAUMONT

DATE: 10-16-18

PEAK HOUR: 04:30PM

NORTH LEG

TOTAL: 81

Rt	Thru	Lt	
1	80		Total
0	29		1st
0	15		2nd
0	20		3rd
1	16		4th

EAST LEG TOTAL: 0

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

WEST LEG TOTAL: 69

Total	1st	2nd	3rd	4th	
10	5	2	3	0	Lt
					Thru
59	22	13	16	8	Rt

PEAK HOUR FACTORS

NORTH LEG = 0.70
SOUTH LEG = 0.92
EAST LEG =
WEST LEG = 0.64

ALL LEGS = 0.77

SOUTH LEG

TOTAL: 129

	Lt	Thru	Rt
1st	16	19	
2nd	9	23	
3rd	16	14	
4th	10	22	
Total	51	78	

HOUR TOTAL: 279

Prepared by NEWPORT TRAFFIC STUDIES

SANBAG CLASSIFICATION SUMMARY

NORTH-SOUTH STREET : OAK VALLEY VILLAGE — BEAUMONT

EAST-WEST STREET : GOLF CLUB DR — 10-16-18

BEGINNING TIME : 04:00PM

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	15	0	0	0	0	0	1	0	0	0	0	16
4	16	0	0	1	0	0	0	0	0	0	0	21
0	28	0	0	0	0	0	0	0	0	1	0	29
0	14	0	0	1	0	0	0	0	0	0	0	15
0	19	0	0	1	0	0	0	0	0	0	0	20
1	16	0	0	0	0	0	0	0	0	0	0	17
1	11	0	0	0	0	0	0	0	0	0	0	12
1	8	0	0	0	0	0	0	0	0	0	0	9
7	127	0	0	3	0	0	1	0	0	1	0	139
SOUTH LEG												
0	12	5	0	1	1	0	0	0	0	0	0	19
0	17	3	0	0	0	0	0	0	0	0	0	20
0	17	15	0	1	0	0	1	0	0	0	1	35
0	22	8	0	1	1	0	0	0	0	0	0	32
0	14	16	0	0	0	0	0	0	0	0	0	30
0	22	7	0	0	1	0	0	2	0	0	0	32
0	17	8	0	2	0	0	0	0	0	0	0	27
0	10	14	0	0	0	0	0	0	0	0	0	24
0	131	76	0	5	3	0	1	2	0	0	1	219
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												
5	0	3	0	0	0	0	0	0	1	0	0	9
2	0	0	1	0	0	1	0	0	0	0	0	4
22	0	5	0	0	0	0	0	0	0	0	0	27
13	0	2	0	0	0	0	0	0	0	0	0	15
14	0	3	0	0	0	1	0	0	1	0	0	19
6	0	0	2	0	0	0	0	0	0	0	0	8
13	0	0	0	0	0	0	0	0	0	0	0	13
10	0	2	0	0	0	0	0	0	0	0	0	12
85	0	15	3	0	0	2	0	0	2	0	0	107

Prepared by Newport Traffic Studies

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY VILLAGE

EAST-WEST STREET: GOLF CLUB DR

TIME: 04:00PM-05:00PM DATE: 10-16-18

NORTH LEG

Rt	Thru	Lt	
4	77		Total
0	16		1st
4	17		2nd
0	29		3rd
0	15		4th

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

Total	1st	2nd	3rd	4th	
10	3	0	5	2	Lt
					Thru
45	6	4	22	13	Rt

	Lt	Thru	Rt
1st	6	13	
2nd	3	17	
3rd	16	19	
4th	9	23	
Total	34	72	

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: OAK VALLEY VILLAGE

EAST-WEST STREET: GOLF CLUB DR

TIME: 05:00PM-06:00PM DATE: 10-16-18

NORTH LEG

Rt	Thru	Lt	
3	55		Total
0	20		1st
1	16		2nd
1	11		3rd
1	8		4th

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

Total	1st	2nd	3rd	4th	
5	3	0	0	2	Lt
					Thru
47	16	8	13	10	Rt

	Lt	Thru	Rt
1st	16	14	
2nd	10	22	
3rd	8	19	
4th	14	10	
Total	48	65	

Prepared by NEWPORT TRAFFIC STUDIES

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	60	55	80	80	5
Future Vol, veh/h	10	60	55	80	80	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	-	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	10	10	5	5	5
Mvmt Flow	13	78	71	104	104	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	353	107	110	0	-	0
Stage 1	107	-	-	-	-	-
Stage 2	246	-	-	-	-	-
Critical Hdwy	6.45	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	639	926	1432	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	788	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	607	926	1432	-	-	-
Mov Cap-2 Maneuver	607	-	-	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	788	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	3.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1432	-	861	-	-
HCM Lane V/C Ratio	0.05	-	0.106	-	-
HCM Control Delay (s)	7.6	-	9.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	-	-

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	180	85	80	80	15
Future Vol, veh/h	20	180	85	80	80	15
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	-	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	10	10	5	5	5
Mvmt Flow	26	234	110	104	104	19

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	438	114	123	0	-	0
Stage 1	114	-	-	-	-	-
Stage 2	324	-	-	-	-	-
Critical Hdwy	6.45	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	570	917	1416	-	-	-
Stage 1	903	-	-	-	-	-
Stage 2	726	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	526	917	1416	-	-	-
Mov Cap-2 Maneuver	526	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	726	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1416	-	854	-	-
HCM Lane V/C Ratio	0.078	-	0.304	-	-
HCM Control Delay (s)	7.8	-	11	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.3	-	1.3	-	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	65	60	85	85	10
Future Vol, veh/h	15	65	60	85	85	10
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	-	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	10	10	5	5	5
Mvmt Flow	19	84	78	110	110	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	383	117	123	0	-	0
Stage 1	117	-	-	-	-	-
Stage 2	266	-	-	-	-	-
Critical Hdwy	6.45	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	614	914	1416	-	-	-
Stage 1	901	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	580	914	1416	-	-	-
Mov Cap-2 Maneuver	580	-	-	-	-	-
Stage 1	851	-	-	-	-	-
Stage 2	772	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	3.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1416	-	825	-	-
HCM Lane V/C Ratio	0.055	-	0.126	-	-
HCM Control Delay (s)	7.7	-	10	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	-	-

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	185	90	85	85	20
Future Vol, veh/h	25	185	90	85	85	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	10	10	5	5	5
Mvmt Flow	32	240	117	110	110	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	467	123	136	0	-	0
Stage 1	123	-	-	-	-	-
Stage 2	344	-	-	-	-	-
Critical Hdwy	6.45	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	549	907	1400	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	711	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	503	907	1400	-	-	-
Mov Cap-2 Maneuver	503	-	-	-	-	-
Stage 1	820	-	-	-	-	-
Stage 2	711	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1400	-	828	-	-
HCM Lane V/C Ratio	0.083	-	0.329	-	-
HCM Control Delay (s)	7.8	-	11.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.3	-	1.4	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	90	80	120	120	10
Future Vol, veh/h	15	90	80	120	120	10
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	-	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	10	10	5	5	5
Mvmt Flow	16	95	84	126	126	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	426	132	137	0	-	0
Stage 1	132	-	-	-	-	-
Stage 2	294	-	-	-	-	-
Critical Hdwy	6.45	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	580	896	1399	-	-	-
Stage 1	887	-	-	-	-	-
Stage 2	749	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	545	896	1399	-	-	-
Mov Cap-2 Maneuver	545	-	-	-	-	-
Stage 1	834	-	-	-	-	-
Stage 2	749	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	3.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1399	-	821	-	-
HCM Lane V/C Ratio	0.06	-	0.135	-	-
HCM Control Delay (s)	7.7	-	10.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	210	110	120	120	20
Future Vol, veh/h	25	210	110	120	120	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	10	10	5	5	5
Mvmt Flow	26	221	116	126	126	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	495	137	147	0	-	0
Stage 1	137	-	-	-	-	-
Stage 2	358	-	-	-	-	-
Critical Hdwy	6.45	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	529	891	1387	-	-	-
Stage 1	882	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	485	891	1387	-	-	-
Mov Cap-2 Maneuver	485	-	-	-	-	-
Stage 1	808	-	-	-	-	-
Stage 2	701	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.3	3.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1387	-	818	-	-
HCM Lane V/C Ratio	0.083	-	0.302	-	-
HCM Control Delay (s)	7.8	-	11.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.3	-	1.3	-	-

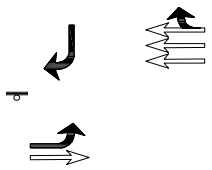
DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	TNM	13-Nov-18	SIRW0000-0002	1 OF 2

E/W STREET : OAK VALLEY PKWY
N/S STREET : PROJECT DRIVEWAY A
CONDITION : AM PEAK HOUR

INTERSECTION : 5
PROJECTED GROWTH PER YEAR : 2%

CONDITION DIAGRAMS



PROJECT GEOMETRICS

TURN MOVEMENTS

Condition	Existing Condition	Project Trips	Existing + Project Condition	Ambient Growth	Background Condition	Project Condition	Future Ambient Growth	Future Condition	Future+ Project Condition
Scenario #	1		3		5	7		9	11
OAK VALLEY PKWY									
EB LEFT	0	45	45	0	0	45	0	0	45
EB THRU	600	-15	585	20	620	605	270	870	855
EB RIGHT	0	0	0	0	0	0	0	0	0
WB LEFT	0	0	0	0	0	0	0	0	0
WB THRU	700	-60	640	20	720	660	315	1015	955
WB RIGHT	0	105	105	0	0	105	0	0	105
PROJECT DRIVEWAY A									
NB LEFT	0	0	0	0	0	0	0	0	0
NB THRU	0	0	0	0	0	0	0	0	0
NB RIGHT	0	0	0	0	0	0	0	0	0
SB LEFT	0	0	0	0	0	0	0	0	0
SB THRU	0	0	0	0	0	0	0	0	0
SB RIGHT	0	90	90	0	0	90	0	0	90
TOTALS	**1300**	**165**	**1465**	**40**	**1340**	**1505**	**585**	**1885**	**2050**

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	45	585	640	105	0	90
Future Vol, veh/h	45	585	640	105	0	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	5	5	0	0	0
Mvmt Flow	54	705	771	127	0	108

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	898	0	-	0	-	449
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.3	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.1	-	-	-	-	3.9
Pot Cap-1 Maneuver	445	-	-	-	0	481
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	445	-	-	-	-	481
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	14.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	445	-	-	-	481
HCM Lane V/C Ratio	0.122	-	-	-	0.225
HCM Control Delay (s)	14.2	0	-	-	14.6
HCM Lane LOS	B	A	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.9

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	45	605	660	105	0	90
Future Vol, veh/h	45	605	660	105	0	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	5	5	0	0	0
Mvmt Flow	54	729	795	127	0	108

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	922	0	-	0	-	461
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.3	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.1	-	-	-	-	3.9
Pot Cap-1 Maneuver	433	-	-	-	0	472
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	433	-	-	-	-	472
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	433	-	-	-	472
HCM Lane V/C Ratio	0.125	-	-	-	0.23
HCM Control Delay (s)	14.5	0	-	-	14.9
HCM Lane LOS	B	A	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.9

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	45	855	955	105	0	90
Future Vol, veh/h	45	855	955	105	0	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	5	5	0	0	0
Mvmt Flow	47	900	1005	111	0	95

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1116	0	-	0	-	558
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.3	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.1	-	-	-	-	3.9
Pot Cap-1 Maneuver	350	-	-	-	0	409
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	350	-	-	-	-	409
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	16.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	350	-	-	-	409
HCM Lane V/C Ratio	0.135	-	-	-	0.232
HCM Control Delay (s)	16.9	0	-	-	16.4
HCM Lane LOS	C	A	-	-	C
HCM 95th %tile Q(veh)	0.5	-	-	-	0.9

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	TNM	13-Nov-18	SIRW0000-0002	1 OF 2

E/W STREET : OAK VALLEY PKWY
N/S STREET : PROJECT DRIVEWAY A
CONDITION : PM PEAK HOUR

INTERSECTION : 5
PROJECTED GROWTH PER YEAR : 2%

TURN MOVEMENTS

Condition	Existing Condition	Project Trips	Existing + Project Condition	Ambient Growth	Background Condition	Project Condition	Future Ambient Growth	Future Condition	Future+ Project Condition
Scenario #	2		4		6	8		10	12
OAK VALLEY PKWY									
EB LEFT	0	75	75	0	0	75	0	0	75
EB THRU	605	-45	560	20	625	580	915	1145	1100
EB RIGHT	0	0	0	0	0	0	0	0	0
WB LEFT	0	0	0	0	0	0	0	0	0
WB THRU	700	-25	675	20	720	695	310	1010	985
WB RIGHT	0	70	70	0	0	70	0	0	70
PROJECT DRIVEWAY A									
NB LEFT	0	0	0	0	0	0	0	0	0
NB THRU	0	0	0	0	0	0	0	0	0
NB RIGHT	0	0	0	0	0	0	0	0	0
SB LEFT	0	0	0	0	0	0	0	0	0
SB THRU	0	0	0	0	0	0	0	0	0
SB RIGHT	0	55	55	0	0	55	0	0	55
TOTALS	**1305**	**130**	**1435**	**40**	**1345**	**1475**	**1225**	**2155**	**2285**

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	75	560	675	70	0	55
Future Vol, veh/h	75	560	675	70	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	0	5	5	0	0	0
Mvmt Flow	97	727	877	91	0	71

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	968	0	-	0	-	484
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.3	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.1	-	-	-	-	3.9
Pot Cap-1 Maneuver	412	-	-	-	0	457
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	412	-	-	-	-	457
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	14.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	412	-	-	-	457
HCM Lane V/C Ratio	0.236	-	-	-	0.156
HCM Control Delay (s)	16.4	0	-	-	14.3
HCM Lane LOS	C	A	-	-	B
HCM 95th %tile Q(veh)	0.9	-	-	-	0.5

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	75	580	695	70	0	55
Future Vol, veh/h	75	580	695	70	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	0	5	5	0	0	0
Mvmt Flow	97	753	903	91	0	71

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	994	0	-	0	-	497
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.3	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.1	-	-	-	-	3.9
Pot Cap-1 Maneuver	400	-	-	-	0	448
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	400	-	-	-	-	448
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	14.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	400	-	-	-	448
HCM Lane V/C Ratio	0.244	-	-	-	0.159
HCM Control Delay (s)	16.9	0	-	-	14.6
HCM Lane LOS	C	A	-	-	B
HCM 95th %tile Q(veh)	0.9	-	-	-	0.6

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	75	1100	985	70	0	55
Future Vol, veh/h	75	1100	985	70	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	5	5	0	0	0
Mvmt Flow	79	1158	1037	74	0	58

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1111	0	-	0	-	556
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.3	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.1	-	-	-	-	3.9
Pot Cap-1 Maneuver	351	-	-	-	0	410
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	351	-	-	-	-	410
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	15.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	351	-	-	-	410
HCM Lane V/C Ratio	0.225	-	-	-	0.141
HCM Control Delay (s)	18.2	0	-	-	15.2
HCM Lane LOS	C	A	-	-	C
HCM 95th %tile Q(veh)	0.8	-	-	-	0.5

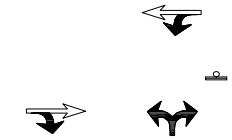
DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	TNM	13-Nov-18	SIRW0000-0002	1 OF 2

E/W STREET : OAK VALLEY VILLAGE CIR
N/S STREET : PROJECT DRIVEWAY B
CONDITION : AM PEAK HOUR

INTERSECTION : 6
PROJECTED GROWTH PER YEAR : 2%

CONDITION DIAGRAMS



PROJECT GEOMETRICS

TURN MOVEMENTS

Condition	Existing Condition	Project Trips	Existing + Project Condition	Ambient Growth	Background Condition	Project Condition	Future Ambient Growth	Future Condition	Future+ Project Condition
Scenario #	1		3		5	7		9	11
OAK VALLEY VILLAGE CIR									
EB LEFT	0	0	0	0	0	0	0	0	0
EB THRU	25	0	25	10	35	35	15	40	40
EB RIGHT	0	0	0	0	0	0	0	0	0
WB LEFT	0	35	35	0	0	35	0	0	35
WB THRU	45	0	45	10	55	55	25	70	70
WB RIGHT	0	0	0	0	0	0	0	0	0
PROJECT DRIVEWAY B									
NB LEFT	0	0	0	0	0	0	0	0	0
NB THRU	0	0	0	0	0	0	0	0	0
NB RIGHT	0	90	90	0	0	90	0	0	90
SB LEFT	0	0	0	0	0	0	0	0	0
SB THRU	0	0	0	0	0	0	0	0	0
SB RIGHT	0	0	0	0	0	0	0	0	0
TOTALS	**70**	**125**	**195**	**20**	**90**	**215**	**40**	**110**	**235**

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	0	35	45	0	90
Future Vol, veh/h	25	0	35	45	0	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	5	0	0	5	0	0
Mvmt Flow	29	0	41	53	0	106

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	29	0	-	29
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	-	3.3
Pot Cap-1 Maneuver	-	-	1597	-	0	1052
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1597	-	-	1052
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.2	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1052	-	-	1597	-
HCM Lane V/C Ratio	0.101	-	-	0.026	-
HCM Control Delay (s)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	4.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	35	0	35	55	0	90
Future Vol, veh/h	35	0	35	55	0	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	5	0	0	5	0	0
Mvmt Flow	41	0	41	65	0	106

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	41	0	-	41
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	-	3.3
Pot Cap-1 Maneuver	-	-	1581	-	0	1036
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1581	-	-	1036
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.9	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1036	-	-	1581	-
HCM Lane V/C Ratio	0.102	-	-	0.026	-
HCM Control Delay (s)	8.9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	4.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	40	0	35	70	0	90
Future Vol, veh/h	40	0	35	70	0	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	0	0	5	0	0
Mvmt Flow	42	0	37	74	0	95

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	42	0	-	42
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	-	3.3
Pot Cap-1 Maneuver	-	-	1580	-	0	1034
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1580	-	-	1034
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1034	-	-	1580	-
HCM Lane V/C Ratio	0.092	-	-	0.023	-
HCM Control Delay (s)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

DAVID EVANS AND ASSOCIATES INC.

SUBJECT	BY	DATE	JOB NO.	SHEET OF
TURN MOVEMENTS	TNM	13-Nov-18	SIRW0000-0002	1 OF 2

E/W STREET : OAK VALLEY VILLAGE CIR
N/S STREET : PROJECT DRIVEWAY B
CONDITION : PM PEAK HOUR

INTERSECTION : 6
PROJECTED GROWTH PER YEAR : 2%

TURN MOVEMENTS

Condition	Existing Condition	Project Trips	Existing + Project Condition	Ambient Growth	Background Condition	Project Condition	Future Ambient Growth	Future Condition	Future+ Project Condition
Scenario #	2		4		6	8		10	12
OAK VALLEY VILLAGE CIR									
EB LEFT	0	0	0	0	0	0	0	0	0
EB THRU	70	0	70	10	80	80	35	105	105
EB RIGHT	0	0	0	0	0	0	0	0	0
WB LEFT	0	40	40	0	0	40	0	0	40
WB THRU	60	0	60	10	70	70	30	90	90
WB RIGHT	0	0	0	0	0	0	0	0	0
PROJECT DRIVEWAY B									
NB LEFT	0	0	0	0	0	0	0	0	0
NB THRU	0	0	0	0	0	0	0	0	0
NB RIGHT	0	130	130	0	0	130	0	0	130
SB LEFT	0	0	0	0	0	0	0	0	0
SB THRU	0	0	0	0	0	0	0	0	0
SB RIGHT	0	0	0	0	0	0	0	0	0
TOTALS	**130**	**170**	**300**	**20**	**150**	**320**	**65**	**195**	**365**

Intersection	
Int Delay, s/veh	5.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	70	0	40	60	0	130
Future Vol, veh/h	70	0	40	60	0	130
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	0	0	5	0	0
Mvmt Flow	91	0	52	78	0	169

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	91	0	-	91
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	-	3.3
Pot Cap-1 Maneuver	-	-	1517	-	0	972
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1517	-	-	972
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	972	-	-	1517	-
HCM Lane V/C Ratio	0.174	-	-	0.034	-
HCM Control Delay (s)	9.5	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	80	0	40	70	0	130
Future Vol, veh/h	80	0	40	70	0	130
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	0	0	5	0	0
Mvmt Flow	104	0	52	91	0	169

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	104	0	-	104
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	-	3.3
Pot Cap-1 Maneuver	-	-	1500	-	0	956
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1500	-	-	956
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	956	-	-	1500	-
HCM Lane V/C Ratio	0.177	-	-	0.035	-
HCM Control Delay (s)	9.6	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	105	0	40	90	0	130
Future Vol, veh/h	105	0	40	90	0	130
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	0	0	5	0	0
Mvmt Flow	111	0	42	95	0	137

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	111	0	-	111
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	-	3.3
Pot Cap-1 Maneuver	-	-	1492	-	0	948
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1492	-	-	948
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.3	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	948	-	-	1492	-
HCM Lane V/C Ratio	0.144	-	-	0.028	-
HCM Control Delay (s)	9.4	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

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Appendix B: Queuing Analysis

Intersection: 5: Oak Valley Pkwy & Project Driveway A

Movement	EB	SB
Directions Served	LT	R
Maximum Queue (ft)	138	70
Average Queue (ft)	47	28
95th Queue (ft)	118	55
Link Distance (ft)	371	55
Upstream Blk Time (%)		2
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Project Driveway B & Oak Valley Village Cir

Movement	NB
Directions Served	R
Maximum Queue (ft)	79
Average Queue (ft)	36
95th Queue (ft)	64
Link Distance (ft)	77
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 5: Oak Valley Pkwy & Project Driveway A

Movement	EB	WB	SB
Directions Served	LT	T	R
Maximum Queue (ft)	232	51	48
Average Queue (ft)	46	2	23
95th Queue (ft)	132	17	35
Link Distance (ft)	371	224	55
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Project Driveway B & Oak Valley Village Cir

Movement	NB
Directions Served	R
Maximum Queue (ft)	77
Average Queue (ft)	41
95th Queue (ft)	64
Link Distance (ft)	77
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 5: Oak Valley Pkwy & Project Driveway A

Movement	EB	WB	WB	SB
Directions Served	LT	T	TR	R
Maximum Queue (ft)	223	55	47	70
Average Queue (ft)	41	3	5	35
95th Queue (ft)	125	21	24	64
Link Distance (ft)	371	224	224	55
Upstream Blk Time (%)				2
Queuing Penalty (veh)				0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Project Driveway B & Oak Valley Village Cir

Movement	WB	NB
Directions Served	LT	R
Maximum Queue (ft)	31	57
Average Queue (ft)	1	35
95th Queue (ft)	10	58
Link Distance (ft)	269	77
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 5: Oak Valley Pkwy & Project Driveway A

Movement	EB	SB
Directions Served	LT	R
Maximum Queue (ft)	128	50
Average Queue (ft)	27	22
95th Queue (ft)	73	42
Link Distance (ft)	371	55
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Project Driveway B & Oak Valley Village Cir

Movement	NB
Directions Served	R
Maximum Queue (ft)	77
Average Queue (ft)	40
95th Queue (ft)	62
Link Distance (ft)	77
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 5: Oak Valley Pkwy & Project Driveway A

Movement	EB	WB	WB	WB	SB
Directions Served	LT	T	T	TR	R
Maximum Queue (ft)	310	237	270	266	70
Average Queue (ft)	75	91	164	173	45
95th Queue (ft)	218	253	303	306	82
Link Distance (ft)	371	224	224	224	55
Upstream Blk Time (%)		1	5	26	18
Queuing Penalty (veh)		3	17	92	0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Project Driveway B & Oak Valley Village Cir

Movement	EB	NB
Directions Served	TR	R
Maximum Queue (ft)	104	92
Average Queue (ft)	9	38
95th Queue (ft)	56	63
Link Distance (ft)	89	77
Upstream Blk Time (%)	5	5
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 112

Intersection: 5: Oak Valley Pkwy & Project Driveway A

Movement	EB	WB	WB	WB	SB
Directions Served	LT	T	T	TR	R
Maximum Queue (ft)	378	142	55	49	48
Average Queue (ft)	91	6	4	4	21
95th Queue (ft)	233	48	27	23	39
Link Distance (ft)	371	224	224	224	55
Upstream Blk Time (%)	0				0
Queuing Penalty (veh)	4				0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Project Driveway B & Oak Valley Village Cir

Movement	WB	NB
Directions Served	LT	R
Maximum Queue (ft)	31	82
Average Queue (ft)	3	42
95th Queue (ft)	16	72
Link Distance (ft)	269	77
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

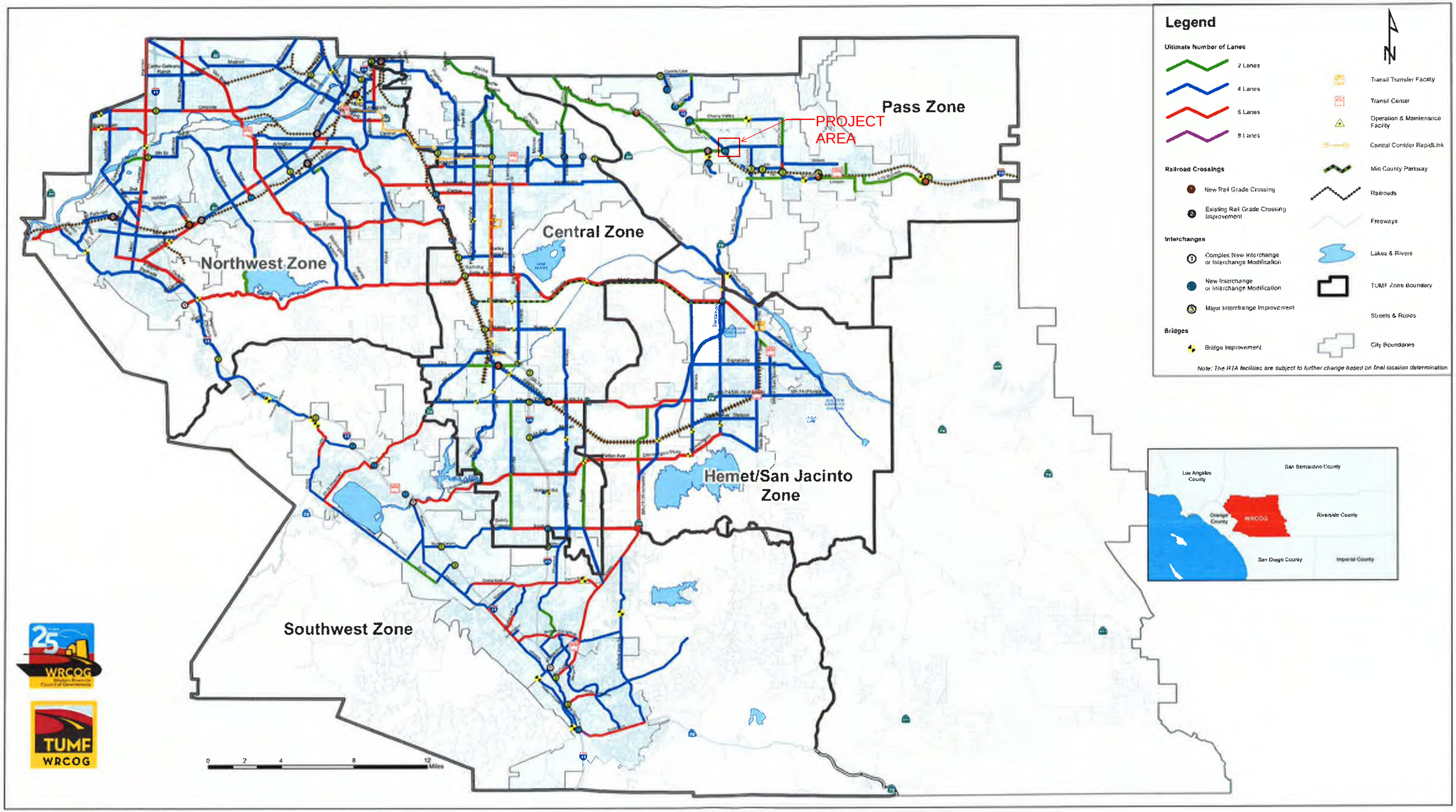
Zone wide Queuing Penalty: 4

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Appendix C: Transportation Uniform Mitigation Fee Program TUMF

Table 4.4 - TUMF Network Cost Estimates (continued)

AREA PLAN DESIGNATION	CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	MILES	TOTAL COST	MAXIMUM TUMF SHARE
Pass	Banning	8th	Wilson	I-10	0.54	$0	$0
Pass	Banning	Highland Springs	Wilson (8th)	Sun Lakes	0.76	$2,661,000	$2,661,000
Pass	Banning	Highland Springs	I-10	Interchange	0.00	$17,897,000	$17,897,000
Pass	Banning	Highland Springs	Oak Valley (14th)	Wilson (8th)	0.73	$5,128,000	$5,128,000
Pass	Banning	Highland Springs	Cherry Valley	Oak Valley (14th)	1.53	$0	$0
Pass	Banning	I-10 Bypass South	I-10	Morongo Trail (Apache Trail)	3.29	$22,952,000	$22,952,000
Pass	Banning	I-10 Bypass South	I-10	Interchange	0.00	$17,897,000	$17,897,000
Pass	Banning	I-10 Bypass South	San Gorgonio	bridge	0.00	$2,767,000	$2,767,000
Pass	Banning	I-10 Bypass South	UP	railroad crossing	0.00	$18,490,000	$18,490,000
Pass	Banning	Lincoln	Sunset	SR-243	2.01	$0	$0
Pass	Banning	Ramsey	I-10	8th	1.70	$0	$0
Pass	Banning	Ramsey	8th	Highland Springs	3.55	$0	$0
Pass	Banning	SR-243	I-10	Wesley	0.67	$0	$0
Pass	Banning	Sun Lakes	Highland Home	Sunset	1.00	$13,971,000	$13,971,000
Pass	Banning	Sun Lakes	Smith Creek	bridge	0.00	$3,688,000	$3,688,000
Pass	Banning	Sun Lakes	Highland Springs	Highland Home	1.33	$0	$0
Pass	Banning	Sunset	Ramsey	Lincoln	0.28	$0	$0
Pass	Banning	Sunset	I-10	Interchange	0.00	$17,897,000	$17,897,000
Pass	Banning	Wilson	Highland Home	8th	2.51	$0	$0
Pass	Banning	Wilson	Highland Springs	Highland Home	1.01	$0	$0
Pass	Beaumont	1st	Viele	Pennsylvania	1.28	$0	$0
Pass	Beaumont	1st	Pennsylvania	Highland Springs	1.10	$0	$0
Pass	Beaumont	6th	I-10	Highland Springs	2.24	$0	$0
Pass	Beaumont	Desert Lawn	Champions	Oak Valley (STC)	0.99	$912,000	$912,000
Pass	Beaumont	Oak Valley (14th)	Highland Springs	Pennsylvania	1.13	$0	$0
Pass	Beaumont	Oak Valley (14th)	Pennsylvania	Oak View	1.40	$0	$0
Pass	Beaumont	Oak Valley (14th)	Oak View	I-10	0.65	$2,270,000	$2,270,000
Pass	Beaumont	Oak Valley (14th)	I-10	Interchange	0.00	$37,060,000	$11,660,000
Pass	Beaumont	Oak Valley (STC)	Beaumont City Limits	Cherry Valley (1 St / Central Over	3.46	$0	$0
Pass	Beaumont	Oak Valley (STC)	Cherry Valley (1 St / Central (	I-10	1.67	$0	$0
Pass	Beaumont	Pennsylvania	6th	1st	0.53	$3,018,000	$3,018,000
Pass	Beaumont	Pennsylvania	I-10	Interchange	0.00	$8,949,000	$0
Pass	Calimesa	Bryant	County Line	Avenue L	0.38	$0	$0
Pass	Calimesa	Calimesa	County Line	I-10	0.80	$0	$0
Pass	Calimesa	Calimesa	I-10	Interchange	0.00	$37,060,000	$37,060,000
Pass	Calimesa	Tukwet Canyon	Roberts	Palmer	0.50	$0	$0
Pass	Calimesa	County Line	Roberts	Bryant	1.86	$6,497,000	$6,497,000
Pass	Calimesa	County Line	I-10	Interchange	0.00	$17,897,000	$17,897,000
Pass	Calimesa	Desert Lawn	Palmer	Champions	1.42	$0	$0
Pass	Calimesa	Singleton	Avenue L	Condit	1.86	$11,834,000	$11,834,000
Pass	Calimesa	Singleton	Condit	Roberts	0.85	$0	$0
Pass	Calimesa	Singleton	I-10	Interchange	0.00	$37,060,000	$37,060,000
Pass	Unincorporated	Cherry Valley	Noble	Desert Lawn	3.40	$0	$0
Pass	Unincorporated	Cherry Valley	I-10	Interchange	0.00	$37,060,000	$36,617,000
Pass	Unincorporated	Cherry Valley	San Timoteo Wash	bridge	0.00	$0	$0
Pass	Unincorporated	Live Oak Canyon	Oak Valley (STC)	San Bernardino County	2.81	$0	$0
Pass	Unincorporated	Oak Valley (STC)	San Bernardino County	Beaumont City Limits	5.65	$0	$0
Pass	Unincorporated	Oak Valley (STC)	UP	railroad crossing	0.00	$18,490,000	$18,490,000
Pass	Unincorporated	Cherry Valley	Bellflower	Noble	1.47	$7,757,000	$7,757,000
Pass	Unincorporated	Cherry Valley	Highland Springs	Bellflower	0.44	$0	$0
San Jacinto	Hemet	Sanderson	Acacia	Menlo	0.98	$0	$0
San Jacinto	Hemet	Sanderson	Domenigoni	Stetson	1.08	$0	$0
San Jacinto	Hemet	Sanderson	RR Crossing	Acacia	0.42	$0	$0
San Jacinto	Hemet	Sanderson	Stetson	RR Crossing	0.58	$0	$0
San Jacinto	Hemet	Sanderson	Menlo	Esplanade	1.00	$0	$0
San Jacinto	Hemet	SR-74 (Florida)	Warren	Cawston	1.02	$0	$0
San Jacinto	Hemet	SR-74 (Florida)	Columbia	Ramona	2.58	$0	$0
San Jacinto	Hemet	SR-74/SR-79 (Florida)	Cawston	Columbia	4.03	$0	$0
San Jacinto	Hemet	State	Domenigoni	Chambers	1.31	$0	$0
San Jacinto	Hemet	State	Chambers	Stetson	0.61	$0	$0
San Jacinto	Hemet	State	Florida	Esplanade	1.74	$0	$0
San Jacinto	Hemet	State	Stetson	Florida	1.25	$9,377,000	$9,377,000
San Jacinto	Hemet	Stetson	Cawston	State	2.52	$0	$0
San Jacinto	Hemet	Stetson	Warren	Cawston	1.08	$2,635,000	$2,635,000
San Jacinto	Hemet	Warren	Esplanade	Domenigoni	4.99	$13,163,000	$13,163,000
San Jacinto	Hemet	Warren	Salt Creek	bridge	0.00*	$2,767,000	$2,490,000
San Jacinto	San Jacinto	Esplanade	Ramona	Mountain	0.20	$2,794,000	$2,794,000
San Jacinto	San Jacinto	Esplanade	Mountain	State	2.55	$0	$0
San Jacinto	San Jacinto	Esplanade	State	Warren	3.53	$9,320,000	$9,320,000
San Jacinto	San Jacinto	Sanderson	Ramona	Esplanade	3.55	$0	$0
San Jacinto	San Jacinto	SR-79 (North Ramona)	State	San Jacinto	1.02	$0	$0
San Jacinto	San Jacinto	SR-79 (San Jacinto)	North Ramona Blvd	7th	0.25	$1,722,000	$1,722,000
San Jacinto	San Jacinto	SR-79 (San Jacinto)	7th	SR-74	2.25	$0	$0
San Jacinto	San Jacinto	State	Ramona	Esplanade	1.99	$0	$0
San Jacinto	San Jacinto	State	Gilman Springs	Quandt Ranch	0.76	$2,207,000	$1,138,000
San Jacinto	San Jacinto	State	San Jacinto River	bridge	0.00*	$4,611,000	$3,167,000
San Jacinto	San Jacinto	State	Quandt Ranch	Ramona	0.70	$0	$0
San Jacinto	San Jacinto	Warren	Ramona	Esplanade	3.47	$9,156,000	$9,156,000
San Jacinto	Unincorporated	Gilman Springs	Sanderson	State	2.54	$6,714,000	$3,462,000
San Jacinto	Unincorporated	Gilman Springs	Massacre Canyon Wash	bridge	0.00	$923,000	$570,000
San Jacinto	Unincorporated	SR 79 (Winchester)	SR-74 (Florida)	Domenigoni	3.23*	$0	$0



Regional System of Highways and Arterials (RSHA)

Transportation Uniform Mitigation Fee Program | Figure 4.4

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