Appendix J-2
Traffic Analysis

URBAN | CROSSROADS

MESA VERDE SPECIFIC PLAN AREA 2 AMENDMENT 2

TRAFFIC ANALYSIS

PREPARED BY: Charlene So | cso@urbanxroads.com
Aric Evatt | aevatt@urbanxroads.com

Reference Number	Agency	Date
15218-16 TA Report	City of Calimesa	June 18, 2025

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CAMUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CMP	Congestion Management Program
DIF	Development Impact Fee
E+P	Existing plus Project
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
NCHRP	National Cooperative Highway Research Program
O/D	Origin/Destination
OPR	Office of Planning and Research
PCE	Passenger Car Equivalent
PHF	Peak Hour Factor
Project	Mesa Verde Specific Plan Area 2 Amendment 2
RCTC	Riverside County Transportation Commission
RIVCOM	Riverside County Transportation Analysis Model
RTA	Riverside Transit Authority
RTP	Regional Transportation Plan
SB 743	Senate Bill 743
SCAG	Southern California Association of Governments
SCS	Sustainable Communities Strategy
SP	Service Population
TA	Traffic Analysis
TAZ	Traffic Analysis Zone
TUMF	Transportation Uniform Mitigation Fee
WRCOG	Western Riverside Council of Governments
VMT	Vehicle Miles Traveled
vphgpl	Vehicles per Hour Green per Lane

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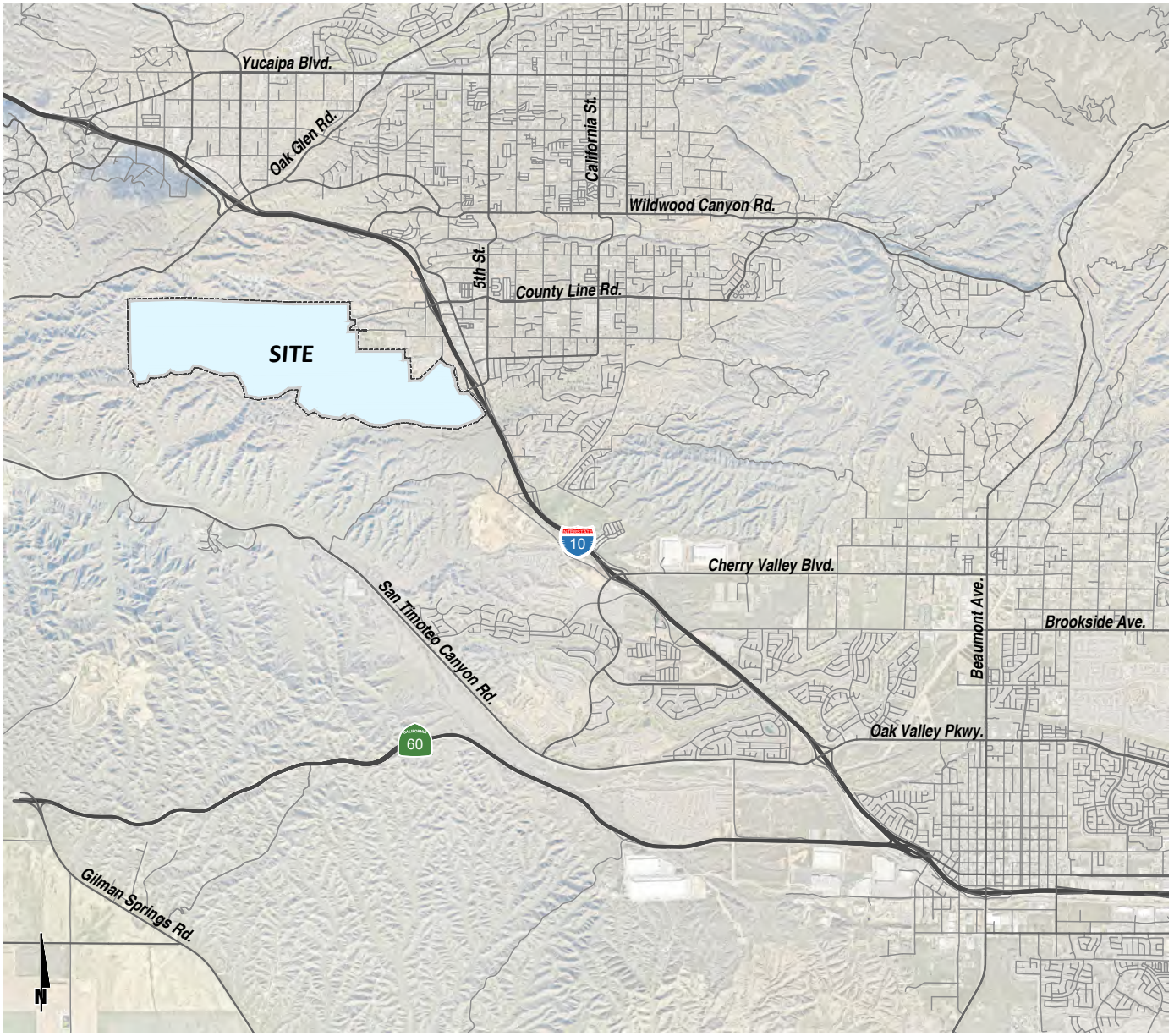
1 SUMMARY OF FINDINGS

This report presents the results of the Traffic Analysis (TA) for the Mesa Verde Specific Plan Area 2 Amendment 2 (**Project** and/or **Specific Plan Amendment**), which is generally located west of the Sandalwood Drive interchange with the I-10 Freeway in the City of Calimesa, as shown on Exhibit 1-1.

The purpose of this TA is to evaluate the potential circulation system deficiencies that may result when the Project is developed and where circulation system (intersection and/or roadway) improvements are needed to maintain acceptable levels of service consistent with the City's General Plan level of service goals and policies, which are described in the City of Calimesa's Final City of Calimesa Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (May 2020) (**City Guidelines**). The scope of analysis included in this evaluation is based on City Guidelines and consultation with City of Calimesa staff during the TA scoping process. (1) The TA Scoping Agreement is included in Appendix 1.1 and has been reviewed and approved by the City of Calimesa.

EXHIBIT 1-1 : LOCATION MAP



1.1 PROJECT OVERVIEW

1.1.1 LAND USE

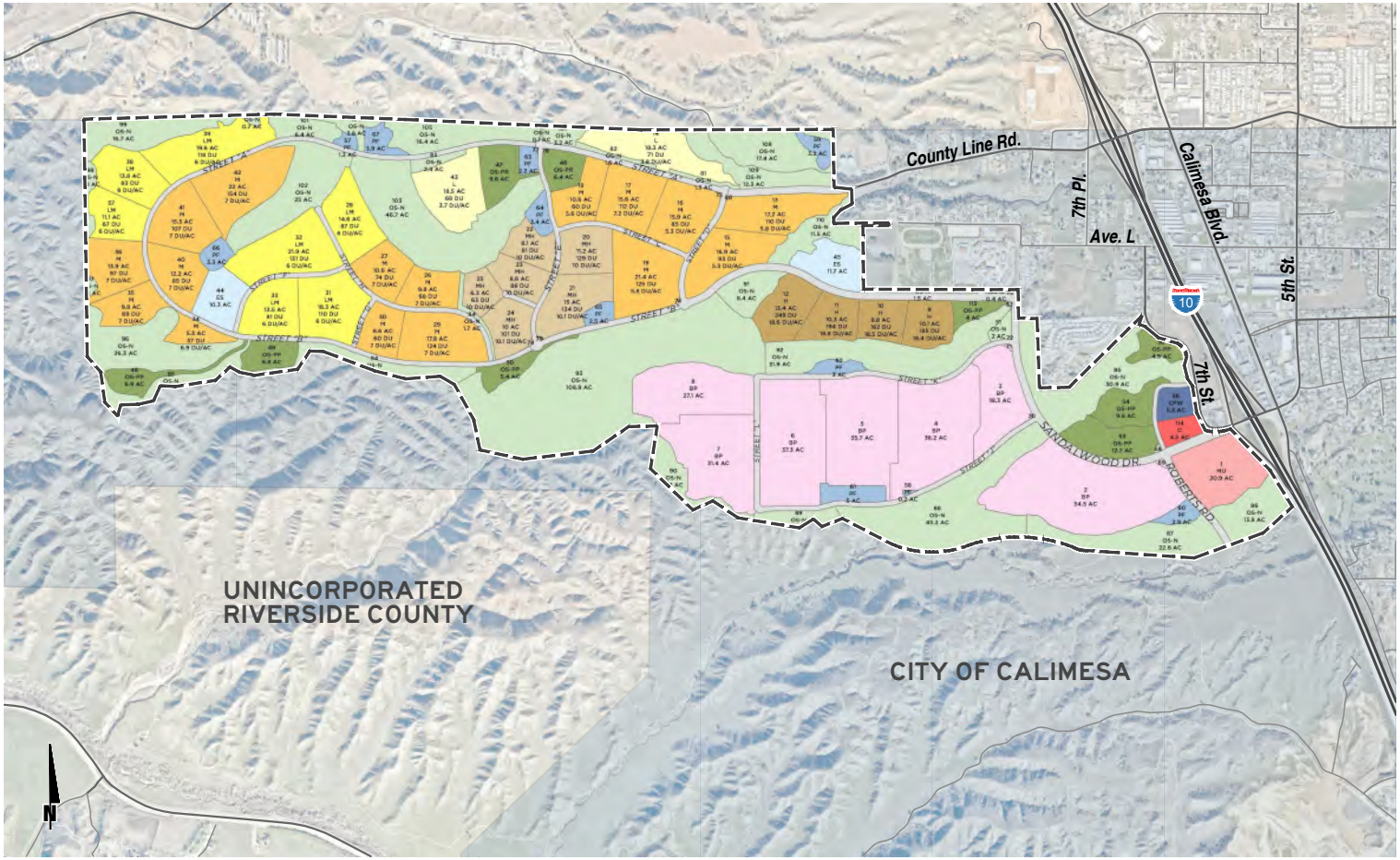
The Specific Plan Amendment is anticipated to be constructed in 5 development phases over approximately 20 years. Anticipated completion years and land use information by phase are shown below in Table 1-1. Exhibit 1-2 shows the Project land use map and phasing summary, while Exhibit 1-3 illustrates each specific phase.

TABLE 1-1 LAND USE SUMMARY

Phase	Year	Land Use	Quantity	Unit[1]
1	2030	BP: General Light Industrial	1,400.00	TSF
		L/LM/M: Single Family Cluster Residential	709	DU
		MH/H: Multifamily (Low-Rise)/Townhomes	185	DU
		PF: Fire and Rescue Station/Public Works Facility	16.5	TSF
		OS-PP: Parks	12.7	AC
2	2035	BP: General Light Industrial	700.000	TSF
		BP: High-Cube Fulfillment Center (Sort)	700.000	TSF
		MU: Mixed Use (Commercial)	50.000	TSF
		L/LM/M: Single Family Cluster Residential	468	DU
		MH/H: Multifamily (Low-Rise)/Townhomes	81	DU
		OS-PP: Parks	16.2	AC
3	2038	BP: General Light Industrial	700.000	TSF
		BP: High-Cube Fulfillment Center (Sort)	700.000	TSF
		L/LM/M: Single Family Cluster Residential	447	DU
		MH/H: Multifamily (Low-Rise)/Townhomes	81	DU
		MU: Mixed Use (Commercial)	250.000	TSF
		OS-PP: Parks	8.9	AC
4	2040	L/LM/M: Single Family Cluster Residential	689	DU
		MH/H: Multifamily (Low-Rise)/Townhomes	194	DU
		BP: General Office	240.000	TSF
		ES: Elementary School	600	Students
		OS-PP: Parks	16.5	AC
5 (Project Buildout)	2045	L/LM/M: Single Family Cluster Residential	547	DU
		MH/H: Multifamily (Low-Rise)	249	DU
		ES: Elementary School	600	Students
		OS-PP: Parks	12.2	AC

[1] TSF = Thousand Square Feet; DU = Dwelling Units; AC = Acres

EXHIBIT 1-2 : PROJECT LAND USE MAP (PAGE 1 OF 2)



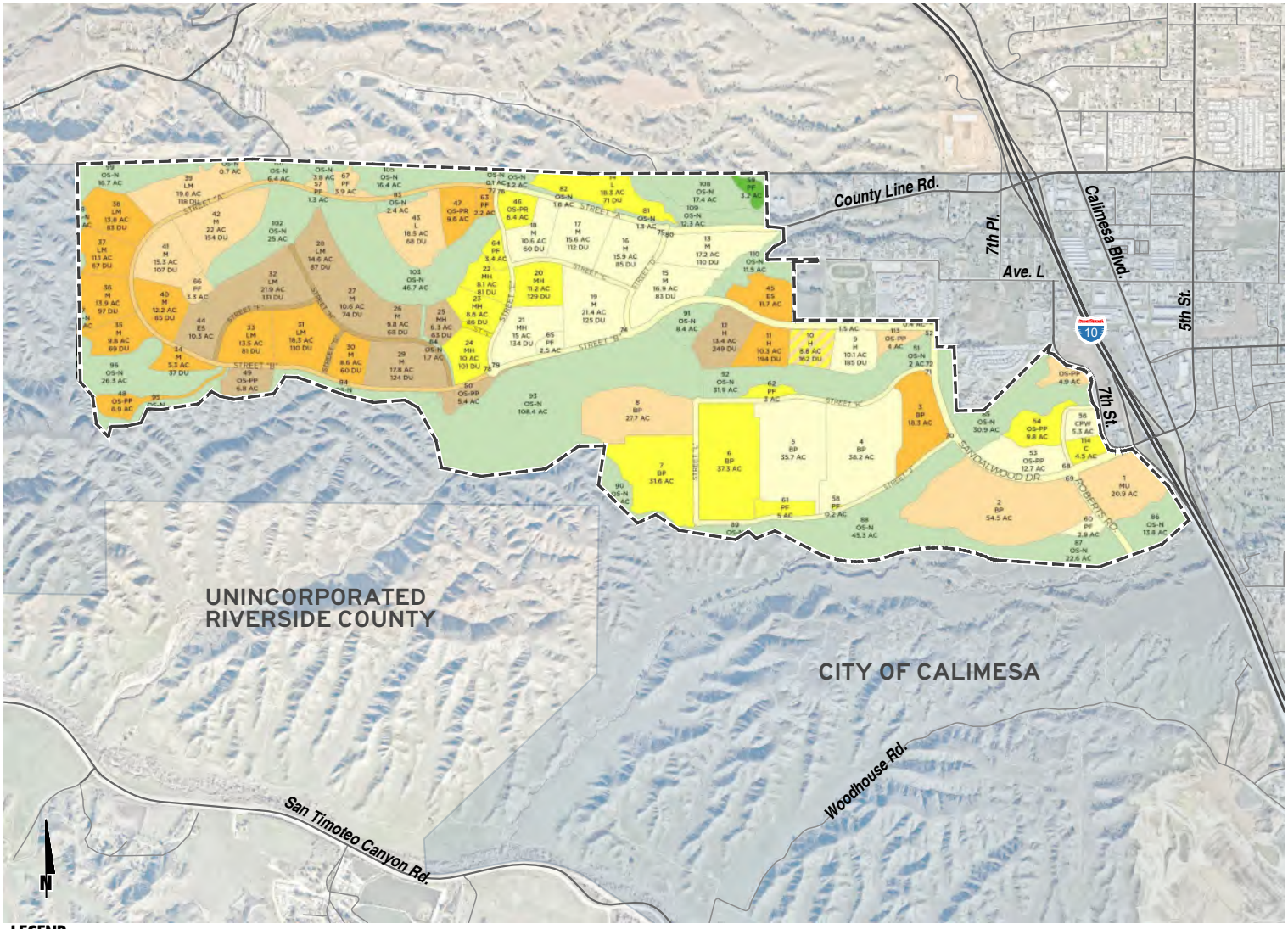
Legend

		Projected No. Units
H	High Residential Multi Family; 24 du/acre	790
MH	Medium High Residential Townhomes; 18 du/ac	594
M	Medium Residential Single Family Cluster; 14 du/ac	1,450
LM	Low Medium Residential Average 4000 SF; 10 du/ac	677
L	Low Residential Average 5000 SF; 8 du/ac	139
MU	Mixed Use	
C	Commercial	
BP	Business Park	

OS-N	Natural Open Space 496.6 Acres
OS-PP OS-PR	Park & Private Rec. 66.5 Acres
PF	Public/Quasi Public Facilities 30.9 Acres (Basins, Water Tank, Lift Station)
ES	Elementary School 22.0 Acres
CPW	Calimesa Public Works 5.3 Acres
	Road 99.1 Acres

3,650 Total Units

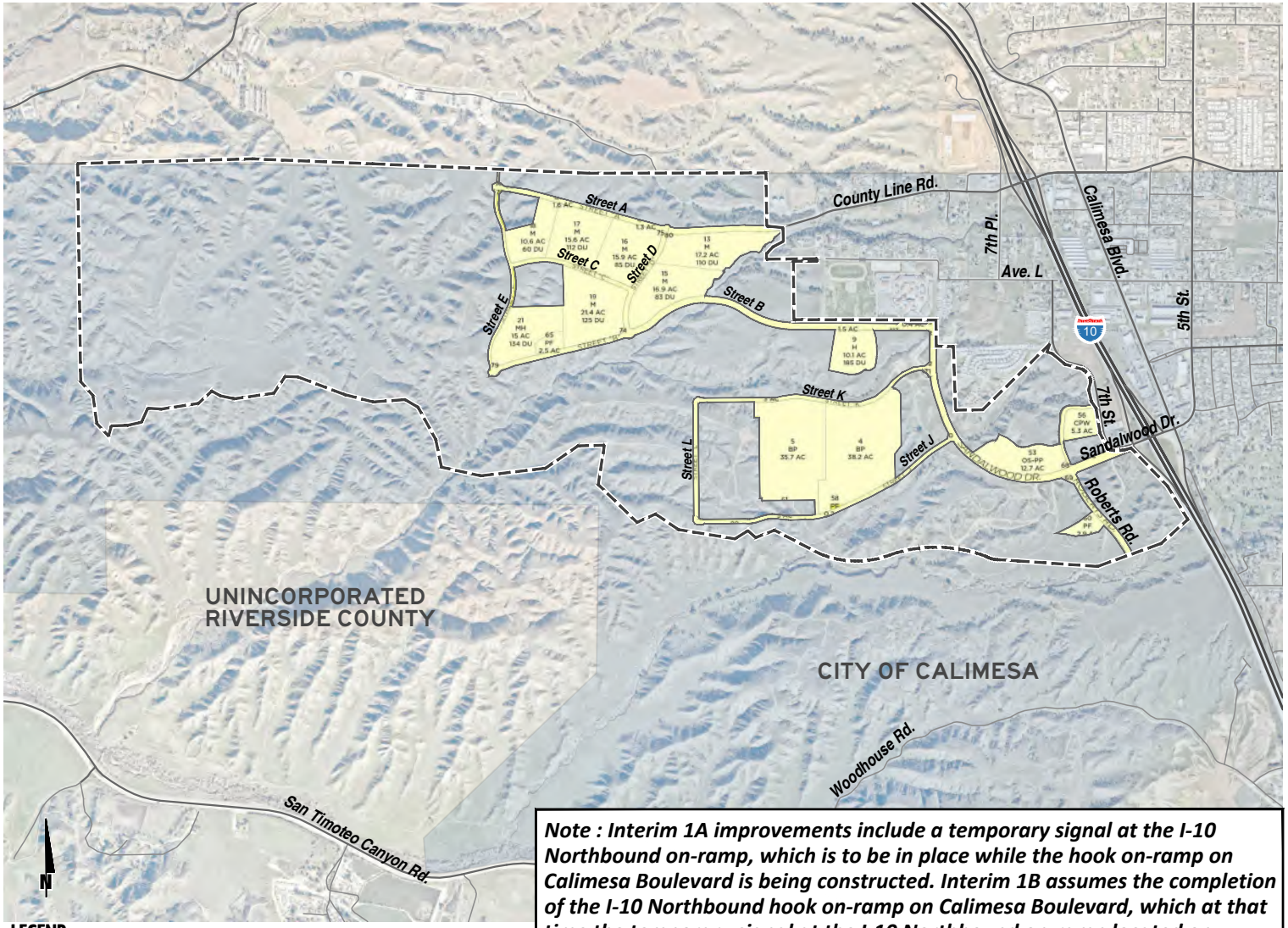
EXHIBIT 1-2 : PROJECT PHASING MAP (PAGE 2 OF 2)



LEGEND:

- = Phase 1
- = Phase 2
- = Phase 3
- = Phase 4
- = Phase 5

EXHIBIT 1-3 : PRELIMINARY PHASING PLAN FOR PHASE 1 (PAGE 1 OF 5)

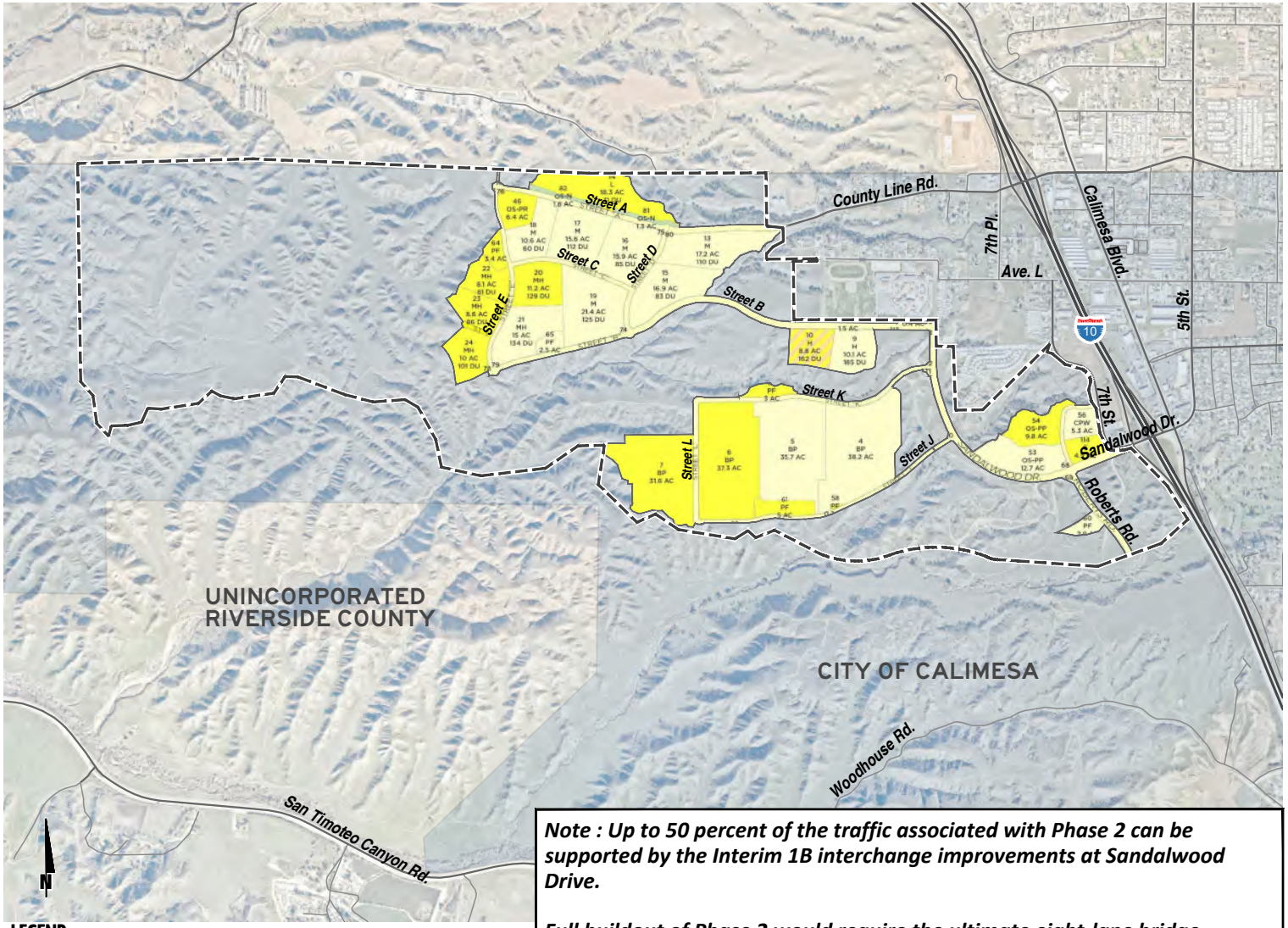


LEGEND:

= Phase 1

Note : Interim 1A improvements include a temporary signal at the I-10 Northbound on-ramp, which is to be in place while the hook on-ramp on Calimesa Boulevard is being constructed. Interim 1B assumes the completion of the I-10 Northbound hook on-ramp on Calimesa Boulevard, which at that time the temporary signal at the I-10 Northbound on-ramp located on Sandalwood Drive would be removed and the access would be restricted to right-on only from the east. No bridge widening across Sandalwood Drive is proposed for Interim 1A and Interim 1B improvements.

EXHIBIT 1-3 : PRELIMINARY PHASING PLAN FOR PHASE 2 (PAGE 2 OF 5)



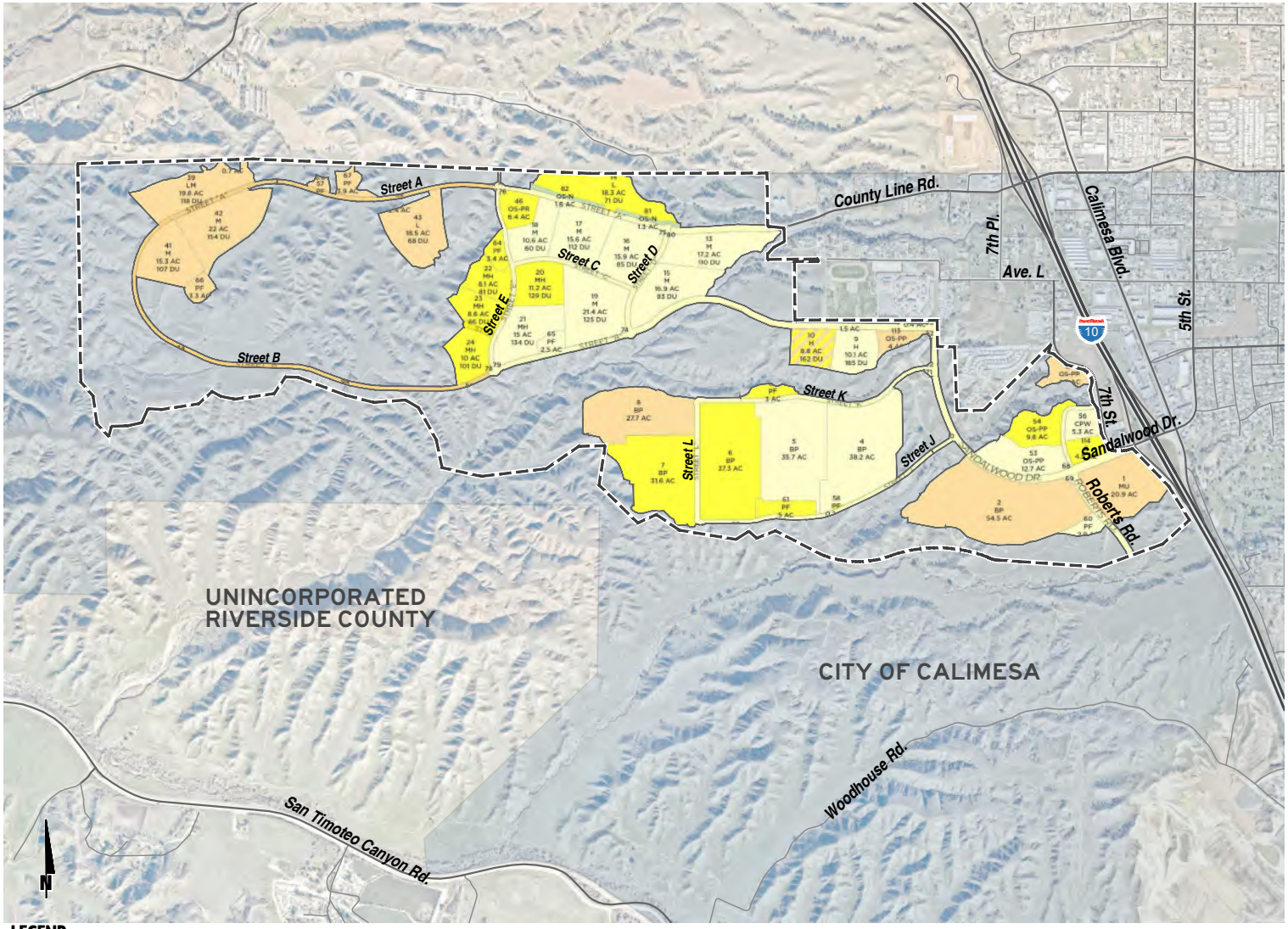
LEGEND:

= Phase 1
= Phase 2

Note : Up to 50 percent of the traffic associated with Phase 2 can be supported by the Interim 1B interchange improvements at Sandalwood Drive.

Full buildout of Phase 2 would require the ultimate eight-lane bridge improvement along Sandalwood Drive including additional improvements to the intersection of Calimesa Boulevard at Sandalwood Drive.

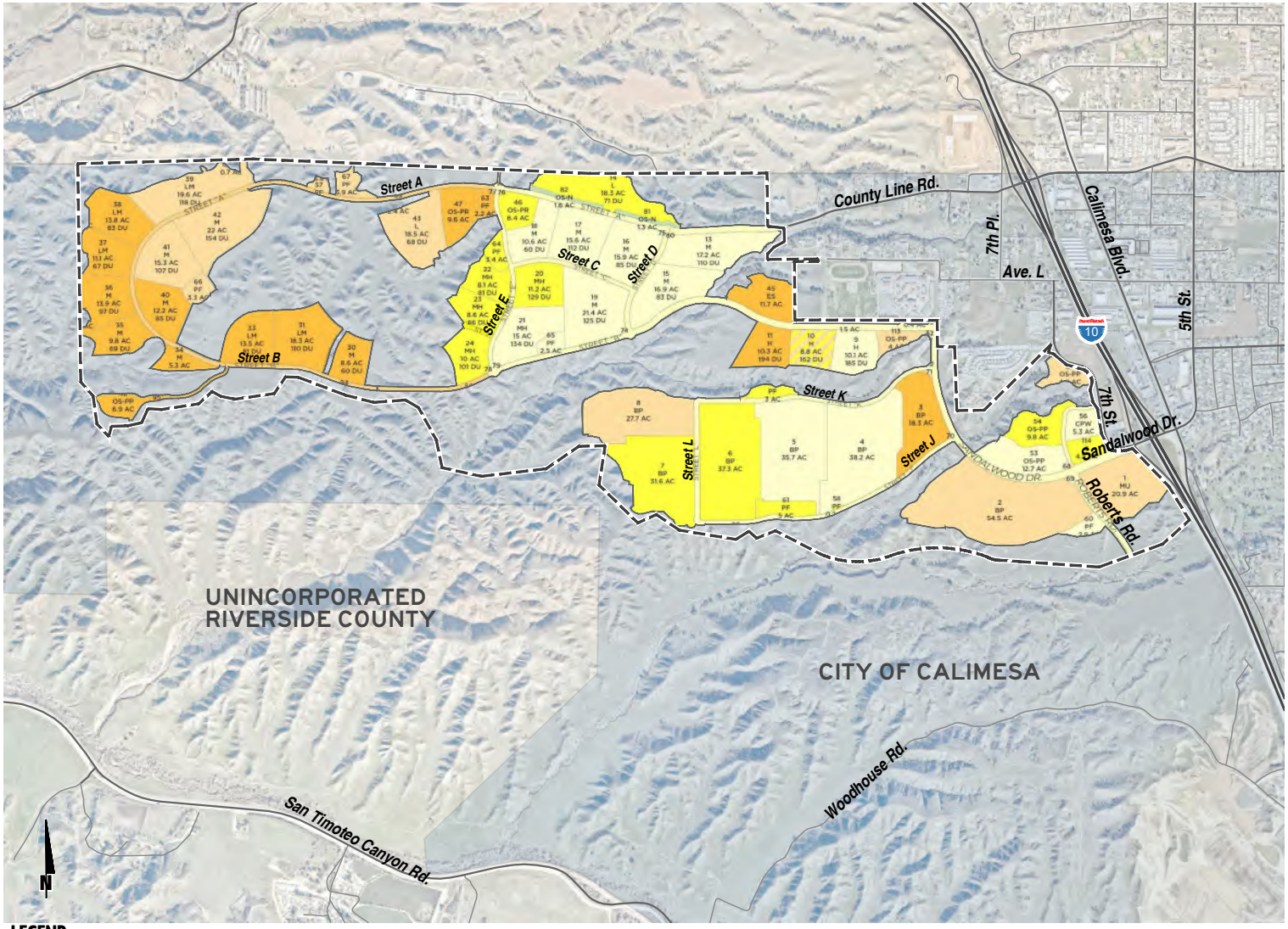
EXHIBIT 1-3 : PRELIMINARY PHASING PLAN FOR PHASE 3 (PAGE 3 OF 5)



LEGEND:

- = Phase 1
- = Phase 2
- = Phase 3

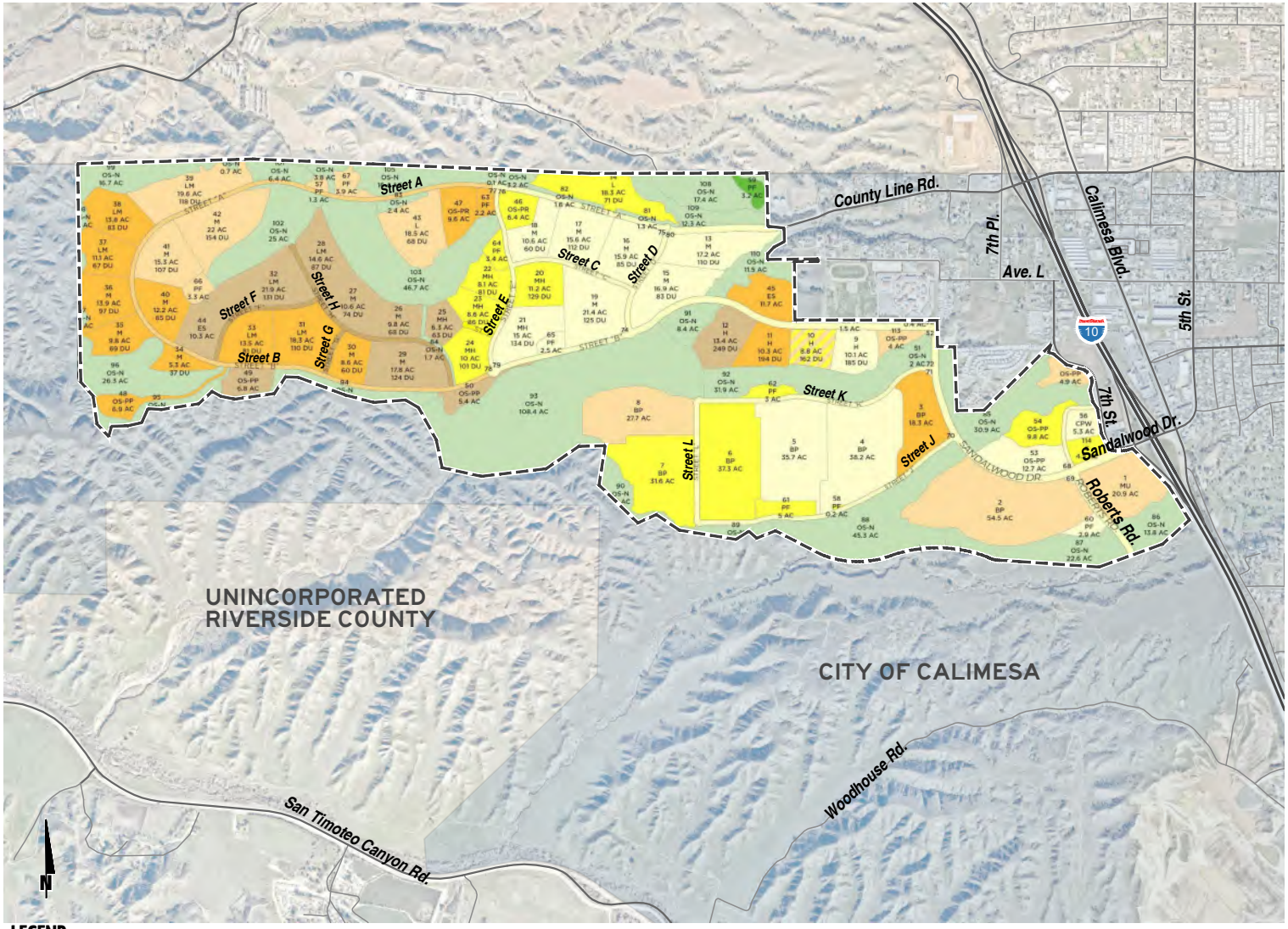
EXHIBIT 1-3 : PRELIMINARY PHASING PLAN FOR PHASE 4 (PAGE 4 OF 5)



LEGEND:

- = Phase 1
- = Phase 2
- = Phase 3
- = Phase 4

EXHIBIT 1-3 : PRELIMINARY PHASING PLAN FOR PHASE 5 (PAGE 5 OF 5)



LEGEND:

- = Phase 1
- = Phase 2
- = Phase 3
- = Phase 4
- = Phase 5

1.1.2 TRIP GENERATION

In order to develop traffic estimates for the proposed Project, trip-generation statistics published by the Institute of Transportation Engineers (ITE) in their Trip Generation Manual (11th Edition, 2021) were utilized to represent the following land uses allowed by the Specific Plan (2):

- High-Cube Fulfillment Center (Sort) (ITE Land Use Code 155)
- General Light Industrial (ITE Land Use Code 110)
- Single Family Detached Housing (ITE Land Use Code 210)
- Multifamily (Low-Rise) Residential (ITE Land Use Code 220)
- Elementary School (ITE Land Use Code 520)
- Fire and Rescue Station (ITE Land Use Code 575)
- Utility (ITE Land Use Code 170)
- General Office (ITE Land Use Code 710)
- Strip Retail Plaza (ITE Land Use Code 822)
- Shopping Center (ITE Land Use Code 820)

For the purposes of this TA, trip generation estimates for the park land uses have been based on trip-generation statistics from the San Diego Municipal Code Land Development Code Trip Generation Manual, May 2003: (3)

- Parks

At buildout of the Specific Plan, the Project is estimated to generate 60,090 two-way trips per day with 5,147 AM peak hour trips and 7,263 PM peak hour trips. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

1.2 ANALYSIS SCENARIOS

For the purposes of this TA, peak hour intersection operations have been evaluated for each of the following traffic conditions:

- Existing (2024) Conditions
- Existing plus Project (E+P) (Phase 1) Conditions
- E+P (Phase 2) Conditions
- E+P (Phase 3) Conditions
- E+P (Phase 4) Conditions
- E+P (Phase 5) Conditions
- Opening Year Cumulative (2030) Conditions
- Opening Year Cumulative (2030 – Phase 1) With Project Conditions
- Opening Year Cumulative (2035) Conditions

- Opening Year Cumulative (2035 – Phase 1 + Phase 2) With Project Conditions
- Opening Year Cumulative (2038) Conditions
- Opening Year Cumulative (2038 – Phase 1 through Phase 3) With Project Conditions
- Opening Year Cumulative (2040) Conditions
- Opening Year Cumulative (2040 – Phase 1 through Phase 4) With Project Conditions
- Horizon Year (2045) Without Project Conditions
- Horizon Year (2045) With Project Conditions (Project Buildout)

Traffic forecasts prepared for Horizon Year (2045) Without Project Conditions include the currently adopted 2017 Mesa Verde Specific Plan Amendment and the following network assumptions:

- Roberts Road extension to the south towards Singleton Road, which is to be constructed by others.
- Extension of Sandalwood Drive north of Street B to County Line Road.

1.2.1 EXISTING (2024) CONDITIONS

Information on Existing (2024) conditions is disclosed to represent the current traffic conditions as they existed at the time this report was prepared.

1.2.2 EXISTING PLUS PROJECT (E+P) CONDITIONS

The Existing plus Project analysis determines traffic deficiencies that would occur on the existing roadway system with the addition of Project traffic. For the purposes of this TA, the E+P analysis scenario has been evaluated for each Phase of development in order to determine site adjacent and off-site improvement needs associated with each phase of development**.**

1.2.3 OPENING YEAR CUMULATIVE (2030, 2035, 2038 & 2040) CONDITIONS

Consistent with City Guidelines, Opening Year Cumulative analysis scenarios are included to assess potential opening year cumulative circulation system deficiencies for each development phase of the Project. To account for background traffic growth, traffic associated with other known cumulative development projects in conjunction with an ambient growth factor of 2% per year compounded annually has been included for Opening Year Cumulative (2030) traffic conditions only. However, due to the length of time it is anticipated to complete development of the Specific Plan, traffic forecasts for Opening Year Cumulative (2035, 2038 & 2040) conditions have been interpolated between the Opening Year Cumulative (2030) and Cumulative (2045) volumes, which have been developed using the Riverside County Transportation Model (RIVCOM). This procedure has been used to ensure that long-range traffic forecasts are not overstated by applying a manually compounded growth factor over the 20-year development cycle.

Consistent with City Guidelines, a list of known and reasonably foreseeable cumulative development projects has been compiled based on information provided by the City of Calimesa Planning Department and information gathered by Urban Crossroads from neighboring public agencies such as the City of Beaumont and City of Yucaipa.

1.2.4 HORIZON YEAR (2045) CONDITIONS

Traffic forecasts for Cumulative (2045) conditions were derived using the Riverside County Transportation Model (RIVCOM) (version 4.0.1, January 2024) using accepted procedures for model forecast refinement and smoothing, which also was insured to include the cumulative development projects in the area. Horizon Year Cumulative conditions analysis has been included to determine if improvements funded through regional transportation mitigation fee programs, such as the Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF) program or City of Calimesa Development Impact Fee (DIF) programs, can accommodate the long-range cumulative traffic at the target Level of Service (LOS) identified in the City of Calimesa (lead agency) General Plan. (4) Each of these regional transportation fee programs are discussed in more detail in Section 11 *Local and Regional Funding Mechanisms*.

1.3 STUDY AREA

For the purposes of this TA, a total of 22 study area intersections were selected for evaluation based on City Guidelines and consultation with City of Calimesa Public Works staff. The study area is shown graphically on Exhibit 1-4 and the intersections included for study are also listed in Table 1-2.

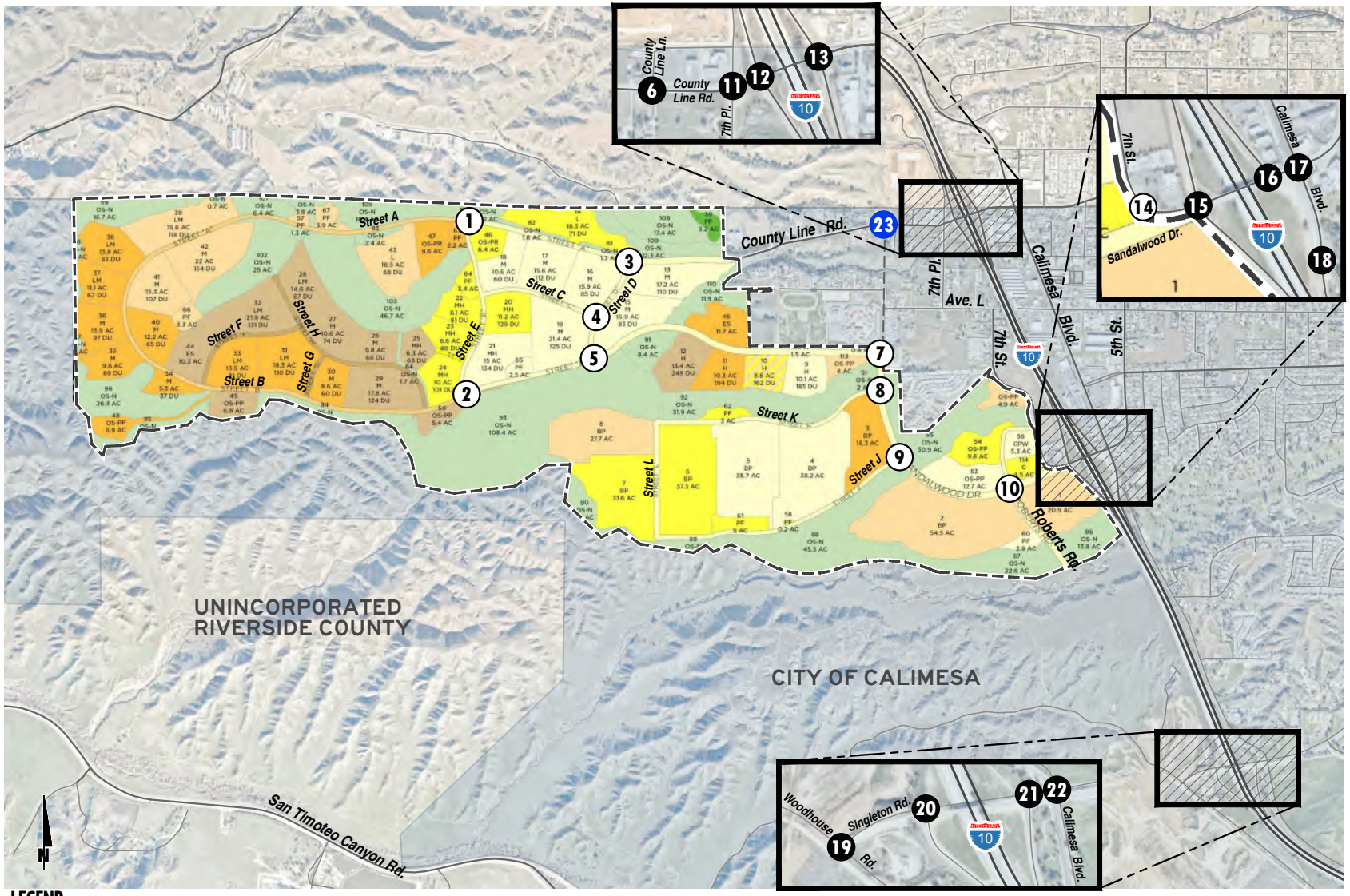
The intent of a Congestion Management Program (CMP) is to directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The County of Riverside CMP became effective with the passage of Proposition 111 in 1990 and most recently updated in 2019 as part of the Riverside County Long Range Transportation Study. The Riverside County Transportation Commission (RCTC) adopted the 2019 CMP for the County of Riverside in December 2019. (5) There are no study area intersections identified as Riverside County CMP intersections.

As the Project is anticipated to contribute more than 50 peak hour trips, the additional potential additional analysis locations identified on Exhibit 1-5 should also be evaluated. However, due to current construction activity (along County Line Road and along Calimesa Boulevard), the additional intersections identified on Exhibit 1-5 would need to be collected and evaluated (likely until post-entitlement) when traffic patterns have normalized after the construction activity have concluded.

TABLE 1-2: INTERSECTION ANALYSIS LOCATIONS

#	Intersection	Jurisdiction	CMP Location?
1	Street E & Street A	Calimesa	No
2	Street E & Street B	Calimesa	No
3	Street D & Street A	Calimesa	No
4	Street D & Street C	Calimesa	No
5	Street D & Street B	Calimesa	No
6	County Line Ln. & County Line Rd.	Calimesa	No
7	Sandalwood Dr. & Street B	Calimesa	No
8	Sandalwood Dr. & Street K	Calimesa	No
9	Sandalwood Dr. & Street J	Calimesa	No
10	Roberts Rd. & Sandalwood Dr.	Calimesa	No
11	7th Pl. & County Line Rd.	Calimesa	No
12	I-10 EB Ramps & County Line Rd.	Calimesa, Caltrans	No
13	I-10 WB Ramps & County Line Rd.	Calimesa, Caltrans	No
14	7th St. & Sandalwood Dr.	Calimesa	No
15	I-10 EB Ramps & Sandalwood Dr.	Calimesa, Caltrans	No
16	I-10 WB On-Ramp & Sandalwood Dr.	Calimesa, Caltrans	No
17	Calimesa Bl. & Sandalwood Dr.	Calimesa	No
18	Calimesa Bl. & I-10 WB Off-Ramp	Calimesa, Caltrans	No
19	Roberts Rd. & Singleton Rd.	Calimesa	No
20	I-10 EB Ramps & Singleton Rd.	Calimesa, Caltrans	No
21	I-10 WB Ramps & Singleton Rd.	Calimesa, Caltrans	No
22	Calimesa Bl. & Singleton Rd.	Calimesa	No

EXHIBIT 1-4 : STUDY AREA

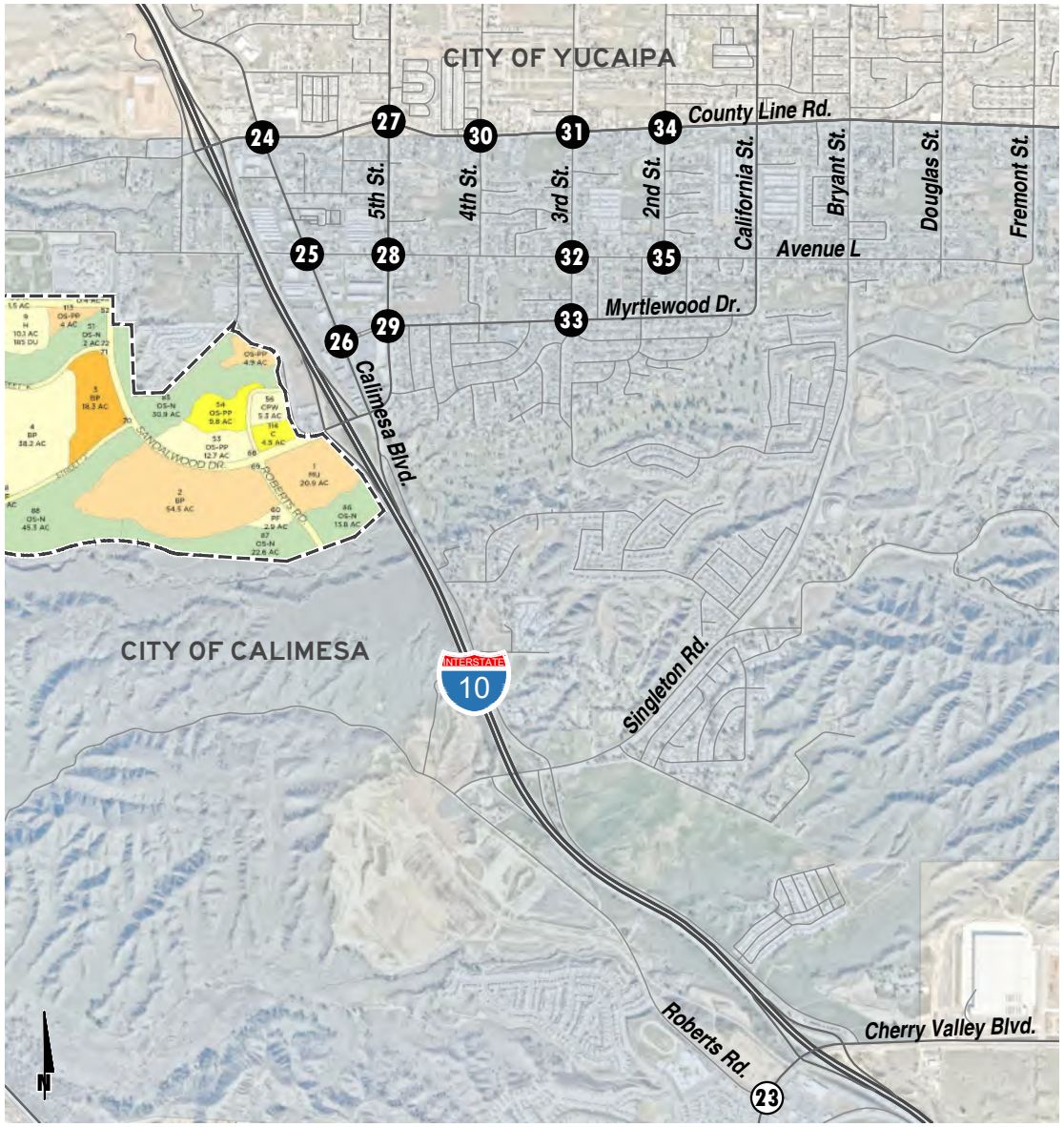


LEGEND:

- = Phase 1
- = Phase 2
- = Phase 3
- = Phase 4
- = Phase 5

- = Existing Intersection Analysis Location
- = Future Intersection Analysis Location
- = Horizon Year Analysis Location Only

EXHIBIT 1-5 : ADDITIONAL STUDY AREA INTERSECTIONS



LEGEND:

0 = *Potential Study Area Intersection Per City Request*

(0) = *Potential Study Area Intersection Per City Request - Only Applicable for Long Range (2045) Conditions*

1.4 GENERAL PLAN CONSISTENCY REQUIREMENTS FOR INTERSECTIONS

This section provides a brief overview of the intersection level of service (LOS) deficiencies identified in this report. The LOS standards used for this assessment are consistent with those identified in the City of Calimesa General Plan. Section 2 *Methodologies* provides a detailed explanation on the methodologies used for this assessment, while Section 3 *Area Conditions*, Section 5 *Existing plus Project Traffic Conditions*, Section 6 *Opening Year Cumulative (2030) Traffic Conditions*, Section 7 *Opening Year Cumulative (2035) Traffic Conditions,* Section 8 *Opening Year Cumulative (2038) Traffic Conditions,* Section 9 *Opening Year Cumulative (2040) Traffic Conditions* and Section 10 *Horizon Year (2045) Traffic Conditions* include the operations analysis results for each analysis scenario. Additionally, a summary of the peak hour LOS analysis results is presented in Table 1-3.

1.4.1 EXISTING (2024) CONDITIONS

The assessment of existing (2024) traffic conditions is performed to establish a baseline of current LOS operations from which the effects of the Project's future contribution of traffic can be measured. The following intersections were found to operate at a deficient LOS (i.e., below the City of Calimesa's adopted General Plan thresholds) during one or both peak hours:

- I-10 SB Ramps & County Line Road (#12) – LOS F AM and PM peak hours
- 7th & Sandalwood Drive (#14) – LOS F AM peak hour only
- I-10 SB Ramps & Sandalwood Drive (#15) – LOS F AM peak hour only
- Calimesa Boulevard & I-10 NB Off-Ramp (#18) – LOS F AM peak hour only
- Calimesa Boulevard & Singleton Road (#22) – LOS F AM peak hour only

1.4.2 EXISTING PLUS PROJECT (E+P) CONDITIONS

The assessment of E+P traffic conditions is performed to identify whether the Project's contribution of traffic has the potential to cause intersection LOS to fall below the City's adopted thresholds.

County Line Road Extension: The Project will construct County Line Road, from the Project's eastern boundary to the existing western terminus of County Line Road as a 2-lane divided roadway. This connection will be available starting with Phase 1, coinciding with the first phase with residential development, and will provide access to the I-10 Freeway/County Line Road interchange.

Sandalwood Drive: The Project will realign the intersection of 7th Street and Sandalwood Drive to implement a new right-in/right-out connection which would be enforced by a raised median. The new Sandalwood Drive will generally follow the alignment of the existing roadway up to the new Street B which will front the southern boundary of the Elementary School. Sandalwood Drive will accommodate a 4-lane divided roadway between Street B and Street K and then widen to a 6-lane roadway between Street K and Roberts Road. Between Street J and Roberts Road, the southbound/eastbound approach will start to drop a lane and taper (via striping) and continue to taper down to east of Roberts Road towards the I-10 Freeway in order to align with the existing bridge deck. Similarly, the northbound/westbound approach of Sandalwood Drive will increase from one lane west of the I-10 Freeway to three through lanes at Roberts Road, which will continue to Street K.

E+P (Phase1)

The following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under E+P (Phase 1) traffic conditions:

- I-10 SB Ramps & County Line Road (#12) – LOS F AM and PM peak hours*
- I-10 SB Ramps & Sandalwood Drive (#15) – LOS F AM and PM peak hours*
- Calimesa Boulevard & Sandalwood Drive (#17) – LOS F AM peak hour only
- Calimesa Boulevard & I-10 NB Off-Ramp (#18) – LOS F AM peak hour only*
- Calimesa Boulevard & Singleton Road (#22) – LOS F AM peak hour only*

*Intersections previously identified as operating at LOS "E" or "F" under Existing (2024) traffic conditions.

E+P (Phase 2)

The following additional study area intersection is anticipated to operate at an unacceptable LOS during the peak hours under Existing (2024) and E+P (Phase 1) traffic conditions:

- I-10 NB Ramps & County Line Road (#13) – LOS F AM peak hour only

E+P (Phase 3)

There are no additional study area intersections anticipated to operate at an unacceptable LOS during the peak hours under E+P (Phase 3) traffic conditions, in addition to the intersections previously identified under Existing (2024) and E+P (Phases 1 and 2) traffic conditions.

E+P (Phase 4)

The following additional study area intersection is anticipated to operate at an unacceptable LOS during the peak hours under E+P (Phase 3) traffic conditions:

- County Line Lane & County Line Road (#6) – LOS F PM peak hour only

E+P (Phase 5/Project Buildout)

There are no additional study area intersections anticipated to operate at an unacceptable LOS during the peak hours under E+P (Project Buildout) traffic conditions, in addition to the intersections previously identified under Existing (2024) and E+P (Phases 1, 2, 3, and 4) traffic conditions.

1.4.2 OPENING YEAR CUMULATIVE (2030, 2035, 2038 & 2040) AND HORIZON YEAR (2045) CONDITIONS

An assessment of the opening year and horizon year cumulative traffic conditions is performed to identify whether the traffic contribution associated with both the proposed Project and that of other reasonably foreseeable future development projects in the area have the potential to cause intersection LOS to fall below the City's adopted thresholds. The Project's contribution to these forecasted LOS deficiencies is typically addressed through fee payments to an established fee program (both local and regional).

Roberts Road Extension: Roberts Road is proposed to terminate as a cul-de-sac at the Project's southern property line abutting Garden Air Wash without extending to the south for Phase 1. The Roberts Road Bridge, consistent with the City's currently adopted General Plan Circulation Element and Mesa Verde's Development Agreement, is assumed to be in place under Horizon Year traffic conditions only. The improvement is to be constructed by others and the timing of the implementation of the future roadway improvement is not certain at this time. Therefore, the Roberts Road Extension has only been considered for Horizon Year traffic conditions.

Sandalwood Drive Extension: The Horizon Year (2045) traffic conditions have also been evaluated with the future extension of Sandalwood Drive between Street B and County Line Road as noted above. The alignment of the future extension is currently unknown at this time. The future extension is not proposed as part of the Project but is anticipated to be needed at such a time in the future when the I-10 Freeway and County Line Road interchange requires improvements beyond signalization (in order to provide a secondary point of access for uses affected by any closure of 7th Place at County Line Road intersection). Comprehensive interchange improvements have the potential to result in the removal of the 7th Place connection to County Line Road due to its proximity to the I-10 Southbound Ramps.

The results of the LOS assessments for cumulative traffic conditions are also summarized in Table 1-3, while Section 6 *Opening Year Cumulative (2030) Traffic Conditions*, Section 7 *Opening Year Cumulative (2035) Traffic Conditions,* Section 8 *Opening Year Cumulative (2038) Traffic Conditions,* Section 9 *Opening Year Cumulative (2040) Traffic Conditions* and Section 10 *Horizon Year (2045) Traffic Conditions* of the report provide a more detailed list of the forecast LOS deficiencies.

TABLE 1-3 : SUMMARY OF LOS

		Existing	E+P (Phase 1)	E+P (Phase 2)	E+P (Phase 3)	E+P (Phase 4)	E+P (Project Buildout)	2030 Without Project	2030 With Project	2035 Without Project	2035 With Project	2038 Without Project	2038 With Project	2040 Without Project	2040 With Project	2045 Without Project	2045 With Project
1	Street E & Street A	N/A						N/A		N/A		N/A		N/A		N/A	
2	Street E & Street B	N/A						N/A		N/A		N/A		N/A		N/A	
3	Street D & Street A	N/A						N/A		N/A		N/A		N/A		N/A	
4	Street D & Street C	N/A						N/A		N/A		N/A		N/A		N/A	
5	Street D & Street B	N/A						N/A		N/A		N/A		N/A		N/A	
6	County Line Ln. & County Line Rd.																
7	Sandalwood Dr. & Street B	N/A						N/A		N/A		N/A		N/A		N/A	
8	Sandalwood Dr. & Street K	N/A						N/A		N/A		N/A		N/A		N/A	
9	Sandalwood Dr. & Street J	N/A						N/A		N/A		N/A		N/A		N/A	
10	Roberts Rd. & Sandalwood Dr.	N/A						N/A		N/A		N/A		N/A			
11	7th Pl. & County Line Rd.																
12	I-10 SB Ramps & County Line Rd.																
13	I-10 NB Ramps & County Line Rd.																
14	7th St. & Sandalwood Dr.																
15	I-10 SB Ramps & Sandalwood Dr.																
16	I-10 NB Ramps & Sandalwood Dr.			N/A	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17	Calimesa Bl. & Sandalwood Dr.																
18	Calimesa Bl. & I-10 NB Off-Ramp																
19	Roberts Rd. & Singleton Rd.																
20	I-10 SB Ramps & Singleton Rd.																
21	I-10 NB Ramps & Singleton Rd.																
22	Calimesa Bl. & Singleton Rd.																

LEGEND:

- = *AM Peak Hour*
- = *PM Peak Hour*
- = *A-D*
- = *E*
- = *F*

1.5 RECOMMENDATIONS

1.5.1 INTERSECTION IMPROVEMENT RECOMMENDATIONS NECESSARY TO MAINTAIN GENERAL PLAN CONSISTENCY

Existing + Project Traffic Conditions

Based on the results of this TA, intersection improvement recommendations necessary to maintain City of Calimesa General Plan LOS standards are listed Table 1-4 and shown graphically on the following exhibits:

- Exhibit 1-6: E+P (Phase 1)
- Exhibit 1-7: E+P (Phase 2)
- Exhibit 1-8: E+P (Phase 3)
- Exhibit 1-9: E+P (Phase 4)
- Exhibit 1-10: E+P (Project Buildout)

Cumulative Traffic Conditions

The summary of intersection improvement recommendations to maintain General Plan LOS standards for Opening Year Cumulative (2030, 2035, 2038 and 2040) and Horizon Year (2045) are listed in Table 1-5. The Project should contribute its proportional share of 31.3% towards the future Sandalwood Drive Extension and 56.6% towards the ultimate widening of County Line Road east of Sandalwood Drive to four-lanes as calculated in Table 11-2.

The City of Yucaipa in coordination with Caltrans District 8 has plans to implement temporary signals at the I-10 ramps on County Line Road. It should be noted that the temporary signals at the I-10 and County Line Road ramps would only be supported through the end of the proposed Project's Phase 3 development. The proposed Project traffic under Phase 4 requires further improvements to the interchange. Based on discussions with City staff, roundabouts are currently contemplated at the ramp locations along County Line Road and have been evaluated as part of this TA.

Interim improvements are planned at the Sandalwood Drive interchange that include signalization at all ramps (southbound ramps, northbound on-ramp which would be temporary signal, and the northbound off-ramp on Calimesa Boulevard). Interim 1A improvements include a temporary signal at the I-10 Northbound on-ramp, which is to be in place while the hook on-ramp on Calimesa Boulevard is being constructed. Interim 1B Sandalwood/I-10 Interchange improvements includes a new hook on-ramp on Calimesa Boulevard. When the I-10 Northbound Hook On-Ramp on Calimesa Boulevard is in place, Intersection #16 (I-10 WB On-Ramp at Sandalwood Drive) will be vacated. No bridge widening across Sandalwood Drive is proposed for Interim 1A and Interim 1B improvements. Up to 50 percent of the traffic associated with Phase 2 (as evaluated in this TA) can be supported by the Interim 1B interchange improvements at Sandalwood Drive. Full buildout of Phase 2 would require the ultimate eight-lane bridge improvement along Sandalwood Drive including additional improvements to the intersection of Calimesa Boulevard at Sandalwood Drive.

Improvements to both the County Line Road and Sandalwood Drive interchanges will require coordination between the City of Calimesa with Caltrans District 8 and other agencies such as the City of Yucaipa.

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TABLE 1-4: IMPROVEMENTS REQUIRED TO MAINTAIN GENERAL PLAN CONSISTENCY FOR EXISTING PLUS PROJECT CONDITIONS

#	Intersection Location	Jurisdiction	Analysis Scenario				
			E+P (Phase 1)	E+P (Phase 2)	E+P (Phase 3)	E+P (Phase 4)	E+P (Project Buildout)
6	County Line Ln. & County Line Rd.	Calimesa	None	None	None	Add EB left turn lane	Same
						Add WB right turn lane	Same
12	I-10 SB Ramps & County Line Rd.	Calimesa, Caltrans	Install a traffic signal	Same	Same	Same	Roundabout with 4-lane County Line Rd. under the I-10 Freeway
						Add EB right turn lane	Same
13	I-10 NB Ramps & County Line Rd.	Calimesa, Caltrans	Install a traffic signal[1]	Same	Same	Same	Roundabout with 4-lane County Line Rd. under the I-10 Freeway
15	I-10 SB Ramps & Sandalwood Dr.	Calimesa, Caltrans	Install a traffic signal	Same	Same	Same	Same
			Add SB right turn lane	Add SB free-right turn lane	Same	Same	Same
			Add WB left turn lane[2]	Add 2nd WB left turn lane	Same	Same	Same
				Add SB left turn lane	Same	Same	Same
				Add 2nd and 3rd EB through lanes	Same	Same	Same
				Add 2nd and 3rd WB through lanes	Same	Same	Same
16	I-10 NB On-Ramp & Sandalwood Dr.	Calimesa, Caltrans	Interim 1A: Add temporary traffic signal until NB hook on-ramp is open on Calimesa Bl.[3]	Not Applicable	Not Applicable	Not Applicable	Not Applicable
			Add EB left turn lane[2]	Not Applicable	Not Applicable	Not Applicable	Not Applicable
			Interim 1B: Remove temporary signal and restrict access to right-on only after hook on-ramp is open on Calimesa Bl.[4]	Same	Same	Same	Same
				Add 2nd and 3rd EB through lanes	Same	Same	Same
				Add 2nd and 3rd WB through lanes	Same	Same	Same
17	Calimesa Bl. & Sandalwood Dr.	Calimesa	Restripe with EB with one left, one through, and one right turn lane	Add 2nd EB left turn lane	Same	Same	Same
				Add 2nd NB left turn lane	Same	Same	Same
				Add EB free-right turn lane	Same	Same	Same
				Add 2nd SB through lane	Same	Same	Same
					Add 2nd EB through lane[5]	Same	Same
					Add 2nd WB through lane	Same	Same
18	Calimesa Bl. & I-10 NB Off-Ramp	Calimesa, Caltrans	Install a traffic signal	Same	Same	Same	Same
			Add NB left turn lane	Same	Same	Same	Same
				Add EB free-right turn lane	Same	Same	Same
				Add WB left turn lane	Same	Same	Same
22	Calimesa Bl. & Singleton Rd.	Calimesa	Add NB left turn lane	Same	Same	Same	Same
			Add SB left turn lane	Same	Same	Same	Same
			Add EB left turn lane	Same	Same	Same	Same
			Add WB left turn lane	Same	Same	Same	Same

[1] Traffic signal not required for acceptable peak hour operations, but likely would be installed with the traffic signal required at the I-10 SB Ramps.

[2] Lane will include restriping of the existing bridge to accommodate a new eastbound left turn lane.

[3] Interim 1A Sandalwood/I-10 Interchange improvements assume signals at all three ramps locations (two on Sandalwood Dr. and one on Calimesa Bl.). Signalized ramp at I-10 Northbound on-ramp is temporary until hook on-ramp is constructed on Calimesa Bl.

[4] Interim 1B Sandalwood/I-10 Interchange improvements restrict the I-10 Northbound on-ramp to right-on only and includes a new hook on-ramp on Calimesa Bl.
These improvements can be supported up through 50% of Phase 2 development before ultimate widening of Sandalwood Drive through the interchange is necessary.

[5] An alternative improvement has also been considered without the addition of a 2nd EB through lane as the ultimate design for the interchange has not yet been determined by the City of Calimesa and Caltrans.

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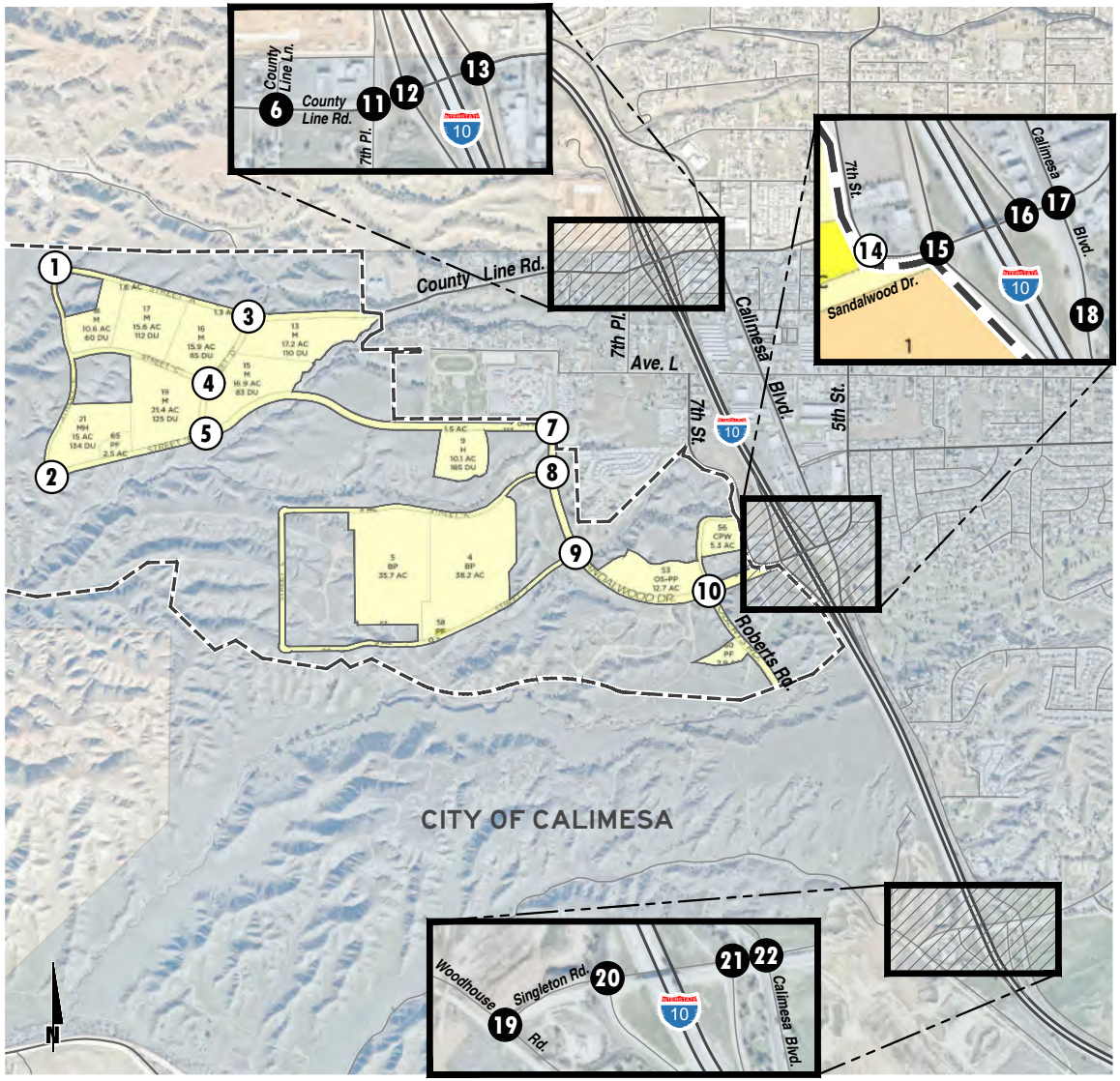
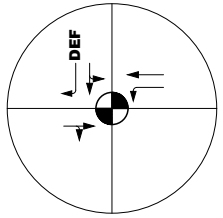
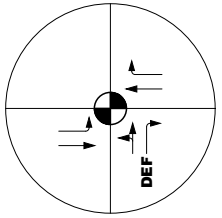
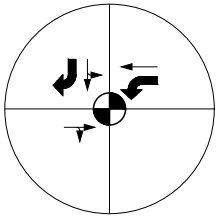
EXHIBIT 1-6 : E+P (PHASE 1) OFF-SITE INTERSECTION IMPROVEMENTS

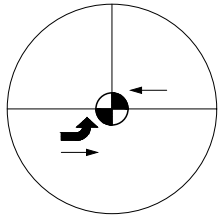


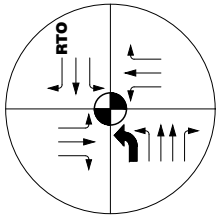
6 County Line Ln. & County Line Rd.
Not Applicable

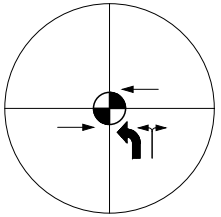
12 I-10 SB Ramps & County Line Rd.


13 I-10 NB Ramps & County Line Rd.


15 I-10 SB Ramps & Sandalwood Dr.


16 I-10 NB Ramps & Sandalwood Dr.


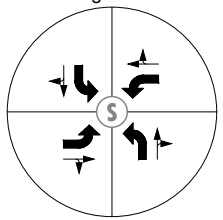
17 Calimesa Bl. & Sandalwood Dr.


18 Calimesa Bl. & I-10 NB Off-Ramp


19 Roberts Rd. & Singleton Rd.
Not Applicable

20 I-10 SB Ramps & Singleton Rd.
Not Applicable

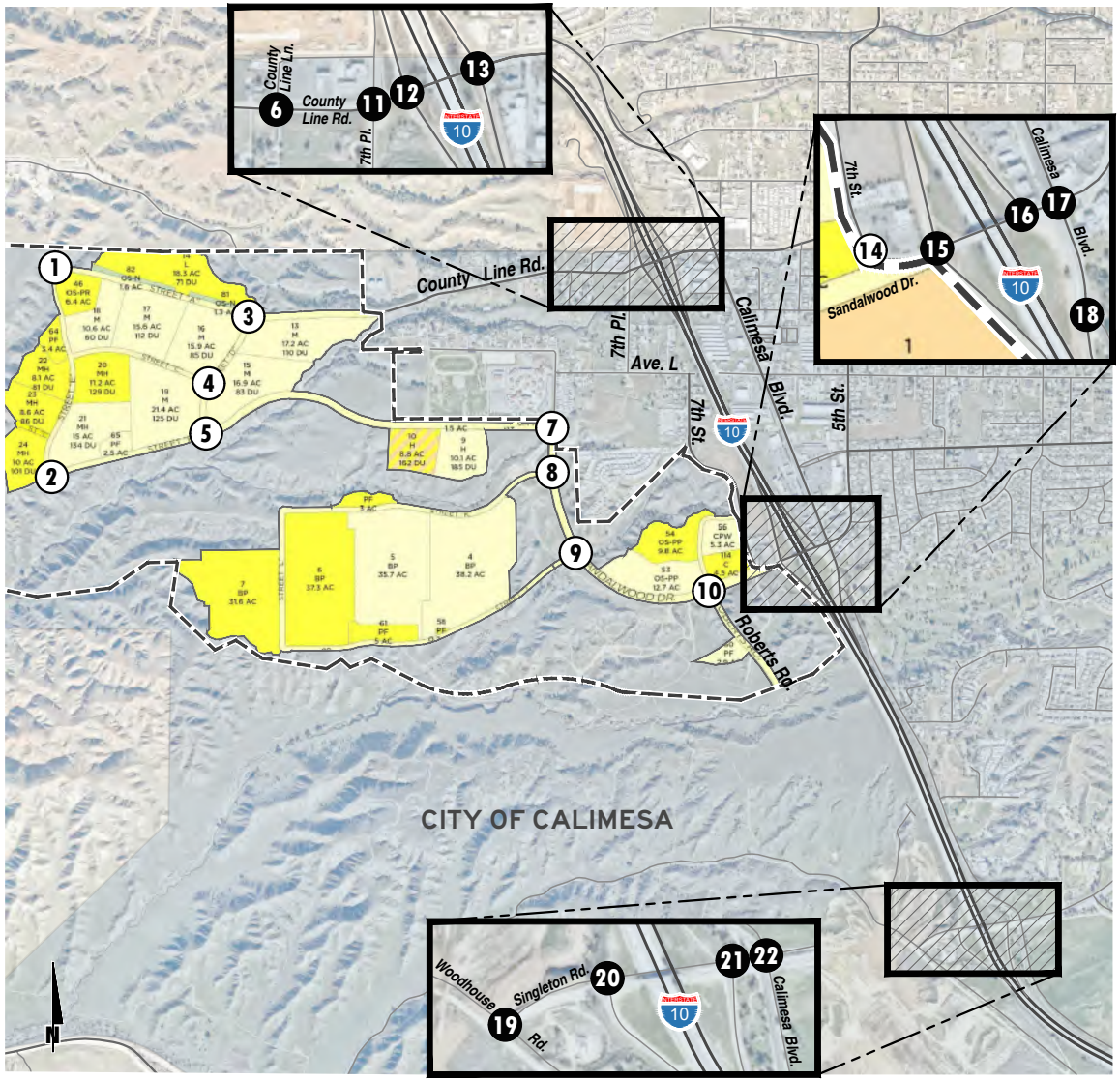
21 I-10 NB Ramps & Singleton Rd.
Not Applicable

22 Calimesa Bl. & Singleton Rd.


LEGEND:

- (0) = Existing Intersection Analysis Location
- (0) = Future Intersection Analysis Location
- = New Traffic Signal
- = Existing Lane
- = Proposed Lane
- (S) = All-Way Stop

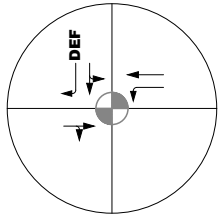
EXHIBIT 1-7 : E+P (PHASE 2) OFF-SITE INTERSECTION IMPROVEMENTS



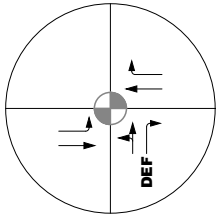
6 County Line Ln. & County Line Rd.

Not Applicable

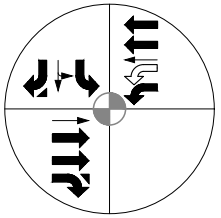
12 I-10 SB Ramps & County Line Rd.



13 I-10 NB Ramps & County Line Rd.



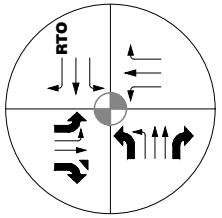
15 I-10 SB Ramps & Sandalwood Dr.



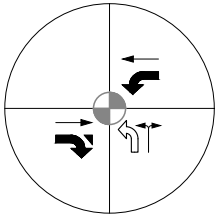
16 I-10 NB Ramps & Sandalwood Dr.

Not Applicable

17 Calimesa Bl. & Sandalwood Dr.



18 Calimesa Bl. & I-10 NB Off-Ramp



19 Roberts Rd. & Singleton Rd.

Not Applicable

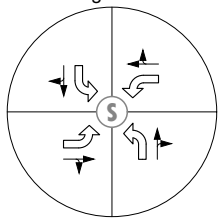
20 I-10 SB Ramps & Singleton Rd.

Not Applicable

21 I-10 NB Ramps & Singleton Rd.

Not Applicable

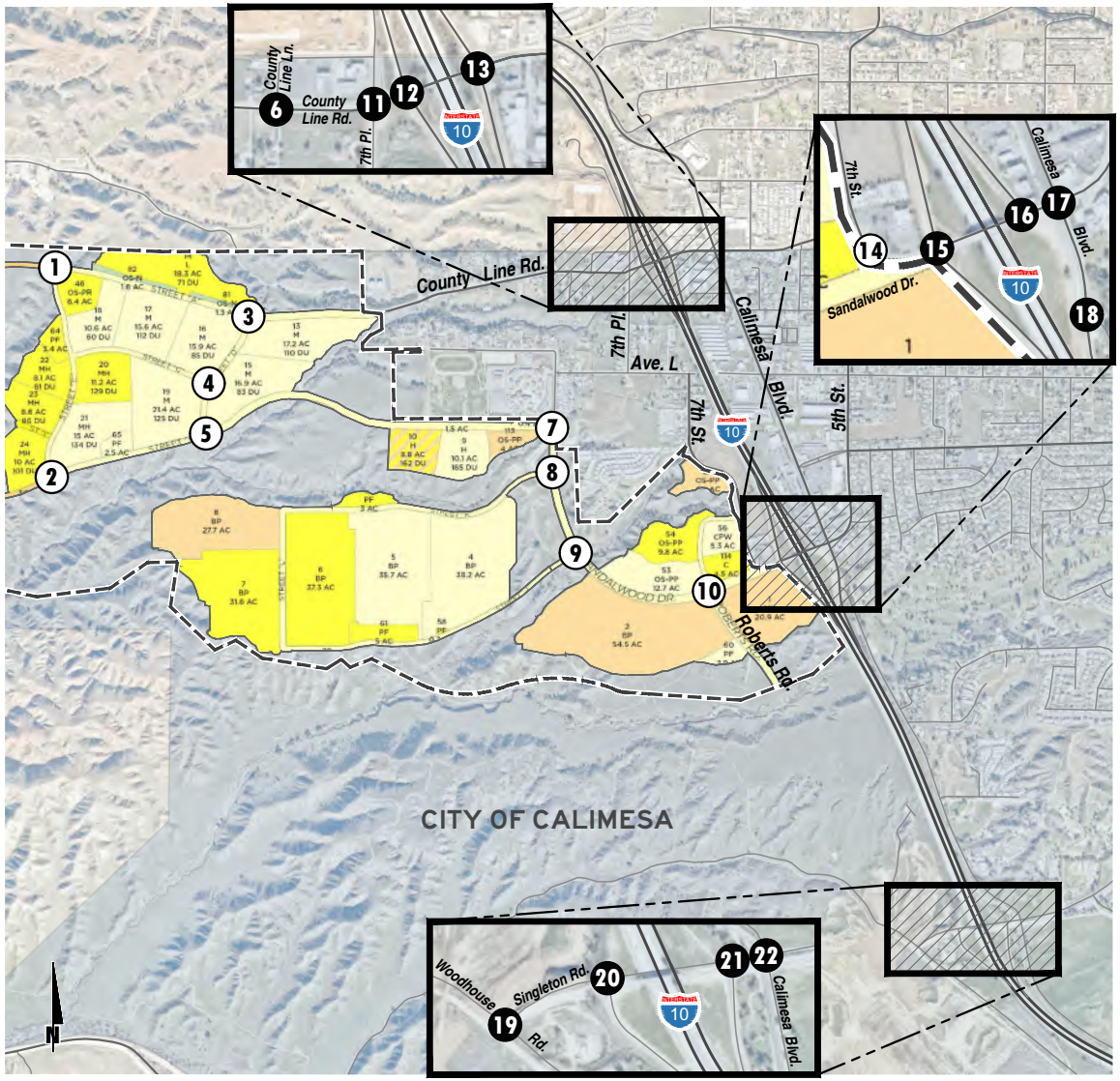
22 Calimesa Bl. & Singleton Rd.



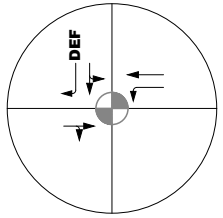
LEGEND:

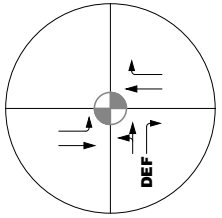
- 0 = *Existing Intersection Analysis Location*
- 0 = *Future Intersection Analysis Location*
- = *Previous Phase Traffic Signal*
- = *Existing Lane*
- = *Proposed Lane*
- S = *All-Way Stop*
- = *Previous Phase Improvement*

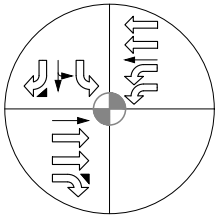
EXHIBIT 1-8 : E+P (PHASE 3) OFF-SITE INTERSECTION IMPROVEMENTS



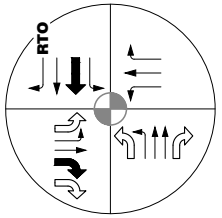
6 County Line Ln. & County Line Rd.
Not Applicable

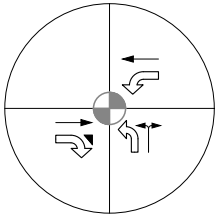
12 I-10 SB Ramps & County Line Rd.


13 I-10 NB Ramps & County Line Rd.


15 I-10 SB Ramps & Sandalwood Dr.


16 I-10 NB Ramps & Sandalwood Dr.
Not Applicable

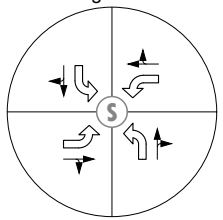
17 Calimesa Bl. & Sandalwood Dr.


18 Calimesa Bl. & I-10 NB Off-Ramp


19 Roberts Rd. & Singleton Rd.
Not Applicable

20 I-10 SB Ramps & Singleton Rd.
Not Applicable

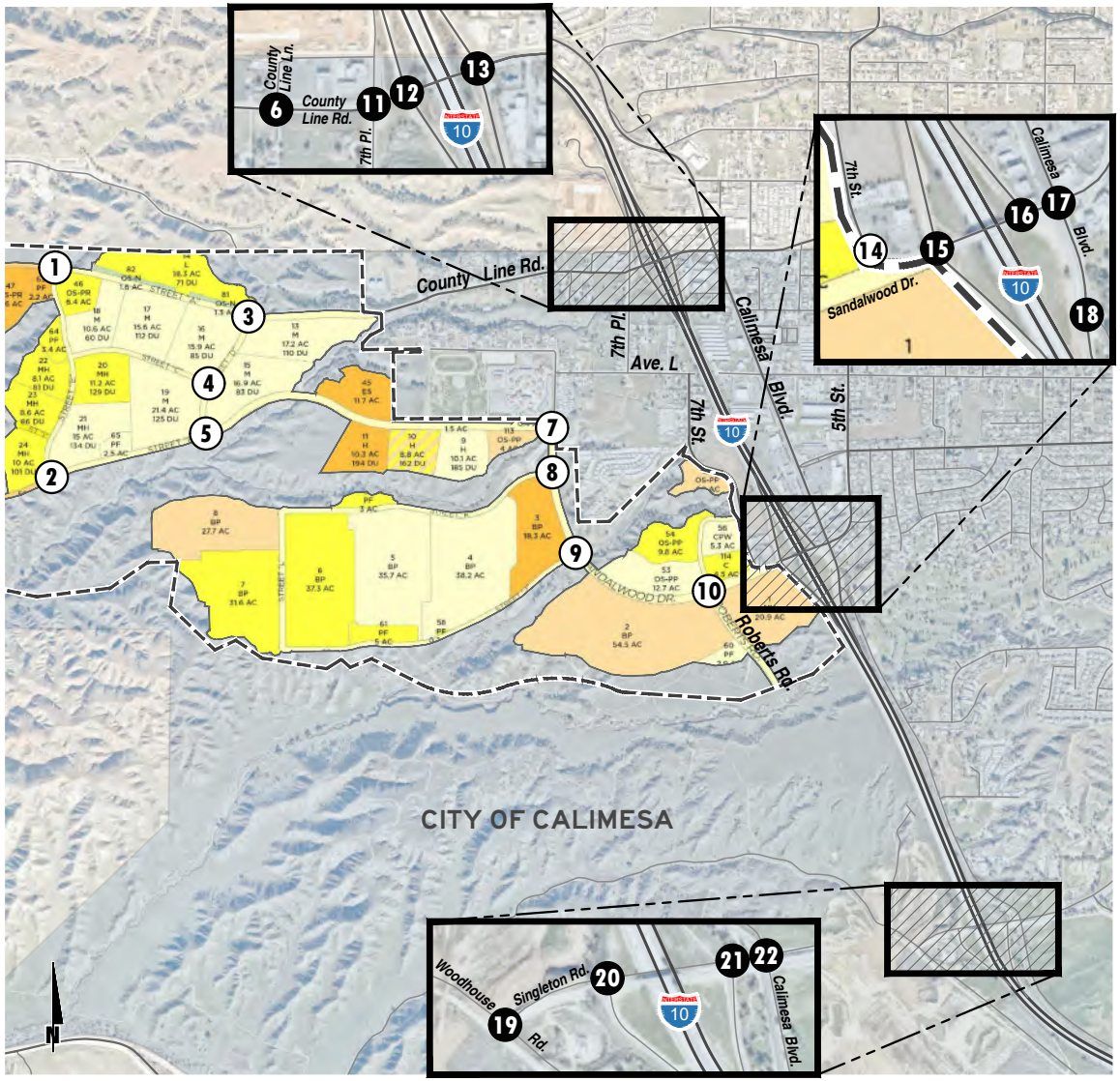
21 I-10 NB Ramps & Singleton Rd.
Not Applicable

22 Calimesa Bl. & Singleton Rd.


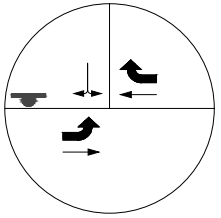
LEGEND:

- (0) = Existing Intersection Analysis Location
- (0) = Future Intersection Analysis Location
- = Existing Traffic Signal
- = Existing Lane
- = Proposed Lane
- (S) = All-Way Stop
- = Previous Phase Improvement

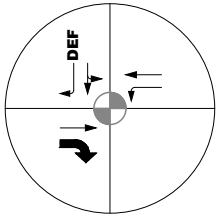
EXHIBIT 1-9 : E+P (PHASE 4) OFF-SITE INTERSECTION IMPROVEMENTS



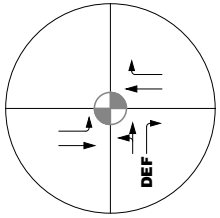
6 County Line Ln. & County Line Rd.



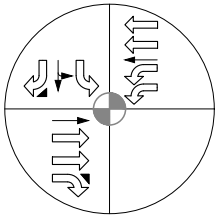
12 I-10 SB Ramps & County Line Rd.



13 I-10 NB Ramps & County Line Rd.



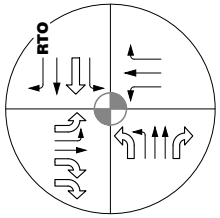
15 I-10 SB Ramps & Sandalwood Dr.



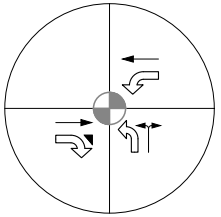
16 I-10 NB Ramps & Sandalwood Dr.

Not Applicable

17 Calimesa Bl. & Sandalwood Dr.



18 Calimesa Bl. & I-10 NB Off-Ramp



19 Roberts Rd. & Singleton Rd.

Not Applicable

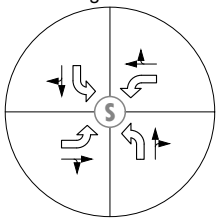
20 I-10 SB Ramps & Singleton Rd.

Not Applicable

21 I-10 NB Ramps & Singleton Rd.

Not Applicable

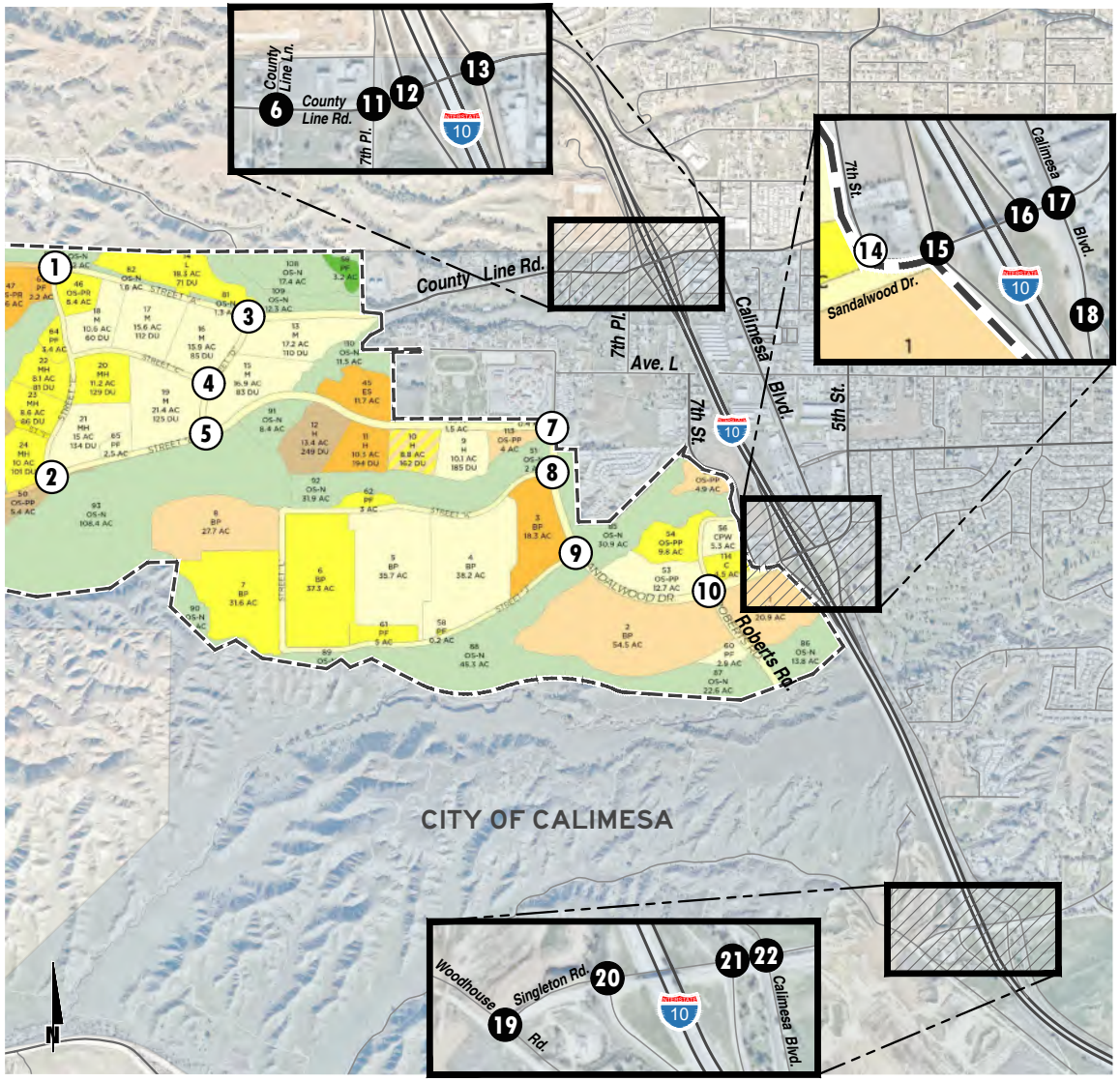
22 Calimesa Bl. & Singleton Rd.

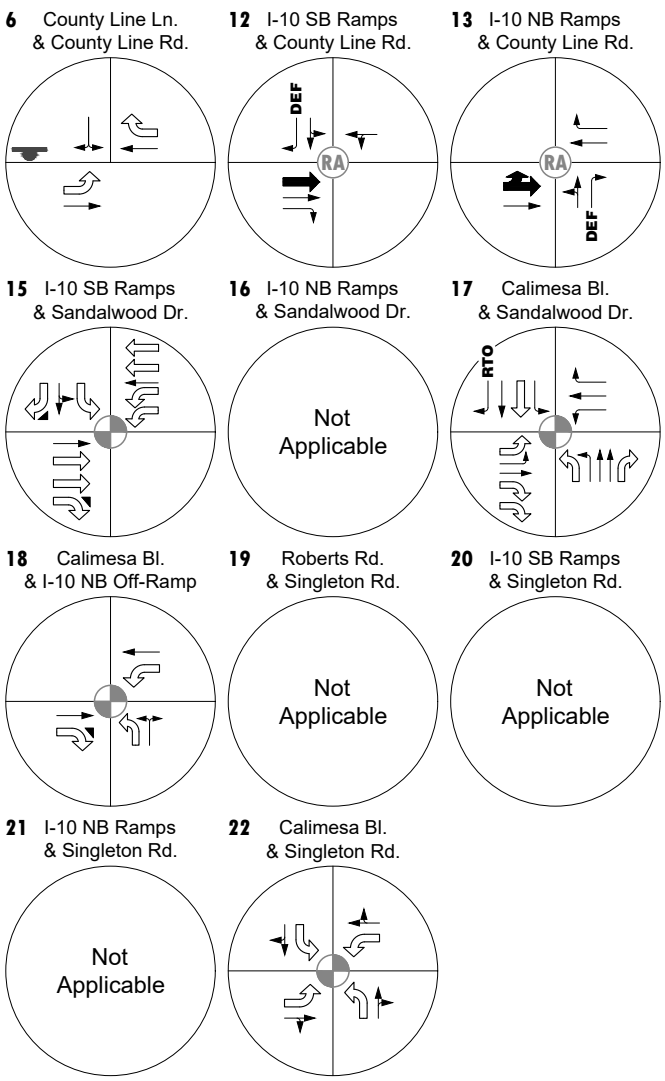


LEGEND:

- (0) = Existing Intersection Analysis Location
- (0) = Future Intersection Analysis Location
- = Existing Traffic Signal
- = Existing Lane
- = Proposed Lane
- = Stop Sign
- (S) = All-Way Stop
- = Previous Phase Improvement

EXHIBIT 1-10 : E+P (PHASE 5) OFF-SITE INTERSECTION IMPROVEMENTS





LEGEND:

- 0 = Existing Intersection Analysis Location
- 0 = Future Intersection Analysis Location
- = Existing Traffic Signal
- = Existing Lane
- = Proposed Lane
- = Stop Sign
- S = All-Way Stop
- = Previous Phase Improvement
- RA = Roundabout

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TABLE 1-5: IMPROVEMENTS REQUIRED TO MAINTAIN GENERAL PLAN CONSISTENCY FOR CUMULATIVE CONDITIONS (PAGE 1 OF 4)

#	Intersection Location	Jurisdiction	Analysis Scenario					Improvements in TUMF/DIF[1,2]	Project Fair Share
			2030 With Phase 1 Project	2035 With Phase 2 Project	2038 With Phase 3 Project	2040 With Phase 4 Project	2045 With Project Buildout		
6	County Line Ln. & County Line Rd.	Calimesa	Install a traffic signal	Same	Same	Same	Same	No	55.9%
			Add EB left turn lane	Same	Same	Same	Same	No	
			Add WB right turn lane	Same	Same	Same	Same	No	
							Add SB shared left-right turn lane	No	
							Add SB right turn lane	No	
							Add 2nd EB through lane	No	
							Add 2nd WB through lane	No	
11	7th Pl. & County Line Rd.	Calimesa	None	Add WB left turn lane	Same	Same	Same	No	61.5%
					Add 2nd EB through lane	Same	Same	No	
					Add 2nd WB through lane	Same	Same	No	
12	I-10 SB Ramps & County Line Rd.	Calimesa, Caltrans	Install a traffic signal[3]	Same	Same	Not Applicable	Not Applicable	Yes (TUMF/DIF)	--
					Add EB right turn lane	Same	Same	Yes (TUMF/DIF)	
						Roundabout with 4-lane County Line Rd. under the I-10 Freeway	Same	Yes (TUMF/DIF)	
13	I-10 NB Ramps & County Line Rd.	Calimesa, Caltrans	Install a traffic signal[3]	Same	Same	Not Applicable	Not Applicable	Yes (TUMF/DIF)	--
						Roundabout with 4-lane County Line Rd. under the I-10 Freeway	Same	Yes (TUMF/DIF)	
15	I-10 SB Ramps & Sandalwood Dr.	Calimesa, Caltrans	Install a traffic signal	Same	Same	Same	Same	Yes (TUMF/DIF)	--
			Add SB right turn lane	Add SB free-right turn lane	Same	Same	Same	Yes (TUMF/DIF)	
			Add EB right turn lane	Add EB free-right turn lane	Same	Same	Same	Yes (TUMF/DIF)	
			Add WB left turn lane	Add 2nd WB left turn lane	Same	Same	Same	Yes (TUMF/DIF)	
				Add SB left turn lane	Same	Same	Same	Yes (TUMF/DIF)	
				Add 2nd and 3rd EB through lanes	Same	Same	Same	Yes (TUMF/DIF)	
				Add 2nd and 3rd WB through lanes	Same	Same	Same	Yes (TUMF/DIF)	

TABLE 1-5: IMPROVEMENTS REQUIRED TO MAINTAIN GENERAL PLAN CONSISTENCY FOR CUMULATIVE CONDITIONS (PAGE 2 OF 4)

#	Intersection Location	Jurisdiction	Analysis Scenario					Improvements in DIF[1,2]	Project Fair Share
			2030 With Project	2035 With Project	2038 With Project	2040 With Project	2045 With Project		
16	I-10 NB On-Ramp & Sandalwood Dr.	Calimesa, Caltrans	Add temporary traffic signal until NB hook on-ramp is open on Calimesa Bl.[5]	Not Applicable	Same	Same	Same	Yes (TUMF/DIF)	--
			Remove temporary signal and restrict access to right-on only after hook on-ramp is open on Calimesa Bl.[6]	Same	Same	Same	Same	Yes (TUMF/DIF)	
				Add 2nd and 3rd EB through lanes	Same	Same	Same	Yes (TUMF/DIF)	
				Add 2nd and 3rd WB through lanes	Same	Same	Same	Yes (TUMF/DIF)	
17	Calimesa Bl. & Sandalwood Dr.	Calimesa	Restripe with EB with one left, one through, and one right turn lane with overlap phasing	Not Applicable	Same	Same	Same	Yes (TUMF/DIF)	--
			Modify the traffic signal to implement protected left turn phasing for the EB/WB approaches	Same	Same	Same	Same	Yes (TUMF/DIF)	
				Add 2nd NB left turn lane	Same	Same	Same	Yes (TUMF/DIF)	
				Add NB right turn lane	Same	Same	Same	Yes (TUMF/DIF)	
				Add 2nd SB through lane	Same	Same	Same	Yes (TUMF/DIF)	
				Add 2nd EB left turn lane	Same	Same	Same	Yes (TUMF/DIF)	
				Add 2nd EB through lane[7]	Same	Same	Same	Yes (TUMF/DIF)	
				Add EB free-right turn lane	Same	Same	Same	Yes (TUMF/DIF)	
				Add 2nd WB through lane	Same	Same	Same	Yes (TUMF/DIF)	
18	Calimesa Bl. & I-10 NB Off-Ramp	Calimesa, Caltrans	Install a traffic signal[6]	Same	Same	Same	Same	Yes (TUMF/DIF)	--
			Add NB left turn lane	Same	Same	Same	Same	Yes (TUMF/DIF)	
			Add EB right turn lane with overlap phasing[6]	Add EB free-right turn lane	Same	Same	Same	Yes (TUMF/DIF)	
			Add WB left turn lane[6]	Same	Same	Same	Same	Yes (TUMF/DIF)	
				Add 2nd WB through lane	Same	Same	Same	Yes (TUMF/DIF)	
					Add 2nd EB through lane	Same	Same	Yes (TUMF/DIF)	

TABLE 1-5: IMPROVEMENTS REQUIRED TO MAINTAIN GENERAL PLAN CONSISTENCY FOR CUMULATIVE CONDITIONS (PAGE 3 OF 4)

#	Intersection Location	Jurisdiction	Analysis Scenario					Improvements in DIF[1,2]	Project Fair Share
			2030 With Project	2035 With Project	2038 With Project	2040 With Project	2045 With Project		
19	Roberts Rd. & Singleton Rd.	Calimesa	None[4]	None[4]	None[4]	None[4]	Install a traffic signal	No	6.1%
							Add 2 NB left turn lanes	No	
							Add 2 NB through lanes	No	
							Add NB right turn lane	No	
							Add 2 SB left turn lanes	No	
							Add 2 SB through lanes	No	
							Add SB right turn lane	No	
							Add 2 EB left turn lanes	No	
							Add 2 EB through lanes	No	
							Add EB right turn lane	No	
							Add 2 WB left turn lanes	No	
							Add 2 WB through lanes	No	
							Add WB right turn lane	No	
							Implement overlap phasing for the NB and WB right turn lanes	No	
20	I-10 SB Ramps & Singleton Rd.	Calimesa, Caltrans	None[4]	None[4]	None[4]	None[4]	Install a traffic signal	Yes (TUMF/DIF)	--
							Add SB shared left-through lane	Yes (TUMF/DIF)	
							Add 2 SB right turn lanes	Yes (TUMF/DIF)	
							Add 2nd EB through lane	Yes (TUMF/DIF)	
							Add EB right turn lane	Yes (TUMF/DIF)	
							Add 2 WB left turn lanes	Yes (TUMF/DIF)	
							Add 2nd WB through lane	Yes (TUMF/DIF)	
21	I-10 NB Ramps & Singleton Rd.	Calimesa, Caltrans	None[4]	None[4]	None[4]	None[4]	Install a traffic signal	Yes (TUMF/DIF)	--
							Add NB left turn lane	Yes (TUMF/DIF)	
							Add NB right turn lane	Yes (TUMF/DIF)	
							Add 2 EB left turn lanes	Yes (TUMF/DIF)	
							Add 2nd EB through lane	Yes (TUMF/DIF)	
							Add 2nd WB through lane	Yes (TUMF/DIF)	
							Add WB right turn lane	Yes (TUMF/DIF)	

TABLE 1-5: IMPROVEMENTS REQUIRED TO MAINTAIN GENERAL PLAN CONSISTENCY FOR CUMULATIVE CONDITIONS (PAGE 4 OF 4)

#	Intersection Location	Jurisdiction	Analysis Scenario					Improvements in DIF[1,2]	Project Fair Share
			2030 With Project	2035 With Project	2038 With Project	2040 With Project	2045 With Project		
22	Calimesa Bl. & Singleton Rd.	Calimesa	Install a traffic signal	Same	Same	Same	Same	No	3.1%
			Add NB left turn lane	Same	Same	Same	Add 2nd NB left turn lane	No	
			Add NB right turn lane	Same	Same	Same	Restripe NB right as 2nd NB through lane	No	
			Add SB left turn lane	Same	Same	Same	Same	No	
			Add EB left turn lane	Same	Same	Same	Same	No	
			Add 2nd EB through lane	Same	Same	Same	Same	No	
			Add WB left turn lane	Same	Same	Same	Same	No	
			Add WB right turn lane	Same	Same	Same	Restripe WB right turn lane as 2nd WB through lane	No	
							Add 2nd SB through lane	No	
							Add SB right turn lane	No	
							Add 2nd EB left turn lane	No	
							Add EB right turn lane	No	
23	Sandalwood Dr. Extension & County Line Rd.	Calimesa	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Install a traffic signal	No	53.7%
							Add NB left turn lane	No	
							Add NB shared through-right turn lane	No	
							Add SB left turn lane	No	
							Add SB shared through-right turn lane	No	
							Add EB left turn lane	No	
							Add WB left turn lane	No	
							Add WB right turn lane (trap lane)	No	

[1] Improvements included in regional/City DIF programs have been identified as such.

[2] Program improvements constructed by project may be eligible for fee credit. In lieu fee payment is at the discretion of the City.

[3] Proposed traffic signals would remain until such time the interchange can be improved to its ultimate condition (proposed roundabouts). Traffic signal at I-10 NB Ramps not required for Phase 1, but would be installed with signal at I-10 SB Ramps.

[4] No improvements have been recommended at near-term deficient intersections as the Project does not contribute any peak hour trips to these locations.

[5] Interim 1A Sandalwood/I-10 Interchange improvements assume signals at all three ramps locations (two on Sandalwood Dr. and one on Calimesa Bl.). Signalized ramp at I-10 Northbound on-ramp is temporary until hook on-ramp is constructed on Calimesa Bl.

[6] Interim 1B Sandalwood/I-10 Interchange improvements includes a new hook on-ramp on Calimesa Bl. When the I-10 NB Hook On-Ramp on Calimesa Bl. is in place, Intersection #16 would be vacated.
Interim 1B improvements can be supported up through 50% of Phase 2 development before ultimate widening of Sandalwood Drive through the interchange is necessary.

[7] An alternative improvement has also been considered without the addition of a 2nd EB through lane as the ultimate design for the interchange has not yet been determined by the City of Calimesa and Caltrans.

1.5.2 ON-SITE CIRCULATION RECOMMENDATIONS

The circulation and roadway classifications for the proposed Project are shown in Exhibit 1-11 and the corresponding roadway cross-sections for each roadway classification are shown in Exhibit 1-12. The following recommendations are based on the improvements needed to accommodate site access and maintain acceptable peak hour LOS at site access and on-site intersections are described below and shown on Exhibits 1-13, 1-14, 1-15, 1-16, and 1-17, respectively. The site adjacent queuing analysis worksheets are provided in Appendix 1.2 for Project Buildout only. No site adjacent queues are anticipated with the proposed improvements. Exhibit 1-18 shows the ultimate conceptual striping plan for Sandalwood Drive from Street B to the I-10 Freeway.

Phase 1 (2030):

Recommendation 1 – Street E & Street A (#1) – The following improvements are necessary to accommodate site access:

- Construct a single-lane roundabout.
- Construct a northbound shared left-right turn lane.
- Construct an eastbound shared through-right turn lane.
- Construct a westbound shared through-right turn lane.

Recommendation 2 – Street E & Street B (#2) – The following improvements are necessary to accommodate site access:

- Construct a single-lane roundabout.
- Construct a southbound shared left-right turn lane.
- Construct an eastbound shared left-through lane.
- Construct a westbound shared through-right turn lane.

Recommendation 3 – Street D & Street A (#3) – The following improvements are necessary to accommodate site access:

- Construct a single-lane roundabout.
- Construct a northbound shared left-right turn lane.
- Construct an eastbound shared through-right turn lane.
- Construct a westbound shared through-right turn lane.

Recommendation 4 – Street D & Street A (#4) – The following improvements are necessary to accommodate site access:

- Construct a northbound left turn lane with a minimum of 100-feet of storage and a through lane.
- Construct an eastbound shared left-right turn lane.
- Construct a southbound shared through-right turn lane.

Recommendation 5 – Street D & Street A (#5) – The following improvements are necessary to accommodate site access:

- Construct a single-lane roundabout.
- Construct a southbound shared through-right turn lane.
- Construct an eastbound left turn lane with a minimum of 100-feet of storage.
- Construct a westbound through lane and right turn lane.

Recommendation 6 – Sandalwood Drive & Street B (#7) – The following improvements are necessary to accommodate site access:

- Install a traffic signal.
- Construct two northbound left turn lanes with a minimum of 300-feet of storage and one through lane (a second through lane will be paved however does not need to be striped in the interim until such time Sandalwood Drive north of Street B is widened).
- Construct a southbound shared through-right turn lane (ultimately the southbound approach for Sandalwood Drive north of Street B will also accommodate a second southbound through lane).
- Construct an eastbound left turn lane with a minimum of 200-feet of storage and right turn lane.

Recommendation 7 – Sandalwood Drive & Street K (#8) – The following improvements are necessary to accommodate site access:

- Install a traffic signal.
- Construct two northbound left turn lanes with a minimum of 300-feet (inner left) and 400-feet (outer left) of storage and two through lanes.
- Construct one southbound through lane and a shared through-right turn lane.
- Construct an eastbound left turn lane with a minimum of 200-feet of storage and right turn lane.

Recommendation 8 – Sandalwood Drive & Street J (#9) – The following improvements are necessary to accommodate site access:

- Install a traffic signal.
- Construct two northbound left turn lanes with a minimum of 350-feet of storage and two through lanes.
- Construct one southbound through lane and a shared through-right turn lane.
- Construct an eastbound left turn lane with a minimum of 200-feet of storage and a right turn lane with overlap phasing.

Recommendation 9 – Roberts Road & Sandalwood Drive (#10) – The following improvements are necessary to accommodate site access:

- Install a traffic signal.
- Construct two southbound left turn lanes with a minimum of 200-feet of storage and a right turn lane.
- Construct an eastbound left turn lane with a minimum of 225-feet of storage and three through lanes.

- Construct two westbound through lanes and a shared through-right turn lane.

Recommendation 10 – 7th Street & Sandalwood Drive (#14) – The following improvements are necessary to accommodate site access:

- Convert the intersection to a stop controlled right-in-right-out access only intersection, with the stop control on the southbound approach.
- Stripe a minimum of two lanes in each direction of travel in the eastbound and westbound directions until such time Sandalwood Drive is widened on either side to accommodate the receiving lanes.

Although not a study area intersection, a traffic signal warrant has been evaluated for the future school driveway on Street "B" in order to identify the need for a future traffic signal. This intersection is anticipated to meet a peak hour traffic signal warrant under E+P (Phase 1) traffic conditions (see discussion in Chapter 5).

Recommendation 11 – Sandalwood Drive is the main roadway providing primary access to the Project. Project to construct Sandalwood Drive at its ultimate full-section width as a Major (117-foot right-of-way) from Street B to mid-point between Street K and Street J, Major (129-foot right-of-way) from mid-point between Street K and Street J to just south of Street J, Major (132-foot right-of-way) from just south of Street J to Roberts Road, and an Enhanced Major (140-foot right-of-way) from Roberts Road to the eastern Project boundary consistent with the Specific Plan standards. Interim conditions can either require less pavement (roadway infrastructure) or reduced striping until such time traffic volumes warrant the ultimate lanes as identified above.

Recommendation 12 – Roberts Road is a north-south oriented roadway located within the Project site. Project to construct Roberts Road at its ultimate full-section width as a Local Street (60-foot right-of-way with one lane in each direction) from Sandalwood Drive to 7th Street consistent with the Specific Plan standards.

Recommendation 13 – Street K is an east-west oriented roadway located within the Project site. Project to construct Street K at its ultimate full-section width as a Modified Collector (70-foot right-of-way with one lane in each direction separated by a painted median), consistent with the Specific Plan standards, although 2 lanes are needed to accommodate receiving lanes for the dual lefts from Sandalwood Drive which will transition back down to the one lane.

Recommendation 14 – Street J is an east-west oriented roadway located within the Project site. Project to construct Street J at its ultimate full-section width as a Modified Collector (70-foot right-of-way with one lane in each direction separated by a painted median) from Sandalwood Drive to the roadway's western terminus, consistent with the Specific Plan standards, although 2 lanes are needed to accommodate receiving lanes for the dual lefts from Sandalwood Drive which will transition back down to one lane.

Recommendation 15 – Street B is an east-west oriented roadway located within the Project site. Project to construct Street B at its ultimate full-section width as a Secondary (106-foot right-of-way with 2 lanes in each direction) from Sandalwood Drive to Street D, consistent with the Specific Plan standards. Project to construct Street B at its ultimate full-section width as a Divided Collector (80-foot

right-of-way with one lane in each direction) from Street D to Street E consistent with the Specific Plan standards.

Recommendation 16 – Street A is an east-west oriented roadway located within the Project site. Project to construct Street A at its ultimate full-section width as a Divided Collector (80-foot right-of-way with one lane in each direction) from the Project's eastern boundary to Street E consistent with the Specific Plan standards.

Recommendation 17 – Street D is a north-south oriented roadway located within the Project site. Project to construct Street D at its ultimate full-section width as a Divided Collector (80-foot right-of-way with one lane in each direction) from Street B to Street A, consistent with the Specific Plan standards.

Recommendation 18 – Street C is a roadway located within the Project site. Project to construct Street C at their ultimate full-section width as a Collector (66-foot right-of-way with one lane in each direction) from Street D to Street E, consistent with the Specific Plan standards.

Recommendation 19 –Street E is a roadway located within the Project site. Project to construct these roadways at their ultimate full-section width as a Collector (66-foot right-of-way with one lane in each direction) from Street A to Street C, consistent with the Specific Plan standards.

Recommendation 20 – County Line Road is an east-west oriented roadway located on the Project's northern boundary. Project to construct County Line Road at its ultimate full-section width as a Modified Collector (80-foot right-of-way with one lane in each direction) from the Project's eastern boundary to the existing terminus of County Line Road, consistent with the Specific Plan standards.

Phase 2 (2035):

Recommendation 21 – 7th Street & Sandalwood Drive (#14) – Stripe a 3rd eastbound and westbound through lane as the improvements proposed to the west and east will accommodate the receiving lanes. This striping should coincide with the ultimate widening of the Sandalwood interchange bridge along with accommodating a westbound right-turn pocket at 7th Street.

Phase 3 (2038):

Recommendation 22 – Roberts Road & Sandalwood Drive (#10) – The following improvements are necessary to accommodate site access:

- Restripe the southbound right turn lane as a shared through-right turn lane.
- Construct two northbound left turn lanes with a minimum of 200-feet of storage, one through lane, and one right turn lane with a minimum of 350-feet of storage. Modify the traffic signal to accommodate right turn overlap phasing on the northbound right turn lane.
- Construct two westbound left turn lanes with a minimum of 350-feet of storage.

Recommendation 23 – Street B is an east-west oriented roadway located within the Project site. Project to construct Street B at its ultimate full-section width as a Collector (66-foot right-of-way) west of Street E, consistent with the Specific Plan standards.

Recommendation 24 – Street A is an east-west oriented roadway located within the Project site. Project to construct Street A at its ultimate full-section width as a Collector (66-foot right-of-way with one lane in each direction) west of Street E, consistent with the Specific Plan standards.

Recommendation 25 – Roberts Road is a north-south oriented roadway located within the Project site. Project to construct Roberts Road at its ultimate half-section width as a Modified Secondary (98-foot right-of-way with two lanes in each direction) from Sandalwood Drive to the southern Project boundary, consistent with the Specific Plan standards.

Phase 4 (2040):

No additional on-site recommendations for Phase 4.

Phase 5 (2045):

Recommendation 24 – Street F, Street G, Street H, and Street A (west of Street E) are roadways located within the Project site. Project to construct the full extent of these roadways at their ultimate full-section width as a Collector (66-foot right-of-way with one lane in each direction) consistent with the Specific Plan standards.

On-site traffic signing and striping for all phases should be implemented agreeable with the provisions of the California Manual on Uniform Traffic Control Devices (CA MUTCD) and in conjunction with detailed construction plans for the Project site. Sight distance at each project access point should be reviewed with respect to standard California Department of Transportation (Caltrans) and City of Calimesa sight distance standards at the time of preparation of final grading, landscape, and street improvement plans.

1.5.3 ON-SITE TRAILS & BIKE LANES

Proposed locations of on-site Paseos and Promenades are depicted on Exhibit 1-19. The proposed Paseos and Promenades provide connectivity for pedestrians throughout the residential component of the Project. All major streets within the Specific Plan are proposed to include sidewalks along roadways and bike lanes in both directions of travel. These streets include County Line Road / Street A, Street B, Street C, Street D, Street E, Street E, Street F, Street G, Street H, Street I, Street J, Street K, Street L, Roberts Road, and Sandalwood Drive.

EXHIBIT 1-11 : PROJECT CIRCULATION AND ROADWAY CLASSIFICATIONS

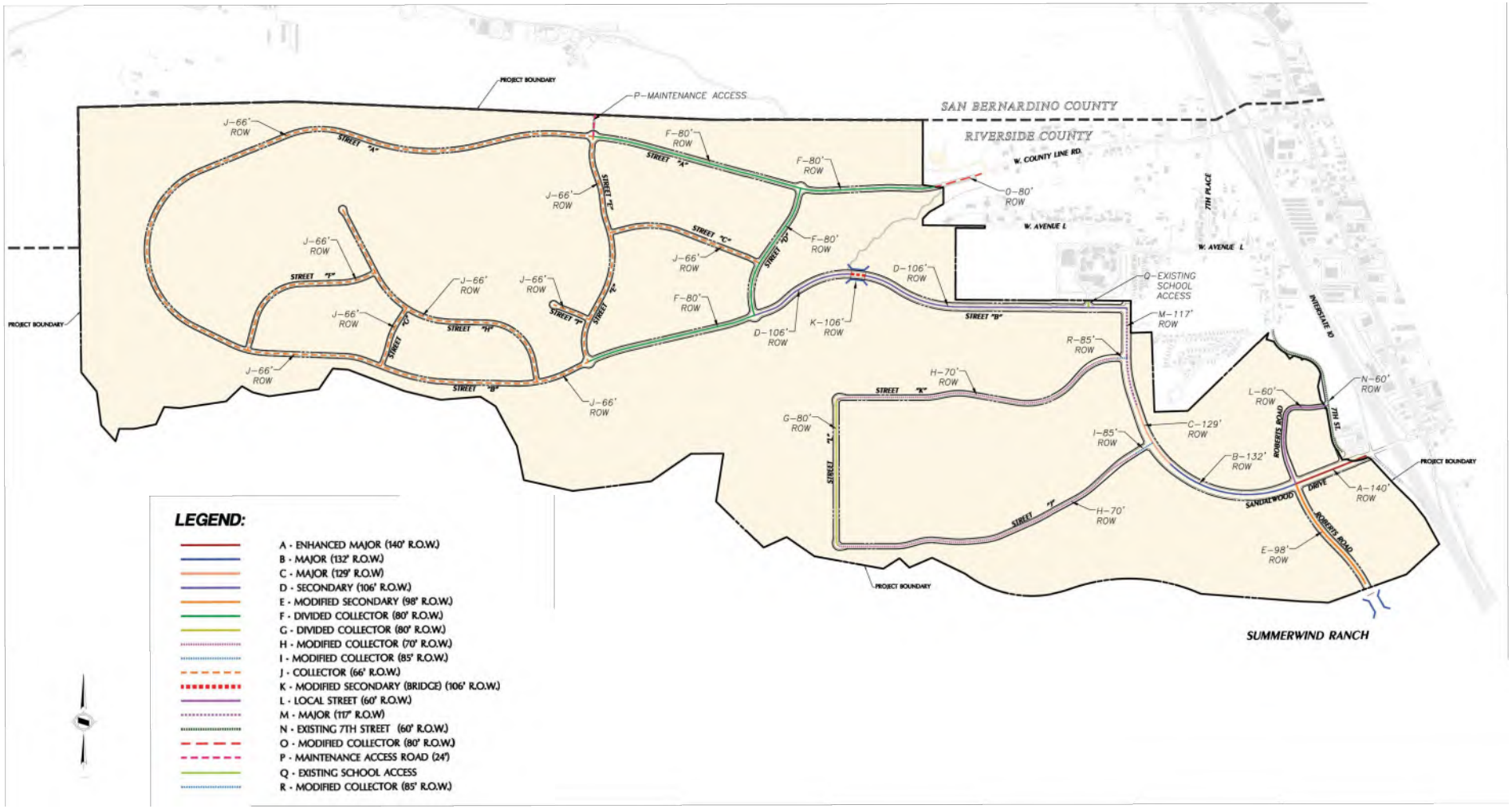


EXHIBIT 1-12 : SPECIFIC PLAN ROADWAY CROSS-SECTIONS

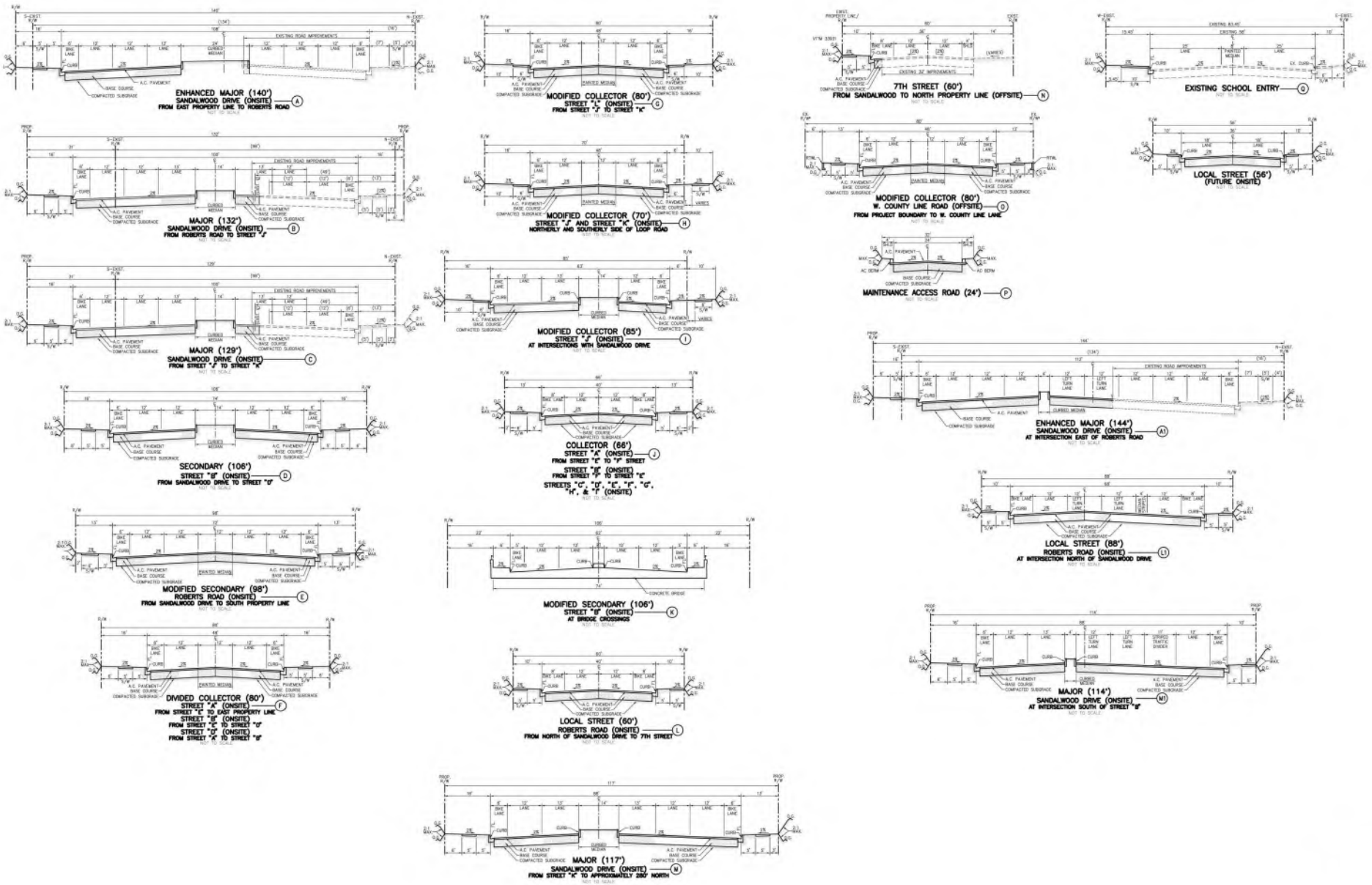
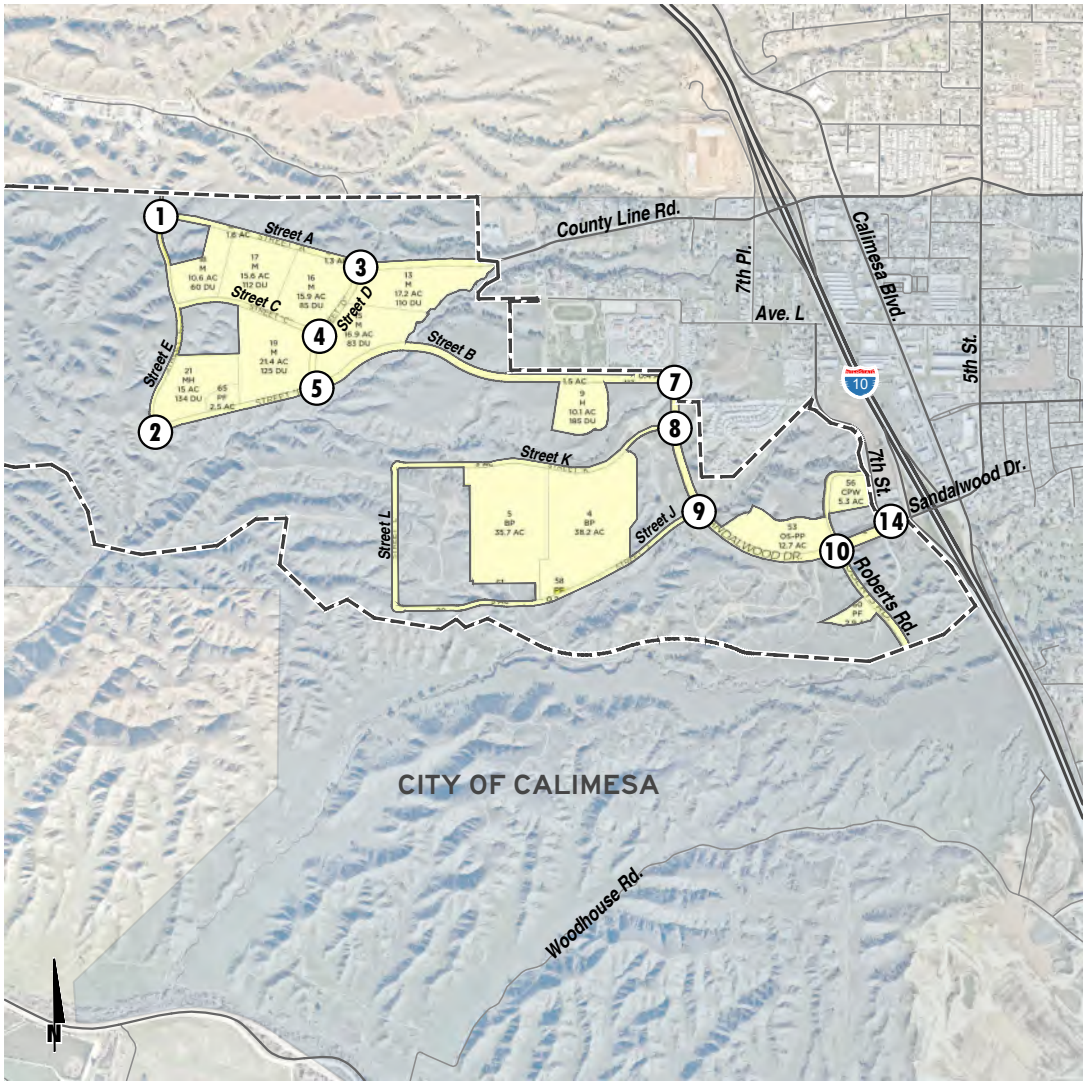
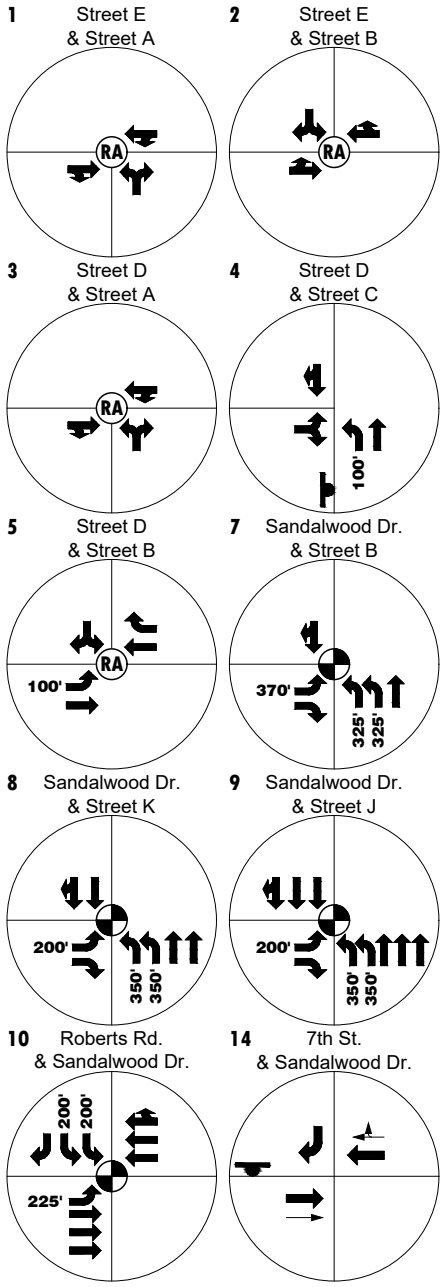


EXHIBIT 1-13 : PHASE 1 ON-SITE RECOMMENDATIONS

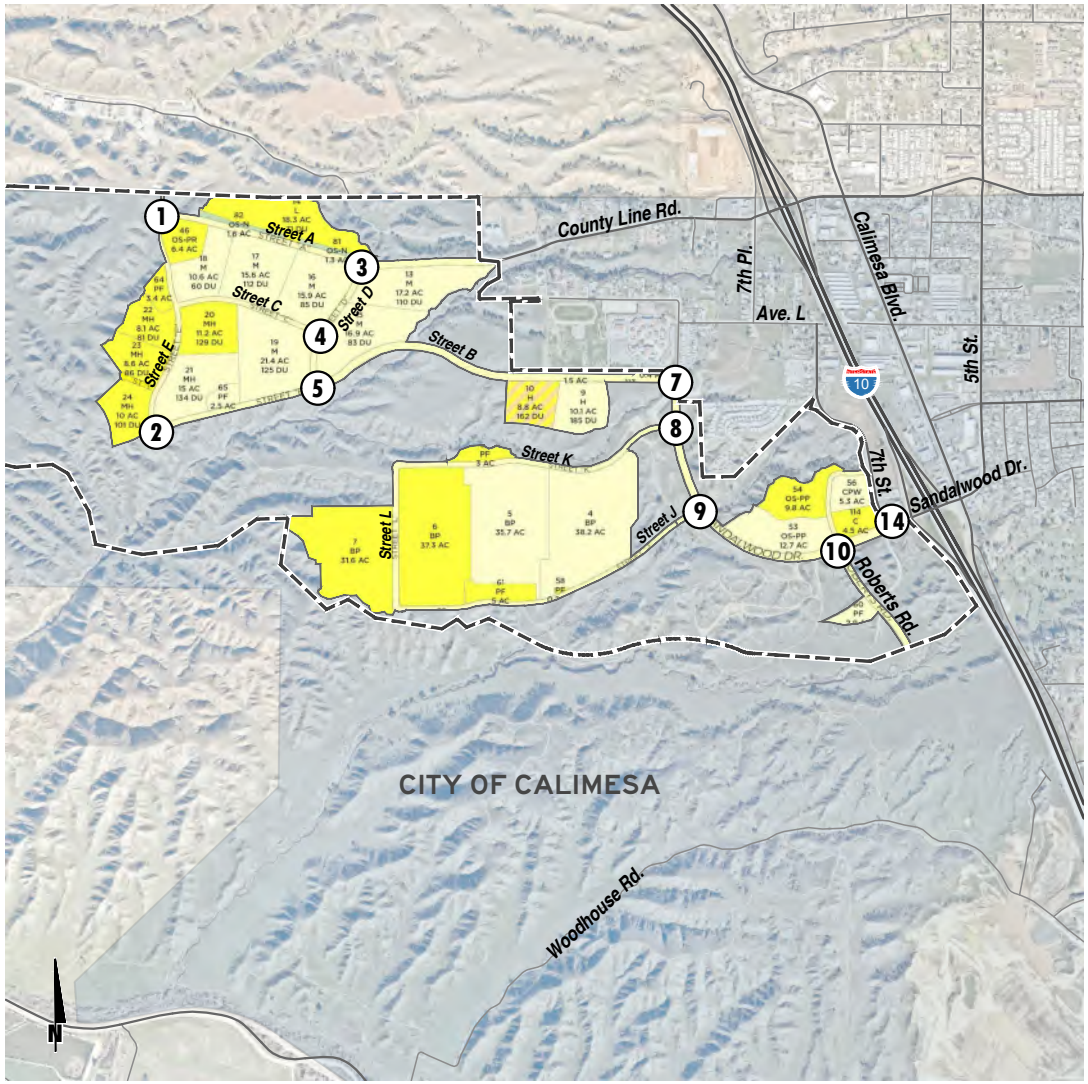


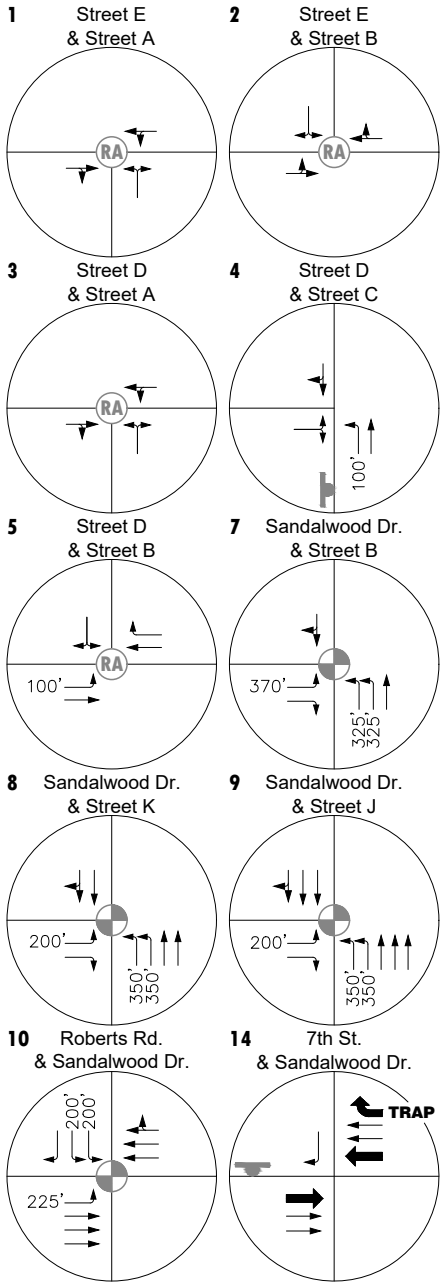


LEGEND:

- (0) = *Future Intersection Analysis Location*
- (RA) = *Future Roundabout*
- = *Future Traffic Signal*
- = *Proposed Stop Sign*
- = *Existing Lane*
- = *Proposed Lane*

EXHIBIT 1-14 : PHASE 2 ON-SITE RECOMMENDATIONS

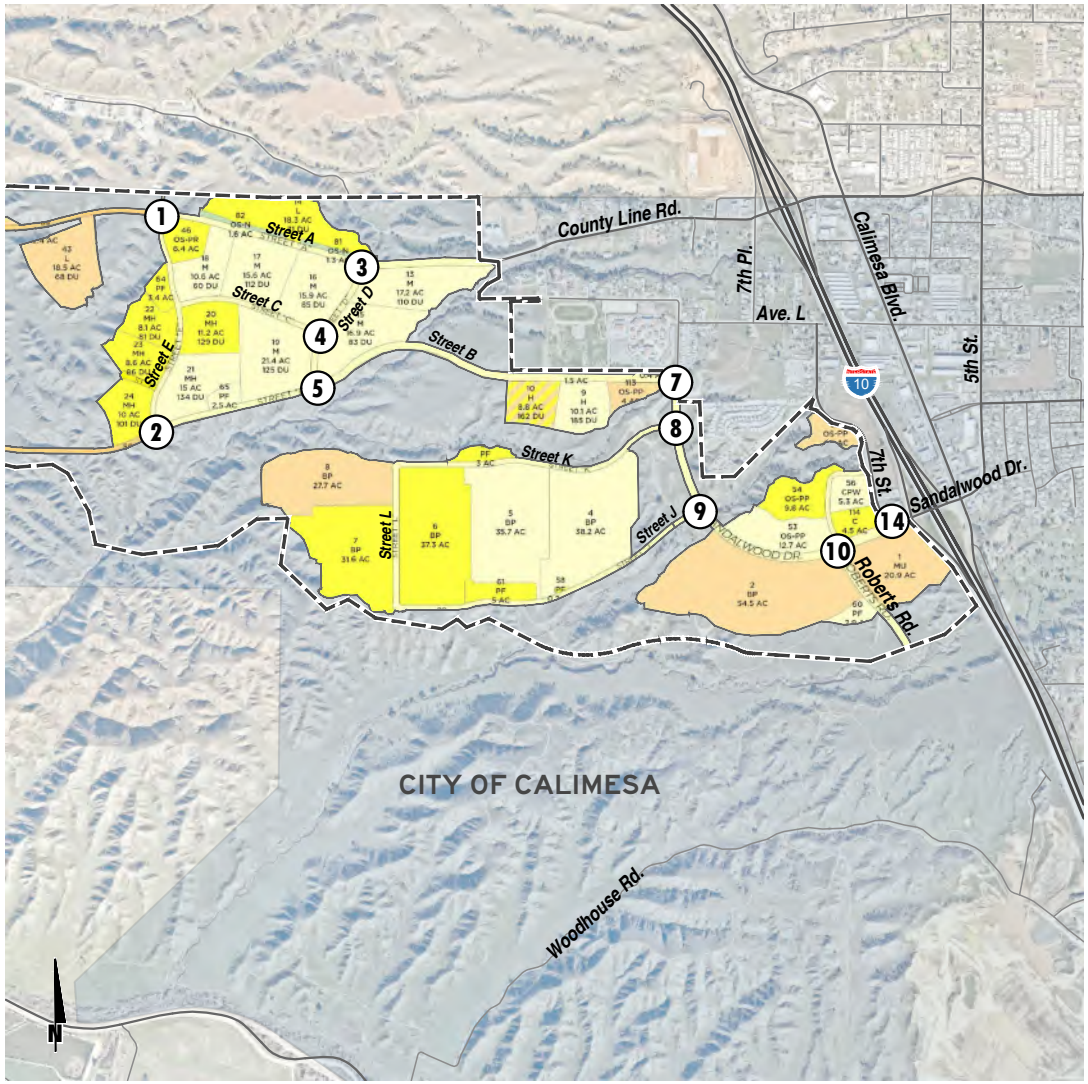


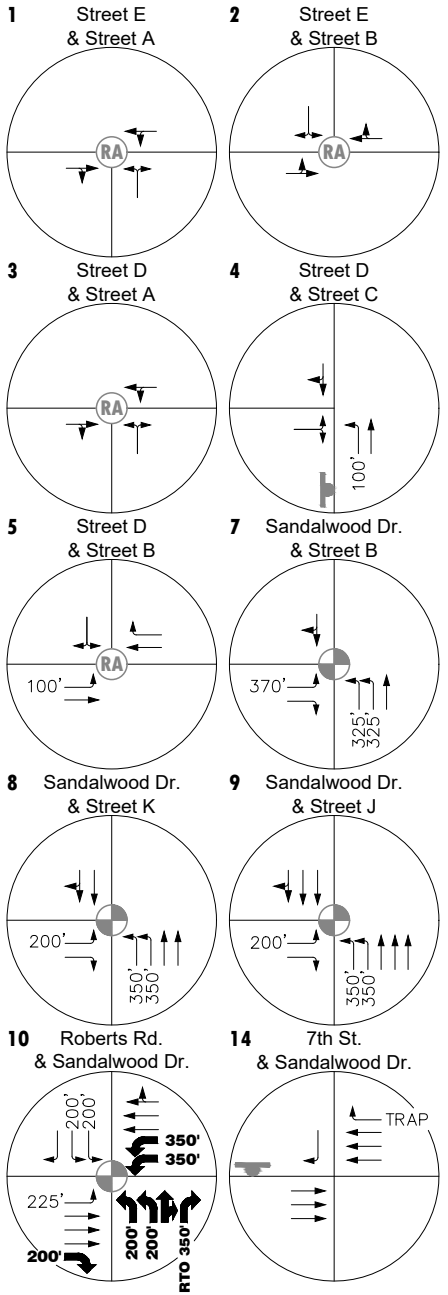


LEGEND:

- (0) = *Future Intersection Analysis Location*
- (RA) = *Existing Roundabout*
- = *Existing Traffic Signal*
- = *Existing Stop Sign*
- = *Existing Lane*
- = *Proposed Lane*

EXHIBIT 1-15 : PHASE 3 ON-SITE RECOMMENDATIONS

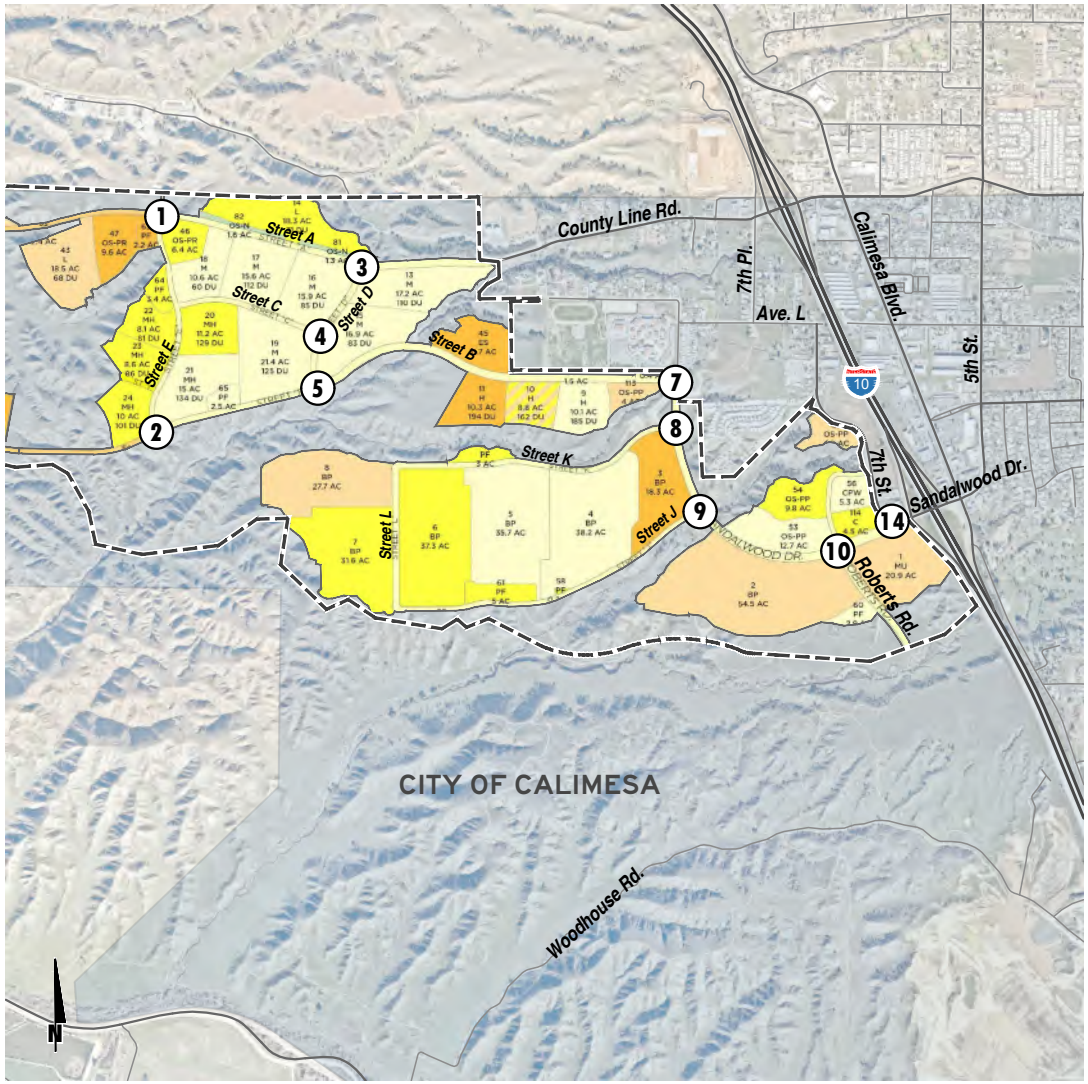


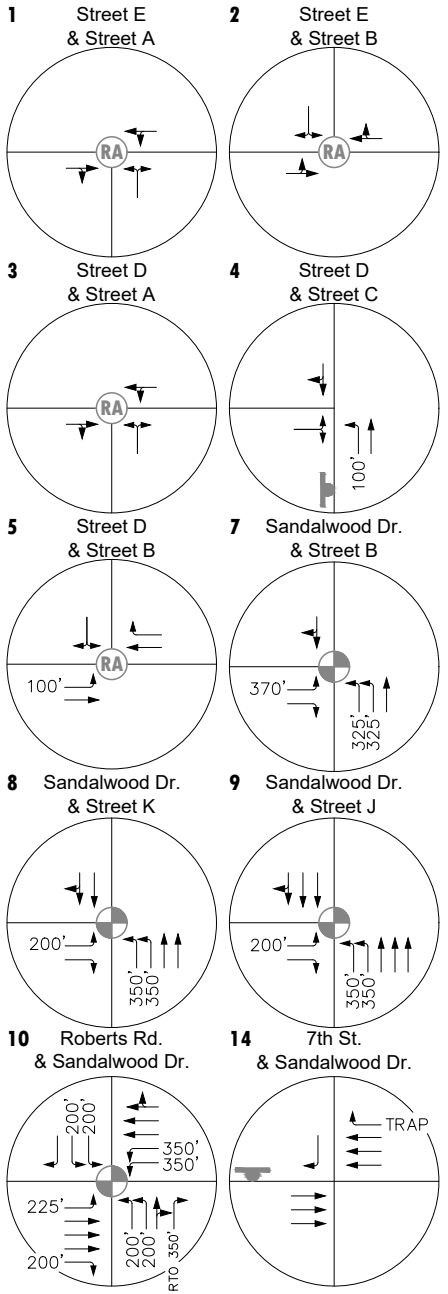


LEGEND:

- (0) = *Future Intersection Analysis Location*
- (RA) = *Existing Roundabout*
- = *Existing Traffic Signal*
- = *Existing Stop Sign*
- = *Existing Lane*

EXHIBIT 1-16 : PHASE 4 ON-SITE RECOMMENDATIONS

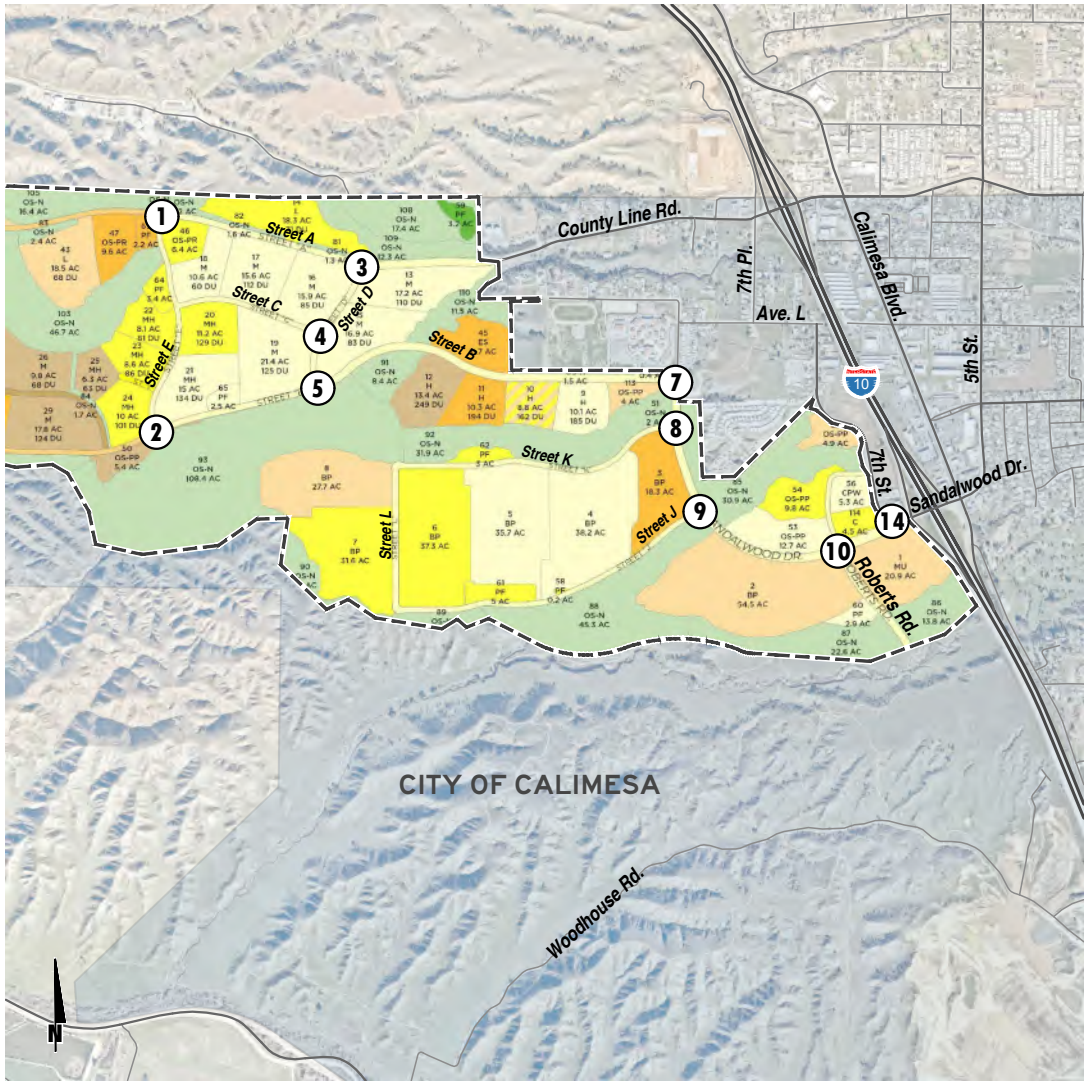


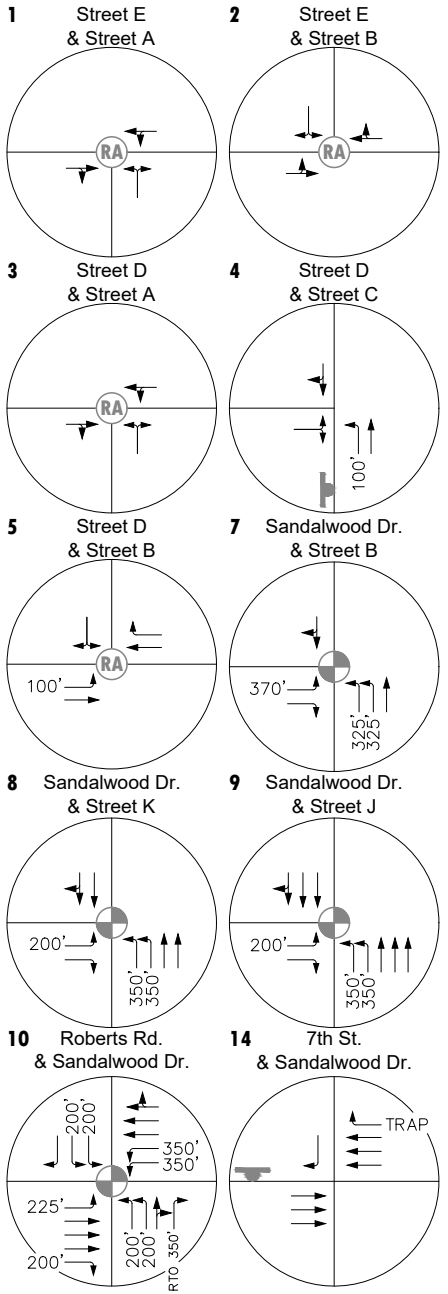


LEGEND:

- (0) = Future Intersection Analysis Location
- (RA) = Existing Roundabout
- = Existing Traffic Signal
- = Existing Stop Sign
- = Existing Lane
- = Proposed Lane

EXHIBIT 1-17 : PROJECT BUILDOUT ON-SITE RECOMMENDATIONS





LEGEND:

- (0) = *Future Intersection Analysis Location*
- (RA) = *Existing Roundabout*
- = *Existing Traffic Signal*
- = *Existing Stop Sign*
- = *Existing Lane*

EXHIBIT 1-18 : CONCEPTUAL STRIPING PLAN FOR SANDALWOOD DRIVE

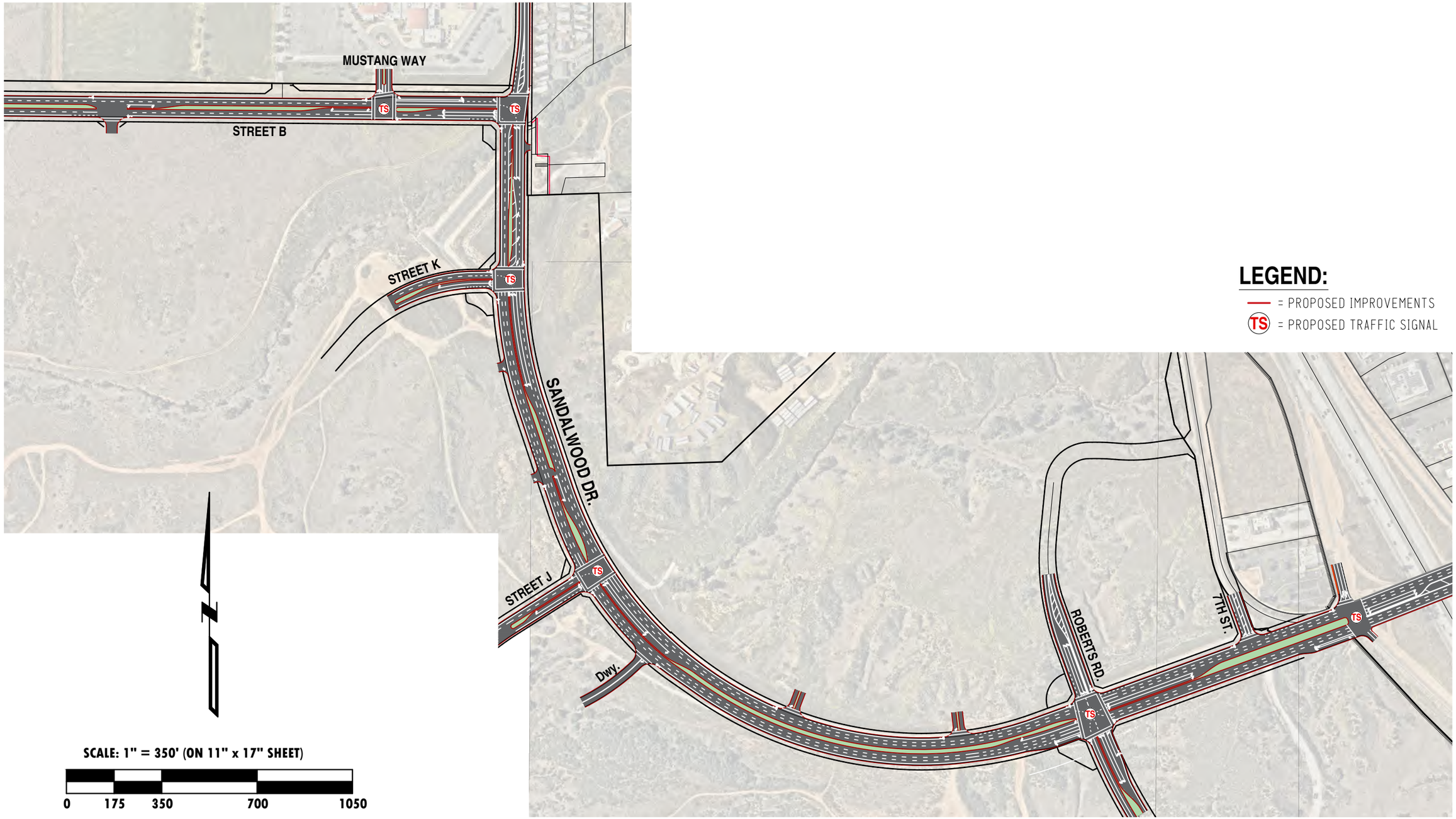
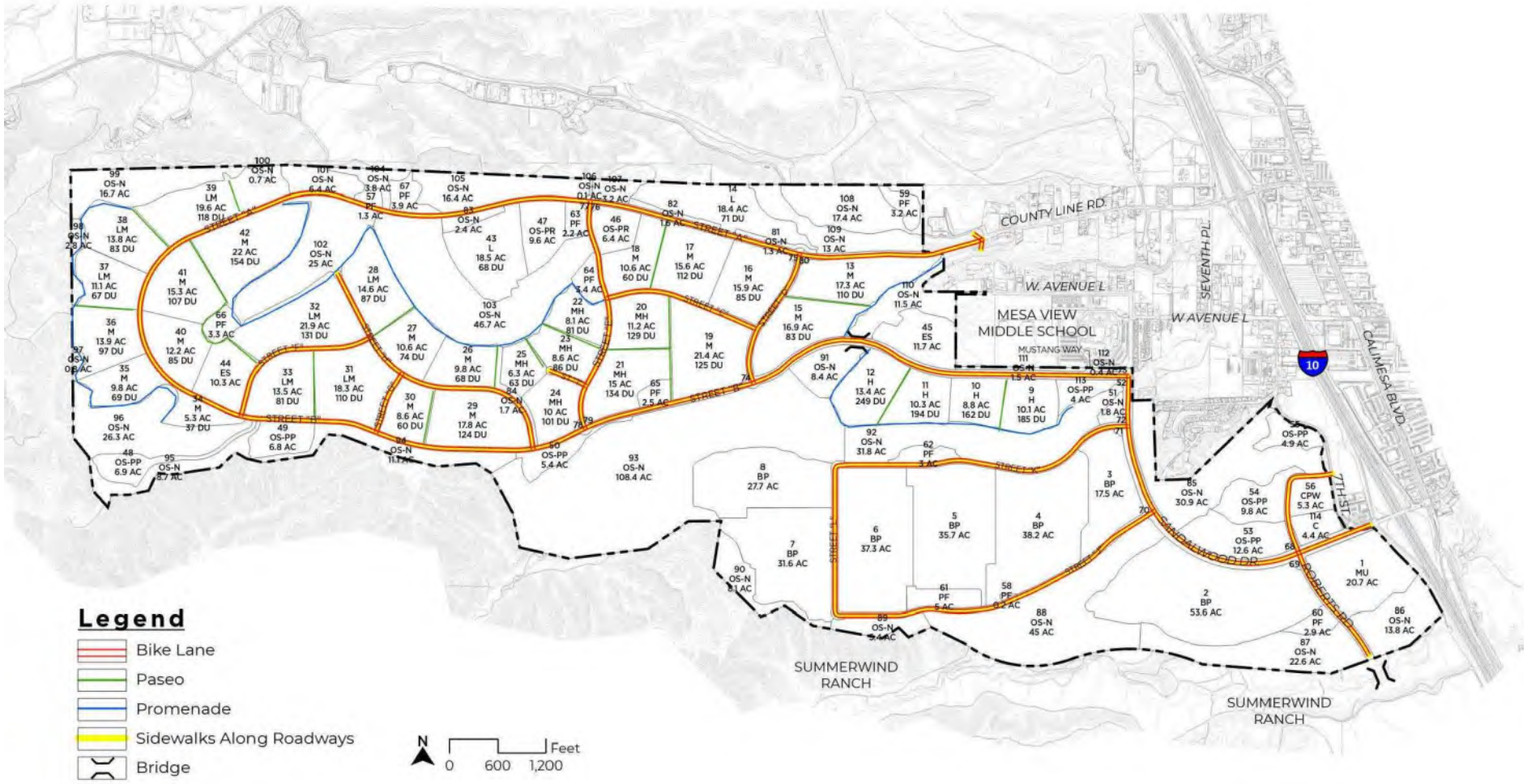


EXHIBIT 1-19 : SPECIFIC PLAN PROPOSED TRAILS & BIKE LANES



1.5.4 COMPARISON OF IMPROVEMENTS

The intersection improvement recommendations have been compared to those identified in the mitigation measures and conditions of approval for the Mesa Verde Estates Specific Plan Focused Traffic Study (dated October 10, 2016, for Project buildout conditions). Specifically, the original transportation conditions of approval from the prior traffic study have been listed and used to compare to the ultimate improvements and identify any changes in improvement requirements whether they are additions or reductions. This comparison has been used to demonstrate consistency with the Specific Plan. It should be noted that the phasing boundaries have shifted as compared with the phasing in the 2017 Specific Plan and land use adjustments have taken place (replacement of residential with industrial use and commercial use with parks/open space). As such, the tables have been provided for informational and comparative purposes only at the request of the City. Table 1-6 shows a comparison of the ultimate improvements from the Mesa Verde Estates Specific Plan Focused Traffic Study (referred to as 2016 Specific Plan Traffic Study) to the proposed Project. The **boldface** text in the table identifies new/different improvements as compared to the 2016 Specific Plan Traffic Study.

TABLE 1-6: COMPARISON OF ULTIMATE IMPROVEMENTS FOR OFF-SITE INTERSECTIONS (PAGE 1 OF 3)

#	Intersection Location	Jurisdiction	2016 Traffic Study[1]	2024 Traffic Study[1]
6	County Line Ln. & County Line Rd.	Calimesa	Not Analyzed	**Install a traffic signal**
				Add EB left turn lane
				Add WB right turn lane
				Add SB shared left-right turn lane
				Add SB right turn lane
11	7th Pl. & County Line Rd.	Calimesa	Not Applicable	**Add WB left turn lane**
			Add 2nd and 3rd EB through lane	**Add 2nd EB through lane**
			Add 2nd WB through lane	Same
12	I-10 SB Ramps & County Line Rd.	Calimesa, Caltrans	Install a traffic signal	Same (Interim Condition Only)
			Add SB left turn lane	Not Applicable
			Add SB right turn lane	Not Applicable
			Add 2nd EB through lane	Not Applicable
			Add EB right turn lane	Not Applicable
			Add 2nd WB through lane	Not Applicable
				Construct a 2-lane Roundabout and provide 2 EB and 2 WB through lanes on County Line under the I-10 Freeway
13	I-10 NB Ramps & County Line Rd.	Calimesa, Caltrans	Install a traffic signal	Same (Interim Condition Only)
			Add NB right turn lane	Not Applicable
			Add 2nd EB through lane	Not Applicable
			Add EB free-right turn lane	Not Applicable
				Construct a 2-lane Roundabout and provide 2 EB and 2 WB through lanes on County Line under the I-10 Freeway
15	I-10 SB Ramps & Sandalwood Dr.	Calimesa, Caltrans	Install a traffic signal	Same
			Add SB left turn lane	Same
			Add SB free-right turn lane	Same
			Add EB shared through-right turn lane	**Add 2nd and 3rd EB through lanes**
			Add EB right turn lane	**Add EB free-right turn lane**
			Add 2 WB left turn lanes	Same
			Add 2nd WB through lane	**Add 2nd and 3rd WB through lanes**
16	I-10 NB On-Ramp & Sandalwood Dr.	Calimesa, Caltrans	Add 2nd, 3rd, and 4th EB through lanes	**Add 2nd, 3rd, 4th, and 5th EB through lanes**
			Add 2nd WB through lane	**Add 2nd and 3rd through lanes**
			Add WB free-right turn lane	Not Applicable

TABLE 1-6: COMPARISON OF ULTIMATE IMPROVEMENTS FOR OFF-SITE INTERSECTIONS (PAGE 2 OF 3)

#	Intersection Location	Jurisdiction	2016 Traffic Study[1]	2024 Traffic Study
17	Calimesa Bl. & Sandalwood Dr.	Calimesa	Add 2nd NB left turn lane	Same
			Add NB right turn lane	Same
			Add EB right turn lane	**Add EB free-right turn lane**
				Add 2nd SB through lane
				Add 2nd EB left turn lane
				Add 2nd WB through lane
18	Calimesa Bl. & I-10 NB Off-Ramp	Calimesa, Caltrans	Install a traffic signal	Same
			Add a NB left turn lane	Same
			Add an EB right turn lane	**Add an EB free-right turn lane**
			Add a WB left turn lane	Same
				Add a 2nd EB through lane
				Add a 2nd WB through lane
19	Roberts Rd. & Singleton Rd.	Calimesa	Not Analyzed	**Install a traffic signal**
				Add 2 NB left turn lanes
				Add 2 NB through lanes
				Add NB right turn lane
				Add 2 SB left turn lanes
				Add 2 SB through lanes
				Add SB right turn lane
				Add 2 EB left turn lanes
				Add 2 EB through lanes
				Add EB right turn lane
				Add 2 WB left turn lanes
				Add 2 WB through lanes
				Add WB right turn lane
				Implement overlap phasing for the NB and WB right turn lanes
20	I-10 SB Ramps & Singleton Rd.	Calimesa, Caltrans	Not Analyzed	**Install a traffic signal**
				Add SB shared left-through lane
				Add 2 SB right turn lanes
				Add 2nd EB through lane
				Add EB right turn lane
				Add 2 WB left turn lanes
				Add 2nd WB through lane

TABLE 1-6: COMPARISON OF ULTIMATE IMPROVEMENTS FOR OFF-SITE INTERSECTIONS (PAGE 3 OF 3)

#	Intersection Location	Jurisdiction	2016 Traffic Study[1]	2024 Traffic Study
21	I-10 NB Ramps & Singleton Rd.	Calimesa, Caltrans	Not Analyzed	**Install a traffic signal**
				Add NB left turn lane
				Add NB right turn lane
				Add 2 EB left turn lanes
				Add 2nd EB through lane
				Add 2nd WB through lane
				Add WB right turn lane
22	Calimesa Bl. & Singleton Rd.	Calimesa	Not Analyzed	**Install a traffic signal**
				Add 1st and 2nd left turn lanes
				Add 2nd NB through lane
				Add SB left turn lane
				Add 2nd SB through lane
				Add SB right turn lane
				Add 1st and 2nd EB left turn lanes
				Add 2nd EB through lane
				Add EB right turn lane
				Add WB left turn lane
				Add 2nd WB through lane
				Add WB right turn lane

Note: **Boldface** text signifies new/different improvements from the 2016 Traffic Study

[1] Improvements are listed as "Not Applicable" or "Not Analyzed" if improvement on the same line was not included in the other study.

1.6 QUEUING ANALYSIS

The traffic modeling and signal timing optimization software package SimTraffic has been utilized to assess the queues, for both on-site roadways (Project design features) and off-site interchange off-ramp queues. SimTraffic is designed to model networks of signalized and unsignalized intersections, with the primary purpose of checking and fine-tuning signal operations. SimTraffic uses the input parameters from Synchro to generate random simulations. These random simulations generated by SimTraffic have been utilized to determine the 95th percentile queue lengths observed for each applicable turn lane. A SimTraffic simulation has been recorded up to 5 times, during the weekday AM and weekday PM peak hours, and has been seeded for 15-minute periods with 60-minute recording intervals.

1.6.1 OFF-SITE QUEUING

Existing (2024) Conditions

Although not required by City Guidelines, a review of freeway off-ramp queues has also been included at the request of Caltrans. Based on the results of this analysis, there are currently no freeway off-ramp movements found to exceed available off-ramp storage capacity during the weekday AM or PM peak 95th percentile traffic flows.

E+P (Phases 1 through 5) Conditions

Consistent with Existing (2024) Conditions, there are no freeway off-ramp movements anticipated to exceed available off-ramp storage capacity during the weekday AM or PM peak 95th percentile traffic flows.

Cumulative Traffic Conditions

There are no freeway off-ramp movements anticipated to exceed available off-ramp storage capacity during the weekday AM or PM peak 95th percentile traffic flows under the Opening Year Cumulative (2030, 2035, 2038, and 2040) traffic conditions or under Horizon Year (2045) traffic conditions.

1.6.2 ON-SITE QUEUING

The results of the queuing analysis worksheets for the weekday AM and PM peak hours are provided in Appendix 1.2 of this report for Horizon Year (2045) traffic conditions and have been used to verify the recommended pocket lengths for each of the future intersections anticipated to be completed as part of the Project, as discussed in Section 1.5 *Recommendations*. Exhibits 1-13 through 1-17 provide the necessary turn pocket lengths, based on the results of the on-site queuing analysis.

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2 METHODOLOGIES

This section of the report presents the methodologies used to perform this TA. The methodologies described are consistent with City of Calimesa's Guidelines. (1)

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors, such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined, ranging from LOS A, representing completely free-flow conditions, to LOS F, representing a breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The 7th Edition Highway Capacity Manual (HCM) methodology expresses LOS at an intersection in terms of delay time for the various intersection approaches. (6) The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The City of Calimesa requires signalized intersection operations analysis based on the methodology described in the HCM. (6) Intersection LOS operations are based on an intersection's average control delay. Control delays include initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections, LOS is related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 2-1.

The traffic modeling and signal timing optimization software package Synchro (Version 12) has been utilized to analyze signalized intersections. Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0[1]
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E
Operations with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up	F

Source: HCM, 7th Edition
[1] If V/C is greater than 1.0, then LOS is F per HCM.

A saturation flow rate of 1900 has been utilized for all study area intersections located within the study area. The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Customary practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g., PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (6)

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Calimesa requires the operations of unsignalized intersections to be evaluated using the methodology described in the HCM. (6) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2). At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. Delay for the intersection is reported for the worst individual movement at a two-way stop-controlled intersection. For all-way stop controlled intersections, LOS is computed for the intersection as a whole (average delay).

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0[1]
Little or no delays.	0 to 10.00	A
Short traffic delays.	10.01 to 15.00	B
Average traffic delays.	15.01 to 25.00	C
Long traffic delays.	25.01 to 35.00	D
Very long traffic delays.	35.01 to 50.00	E
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F

Source: HCM, 7th Edition

[1] If V/C is greater than 1.0, then LOS is F per HCM.

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term “signal warrants” refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or determine the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD). (7)

The signal warrant criteria for Existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (7) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions and for all future analysis scenarios for existing unsignalized intersections. Warrant 3 is appropriate to use for this TA because it provides specialized warrant criteria for intersections with rural characteristics. For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection. Rural warrants have been used where posted speed limits on the major roadways with unsignalized intersections are over 40 miles per hour while urban warrants have been used where speeds are 40 miles per hour or below.

Future intersections that do not currently exist have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets. Similarly, the speed limit has been used as the basis for determining the use of Urban and Rural warrants. Traffic signal warrant analyses were performed for the following study area intersections shown in Table 2-3.

TABLE 2-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

#	Intersection
4	Street D & Street C
6	County Line Ln. & County Line Rd.
7	Sandalwood Dr. & Street B
8	Sandalwood Dr. & Street N
9	Sandalwood Dr. & Street M
10	Roberts Rd. & Sandalwood Dr.
11	7th Pl. & County Line Rd.
12	I-10 SB Ramps & County Line Rd.
13	I-10 NB Ramps & County Line Rd.
15	I-10 SB Ramps & Sandalwood Dr.
16	I-10 NB On-Ramp & Sandalwood Dr.
18	Calimesa Bl. & I-10 NB Off-Ramp
19	Roberts Rd. & Singleton Rd.
20	I-10 SB Ramps & Singleton Rd.
21	I-10 NB Ramps & Singleton Rd.
22	Calimesa Bl. & Singleton Rd.

The traffic signal warrant analyses are presented in Section 3 *Area Conditions*, Section 5 Existing plus Project Conditions, Section 6 *Opening Year Cumulative (2030) Traffic Conditions* and Section 7 *Opening Year Cumulative (2035) Traffic Conditions*. Subsequent analysis scenarios do not include traffic signal warrant analysis since all unsignalized intersections are met under earlier scenarios. It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.4 QUEUING ANALYSIS

Consistent with Caltrans requirements, the 95th percentile queuing of vehicles has been assessed at all freeway or state highway off-ramps to determine potential queuing deficiencies at the freeway ramp intersections at the I-10 Freeway at County Line Road, Sandalwood Drive, Calimesa Boulevard, and Singleton Road interchanges. Specifically, the off-ramp queuing analysis is utilized to identify any potential queuing and "spill back" onto the freeway mainline from the off-ramps. The 95th percentile queue has also been utilized to assess the queues at the interchanges to identify any potential peak hour queuing issues.

The traffic modeling and signal timing optimization software package SimTraffic has been utilized to assess the queues. SimTraffic is designed to model networks of signalized and unsignalized intersections, with the primary purpose of checking and fine-tuning signal operations. SimTraffic uses the input parameters from Synchro to generate random simulations. These random simulations generated by SimTraffic have been utilized to determine the 95th percentile queue lengths observed for each applicable turn lane. A SimTraffic simulation has been recorded up to 5 times, during the weekday AM and weekday PM peak hours, and has been seeded for 15-minute periods with 60-minute recording intervals.

2.5 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

Minimum acceptable LOS and associated definitions of intersection deficiencies have been obtained from each of the applicable surrounding jurisdictions.

2.5.1 CITY OF CALIMESA

According to the City of Calimesa, any signalized study intersection consisting of one or more highway or arterial road that is operating at an acceptable LOS D or better without project traffic in which the addition of project traffic causes the intersection to degrade to a LOS E or F shall identify improvements to improve operations to LOS D or better. For the purposes of this traffic study, LOS D is defined as the minimum acceptable condition.

2.5.2 CALTRANS

Senate Bill 743 (SB 743), approved in 2013, endeavors to change the way transportation impacts will be determined according to the California Environmental Quality Act (CEQA). The Office of Planning and Research (OPR) has recommended the use of vehicle miles traveled (VMT) as the replacement for automobile delay-based LOS. Caltrans acknowledges automobile delay will no longer be considered a CEQA impact for development projects and will use VMT as the metric for determining impacts on the State Highway System (SHS). However, LOS D has been utilized as the target LOS for Caltrans facilities, consistent with the County of Riverside and City of Calimesa.

2.6 DEFICIENCY CRITERIA

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies. To determine whether the addition of project traffic at a study intersection result in a deficiency, the following thresholds of significance will be utilized:

2.6.1 COLLECTOR AND LOCAL ROAD SIGNALIZED INTERSECTIONS

Any signalized study intersection consisting of two or more collector or local roads that is operating at an acceptable LOS C or better without project traffic in which the addition of project traffic causes the intersection to degrade to a LOS D or worse shall identify improvements to improve operations to LOS C or better.

Any signalized study intersection consisting of two or more collector or local roads that is operating at LOS D or worse without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

2.6.2 HIGHWAY AND ARTERIAL SIGNALIZED INTERSECTIONS

Any signalized study intersection consisting of one or more highway or arterial road that is operating at an acceptable LOS D or better without project traffic in which the addition of project traffic causes the intersection to degrade to a LOS E or F shall identify improvements to improve operations to LOS D or better.

Any signalized study intersection consisting of one or more highway or arterial road that is operating at LOS E or F without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

2.6.3 UNSIGNALIZED INTERSECTIONS

Consistent with the acceptable LOS in the City of Calimesa General Plan, the following criteria is considered for unsignalized intersections when identifying operational deficiencies:

An operational improvement would be required if the study determines that either section a) or both sections b) and c) occur:

a) The addition of project related traffic causes the intersection to degrade from an acceptable LOS C or better to LOS D or worse.

   OR

b) The project adds 5.0 seconds or more of delay to an intersection that is already projected to operate without project traffic at a LOS D or worse,

   AND

c) The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

If the conditions above are satisfied, improvements should be identified that achieve the following: LOS C or better for case a) above or to pre-project LOS and delay for case b) above.

2.7 PROJECT FAIR SHARE CALCULATION METHODOLOGY

Improvements found to be included in the TUMF and/or DIF will be identified as such. For improvements that do not appear to be in either of the pre-existing fee programs, a fair share contribution based on the Project's proportional share may be imposed in order to address the Project's share of deficiencies in lieu of construction. It should be noted that fair share calculations are for informational purposes only and the City Traffic Engineer will determine the appropriate improvements to be implemented by a project (to be identified in the conditions of approval). The Project's fair share contribution is determined based on the following equation, which is the ratio of Project traffic to net new traffic (where net new traffic is the future traffic less existing traffic):

Project Fair Share % = Project Buildout Traffic / (2045 With Project Total Traffic – Existing Traffic)

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3 AREA CONDITIONS

This section provides a summary of the existing circulation network and the City of Calimesa General Plan Circulation Network.

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the scoping agreement with City of Calimesa staff (Appendix 1.1), the study area includes a total of 22 existing and future intersections as shown previously on Exhibit 1-2. Exhibit 3-1 illustrates the study area intersections and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 CITY OF CALIMESA GENERAL PLAN CIRCULATION ELEMENT

As noted previously, the Project site is located within the City of Calimesa. The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified in the City of Calimesa General Plan Circulation Element, are described subsequently. Exhibit 3-2 shows the City of Calimesa General Plan Circulation Element and Exhibit 3-3 illustrates the City of Calimesa General Plan roadway cross-sections.

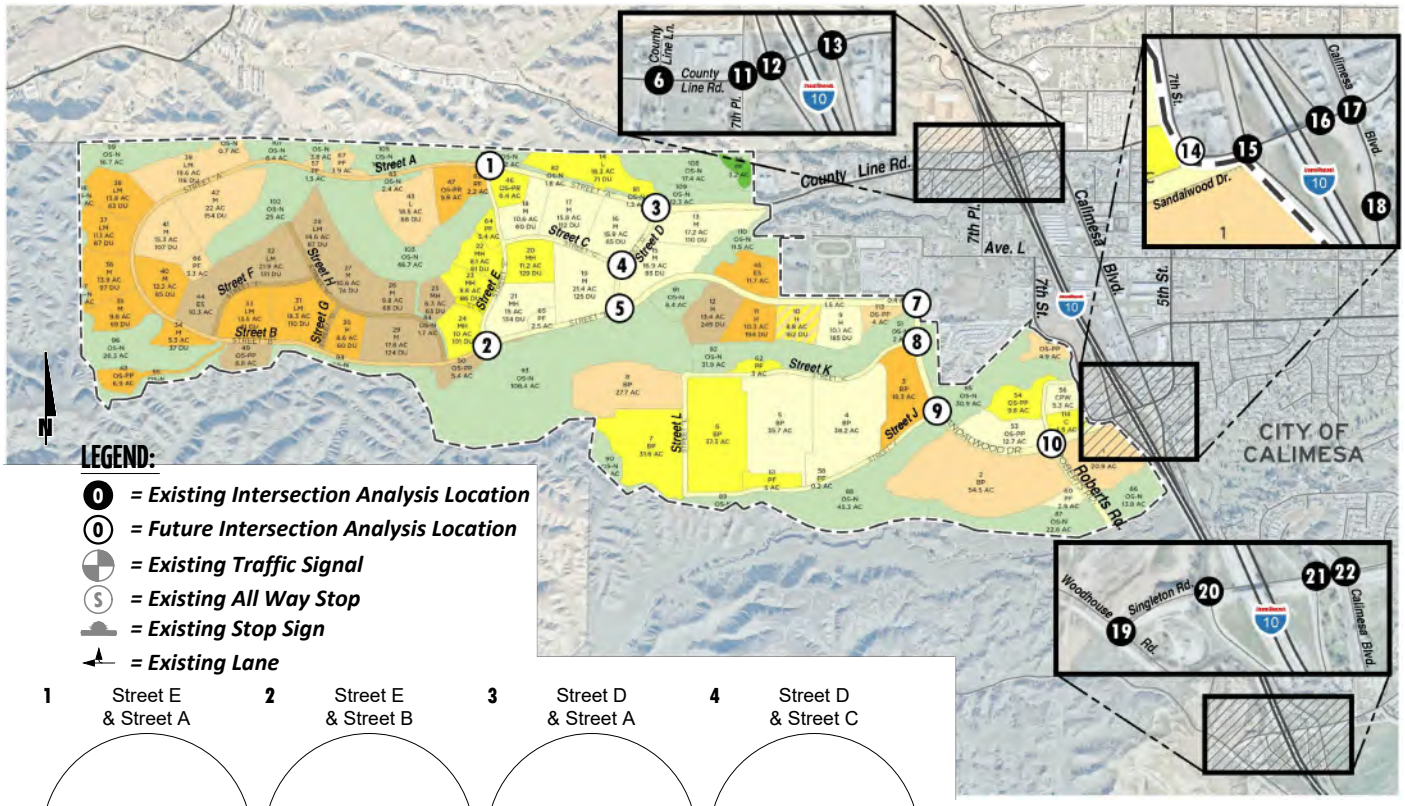
Major Arterials are four-to-six-lane divided roadways (typically divided by a raised median or painted median) with a 92-foot right-of-way and a 76-foot curb-to-curb measurement. These roadways serve both regional through-traffic and inter-city traffic and typically direct traffic onto and off of the freeways. The following study area roadways within the City of Calimesa are classified as a Major Arterial:

- County Line Road, between 7th Place and Calimesa Boulevard
- Sandalwood Drive, between I-10 Eastbound Ramps and Beckwith Avenue
- Singleton Road, between Roberts Road and Beckwith Avenue
- Calimesa Boulevard

Secondary Arterials are two-to-four-lane divided roadways (typically divided by a raised median or painted median) with an 88-foot right-of-way and a 72-foot curb-to-curb measurement. These roadways serve in a similar manner to major arterials except that secondary arterials carry less total traffic, less non-local through traffic, and a relatively greater proportion of local traffic. The following study area roadways within the City of Calimesa are classified as a Secondary Arterial:

- County Line Road, west of 7th Place and east of Calimesa Boulevard
- Singleton Road, east of Beckwith Avenue

EXHIBIT 3-1 : EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



1 Street E & Street A

Future Intersection

2 Street E & Street B

Future Intersection

3 Street D & Street A

Future Intersection

4 Street D & Street C

Future Intersection

5 Street D & Street B

Future Intersection

6 County Line Ln. & County Line Rd.

Future Intersection

7 Sandalwood Dr. & Street B

Future Intersection

8 Sandalwood Dr. & Street K

Future Intersection

9 Sandalwood Dr. & Street J

Future Intersection

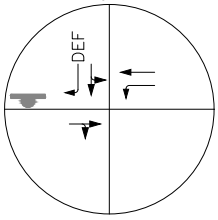
10 Roberts Rd. & Sandalwood Dr.

Future Intersection

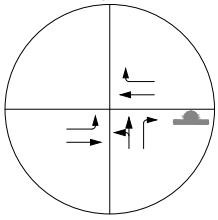
11 7th Pl. & County Line Rd.

Future Intersection

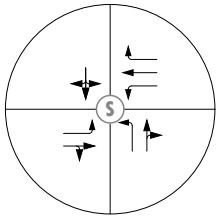
12 I-10 SB Ramps & County Line Rd.



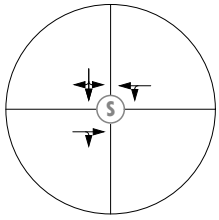
13 I-10 NB Ramps & County Line Rd.



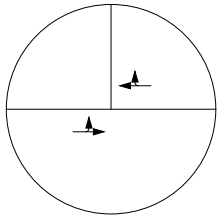
14 7th St. & Sandalwood Dr.



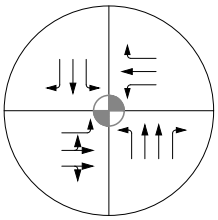
15 I-10 SB Ramps & Sandalwood Dr.



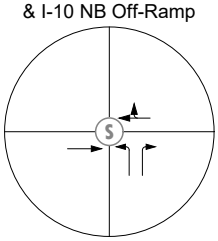
16 I-10 NB Ramps & Sandalwood Dr.



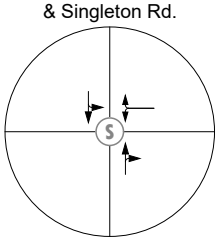
17 Calimesa Bl. & Sandalwood Dr.



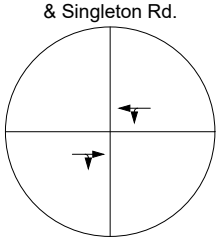
18 Calimesa Bl. & I-10 NB Off-Ramp



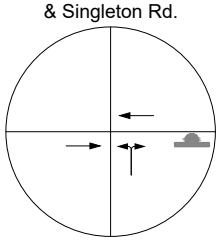
19 Roberts Rd. & Singleton Rd.



20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.

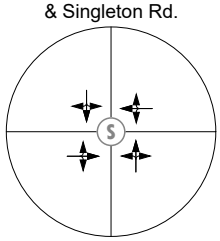


EXHIBIT 3-2: CITY OF CALIMESA GENERAL PLAN CIRCULATION ELEMENT

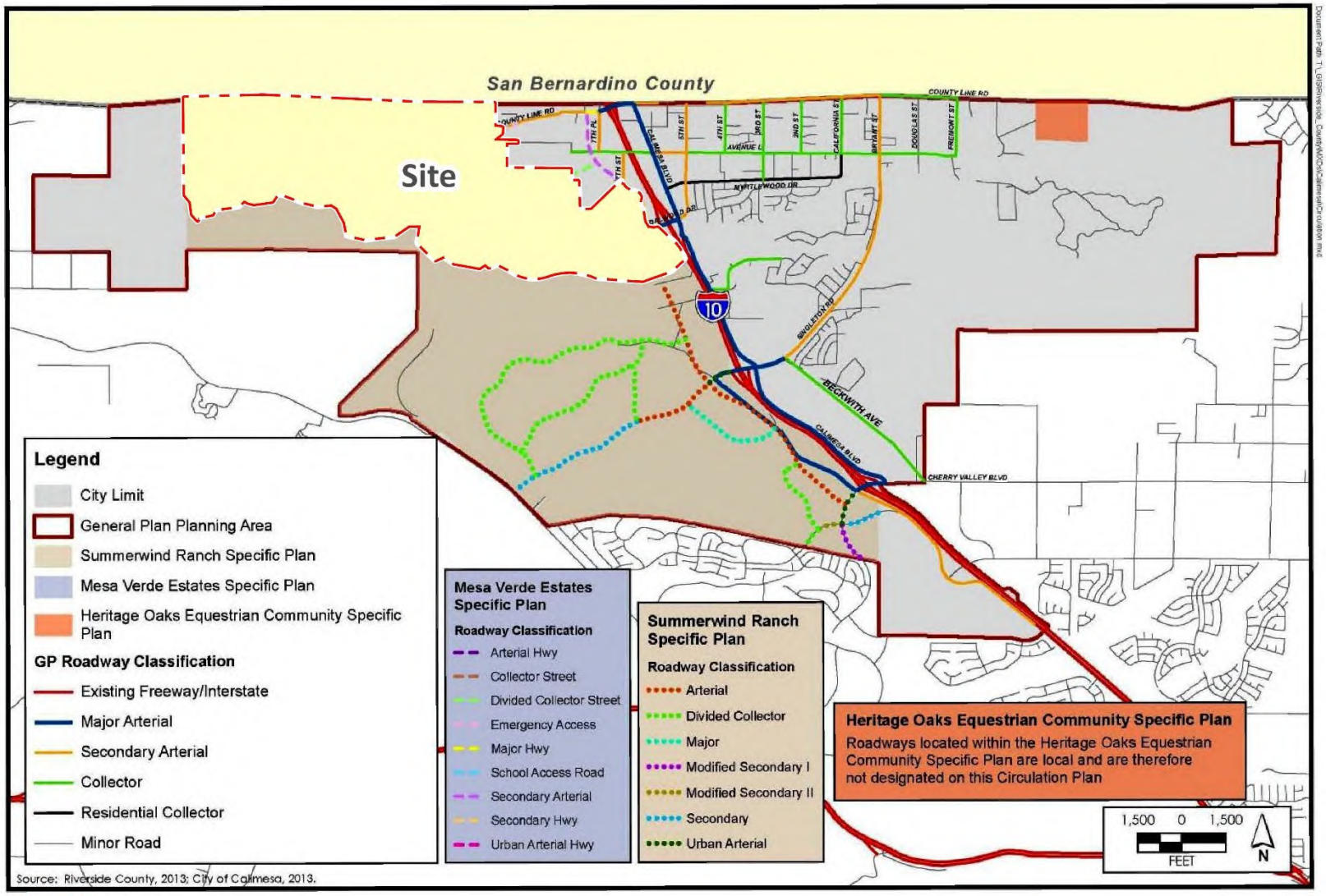


EXHIBIT 3-3: CITY OF CALIMESA GENERAL PLAN ROADWAY CROSS-SECTIONS (PAGE 1 OF 2)

Roadway Classification	Number of Lanes	Right-of-Way Width	Curb-to-Curb Width
Residential Collector These roadways would provide a 40-foot curb-to-curb roadway within a 52-foot right-of-way. This functional classification is similar to a local street classification, although it would generally have less fronting land uses than a purely local street and would also function as a connection for a limited number of local trips to the arterial system.	2	52 feet	40 feet
Collector These streets would provide a 40-foot curb-to-curb roadway within a 52-foot right-of-way. This is sufficient to provide one lane in each direction with parking. Collector streets function as feeder routes to carry traffic from the arterial system to the local system, but should carry only very minimal levels of non-local through traffic.	2	52 feet	40 feet
Secondary Arterial These roadways would provide a 72-foot curb-to-curb roadway within an 88-foot right-of-way. This is sufficient width to provide two through lanes in each direction (plus a center left turn lane) without parking, or one lane in each direction (plus a center left turn lane) with parking. Secondary arterials would function in a similar	2-4 plus center turn lane	88 feet	72 feet

EXHIBIT 3-3: CITY OF CALIMESA GENERAL PLAN ROADWAY CROSS-SECTIONS (PAGE 2 OF 2)

Roadway Classification	Number of Lanes	Right-of-Way Width	Curb-to-Curb Width
manner to major arterials except that secondary arterials carry less total traffic, less non-local through traffic, and a relatively greater proportion of local traffic. Secondary arterials are typically spaced at half-mile intervals between major arterials, or, where appropriate, depending on geographic and land use conditions.			
Major Arterial These roadways would provide a 76-foot curb-to-curb roadway within a 92-foot right-of-way upon full buildout. This is sufficient width to provide three lanes in each direction (plus a center left turn lane) without curbside parking, or two lanes in each direction (plus a center left turn lane) with curbside parking.	4-6 plus center turn lane	92 feet	76 feet
Specific Plan Streets These are defined as streets in an area to be covered in the future by a specific plan. The exact alignment, width and right-of-way of specific plan streets are not specified at this time, but will be determined based upon more detailed studies of proposed land use patterns and anticipated traffic volumes once the development plans are more fully described.	Varies; see Specific Plan for details.	Varies; see Specific Plan for details.	Varies; see Specific Plan for details.

3.3 BICYCLE & PEDESTRIAN FACILITIES

There are currently limited pedestrian facilities and no bicycle facilities in the study area. The development of the proposed Project would result in new sidewalk and bicycle lane improvements as part of the frontage improvements along the future internal roadways and along Sandalwood Drive and Roberts Road (as required per the City's standards). The City of Calimesa has bicycle lanes painted adjacent to existing roadways. There are no facilities in the community for bikes only; however, the City does maintain a series of multi-use trails, which accommodate bicycles as well as pedestrians.

The Project would construct new sidewalk and bicycle lane improvements as part of the frontage improvements along the future internal roadways and along Sandalwood Drive and Roberts Road (as required by City standards).

Pedestrian facilities include sidewalks, walkways, bridges, crosswalks, signals, illumination, and benches, among other amenities. Pedestrian facilities provide a vital link between other methods of travel and can make up a considerable portion of short-range trips made in the community. Where pedestrian facilities exist, people will be much more likely to make shorter trips by walking rather than by vehicle. Pedestrian facilities also provide a vital link for commuters who use other transportation facilities such as rail, bus, and park-and-ride lots.

Pedestrian facilities include multi-use trails, pedestrian signals, sidewalks, and crosswalks. Within the study area there are currently three crosswalks of Sandalwood Drive, two at the I-10 on/off ramps and one at the intersection of Sandalwood Drive and Calimesa Boulevard. In addition, there are sidewalks; along County Line Road at the I-10 on/off ramps, along Sandalwood Drive and at the intersection of Sandalwood Drive and Calimesa Boulevard.

3.4 TRANSIT SERVICE

The study area is currently not served by any transit routes. Transit service is reviewed and updated by Riverside Transit Agency (RTA) periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

3.5 EXISTING (2024) TRAFFIC COUNTS

Existing traffic volumes observed during the peak hour conditions are based on traffic count data collected in January 2024 when local schools were in session and operating on normal bell schedules. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and nearby schools were in session and operating on normal schedules. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1.

Existing weekday ADT volumes on arterial highways throughout the study area are shown in Exhibit 3-4. Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 14.1 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 7.1 percent. As such, the above equation utilizing a factor of 14.1 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 7.1 percent (i.e., 1/0.071 = 14.1) and was assumed to sufficiently estimate ADT volumes for planning-level analyses.

3.6 INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized in Table 3-1, which indicates that the following study area intersections are currently operating at an unacceptable LOS (i.e., LOS E or F) during the peak hours:

- I-10 SB Ramps & County Line Road (#12) – LOS F AM and PM peak hours
- 7th & Sandalwood Drive (#14) – LOS F AM peak hour only
- I-10 SB Ramps & Sandalwood Drive (#15) – LOS F AM peak hour only
- Calimesa Boulevard & I-10 NB Off-Ramp (#18) – LOS E AM peak hour only
- Calimesa Boulevard & Singleton Road (#22) – LOS F AM peak hour only

The intersection operations analysis worksheets are included in Appendix 3.2 of this TA.

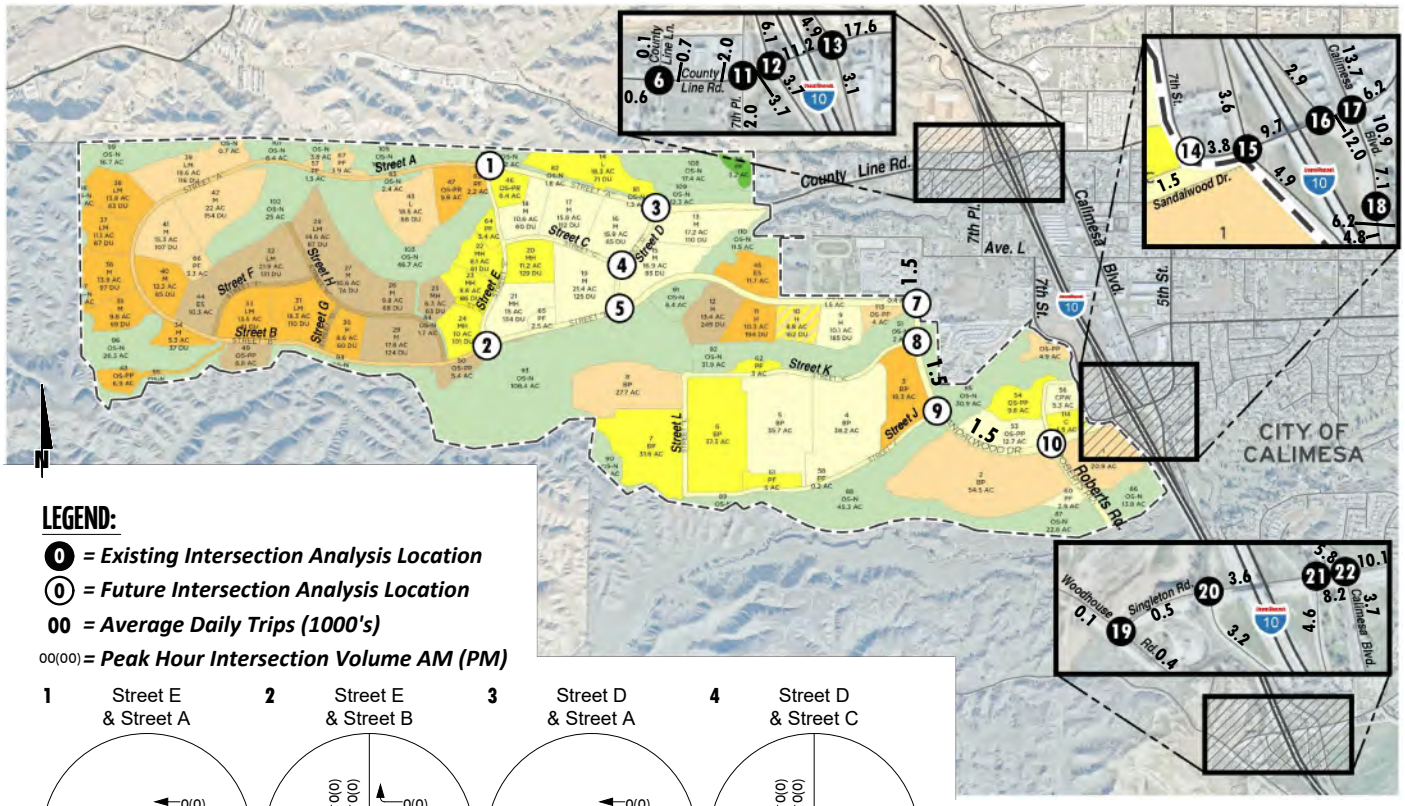
3.7 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. The following intersections currently meet a traffic signal warrant under Existing (2024) traffic conditions:

- I-10 NB Ramps & County Line Road (#13)
- 7th Street & Sandalwood Drive (#14)
- I-10 SB Ramps & Sandalwood Drive (#15)
- Calimesa Boulevard & Singleton Road (#22)

Existing (2024) conditions traffic signal warrant analysis worksheets are provided in Appendix 3.3.

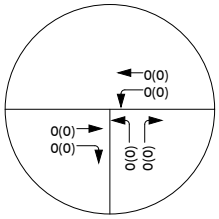
EXHIBIT 3-4 : EXISTING (2024) TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



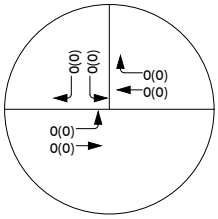
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

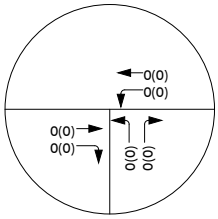
1 Street E & Street A



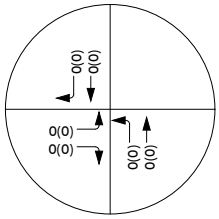
2 Street E & Street B



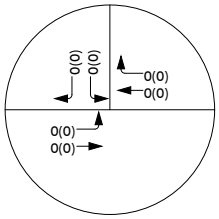
3 Street D & Street A



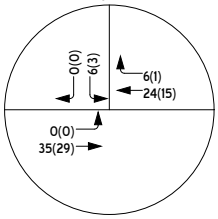
4 Street D & Street C



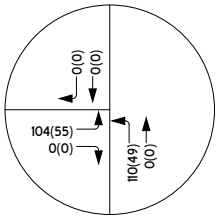
5 Street D & Street B



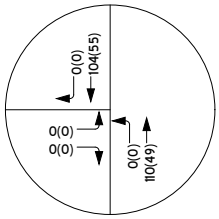
6 County Line Ln. & County Line Rd.



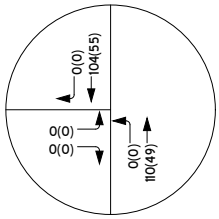
7 Sandalwood Dr. & Street B



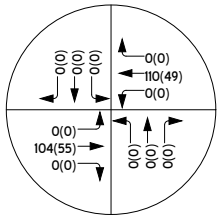
8 Sandalwood Dr. & Street K



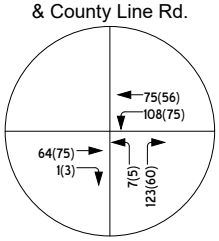
9 Sandalwood Dr. & Street J



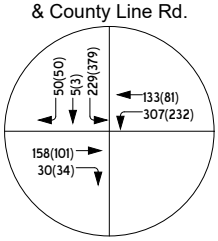
10 Roberts Rd. & Sandalwood Dr.



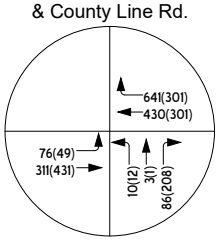
11 7th Pl. & County Line Rd.



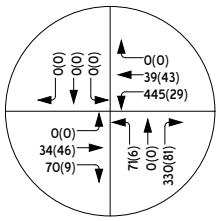
12 I-10 SB Ramps & County Line Rd.



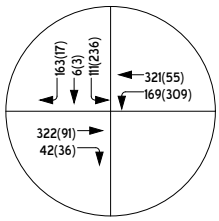
13 I-10 NB Ramps & County Line Rd.



14 7th St. & Sandalwood Dr.



15 I-10 SB Ramps & Sandalwood Dr.



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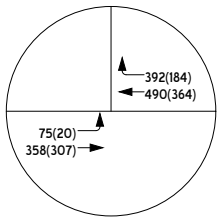
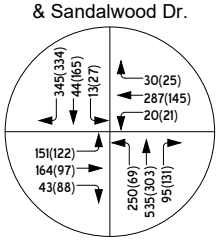
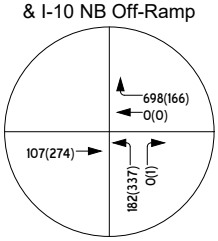


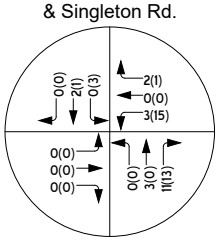
17 Calimesa Bl. & Sandalwood Dr.



18 Calimesa Bl. & I-10 NB Off-Ramp



19 Roberts Rd. & Singleton Rd.



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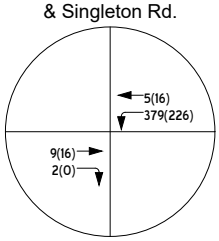
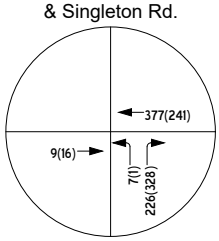


21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.

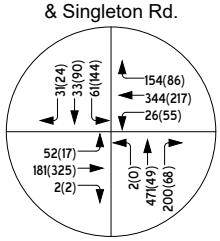


TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2024) CONDITIONS

#	Intersection	Traffic Control[2]	Delay[1] (secs.)		Level of Service	
			AM	PM	AM	PM
1	Street E & Street A		Future Intersection			
2	Street E & Street B		Future Intersection			
3	Street D & Street A		Future Intersection			
4	Street D & Street C		Future Intersection			
5	Street D & Street B		Future Intersection			
6	County Line Ln. & County Line Rd.	CSS	9.1	8.9	A	A
7	Sandalwood Dr. & Street B		Future Intersection			
8	Sandalwood Dr. & Street K		Future Intersection			
9	Sandalwood Dr. & Street J		Future Intersection			
10	Roberts Rd. & Sandalwood Dr.		Future Intersection			
11	7th Pl. & County Line Rd.	CSS	9.8	9.3	A	A
12	I-10 SB Ramps & County Line Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**
13	I-10 NB Ramps & County Line Rd.	CSS	16.8	14.9	C	B
14	7th St. & Sandalwood Dr.	AWS	**85.2**	8.0	**F**	A
15	I-10 SB Ramps & Sandalwood Dr.	AWS	**50.1**	12.6	**F**	B
16	I-10 NB On-Ramp & Sandalwood Dr.	UC	11.1	8.9	B	A
17	Calimesa Bl. & Sandalwood Dr.	TS	26.0	19.0	C	B
18	Calimesa Bl. & I-10 NB Off-Ramp	AWS	**36.1**	13.2	**E**	B
19	Roberts Rd. & Singleton Rd.	AWS	6.6	7.0	A	A
20	I-10 SB Ramps & Singleton Rd.	UC	8.1	7.6	A	A
21	I-10 NB Ramps & Singleton Rd.	CSS	9.7	10.2	A	B
22	Calimesa Bl. & Singleton Rd.	AWS	**>100.0**	19.7	**F**	C

*** BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

[2] TS = Traffic Signal; AWS = All-way Stop; CSS = Cross-street Stop; UC = Uncontrolled

3.8 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the I-10 Freeway at Sandalwood Drive, Singleton Road, and County Line Road interchanges to assess vehicle queues for the off-ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-10 Freeway mainline. The study area included in the queuing analysis consists of the northbound and southbound off-ramps at the I-10 Freeway and County Line Road, Sandalwood Drive, and Singleton Road interchanges. No improvements have been assumed as part of the off-ramp queuing analyses as the lane geometrics are consistent with the existing number of lanes as shown previously on Exhibit 3-1. Therefore, no improvements have been assumed as part of the off-ramp queuing analyses.

Queuing analysis findings are presented in Table 3-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 3-2, there are no movements that are currently experiencing queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows. Worksheets for Existing (2024) traffic conditions off-ramp queuing analysis are provided in Appendix 3.4.

TABLE 3-2: PEAK HOUR OFF-RAMP QUEUING SUMMARY FOR EXISTING (2024) CONDITIONS

Intersection	Movement	Available Stacking Distance (Feet)	95th Percentile Queue (Feet)[3]		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM
I-10 SB Ramps & County Line Rd. (#12)	SBL/T	1,165	478	390	Yes	Yes
	SBR	50	8	5	Yes	Yes
I-10 NB Ramps & County Line Rd. (#13)	NBL/T	1,085	5	5	Yes	Yes
	NBR	50	13	45	Yes	Yes
I-10 SB Ramps & Sandalwood Dr. (#15)	SBL/T/R	1,195	125	50	Yes	Yes
Calimesa Bl. & I-10 WB Off-Ramp (#18)	NBL/T	770	50	93	Yes	Yes
	NBR	50	0	0	Yes	Yes
I-10 SB Ramps & Singleton Rd. (#20)	SBL/T/R		Does Not Exist		N/A	N/A
I-10 NB Ramps & Singleton Rd. (#21)	NBL/T/R	1,140	28	40	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

4 PROJECTED FUTURE TRAFFIC

This section presents the traffic volume estimates for the Project along with the Project's trip distribution and assignment to the study area roadway network. The Specific Plan Amendment proposes modifying the currently adopted land use mix to maintain the adopted residential land use intensities while adding a business park land use type (allowing for industrial, logistics, office, and/or educational uses). As proposed, the Project will be developed over 5 phases. Anticipated phasing, land use information and development intensities by phase are shown in Table 4-1.

TABLE 4-1: LAND USE SUMMARY

Phase	Year	Land Use	Quantity	Unit[1]
1	2030	BP: General Light Industrial	1,400.00	TSF
		L/LM/M: Single Family Cluster Residential	709	DU
		MH/H: Multifamily (Low-Rise)/Townhomes	185	DU
		PF: Fire and Rescue Station/Public Works Facility	16.5	TSF
		OS-PP: Parks	12.7	AC
2	2035	BP: General Light Industrial	700.000	TSF
		BP: High-Cube Fulfillment Center (Sort)	700.000	TSF
		MU: Mixed Use (Commercial)	50.000	TSF
		L/LM/M: Single Family Cluster Residential	468	DU
		MH/H: Multifamily (Low-Rise)/Townhomes	81	DU
		OS-PP: Parks	16.2	AC
3	2038	BP: General Light Industrial	700.000	TSF
		BP: High-Cube Fulfillment Center (Sort)	700.000	TSF
		L/LM/M: Single Family Cluster Residential	447	DU
		MH/H: Multifamily (Low-Rise)/Townhomes	81	DU
		MU: Mixed Use (Commercial)	250.000	TSF
		OS-PP: Parks	8.9	AC
4	2040	L/LM/M: Single Family Cluster Residential	689	DU
		MH/H: Multifamily (Low-Rise)/Townhomes	194	DU
		BP: General Office	240.000	TSF
		ES: Elementary School	600	Students
		OS-PP: Parks	16.5	AC
5 (Project Buildout)	2045	L/LM/M: Single Family Cluster Residential	547	DU
		MH/H: Multifamily (Low-Rise)	249	DU
		ES: Elementary School	600	Students
		OS-PP: Parks	12.2	AC

[1] TSF = Thousand Square Feet; DU = Dwelling Units; AC = Acres

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic, which is both attracted to, and produced by, a land use project. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to, and produced by, the specific land uses being proposed for a given development.

4.1.1 APPROVED SPECIFIC PLAN TRIP GENERATION

The adopted Mesa Verde Specific Plan Area 2 Amendment 1 land use mix and associated trip generation was previously analyzed as part of the approved Environmental Impact Report in 2017 (2017 Specific Plan Amendment). The currently approved land uses include 3,292 single family dwelling units, 358 multifamily dwelling units, 48.0 acres of active park, 8,000-square-foot recreation community center on 8.2 acres, 2 elementary schools with 1,200 students, and 250,000 square feet of commercial retail use. As shown in Table 4-2, the currently approved land uses are estimated to generate a net total of 35,928 two-way trips per day with 2,570 AM peak hour trips and 3,664 PM peak hour trips (external off-site trips).

TABLE 4-2: 2017 SPECIFIC PLAN AMENDMENT TRIP GENERATION SUMMARY

			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
Single Family Detached Residential	3,292	DU	624	1,843	2,467	2,074	1,218	3,292	31,340
Multifamily Residential	358	DU	36	147	183	143	78	221	2,381
Parks	48.0	AC	41	35	76	107	107	214	1,894
Recreational Community Center	8.000	TSF	10	6	16	10	11	21	271
Elementary School	1,200	STU	300	240	540	84	96	180	1,548
Shopping Center	250.000	TSF	170	102	272	532	576	1,108	12,320
Internal Capture Trip Reductions			-471	-469	-940	-599	-597	-1,196	-11,854
Commercial Pass-by/Diverted Trips			-22	-22	-44	-88	-88	-176	-1,972
Total External (Off-Site) Trips			**688**	**1,882**	**2,570**	**2,263**	**1,401**	**3,664**	**35,928**

Note: Trip generation rates used are based on Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition, 2012).

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = Students

4.1.2 PROPOSED SPECIFIC PLAN AMENDMENT TRIP GENERATION

The trip generation rates used to estimate vehicle trips for the proposed Specific Plan Amendment are based upon information collected by ITE as provided in their latest Trip Generation Manual, 11th Edition, 2021. Table 4-3 summarizes the trip generation rates used for the proposed Project. The proposed Project trip generation summary is provided in Appendix 4.1 and is shown in the following tables:

- Table 4.1-1 for Phase 1 (both actual vehicles and passenger car equivalent (**PCE**)
- Table 4.1-2 for Phase 2 (both actual vehicles and PCE)
- Table 4.1-3 for Phase 3 (actual vehicles)
- Table 4.1-4 for Phase 3 (PCE)
- Table 4.1-5 for Phase 4 (actual vehicles)
- Table 4.1-6 for Phase 4 (PCE)

- Table 4.1-7 for Project Buildout (actual vehicles)
- Table 4.1-8 for Project Buildout (PCE)

TABLE 4-3: PROJECT TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
High-Cube Fulfillment Center (Sort)[3,4]	TSF	155	0.705	0.165	0.870	0.468	0.732	1.200	6.440
Passenger Cars			0.695	0.155	0.850	0.458	0.722	1.180	6.250
2-Axle Trucks			0.002	0.001	0.003	0.002	0.001	0.003	0.032
3-Axle Trucks			0.002	0.002	0.004	0.002	0.002	0.004	0.039
4+-Axle Trucks			0.006	0.007	0.013	0.006	0.007	0.013	0.119
General Light Industrial[3]	TSF	110	0.651	0.089	0.740	0.091	0.559	0.650	4.870
Passenger Cars (AM=98.6%, PM=98.5%, Daily=94.9%)			0.645	0.085	0.730	0.086	0.554	0.640	4.620
2-Axle Trucks (AM=0.23%, PM=0.25%, Daily=0.85%)			0.001	0.001	0.002	0.001	0.001	0.002	0.042
3-Axle Trucks (AM=0.29%, PM=0.31%, Daily=1.05%)			0.001	0.001	0.002	0.001	0.001	0.002	0.052
4+-Axle Trucks (AM=0.88%, PM=0.94%, Daily=3.20%)			0.004	0.002	0.006	0.003	0.003	0.006	0.157
Single Family Detached Residential	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Multifamily (Low-Rise) Residential	DU	220	0.10	0.30	0.40	0.32	0.19	0.51	6.74
Parks	AC	--[5]	1.00	1.00	2.00	2.00	2.00	4.00	50.00
Elementary School	STU	520	0.40	0.34	0.74	0.07	0.09	0.16	2.27
Fire and Rescue Station[7]	TSF	575	0.34	0.14	0.48	0.14	0.34	0.48	4.80
Utility	TSF	170	2.03	0.30	2.33	0.39	1.77	2.16	12.29
General Office	TSF	710	1.34	0.18	1.52	0.24	1.20	1.44	10.84
Strip Retail Plaza (<40 TSF)	TSF	822	1.42	0.94	2.36	3.30	3.29	6.59	54.45
Shopping Center (>150,000 SF, Regression Equation)	TSF	820	0.69	0.42	1.11	2.06	2.23	4.29	44.84
Passenger Car Equivalent (PCE) Trip Generation Rates[6]									
High-Cube Fulfillment Center (Sort)[3,4]	TSF	155	0.705	0.165	0.870	0.468	0.732	1.200	6.440
Passenger Cars			0.695	0.155	0.850	0.458	0.722	1.180	6.250
2-Axle Trucks (PCE = 1.5)			0.003	0.002	0.005	0.003	0.002	0.005	0.048
3-Axle Trucks (PCE = 2.0)			0.004	0.004	0.008	0.004	0.004	0.008	0.079
4+-Axle Trucks (PCE = 3.0)			0.018	0.020	0.038	0.018	0.020	0.038	0.357
General Light Industrial[3]	TSF	110	0.651	0.089	0.740	0.091	0.559	0.650	4.870
Passenger Cars			0.645	0.085	0.730	0.086	0.554	0.640	4.620
2-Axle Trucks (PCE = 1.5)			0.002	0.001	0.003	0.002	0.001	0.003	0.063
3-Axle Trucks (PCE = 2.0)			0.002	0.002	0.004	0.002	0.002	0.004	0.104
4+-Axle Trucks (PCE = 3.0)			0.012	0.007	0.019	0.009	0.010	0.019	0.470

[1] Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

[2] TSF = thousand square feet; DU = dwelling units; AC = Acres; STU = Students
Inbound and outbound split source: ITE Trip Generation Manual, Eleventh Edition (2021) for ITE Land Use Code 154.

[3] Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.
Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks.

[4] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition Supplement (February 2020).

[5] Trip Generation Source: San Diego Municipal Code Land Development Code Trip Generation Manual, May 2003.

[6] PCE factors: 2-axle = 1.5; 3-axle = 2.0; 4+-axle = 3.0.

[7] AM peak hour and daily rates are not available in the ITE Trip Generation Manual. As such, the AM peak hour trip generations have been estimated utilizing the PM peak hour data, while the daily rate has been estimated at 10 times the PM peak hour rate.

Consistent with CEQA requirements, vehicle trip generation within the Business Park Land Areas are based on the highest trip generation land use category as allowed by the Specific Plan. The Specific Plan will limit the development of high-cube fulfillment center (sort facility) use to 1,400,000 square feet. The remaining 2,800,000 square feet of industrial use will be evaluated assuming the general light industrial land use category which is the next highest trip generation land use category after high-cube fulfillment (sort facility) and 240,000 square feet of general office use. Due to the speculative nature of the Business Park Area, the intent was to select reasonable land uses that would conservatively generate higher trips in an effort to overstate as opposed to understate potential trips associated with the Business Park Area. It is anticipated the City will require the occasional monitoring of trip-making in order to ensure trips do not exceed those evaluated as part of this TA.

Internal capture percentages are based on the Riverside County Transportation Model (RIVCOM) traffic model based on the land uses and intensities proposed for the Project. Additional internal capture reductions have been applied for the residential and school uses to account for students walking/biking to and from school. Based on the Yucaipa-Calimesa Unified School District service area, there are approximately 9,130 students and 20,613 households within the school district which equates to approximately 0.44 students per household. Based on the anticipate total dwelling unit count it is anticipated all students for the proposed elementary school sites could be fulfilled by the dwelling units proposed, however, in an effort to conduct a conservative analysis and based on the service area of the existing schools, it is assumed that 81% of the school would be served within the Project boundary, while 19% of the school service area would lie outside of the Project boundary. As such, internal capture has only been applied to the residential uses served internally by the school site.

A condensed summary of the Project's trip generation is shown on Table 4-4 (see below) that summarizes the detailed trip generation information provided in Appendix 4.1 and in Table 4-5 in passenger car equivalent (PCE), which is a method used by some agencies to account for the effects of heavy-truck traffic during peak hour intersection operations analysis. As shown in Table 4-4, the proposed Project is anticipated to generate a total of 60,090 two-way trips per day with 5,147 AM peak hour trips and 7,263 PM peak hour trips (actual vehicles). Table 4-5 shows the Project is anticipated to generate a net total of 61,580 two-way PCE vehicle trip-ends per day with 5,234 PCE AM peak hour trips and 7,349 PCE PM peak hour trips. Internal capture percentages have been derived from the RIVCOM.

TABLE 4-4: PROJECT TRIP GENERATION SUMMARY (ACTUAL VEHICLES)

			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
High-Cube Fulfillment Center (Sort)	1,400.000	TSF	987	231	1,218	655	1,025	1,680	9,018
General Light Industrial	2,800.000	TSF	1,824	248	2,072	255	1,565	1,820	13,638
Single Family Detached Residential	2,860	DU	521	1,481	2,002	1,694	995	2,689	26,970
Multifamily Residential	790	DU	76	240	316	254	149	403	5,326
Fire Station/Public Works Facility	16.5	AC	13	3	16	3	12	15	114
Parks	66.5	AC	67	67	133	133	133	266	3,326
Elementary School	1,200	STU	480	408	888	88	104	192	2,724
Shopping Center	300.000	TSF	207	126	333	618	669	1,287	13,452
General Office	240.000	TSF	321	44	365	59	287	346	2,602
Internal Capture Trip Reductions			-1,098	-1,098	-2,196	-717	-717	-1,435	-17,080
Total Project Buildout Trips (Actual Vehicles)			**3,398**	**1,750**	**5,147**	**3,042**	**4,222**	**7,263**	**60,090**

Note: Trip generation rates used are based on Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021).

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = students

TABLE 4-5: PROJECT TRIP GENERATION SUMMARY (PCE)

			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
High-Cube Fulfillment Center (Sort)	1,400.000	TSF	1,008	253	1,261	676	1,047	1,723	9,428
General Light Industrial	2,800.000	TSF	1,851	265	2,116	276	1,587	1,863	14,718
Single Family Detached Residential	2,860	DU	521	1,481	2,002	1,694	995	2,689	26,970
Multifamily Residential	790	DU	76	240	316	254	149	403	5,326
Fire Station/Public Works Facility	16.5	AC	13	3	16	3	12	15	114
Parks	66.5	AC	67	67	133	133	133	266	3,326
Elementary School	1,200	STU	480	408	888	88	104	192	2,724
Shopping Center	300.000	TSF	207	126	333	618	669	1,287	13,452
General Office	240.000	TSF	321	44	365	59	287	346	2,602
Internal Capture Trip Reductions			-1,098	-1,098	-2,196	-717	-717	-1,435	-17,080
Total Project Buildout Trips (PCE)			**3,446**	**1,789**	**5,234**	**3,084**	**4,266**	**7,349**	**61,580**

Note: Trip generation rates used are based on Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021).

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = students

4.1.3 TRIP GENERATION COMPARISON

A comparison between the vehicle trips previously evaluated as part of the approved 2017 Specific Plan Amendment and the proposed Specific Plan Amendment are presented in Table 4-6. The proposed Specific Plan Amendment is anticipated to generate an additional 25,652 external two-way trips per day, along with 2,664 additional trips in AM peak hour and 3,685 additional PM peak hour trips as compared to the 2017 Specific Plan Amendment. The additional vehicle traffic is in part being accommodated by a new point of access to the Project via County Line Road extending east to the I-10 Freeway, which originally was restricted to emergency vehicle access (EVA) in the approved 2017 Specific Plan Amendment.

TABLE 4-6: TRIP GENERATION COMPARISON

	AM Peak Hour			PM Peak Hour			
Land Use	In	Out	Total	In	Out	Total	Daily
2017 Adopted Specific Plan	688	1,882	2,570	2,263	1,401	3,664	35,928
Proposed Project Buildout (PCE)	3,446	1,789	5,234	3,084	4,266	7,349	61,580
Variance	**2,758**	**-93**	**2,664**	**821**	**2,865**	**3,685**	**25,652**

4.2 PROJECT TRIP DISTRIBUTION

The trip distribution and assignment process represent the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. In addition, heavy truck travel patterns are identified as the most direct routes to the State highway system. s

Project trip distribution patterns have been based on select-zone runs from the RIVCOM travel demand model based on long-range traffic conditions for each land use type. The near-term distributions have been modified accordingly based on available roadway connections for each phase while staying consistent with the regional distributions determined by the select zone run. The Project distributions have been reviewed and approved by the City during the scoping process.

The Project trip distributions are illustrated on the following exhibits, which are provided in Appendix 4.2 for each applicable land use from Phase 1 through Phase 5 (Project Buildout).

4.3 MODAL SPLIT

The potential for Project trips (non-truck) to be reduced by the use of public transit, walking, or bicycling has not been included as part of the Project's estimated trip generation. Essentially, the Project's traffic projections are "conservative" in that these alternative travel modes would reduce the forecasted traffic volumes.

4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns for each applicable phase, the Project Only ADT and peak hour intersection turning movement volumes are shown on the following exhibits, which are provided in Appendix 4.3:

- Exhibit 4.3-1: Project Only (Phase 1)
- Exhibit 4.3-2: Project Only (Phase 2)
- Exhibit 4.3-3: Project Only (Phase 3)
- Exhibit 4.3-4: Project Only (Phase 4)
- Exhibit 4.3-5: Project Only (Project Buildout) – Used for Horizon Year Conditions and assumes future Sandalwood Drive extension (north of Street B) and Roberts Road extension (south of the Project).
- Exhibit 4-.3-6: Project Only (E+P Project Buildout) – Used for E+P Conditions and does not assume any future roadway connections that are not being constructed by the Project.

4.5 OPENING YEAR CUMULATIVE TRAFFIC

4.5.1 OPENING YEAR CUMULATIVE (2030, 2035, 2038, AND 2040) CONDITIONS

Future year traffic forecasts have been based upon background (ambient) growth at 2% per year, compounded annually (or 12.62%) for Opening Year Cumulative (2030) traffic conditions only. The ambient growth factor is intended to approximate regional traffic growth and is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies. However, due to the length of time it is anticipated to complete development of the Specific Plan, long-range traffic forecasts for Opening Year Cumulative (2035, 2038 & 2040) conditions have been interpolated between the Opening Year Cumulative (2030) and Horizon Year (2045) volumes, which have been developed using the Riverside County Transportation Model (RIVCOM). This procedure has been used to ensure that long-range traffic forecasts are not overstated by applying a manually compounded growth factor over 20+ year development cycle.

4.6 CUMULATIVE DEVELOPMENT TRAFFIC

Consistent with City Guidelines, a list of known and reasonably foreseeable cumulative development projects has been compiled based on information provided by the City of Calimesa Planning Department and information gathered by Urban Crossroads from neighboring public agencies such as the City of Beaumont and City of Yucaipa.

Where applicable, cumulative projects anticipated to contribute measurable traffic (i.e., 50 or more peak hour trips) to study area intersections have been manually added to the study area network to generate Opening Year Cumulative forecasts. In other words, this list of cumulative development projects has been reviewed to determine which projects would likely contribute measurable traffic through the study area intersections (e.g., those cumulative projects in close proximity to the proposed Project). For the purposes of this analysis, the cumulative projects that were determined to affect one or more of the study area intersections as shown in Exhibit 4-1 and listed in Table 4-7 and have been considered for inclusion. Any additional traffic generated by other projects not on the cumulative projects list is likely accounted for through background ambient growth factors that have been applied to the peak hour volumes at study area intersections as discussed in Section 4.5 *Background Traffic*. Cumulative Only ADT and peak hour intersection turning movement volumes are provided in Appendix 4.3 (see Exhibit 4.3-7).

EXHIBIT 4-1 : CUMULATIVE DEVELOPMENT LOCATION MAP

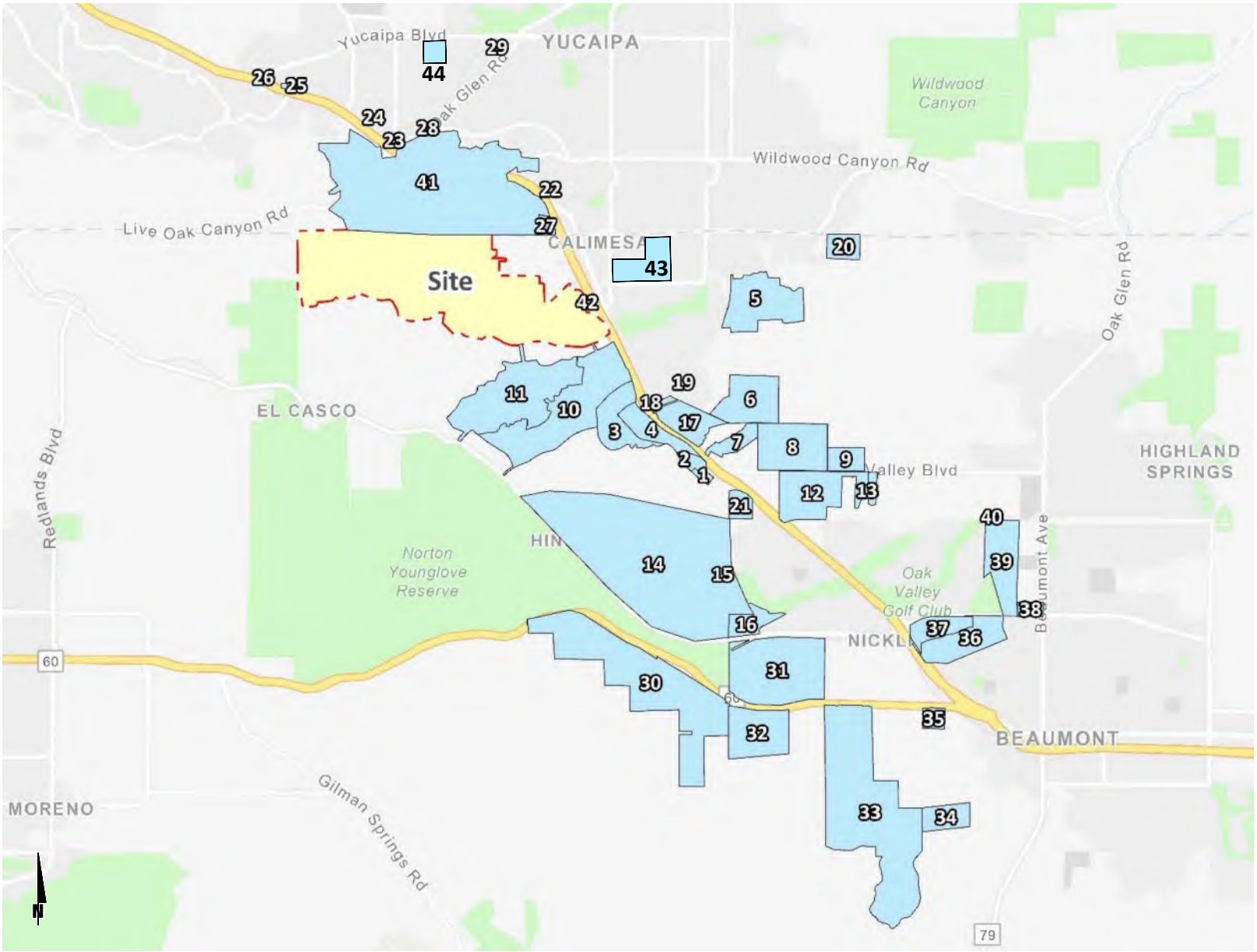


TABLE 4-7: CUMULATIVE DEVELOPMENT LAND USE SUMMARY (PAGE 1 OF 2)

#	Project	Land Use	Quantity[1]
1	Calimesa II	Health/Fitness Club	20.000 TSF
		Clinic	12.00 TSF
		Animal Hospital/Veterinary Clinic	9.90 TSF
		Medical-Dental Office	5.00 TSF
		Shopping Center (>150k)	8.50 TSF
		High Turnover (Sit-Down) Restaurant	8.50 TSF
		Fast-Food Restaurant w/ Drive-Through Window	7.50 TSF
		Super Convenience Market/Gas Station	16.00 VFP
2	Summerwind Commons II	Single Family Detached	168.0 DU
3	Oak Valley Town Center	High Cube Warehouse	2,250.000 TSF
		Truck/trailer Parking Lot	10.07 AC
4	Oak Valley Town Commercial	Commercial Retail	751.800 TSF
5	JP Ranch (Tract No. 30387)	Single Family Residential	689 DU
		Shopping Center	72.70 SF
6	Holly Hills (within RIVCOM TAZ 140)	Single Family Detached	1,039 DU
		Multifamily Housing (Low-Rise)	266 DU
		Parks/Recreation	11.6 AC
7	Holly Hills (within RIVCOM TAZ 143)	Single Family Detached	470 DU
		Multifamily Housing (Low-Rise)	473 DU
		Parks/Recreation	10.3 AC
8	I-10 Gateway	High-Cube Warehouse	2,560.000 TSF
9	Borstein Property	Single Family Residential	209 DU
10	Summerwind Trails (Phases 2 & 3)	Single Family Residential	1,747 DU
		Single Family Residential - Attached	411 DU
		Parks	25.6 AC
11	Summerwind Trails (Phases 4 & 5)	Single Family Residential	790 DU
		Parks	29.5 AC
12	Sunny-Cal Specific Plan	Single Family Residential	571 DU
13	Beaumont Tract 31966	Single Family Residential	60 DU
14	Fairway Canyon SCPGA	Single Family Residential	1,650 DU
15	Beyond Beaumont Commercial	Shopping Center	6.580 TSF
16	Tournament Hills 3, TM 36307	Single Family Residential	279 DU
17	Oak Valley North Specific Plan	High-Cube Warehouse	1,288.505 TSF
		High-Cube Cold Storage	2,560.000 TSF
		Multifamily Housing (Low-Rise)	396 DU
18	Oak Valley Commercial 1 (SWC of Calimesa Bl./Singleton Rd.)	Shopping Center	64.033 TSF
19	Oak Valley Commercial 2 (SEC of Calimesa Bl./Singleton Rd.)	Shopping Center	128.067 TSF
20	Heritage Oaks Specific Plan	Single Family Residential	45 DU
21	Riedman Subdivision	Single Family Residential	179 DU
22	Advantage Paving	Metal Office and Shop	5.000 TSF

TABLE 4-7: CUMULATIVE DEVELOPMENT LAND USE SUMMARY (PAGE 2 OF 2)

#	Project	Land Use	Quantity[1]
23	Yucaipa Gateway Plaza	Hotel	92 RM
		Restaurant and Office	11.250 TSF
		Drive-Thru Restaurant	3.677 TSF
24	Dunlap	Office Building	2.419 TSF
25	Pop Top	Metal Office Building/Auto Repair	2.520 TSF
26	Commercial Building	Commercial	7.500 TSF
27	I-10 Fulfillment Center 7th Place/County Line Retail	High-Cube Fulfillment Center	363.650 TSF
		Coffee/Donut Shop w/ Drive-Thru Window	3.000 TSF
		RV Fueiling Facility/Gas Station	3 VFP
28	Opal Hotel and Fuel Station	Convenience Store	4.500 TSF
		Fuel Station	24.000 TSF
		Hotel	90 RM
29	Construction Equipment Storage	Office	2.080 TSF
30	Beaumont Pointe	High-Cube Fulfillment	4,500.000 TSF
		General Light Industrial	500.000 TSF
		Hotel	125 RM
		Restaurant/Retail	251.000 TSF
31	Heartland (Olivewood)	Single Family Residential	981 DU
32	Hidden Canyon Industrial	High-Cube Warehouse	2,890.000 TSF
33	Legacy Highlands	High-Cube Warehouse	18,365.400 TSF
		High-Cube Cold Storage	2,040.600 TSF
		Commercial	143.000 TSF
34	Taurek (Tract no. 31162)	Single Family Residential	244 DU
35	Orchard Logistics	High-Cube Fulfillment/Cold Storage	610.000 TSF
36	Kirkwood Ranch	Single Family Residential	403 DU
37	Oak Valley Village (Mountain Bridge)	Commercial	441.709 TSF
38	Beaumont Village	Commercial	50.810 TSF
39	Noble Creek Vistas	Single Family Residential	648 DU
40	CUP 03629	Mini-Warehouse	90.000 TSF
41	Yucaipa Freeway Corridor Specific Plan	Commercial Retail	1,100.761 TSF
		Business Park	3,992.503 TSF
		Single Family Residential	2,472 DU
42	Sandalwood Travel Center	Gasoline Service Station	8 VFP
		Diesel Service Station	12 VFP
43	5th Street Townhomes	Multifamily Housing (Low-Rise)	120 DU
44	Yucaipa Business Park - 33193 Yucaipa Bl.	Business Park	96.060 TSF
		Live/Work & Manager Apartments	6 DU

[1] AC = Acres; DU = Dwelling Units; RM = Rooms; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions

4.7 HORIZON YEAR TRAFFIC FORECASTS

Traffic projections for Horizon Year conditions were derived from RIVCOM (version 4.0.1, January 2024) using accepted procedures for model forecast refinement and smoothing. The traffic forecasts reflect the area-wide growth anticipated between Existing and Horizon Year traffic conditions. The base model year for the RIVCOM regional model is Year 2018 and the future year model is Year 2045.

In most instances, the traffic model zone structure is not designed to provide accurate turning movements along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the Horizon Year peak hour forecasts were refined using the model derived long-range forecasts, base (validation) year model forecasts, along with existing peak hour traffic count data collected at each analysis location.

The refined future peak hour approach and departure volumes obtained from these calculations are then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program (NCHRP Report 765), along with initial estimates of turning movement proportions. A linear programming algorithm is used to calculate individual turning movements which match the known directional roadway segment forecast volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

Typically, the model growth is prorated and is subsequently added to the existing (base validation) traffic volumes to represent Horizon Year (2045) traffic conditions. However, review of the resulting model growth indicates negative growth for some of the study area intersections. In an effort to conduct a conservative analysis, reductions to traffic forecasts from either Existing or Opening Year Cumulative traffic conditions were not assumed as part of this analysis. As such, in conjunction with the addition of cumulative projects that are not consistent with the General Plan, additional growth has also been applied on a movement-by-movement basis, where applicable, to estimate reasonable Horizon Year forecasts. Horizon Year turning volumes were compared to Opening Year Cumulative volumes in order to ensure a minimum growth as a part of the refinement process. The minimum growth includes any additional growth between Opening Year Cumulative and Horizon Year traffic conditions that is not accounted for by the traffic generated by cumulative development projects and ambient growth rates assumed between Existing (2024) and Horizon Year traffic conditions. Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the Horizon Year peak hour forecasts. The only instance when the Opening Year Cumulative forecasts would not be used to manually adjust the Horizon Year forecasts is if there are new proposed roadway connections/facilities that would explain the change in travel patterns within the study area.

The future Horizon Year Without Project peak hour turning movements were then reviewed for reasonableness, and in some cases, were adjusted to achieve flow conservation, reasonable growth, and reasonable diversion between parallel routes. Flow conservation checks ensure that traffic flow between two closely spaced intersections, such as two freeway ramp locations, is verified in order to make certain that vehicles leaving one intersection are entering the adjacent intersection and that there is no unexplained loss of vehicles. The result of this traffic forecasting procedure is a series of traffic volumes which are suitable for traffic operations analysis. The post-processing worksheets are provided in Appendix 4.4.

5 EXISTING PLUS PROJECT (E+P) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for E+P conditions and the resulting intersection operations, traffic signal warrant, and off-ramp queuing analyses.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for E+P conditions are consistent with those shown previously in Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for E+P conditions only (e.g., intersection and roadway improvements at the Project's frontage and driveways).
- The Project will construct County Line Road, from the Project's eastern boundary to the existing western terminus of County Line Road as a 2-lane divided roadway. This connection will be available starting with Phase 1, coinciding with the first phase with residential development, and will provide access to the I-10 Freeway/County Line Road interchange.
- The Project will realign the intersection of 7th Street and Sandalwood Drive to implement a new right-in/right-out connection which would be enforced by a raised median. The new Sandalwood Drive will generally follow the alignment of the existing roadway up to the new Street B which will front the southern boundary of the Elementary School. Sandalwood Drive will accommodate a 4-lane divided roadway between Street B and Street K and then widen to a 6-lane roadway between Street K and Roberts Road. Between Street J and Roberts Road, the southbound/eastbound approach will start to drop a lane and taper (via striping) and continue to taper down to east of Roberts Road towards the I-10 Freeway in order to align with the existing bridge deck. Similarly, the northbound/westbound approach of Sandalwood Drive will increase from one lane west of the I-10 Freeway to three through lanes at Roberts Road, which will continue to Street K.

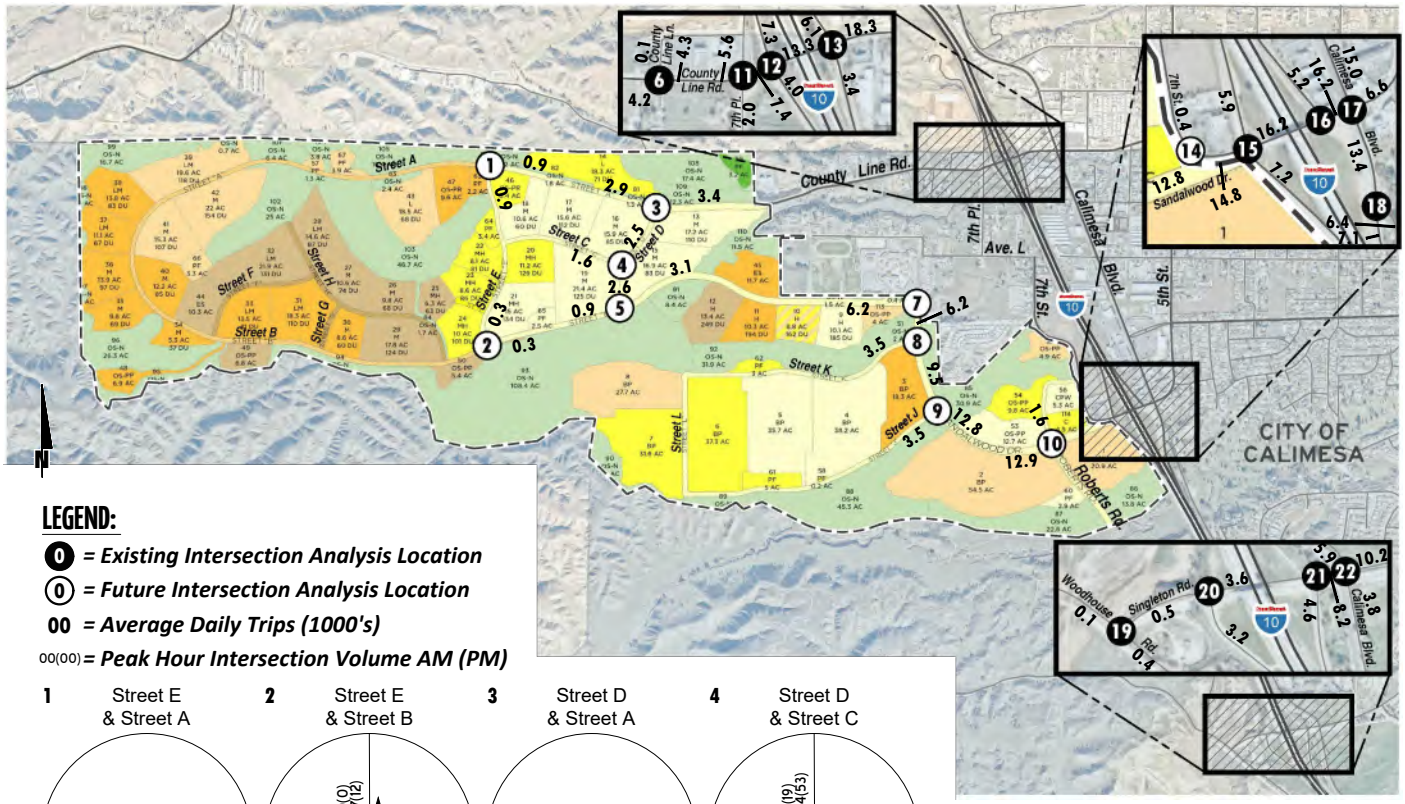
Future roadway connections that are not to be constructed by the Project have not been assumed to be in place for E+P traffic conditions. These facilities include, but are not limited to, the Sandalwood Drive extension north of Street B, Roberts Road extension south of the Project, or future interchange improvements at County Line Road, Sandalwood Drive, and Singleton Road.

5.2 E+P TRAFFIC VOLUME FORECASTS

This scenario includes Existing (2024) traffic volumes plus the addition of Project traffic. The weekday ADT and weekday AM and PM peak hour volumes, in actual vehicles, which can be expected for the E+P scenarios conditions are shown in the following exhibits:

- Exhibit 5-1 for E+P (Phase 1) Conditions
- Exhibit 5-2 for E+P (Phase 2) Conditions
- Exhibit 5-3 for E+P (Phase 3) Conditions
- Exhibit 5-4 for E+P (Phase 4) Conditions
- Exhibit 5-5 for E+P (Project Buildout) Conditions

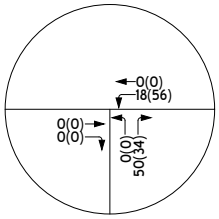
EXHIBIT 5-1 : E+P (PHASE 1) TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



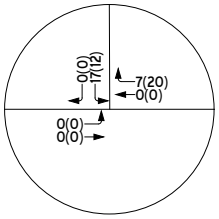
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

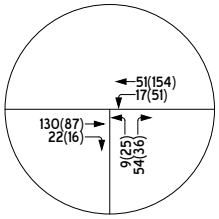
1 Street E & Street A



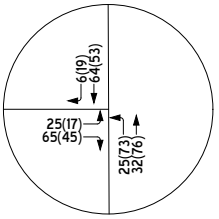
2 Street E & Street B



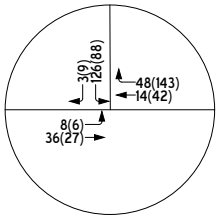
3 Street D & Street A



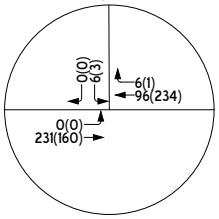
4 Street D & Street C



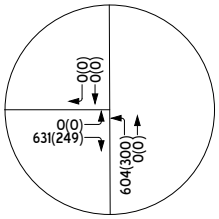
5 Street D & Street B



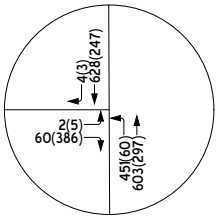
6 County Line Ln. & County Line Rd.



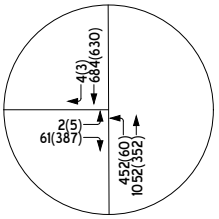
7 Sandalwood Dr. & Street B



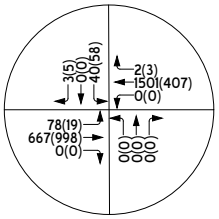
8 Sandalwood Dr. & Street K



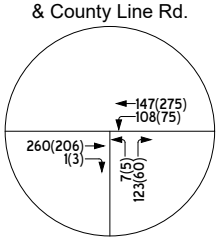
9 Sandalwood Dr. & Street J



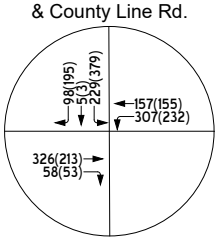
10 Roberts Rd. & Sandalwood Dr.



11 7th Pl. & County Line Rd.



12 I-10 SB Ramps & County Line Rd.



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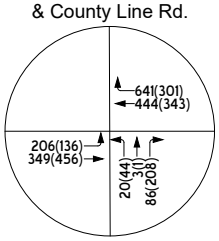
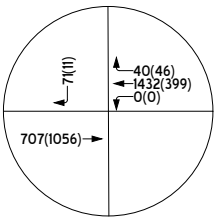
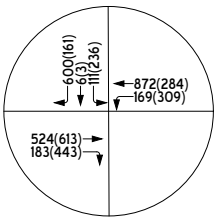


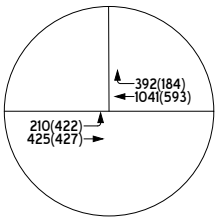
14 7th St. & Sandalwood Dr.



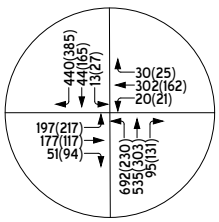
15 I-10 SB Ramps & Sandalwood Dr.



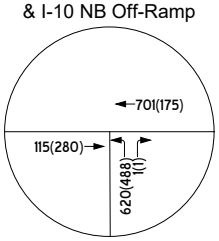
16 I-10 NB Ramps & Sandalwood Dr.



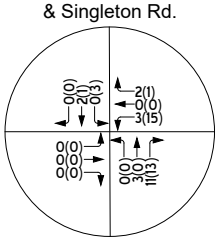
17 Calimesa Bl. & Sandalwood Dr.



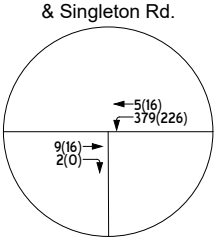
18 Calimesa Bl. & I-10 NB Off-Ramp



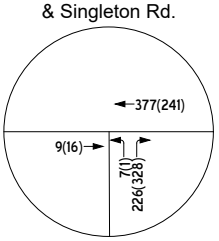
19 Roberts Rd. & Singleton Rd.



20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.

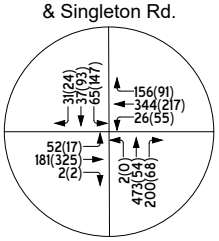
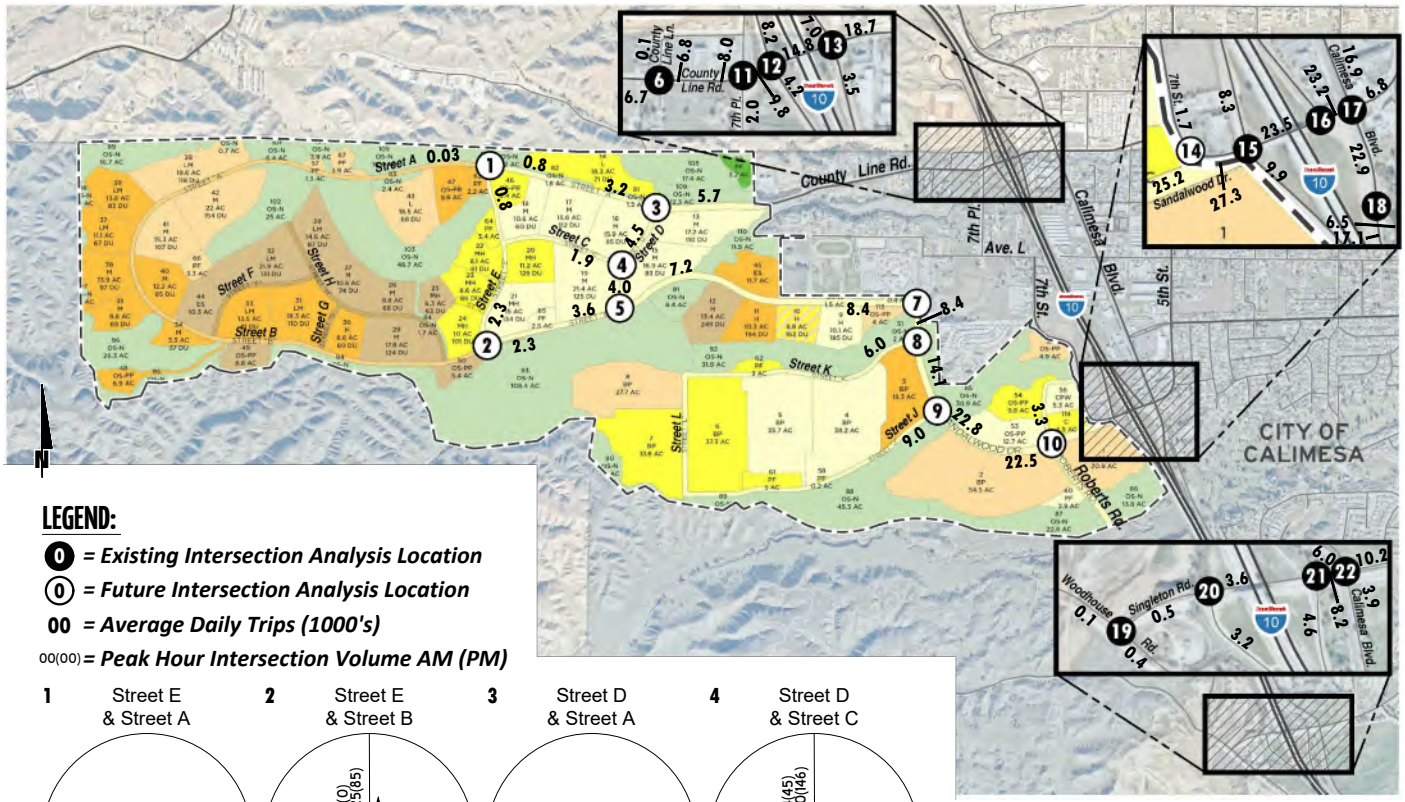


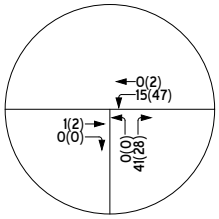
EXHIBIT 5-2 : E+P (PHASE 2) TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



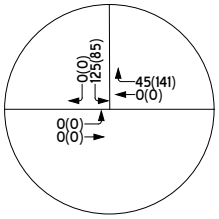
LEGEND:

- (0) = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- 00 = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

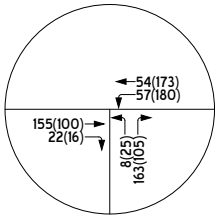
1 Street E & Street A



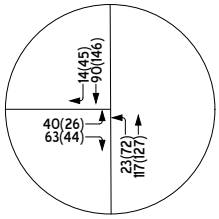
2 Street E & Street B



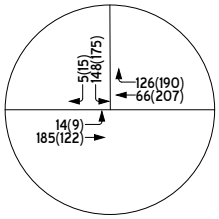
3 Street D & Street A



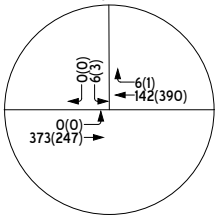
4 Street D & Street C



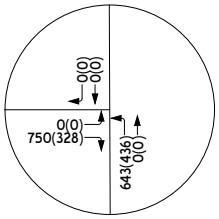
5 Street D & Street B



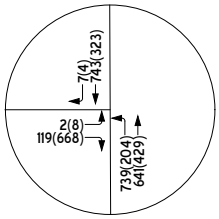
6 County Line Ln. & County Line Rd.



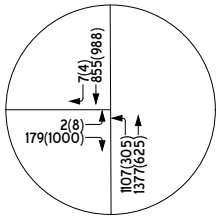
7 Sandalwood Dr. & Street B



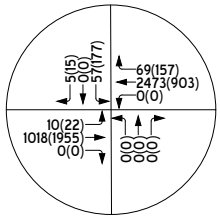
8 Sandalwood Dr. & Street K



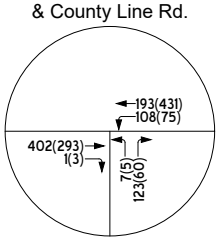
9 Sandalwood Dr. & Street J



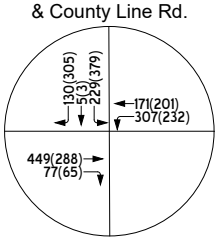
10 Roberts Rd. & Sandalwood Dr.



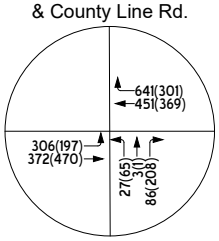
11 7th Pl. & County Line Rd.



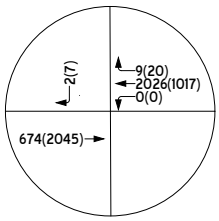
12 I-10 SB Ramps & County Line Rd.



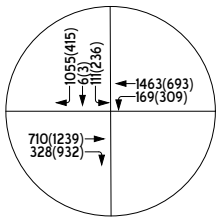
13 I-10 NB Ramps & County Line Rd.



14 7th St. & Sandalwood Dr.



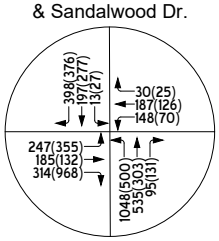
15 I-10 SB Ramps & Sandalwood Dr.



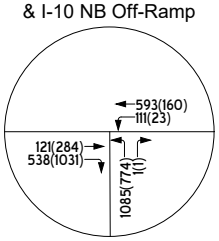
16 I-10 NB Ramps & Sandalwood Dr.

Not An Analysis Location

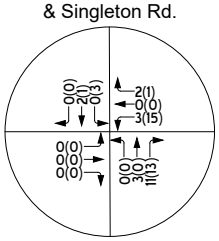
17 Calimesa Bl. & Sandalwood Dr.



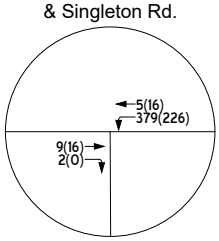
18 Calimesa Bl. & I-10 NB Off-Ramp



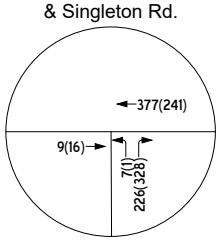
19 Roberts Rd. & Singleton Rd.



20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.

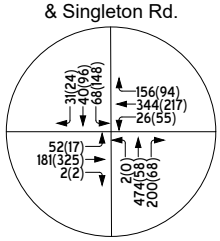
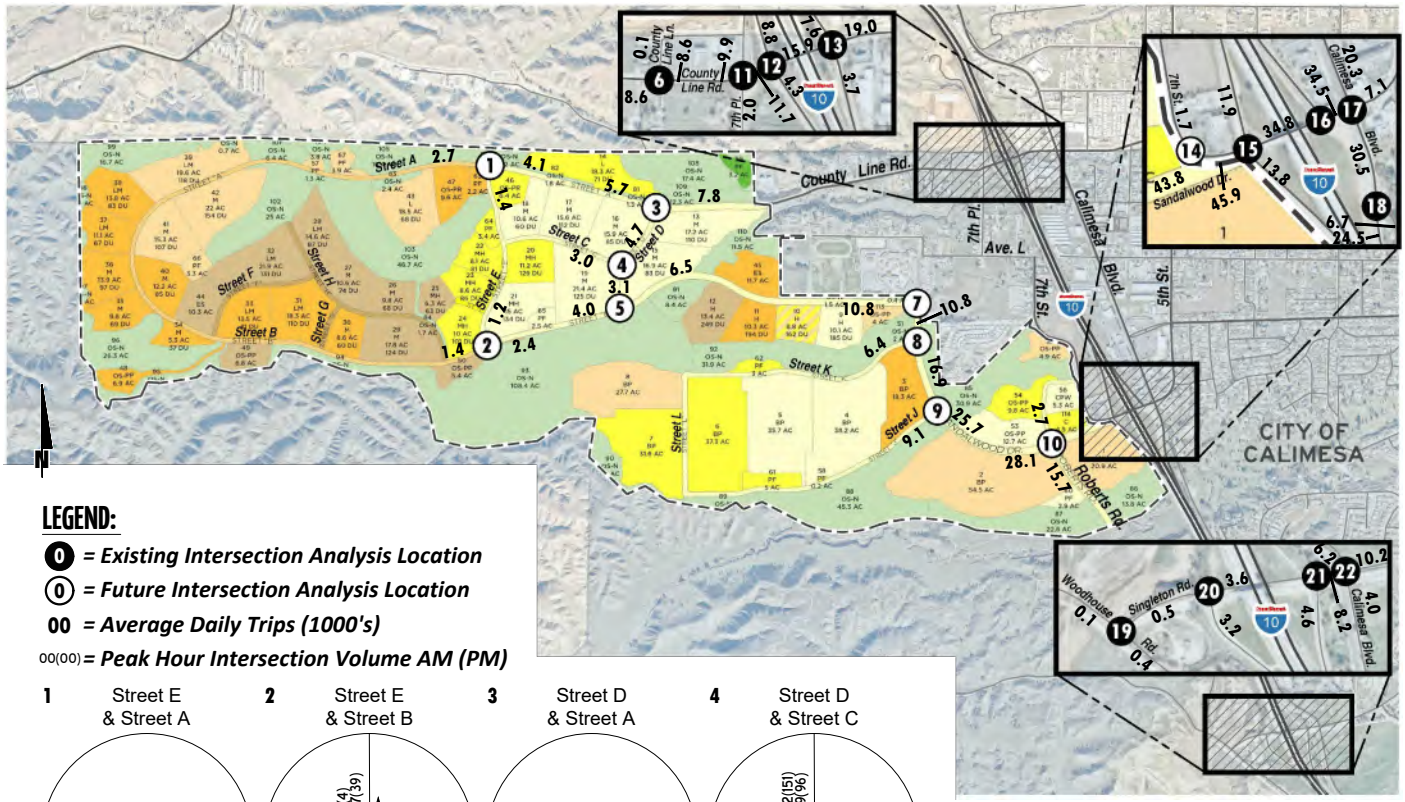


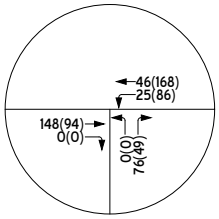
EXHIBIT 5-3 : E+P (PHASE 3) TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



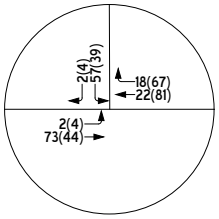
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

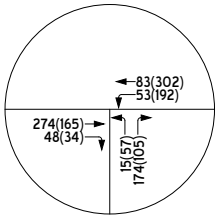
1 Street E & Street A



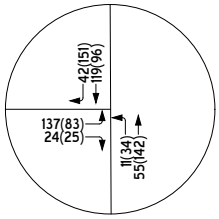
2 Street E & Street B



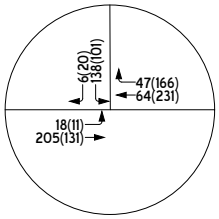
3 Street D & Street A



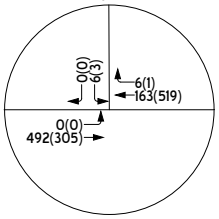
4 Street D & Street C



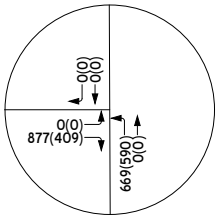
5 Street D & Street B



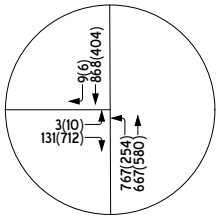
6 County Line Ln. & County Line Rd.



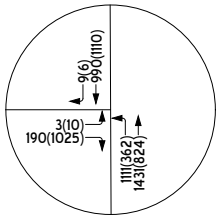
7 Sandalwood Dr. & Street B



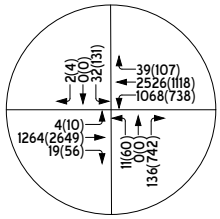
8 Sandalwood Dr. & Street K



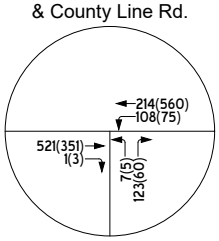
9 Sandalwood Dr. & Street J



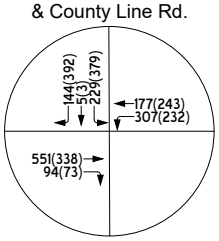
10 Roberts Rd. & Sandalwood Dr.



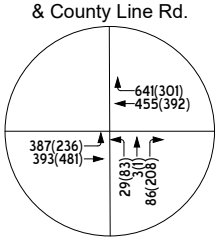
11 7th Pl. & County Line Rd.



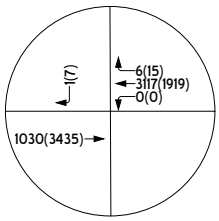
12 I-10 SB Ramps & County Line Rd.



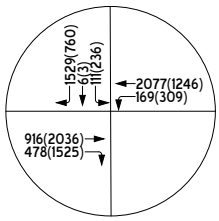
13 I-10 NB Ramps & County Line Rd.



14 7th St. & Sandalwood Dr.



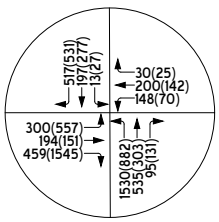
15 I-10 SB Ramps & Sandalwood Dr.



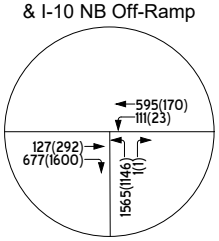
16 I-10 NB Ramps & Sandalwood Dr.

Not An Analysis Location

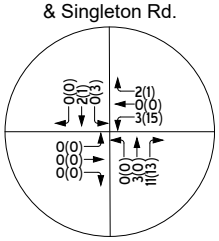
17 Calimesa Bl. & Sandalwood Dr.



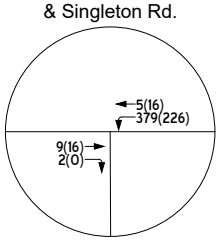
18 Calimesa Bl. & I-10 NB Off-Ramp



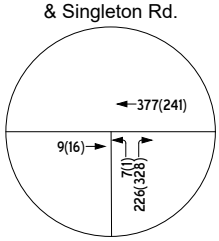
19 Roberts Rd. & Singleton Rd.



20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.

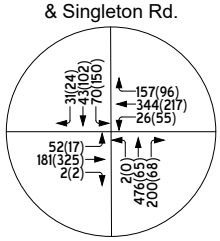
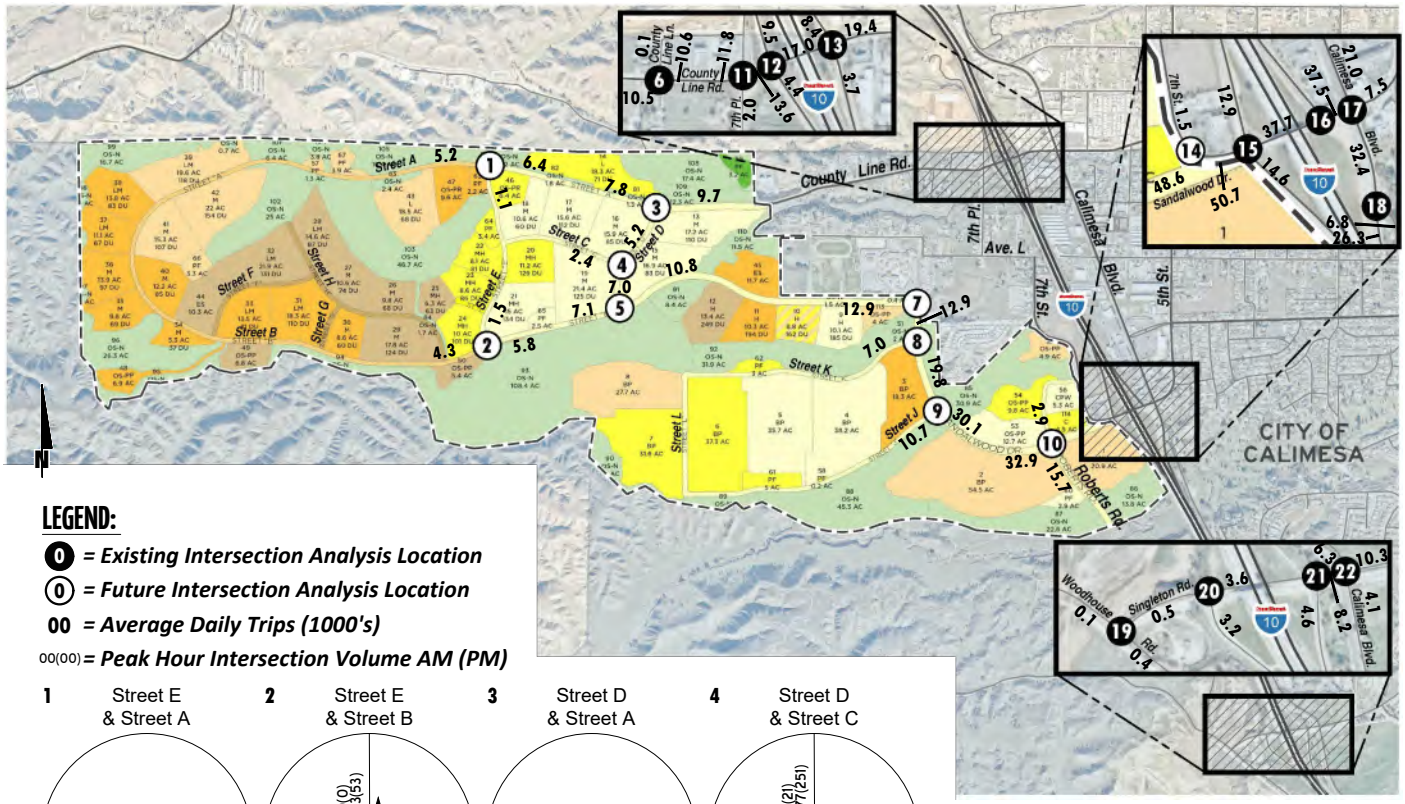


EXHIBIT 5-4 : E+P (PHASE 4) TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- 00 = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

1 Street E & Street A
66(344) / 12(68) / 303(173) / 0(0) / 0(0) / 52(39)

2 Street E & Street B
0(0) / 73(53) / 32(81) / 72(273) / 0(0) / 249(147)

3 Street D & Street A
50(436) / 24(208) / 351(216) / 93(43) / 47(73) / 168(103)

4 Street D & Street C
2(21) / 177(251) / 17(10) / 117(70) / 37(127) / 202(227)

5 Street D & Street B
16(105) / 278(216) / 157(297) / 110(341) / 81(58) / 331(186)

6 County Line Ln. & County Line Rd.
0(0) / 6(3) / 6(1) / 100(673) / 0(0) / 565(355)

7 Sandalwood Dr. & Street B
0(0) / 0(0) / 0(0) / 968(473) / 651(742) / 0(0)

8 Sandalwood Dr. & Street K
11(7) / 957(466) / 2(13) / 138(767) / 866(262) / 649(728)

9 Sandalwood Dr. & Street J
11(7) / 1095(1298) / 2(13) / 213(1172) / 1326(401) / 1513(977)

10 Roberts Rd. & Sandalwood Dr.
4(12) / 0(0) / 31(32) / 43(115) / 2831(1318) / 1064(740) / 5(12) / 1398(3001) / 19(55) / 11(60) / 0(0) / 132(743)

11 7th Pl. & County Line Rd.
151(714) / 108(75) / 594(401) / 1(3) / 7(5) / 123(60)

12 I-10 SB Ramps & County Line Rd.
103(509) / 5(3) / 229(379) / 156(280) / 307(232) / 626(388) / 92(72)

13 I-10 NB Ramps & County Line Rd.
641(301) / 444(423) / 446(276) / 409(491) / 19(89) / 3(0) / 86(208)

14 7th St. & Sandalwood Dr.
0(0) / 3(8) / 3423(2136) / 0(0) / 1161(3789)

15 I-10 SB Ramps & Sandalwood Dr.
1652(849) / 63(3) / 111(236) / 2257(1365) / 169(309) / 1014(2248) / 510(1668)

16 I-10 NB Ramps & Sandalwood Dr.
Not An Analysis Location

17 Calimesa Bl. & Sandalwood Dr.
537(568) / 197(277) / 13(27) / 30(25) / 229(158) / 148(70) / 319(597) / 222(166) / 510(1701) / 1660(948) / 535(303) / 95(131)

18 Calimesa Bl. & I-10 NB Off-Ramp
592(176) / 111(23) / 130(294) / 725(1754) / 1698(1206) / 1(1)

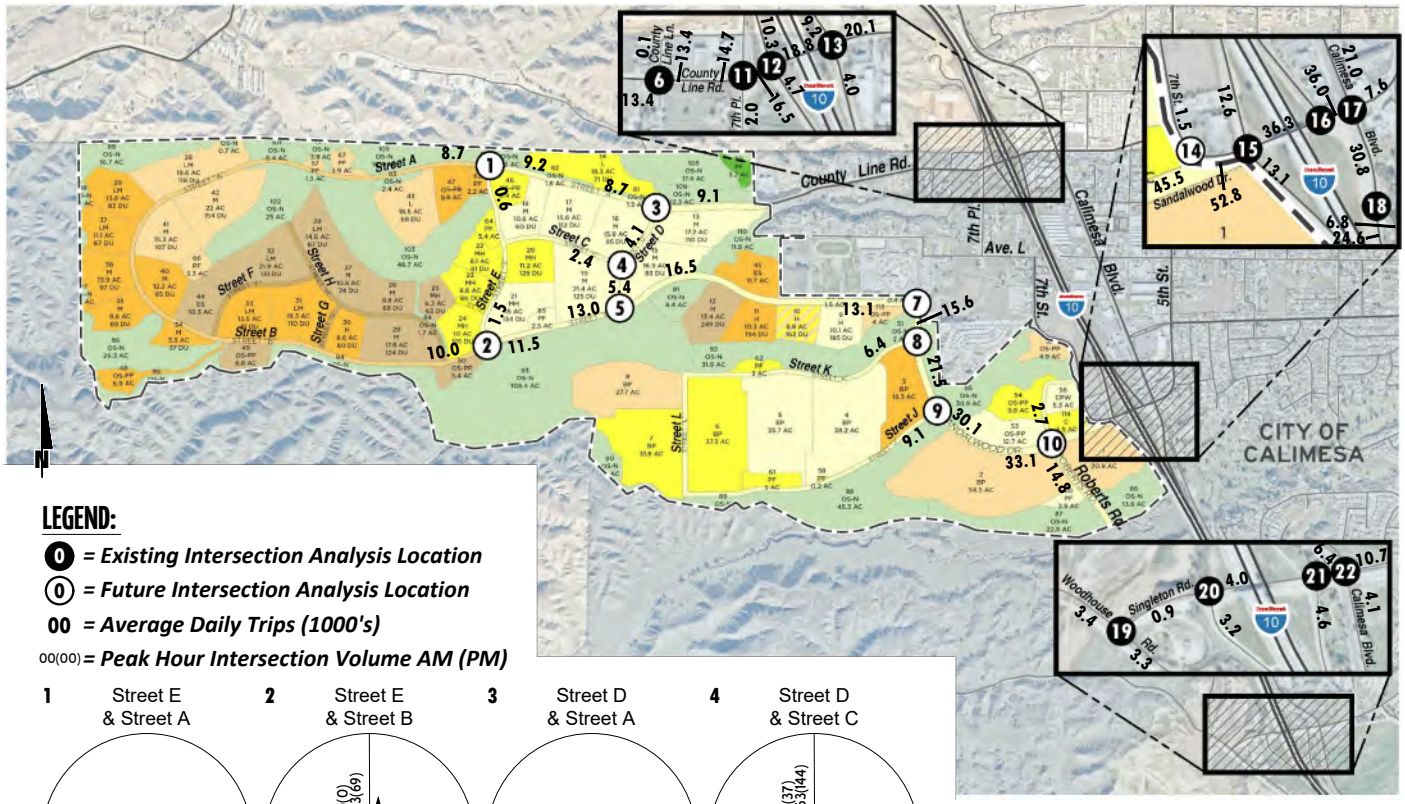
19 Roberts Rd. & Singleton Rd.
0(0) / 2(0) / 0(3) / 2(1) / 0(0) / 3(15) / 0(0) / 0(0) / 0(0) / 0(0) / 3(0) / 11(13)

20 I-10 SB Ramps & Singleton Rd.
5(16) / 379(226) / 9(16) / 2(0)

21 I-10 NB Ramps & Singleton Rd.
377(241) / 9(16) / 7(1) / 226(328)

22 Calimesa Bl. & Singleton Rd.
31(24) / 45(103) / 72(151) / 156(99) / 344(217) / 26(55) / 52(17) / 181(325) / 2(2) / 2(0) / 475(68) / 200(68)

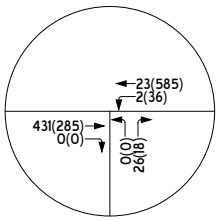
EXHIBIT 5-5 : E+P (PROJECT BUILDOUT) TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



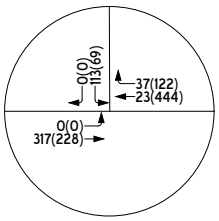
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

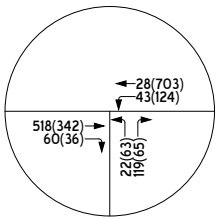
1 Street E & Street A



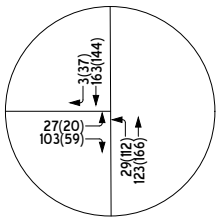
2 Street E & Street B



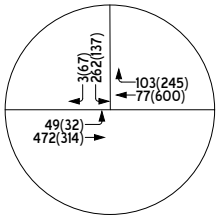
3 Street D & Street A



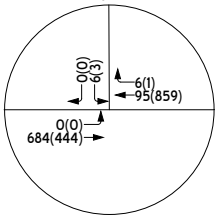
4 Street D & Street C



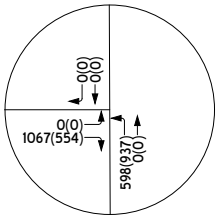
5 Street D & Street B



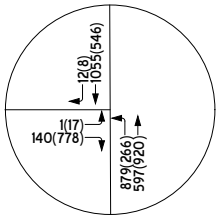
6 County Line Ln. & County Line Rd.



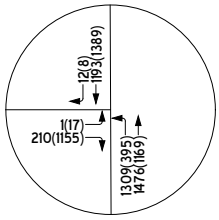
7 Sandalwood Dr. & Street B



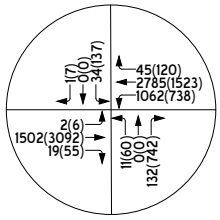
8 Sandalwood Dr. & Street K



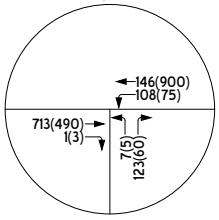
9 Sandalwood Dr. & Street J



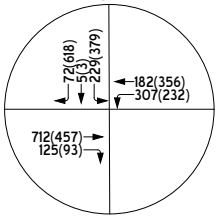
10 Roberts Rd. & Sandalwood Dr.



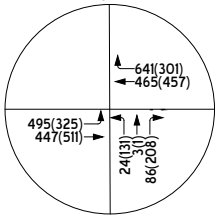
11 7th Pl. & County Line Rd.



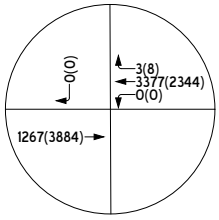
12 I-10 SB Ramps & County Line Rd.



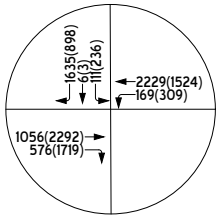
13 I-10 NB Ramps & County Line Rd.



14 7th St. & Sandalwood Dr.



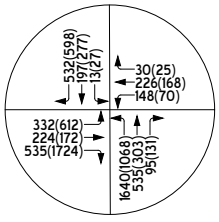
15 I-10 SB Ramps & Sandalwood Dr.



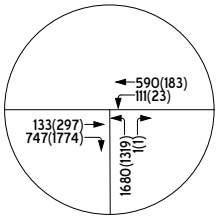
16 I-10 NB Ramps & Sandalwood Dr.

Not An Analysis Location

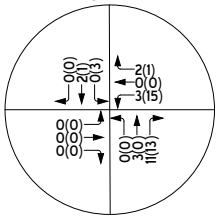
17 Calimesa Bl. & Sandalwood Dr.



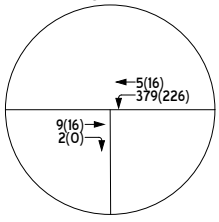
18 Calimesa Bl. & I-10 NB Off-Ramp



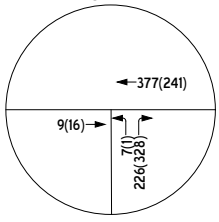
19 Roberts Rd. & Singleton Rd.



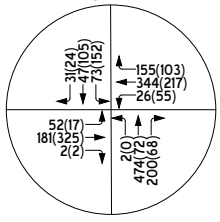
20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.



5.3 INTERSECTION OPERATIONS ANALYSIS

E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 5-1 (Phases 1, 2 and 3) and Table 5-2 (Phases 4 and 5) for E+P traffic conditions, which indicates that the following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under E+P (Phase 1) traffic conditions, in addition to the intersections previously identified under Existing (2024) traffic conditions:

- Calimesa Boulevard & Sandalwood Drive (#17) – LOS F AM peak hour only

The following additional study area intersection is anticipated to operate at an unacceptable LOS during the peak hours under Existing (2024) and E+P (Phase 1) traffic conditions:

- I-10 NB Ramps & County Line Road (#13) – LOS F AM peak hour only

There are no additional study area intersections anticipated to operate at an unacceptable LOS during the peak hours under E+P (Phase 3) traffic conditions, in addition to the intersections previously identified under Existing (2024) and E+P (Phases 1 and 2) traffic conditions.

The following additional study area intersection is anticipated to operate at an unacceptable LOS during the peak hours under E+P (Phase 3) traffic conditions:

- County Line Lane & County Line Road (#6) – LOS F PM peak hour only

There are no additional study area intersections anticipated to operate at an unacceptable LOS during the peak hours under E+P (Project Buildout) traffic conditions, in addition to the intersections previously identified under Existing (2024) and E+P (Phases 1, 2, 3, and 4) traffic conditions.

The intersection operations analysis worksheets for E+P traffic conditions are included in the following appendices:

- Appendix 5.1 for E+P (Phase 1) traffic conditions
- Appendix 5.2 for E+P (Phase 2) traffic conditions
- Appendix 5.3 for E+P (Phase 3) traffic conditions
- Appendix 5.4 for E+P (Phase 4) traffic conditions
- Appendix 5.5 for E+P (Project Buildout) traffic conditions

TABLE 5-1: INTERSECTION ANALYSIS FOR E+P (PHASES 1-3) CONDITIONS

#	Intersection	Traffic Control[2]	Existing (2024) Delay[1] (secs.) AM	Existing (2024) Delay[1] (secs.) PM	Existing (2024) LOS AM	Existing (2024) LOS PM	E+P (Phase 1) Delay[1] (secs.) AM	E+P (Phase 1) Delay[1] (secs.) PM	E+P (Phase 1) LOS AM	E+P (Phase 1) LOS PM	E+P (Phase 2) Delay[1] (secs.) AM	E+P (Phase 2) Delay[1] (secs.) PM	E+P (Phase 2) LOS AM	E+P (Phase 2) LOS PM	E+P (Phase 3) Delay[1] (secs.) AM	E+P (Phase 3) Delay[1] (secs.) PM	E+P (Phase 3) LOS AM	E+P (Phase 3) LOS PM
1	Street E & Street A	**RA**	Future Intersection				2.9	2.9	A	A	2.8	2.9	A	A	3.5	4.0	A	A
2	Street E & Street B	**RA**	Future Intersection				2.7	2.7	A	A	3.3	3.4	A	A	3.1	3.4	A	A
3	Street D & Street A	**RA**	Future Intersection				3.5	3.8	A	A	4.0	4.7	A	A	4.9	5.9	A	A
4	Street D & Street C	**CSS**	Future Intersection				9.3	9.5	A	A	10.0	10.8	A	B	11.1	12.0	B	B
5	Street D & Street B	**RA**	Future Intersection				3.2	3.3	A	A	3.8	4.1	A	A	3.8	3.9	A	A
6	County Line Ln. & County Line Rd.	CSS	9.1	8.9	A	A	11.8	14.1	B	B	14.8	21.7	B	C	17.9	32.1	C	D
7	Sandalwood Dr. & Street B	**TS**	Future Intersection				8.3	25.5	B	C	8.9	29.1	A	C	9.9	33.2	A	C
8	Sandalwood Dr. & Street K	**TS**	Future Intersection				16.6	30.5	B	C	23.1	43.2	C	D	24.1	43.5	C	D
9	Sandalwood Dr. & Street J	**TS**	Future Intersection				9.8	32.2	A	C	12.6	37.8	B	D	19.7	42.5	B	D
10	Roberts Rd. & Sandalwood Dr.	**TS**	Future Intersection				6.4	3.8	A	A	7.6	5.6	A	A	35.5	46.6	D	D
11	7th Pl. & County Line Rd.	CSS	9.8	9.3	A	A	12.0	10.7	B	B	14.6	12.0	B	B	17.6	13.2	C	B
12	I-10 SB Ramps & County Line Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
13	I-10 NB Ramps & County Line Rd.	CSS	16.8	14.9	C	B	30.0	21.6	D	C	**65.5**	31.8	**F**	D	**>200.0**	**48.3**	**F**	**E**
14	7th St. & Sandalwood Dr.	AWS/**CSS**	**85.2**	8.0	**F**	A	14.7	11.0	B	B	15.8	16.5	C	C	17.0	18.7	C	C
15	I-10 SB Ramps & Sandalwood Dr.	AWS	**50.1**	12.6	**F**	B	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
16	I-10 NB On-Ramp & Sandalwood Dr.[3]	UC	11.1	8.9	B	A	29.2	18.7	D	C	Not Applicable				Not Applicable			
17	Calimesa Bl. & Sandalwood Dr.	TS	26.0	19.0	C	B	**96.1**	24.3	**F**	C	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**
18	Calimesa Bl. & I-10 NB Off-Ramp	AWS	**71.8**	15.1	**F**	C	**>100.0**	20.4	**F**	C	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
19	Roberts Rd. & Singleton Rd.	AWS	6.6	7.0	A	A	6.6	7.0	A	A	6.6	7.0	A	A	6.6	7.0	A	A
20	I-10 SB Ramps & Singleton Rd.	UC	8.1	7.6	A	A	8.1	7.6	A	A	8.1	7.6	A	A	8.1	7.6	A	A
21	I-10 NB Ramps & Singleton Rd.	CSS	9.7	10.2	A	B	9.7	10.2	A	B	9.7	10.2	A	B	9.7	10.2	A	B
22	Calimesa Bl. & Singleton Rd.	AWS	**>100.0**	19.7	**F**	C	**>100.0**	20.6	**F**	C	**>100.0**	21.2	**F**	C	**>100.0**	22.6	**F**	C

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

[2] TS = Traffic Signal; AWS = All-way Stop; CSS = Cross-street Stop; UC = Uncontrolled

[3] Starting in E+P (Phase 2) when the I-10 NB Hook On-Ramp on Calimesa Boulevard is assumed to be in place, it is anticipated this intersection would be vacated.

TABLE 5-2: INTERSECTION ANALYSIS FOR E+P (PHASES 4-5) CONDITIONS

#	Intersection	Traffic Control[2]	Existing (2024) Delay[1] (secs.) AM	Existing (2024) Delay[1] (secs.) PM	Existing (2024) Level of Service AM	Existing (2024) Level of Service PM	E+P (Phase 4) Delay[1] (secs.) AM	E+P (Phase 4) Delay[1] (secs.) PM	E+P (Phase 4) Level of Service AM	E+P (Phase 4) Level of Service PM	E+P Project Buildout Delay[1] (secs.) AM	E+P Project Buildout Delay[1] (secs.) PM	E+P Project Buildout Level of Service AM	E+P Project Buildout Level of Service PM
1	Street E & Street A	**RA**	Future Intersection				4.3	5.0	A	A	5.4	6.6	A	A
2	Street E & Street B	**RA**	Future Intersection				4.1	4.6	A	A	4.7	6.1	A	A
3	Street D & Street A	**RA**	Future Intersection				5.8	7.5	A	A	7.1	10.0	A	B
4	Street D & Street C	**CSS**	Future Intersection				10.6	11.4	B	B	10.4	11.0	B	B
5	Street D & Street B	**RA**	Future Intersection				5.2	5.6	A	A	6.3	6.5	A	A
6	County Line Ln. & County Line Rd.	CSS	9.1	8.9	A	A	18.2	**52.0**	C	**F**	21.7	**>100.0**	C	**F**
7	Sandalwood Dr. & Street B	**TS**	Future Intersection				10.4	44.2	B	D	10.6	46.4	B	D
8	Sandalwood Dr. & Street K	**TS**	Future Intersection				26.5	51.3	C	D	27.8	51.7	C	D
9	Sandalwood Dr. & Street J	**TS**	Future Intersection				28.2	47.9	C	D	33.3	53.3	C	D
10	Roberts Rd. & Sandalwood Dr.	**TS**	Future Intersection				36.1	54.9	D	D	36.3	54.8	D	D
11	7th Pl. & County Line Rd.	CSS	9.8	9.3	A	A	19.8	14.8	C	B	25.3	18.8	D	C
12	I-10 SB Ramps & County Line Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
13	I-10 NB Ramps & County Line Rd.	CSS	16.8	14.9	C	B	**>100.0**	**78.1**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
14	7th St. & Sandalwood Dr.	AWS/**CSS**	**85.2**	8.0	**F**	A	18.6	20.4	C	C	18.3	22.8	C	C
15	I-10 SB Ramps & Sandalwood Dr.	AWS	**50.1**	12.6	**F**	B	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
16	I-10 NB On-Ramp & Sandalwood Dr.[3]	UC	11.1	8.9	B	A	Not Applicable				Not Applicable			
17	Calimesa Bl. & Sandalwood Dr.	TS	26.0	19.0	C	B	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**
18	Calimesa Bl. & I-10 NB Off-Ramp	AWS	**71.8**	15.1	**F**	C	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
19	Roberts Rd. & Singleton Rd.	AWS	6.6	7.0	A	A	6.6	7.0	A	A	6.6	7.0	A	A
20	I-10 SB Ramps & Singleton Rd.	UC	8.1	7.6	A	A	8.1	7.6	A	A	8.1	7.6	A	A
21	I-10 NB Ramps & Singleton Rd.	CSS	9.7	10.2	A	B	9.7	10.2	A	B	9.7	10.2	A	B
22	Calimesa Bl. & Singleton Rd.	AWS	**>100.0**	19.7	**F**	C	**>100.0**	19.7	**F**	C	**>100.0**	24.3	**F**	C

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

[2] TS = Traffic Signal; AWS = All-way Stop; CSS = Cross-street Stop; UC = Uncontrolled

[3] Starting in E+P (Phase 2) when the I-10 NB Hook On-Ramp on Calimesa Boulevard is assumed to be in place, it is anticipated this intersection would be vacated.

5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis for E+P traffic conditions is based on the peak hour volumes or planning level ADT volume-based traffic signal warrants for each applicable phase. The following study area intersection is anticipated to meet traffic signal warrants for E+P (Phase 1) traffic conditions, in addition to the intersections previously identified under Existing (2024) traffic conditions:

- Calimesa Boulevard & I-10 NB Off-Ramp (#18)

The following study area intersections are anticipated to meet traffic signal warrants for E+P (Phase 2) traffic conditions, in addition to the intersections previously identified under Existing (2024) and E+P (Phase 1) traffic conditions:

- Sandalwood Drive & Street B (#7)
- Sandalwood Drive & Street K (#8)
- Sandalwood Drive & Street J (#9)
- Roberts Road & Sandalwood Drive (#10)

The following study area intersection is anticipated to meet traffic signal warrants for E+P (Phase 3) traffic conditions, in addition to the intersections previously identified under Existing (2024), E+P (Phase 1), and E+P (Phase 2) traffic conditions:

- Street D & Street B (#5)
- I-10 SB Ramps & County Line Road (#12)

There are no additional study area intersections anticipated to meet a traffic signal warrant for E+P (Phase 4) traffic conditions, in addition to the intersections previously identified under Existing (2024), E+P (Phase 1), E+P (Phase 2), and E+P (Phase 3) traffic conditions.

The following study area intersection is anticipated to meet traffic signal warrants for E+P (Project Buildout) traffic conditions, in addition to the intersections previously identified under Existing (2024), E+P (Phase 1), E+P (Phase 2), E+P (Phase 3), and E+P (Phase 4) traffic conditions:

- 7th Place & County Line Road (#11)

Although not a study area intersection, a traffic signal warrant has been evaluated for the future school driveway on Street "B" in order to identify the need for a future traffic signal. This intersection is anticipated to meet a peak hour traffic signal warrant under E+P (Phase 1) traffic conditions (see Appendix 5.6).

Worksheets for E+P traffic signal warrants are provided in the following appendices:

- Appendix 5.6 for E+P (Phase 1) traffic conditions
- Appendix 5.7 for E+P (Phase 2) traffic conditions
- Appendix 5.8 for E+P (Phase 3) traffic conditions
- Appendix 5.9 for E+P (Phase 4) traffic conditions
- Appendix 5.10 for E+P (Project Buildout) traffic conditions

5.5 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for E+P traffic conditions are presented in Tables 5-3, 5-4, and 5-5. There are no queueing issues identified under E+P (Phases 1, 2, 3, 4, and Project Buildout), based on the SimTraffic queuing results.

Worksheets for E+P traffic conditions queuing analysis are provided in the following appendices:

- Appendix 5.11 for E+P (Phase 1) traffic conditions
- Appendix 5.12 for E+P (Phase 2) traffic conditions
- Appendix 5.13 for E+P (Phase 3) traffic conditions
- Appendix 5.14 for E+P (Phase 4) traffic conditions
- Appendix 5.15 for E+P (Project Buildout) traffic conditions

5.6 IMPROVEMENT RECOMMENDATIONS TO MAINTAIN GENERAL PLAN CONSISTENCY

Improvements needed to maintain an acceptable LOS have been identified at intersections or off-ramps that are anticipated to operate at a deficient LOS under E+P traffic conditions.

5.6.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvements have been identified for intersections that have been identified as deficient under E+P traffic conditions in an effort to achieve an acceptable LOS. The effectiveness of the recommended improvement strategies to address E+P traffic deficiencies are presented in Table 5-6 and are shown in Table 1-4. E+P traffic conditions with improvements HCM calculation worksheets are provided in the following appendices:

- Appendix 5.16 for E+P (Phase 1) traffic conditions
- Appendix 5.17 for E+P (Phase 2) traffic conditions
- Appendix 5.18 for E+P (Phase 3) traffic conditions
- Appendix 5.19 for E+P (Phase 4) traffic conditions
- Appendix 5.20 for E+P (Project Buildout) traffic conditions

An alternative set of improvements have been considered at the intersection of Calimesa Boulevard and Sandalwood Drive which assumes only a single eastbound through lane (starting in E+P Phase 3). The ultimate design of the I-10 Freeway and Sandalwood Drive interchange is currently unknown and will be determined by the City of Calimesa in conjunction with Caltrans.

5.6.2 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT OFF-RAMPS

There are no queuing issues anticipated under E+P (Phases 1, 2, 3, 4, and Project Buildout). As such, no improvements have been identified.

TABLE 5-3: PEAK HOUR QUEUING SUMMARY FOR E+P (PHASES 1-2) CONDITIONS

Intersection	Movement	Available Stacking Distance (Feet)	Existing (2024) 95th Percentile Queue (Feet)		Existing (2024) Acceptable? [1]		E+P (Phase 1) 95th Percentile Queue (Feet)		E+P (Phase 1) Acceptable? [1]		E+P (Phase 2) 95th Percentile Queue (Feet)		E+P (Phase 2) Acceptable? [1]	
			AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
I-10 SB Ramps & County Line Rd. (#12)	SBL/T	1,165	151	222	Yes	Yes	912	974	Yes	Yes	764	756	Yes	Yes
	SBR	50	89	111	Yes	Yes	133 [2]	114 [2]	Yes	Yes	132 [2]	100 [2]	Yes	Yes
I-10 NB Ramps & County Line Rd. (#13)	NBL/T	1,085	38	51	Yes	Yes	589	66	Yes	Yes	996	89	Yes	Yes
	NBR	50	47	74	Yes	Yes	106 [2]	86 [2]	Yes	Yes	102 [2]	92 [2]	Yes	Yes
I-10 SB Ramps & Sandalwood Dr. (#15)	SBL/T/R	1,195	94	84	Yes	Yes	703	344	Yes	Yes	703	836	Yes	Yes
Calimesa Bl. & I-10 NB Off-Ramp (#18)	NBL/T/R	770	70	102	Yes	Yes	538	725	Yes	Yes	539	546	Yes	Yes
I-10 SB Ramps & Singleton Rd. (#20)	SBL/T/R		Off-Ramp Does Not Exist				Off-Ramp Does Not Exist				Off-Ramp Does Not Exist			
I-10 NB Ramps & Singleton Rd. (#21)	NBL/T/R	1,140	78	82	Yes	Yes	76	85	Yes	Yes	75	89	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.

TABLE 5-4: PEAK HOUR QUEUING SUMMARY FOR E+P (PHASES 3-4) CONDITIONS

Intersection	Movement	Available Stacking Distance (Feet)	Existing (2024) 95th Percentile Queue (Feet)		Existing (2024) Acceptable? [1]		E+P (Phase 3) 95th Percentile Queue (Feet)		E+P (Phase 3) Acceptable? [1]		E+P (Phase 4) 95th Percentile Queue (Feet)		E+P (Phase 4) Acceptable? [1]	
			AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
I-10 SB Ramps & County Line Rd. (#12)	SBL/T	1,165	151	222	Yes	Yes	759	756	Yes	Yes	759	756	Yes	Yes
	SBR	50	89	111	Yes	Yes	76 [2]	100 [2]	Yes	Yes	76 [2]	109 [2]	Yes	Yes
I-10 NB Ramps & County Line Rd. (#13)	NBL/T	1,085	38	51	Yes	Yes	872	250	Yes	Yes	872	290	Yes	Yes
	NBR	50	47	74	Yes	Yes	80 [2]	111 [2]	Yes	Yes	80 [2]	112 [2]	Yes	Yes
I-10 SB Ramps & Sandalwood Dr. (#15)	SBL/T/R	1,195	94	84	Yes	Yes	703	703	Yes	Yes	703	703	Yes	Yes
Calimesa Bl. & I-10 WB Off-Ramp (#18)	NBL/T	770	70	102	Yes	Yes	539	547	Yes	Yes	539	547	Yes	Yes
I-10 SB Ramps & Singleton Rd. (#20)	SBL/T/R		Off-Ramp Does Not Exist				Off-Ramp Does Not Exist				Off-Ramp Does Not Exist			
I-10 NB Ramps & Singleton Rd. (#21)	NBL/T/R	1,140	78	82	Yes	Yes	85	111	Yes	Yes	85	81	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.

TABLE 5-5: PEAK HOUR QUEUING SUMMARY FOR E+P (PHASE 5) CONDITIONS

Intersection	Movement	Available Stacking Distance (Feet)	Existing (2024) 95th Percentile Queue (Feet)		Existing (2024) Acceptable? [1]		E+P (Project Buildout) 95th Percentile Queue (Feet)		E+P (Project Buildout) Acceptable? [1]	
			AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
I-10 SB Ramps & County Line Rd. (#12)	SBL/T	1,165	151	222	Yes	Yes	759 [2]	756	Yes	Yes
	SBR	50	89	111	Yes	Yes	55 [2]	101 [3]	Yes	Yes
I-10 NB Ramps & County Line Rd. (#13)	NBL/T	1,085	38	51	Yes	Yes	921	997	Yes	Yes
	NBR	50	47	74	Yes	Yes	73 [2]	135 [3]	Yes	Yes
I-10 SB Ramps & Sandalwood Dr. (#15)	SBL/T/R	1,195	94	84	Yes	Yes	703	703	Yes	Yes
Calimesa Bl. & I-10 WB Off-Ramp (#18)	NBL/T	770	70	102	Yes	Yes	539	547	Yes	Yes
I-10 SB Ramps & Singleton Rd. (#20)	SBL/T/R		Off-Ramp Does Not Exist				Off-Ramp Does Not Exist			
I-10 NB Ramps & Singleton Rd. (#21)	NBL/T/R	1,140	78	82	Yes	Yes	71	78	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.

TABLE 5-6: INTERSECTION ANALYSIS RESULTS FOR E+P CONDITIONS WITH IMPROVEMENTS (PAGE 1 OF 2)

#	Intersection	Traffic Control [3]	Intersection Approach Lanes[1] Northbound L	NB T	NB R	Southbound L	SB T	SB R	Eastbound L	EB T	EB R	Westbound L	WB T	WB R	Delay[2] (secs.) AM	Delay PM	Level of Service AM	LOS PM
6	County Line Ln. & County Line Rd.																	
	Existing:	CSS	0	0	0	0	1	0	0	1	0	0	1	0	9.1	8.9	A	A
	E+P (Phase 1):		Not Applicable															
	E+P (Phase 2):		Not Applicable															
	E+P (Phase 3):		Not Applicable															
	E+P (Phase 4):	CSS	0	0	0	0	1	0	**1**	1	0	0	1	**1**	15.0	23.3	B	C
	E+P (Project Buildout):	CSS	0	0	0	0	1	0	**1**	1	0	0	1	**1**	17.0	32.0	C	D
12	I-10 SB Ramps & County Line Rd.																	
	Existing:	CSS	0	0	0	0	1	1	0	1	0	1	1	0	**307.7**	**113.9**	**F**	**F**
	E+P (Phase 1):	**TS**	0	0	0	0	1	1	0	1	0	1	1	0	48.2	39.4	D	D
	E+P (Phase 2):	**TS**	0	0	0	0	1	1	0	1	0	1	1	0	49.1	37.1	D	D
	E+P (Phase 3):	**TS**	0	0	0	0	1	1	0	1	0	1	1	0	51.7	42.4	D	D
	E+P (Phase 4):	**TS**	0	0	0	0	1	1	0	1	**1**	1	1	0	52.1	44.8	D	D
	E+P (Project Buildout):	**RA**	0	0	0	0	1	1	0	**2**	0	**0**	1	0	12.0	13.9	B	B
13	I-10 NB Ramps & County Line Rd.																	
	Existing:	CSS	0	1	d	0	0	0	1	1	0	0	1	1	16.8	14.9	C	B
	E+P (Phase 1):		Not Applicable															
	E+P (Phase 2):	**TS**	0	1	1	0	0	0	1	1	0	0	1	1	28.2	20.7	C	C
	E+P (Phase 3):	**TS**	0	1	1	0	0	0	1	1	0	0	1	1	33.2	22.3	C	C
	E+P (Phase 4):	**TS**	0	1	1	0	0	0	1	1	0	0	1	1	41.2	23.8	D	C
	E+P (Project Buildout):	**RA**	0	1	1	0	0	0	**0**	**2**	0	0	1	1	13.7	8.5	B	A
15	I-10 SB Ramps & Sandalwood Dr.																	
	Existing:	AWS	0	0	0	0	1	0	0	1	0	0	1	0	**50.1**	12.6	**F**	B
	E+P (Phase 1):	**TS**	0	0	0	0	1	**1**	0	1	1	**1**	1	0	43.4	34.7	D	C
	E+P (Phase 2)[4]:	**TS**	0	0	0	**1**	1	**1>>**	0	**3**	**1>>**	**2**	**3**	0	8.7	17.7	A	B
	E+P (Phase 3)[4]:	**TS**	0	0	0	**1**	1	**1>>**	0	**3**	**1>>**	**2**	**3**	0	9.9	15.0	A	B
	E+P (Phase 4)[4]:	**TS**	0	0	0	**1**	1	**1>>**	0	**3**	**1>>**	**2**	**3**	0	10.0	15.1	A	B
	E+P (Project Buildout)[4]:	**TS**	0	0	0	**1**	1	**1>>**	0	**3**	**1>>**	**2**	**3**	0	10.0	14.7	A	B
17	Calimesa Bl. & Sandalwood Dr.																	
	Existing:	TS	1	2	d	1	1	1>	1	2	0	1	1	1	26.0	19.0	C	B
	E+P (Phase 1):	TS	1	2	d	1	1	1>	1	**1**	**1**	1	1	1	50.6	46.2	D	D
	E+P (Phase 2)[5]:	TS	**2**	2	**1**	1	**2**	1>	**2**	**1**	**1>>**	1	1	1	39.9	42.5	D	D
	E+P (Phase 3)[5]:	TS	**2**	2	**1**	1	**2**	1>	**2**	**2**	**1>>**	1	**2**	1	27.9	47.0	C	D
	E+P (Phase 3) Alternative[7]:	TS	**2**	2	**1**	1	**2**	1>	**2**	**1**	**1>>**	1	**2**	1	28.3	47.2	C	D
	E+P (Phase 4)[5]:	TS	**2**	2	**1**	1	**2**	1>	**2**	**2**	**1>>**	1	**2**	1	28.9	47.2	C	D
	E+P (Phase 4) Alternative[7]:	TS	**2**	2	**1**	1	**2**	1>	**2**	**1**	**1>>**	1	**2**	1	32.4	47.4	C	D
	E+P (Project Buildout)[5]:	TS	**2**	2	**1**	1	**2**	1>	**2**	**2**	**1>>**	1	**2**	1	25.5	45.9	C	D
	E+P (Project Buildout) Alternative[7]:	TS	**2**	2	**1**	1	**2**	1>	**2**	**1**	**1>>**	1	**2**	1	29.5	46.1	C	D

TABLE 5-6: INTERSECTION ANALYSIS RESULTS FOR E+P CONDITIONS WITH IMPROVEMENTS (PAGE 2 OF 2)

#	Intersection	Traffic Control [3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	Level of Service AM	PM
18	Calimesa Bl. & I-10 NB Off-Ramp																	
	Existing:	AWS	0	1	d	0	0	0	0	1	0	0	0	1	**71.8**	15.1	**F**	C
	E+P (Phase 1):	**TS**	**1**	1	0	0	0	0	0	1	0	0	1	0	31.8	26.2	C	C
	E+P (Phase 2)[6]:	**TS**	**1**	1	0	0	0	0	0	1	**1>>**	**1**	1	0	34.4	23.5	C	C
	E+P (Phase 3)[6]:	**TS**	**1**	1	0	0	0	0	0	1	**1>>**	**1**	1	0	43.3	21.7	D	C
	E+P (Phase 4)[6]:	**TS**	**1**	1	0	0	0	0	0	1	**1>>**	**1**	1	0	51.9	21.7	D	C
	E+P (Project Buildout)[6]:	**TS**	**1**	1	0	0	0	0	0	1	**1>>**	**1**	1	0	52.7	21.8	D	C
22	Calimesa Bl. & Singleton Rd.																	
	Existing:	AWS	0	1	0	0	1	0	0	1	0	0	1	0	**133.5**	19.7	**F**	C
	E+P (Phase 1):	AWS	**1**	1	**1**	**1**	1	0	**1**	1	0	**1**	1	0	**96.2**	23.8	**F**	C
	E+P (Phase 2):	AWS	**1**	1	**1**	**1**	1	0	**1**	1	0	**1**	1	0	**97.4**	24.4	**F**	C
	E+P (Phase 3):	AWS	**1**	1	**1**	**1**	1	0	**1**	1	0	**1**	1	0	**99.3**	26.0	**F**	D
	E+P (Phase 4):	AWS	**1**	1	**1**	**1**	1	0	**1**	1	0	**1**	1	0	**99.2**	26.6	**F**	D
	E+P (Project Buildout):	AWS	**1**	1	**1**	**1**	1	0	**1**	1	0	**1**	1	0	**98.9**	27.3	**F**	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free Right-Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] UC = Uncontrolled; CSS = Cross-street Stop; TS = Traffic Signal; **TS** = Traffic Signal

[4] Buildout of Phase 2 requires the implementation of the hook ramps and widening to the ultimate bridge along Sandalwood Drive.

[5] Improvements assume modifying the traffic signal to implement protected left turn phasing for the EB and WB approaches.

[6] Starting in E+P (Phase 2) when the I-10 NB Hook On-Ramp on Calimesa Boulevard is assumed to be in place (Interim 1B).

6 OPENING YEAR CUMULATIVE (2030) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Opening Year Cumulative (2030) conditions and the resulting intersection operations, traffic signal warrant, and off-ramp queuing analyses.

6.1 ROADWAY IMPROVEMENTS

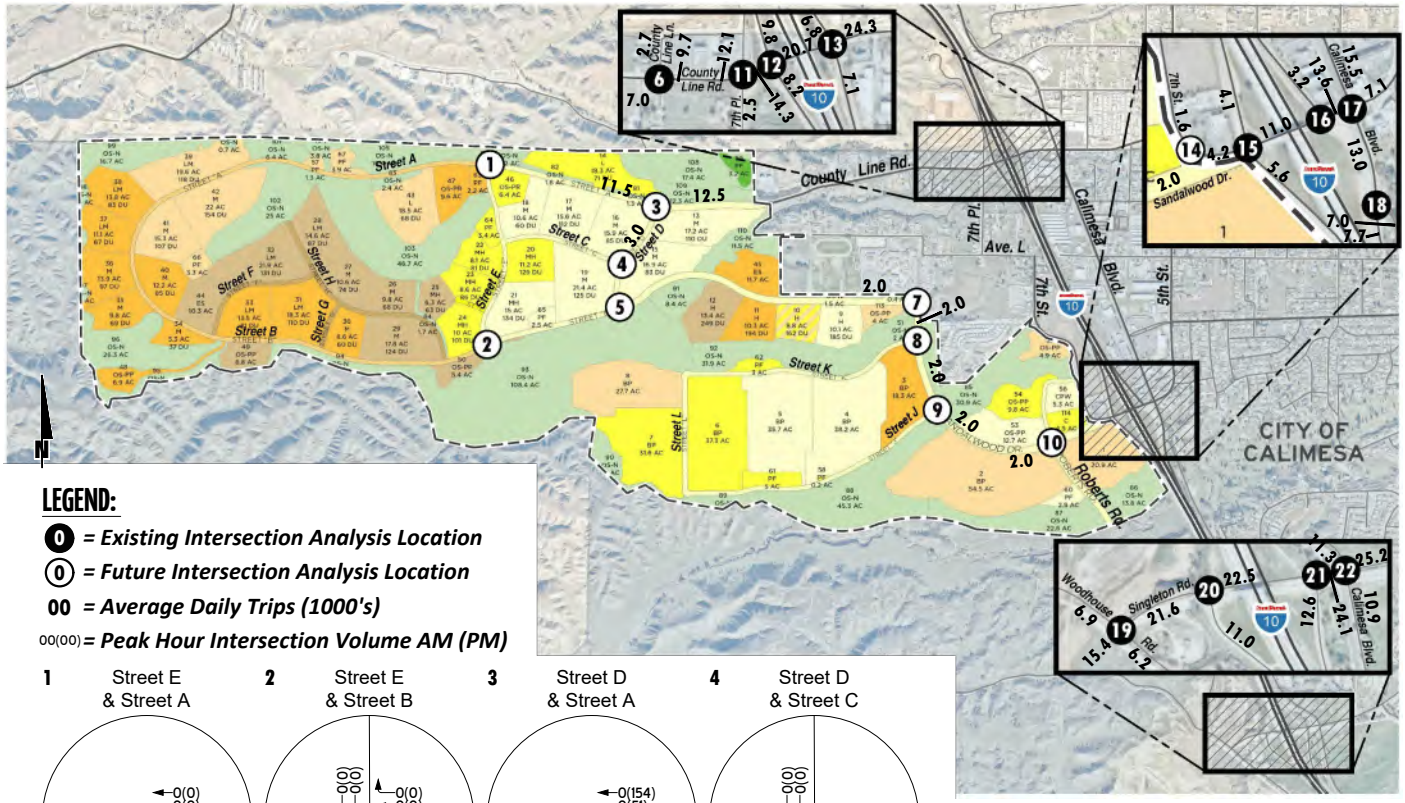
The lane configurations and traffic controls assumed to be in place for Opening Year Cumulative (2030) conditions are consistent with those shown previously in Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for 2030 conditions only (e.g., intersection and roadway improvements at the Project's frontage and driveways).
- Interim 1A improvements assume signalization at the I-10 Southbound and Northbound ramps on Sandalwood Drive and the I-10 Northbound off-ramp on Calimesa Boulevard. Improvements assume modifying the traffic signal to implement protected eastbound and westbound left turn movements at the intersection of Calimesa Boulevard and Sandalwood Drive. The Interim 1A improvements at the I-10 Northbound on-ramps are temporary while the hook on-ramps on Calimesa Boulevard are under construction.
- Interim 1B Sandalwood/I-10 Interchange improvements includes a new hook on-ramp on Calimesa Boulevard. When the I-10 Northbound Hook On-Ramp on Calimesa Boulevard is in place, Intersection #16 (I-10 WB On-Ramp at Sandalwood Drive) will be vacated. No bridge widening across Sandalwood Drive is proposed for Interim 1A and Interim 1B improvements. Note that Interim 1B improvements do not assume any widening of the existing bridge.
- The Project will construct County Line Road, from the Project's eastern boundary to the existing western terminus of County Line Road as a 2-lane divided roadway. This connection will be available starting with Phase 1, coinciding with the first phase with residential development, and will provide access to the I-10 Freeway/County Line Road interchange.
- The Project will realign the intersection of 7th Street and Sandalwood Drive to implement a new right-in/right-out connection which would be enforced by a raised median. The new Sandalwood Drive will generally follow the alignment of the existing roadway up to the new Street B which will front the southern boundary of the Elementary School. Sandalwood Drive will accommodate a 4-lane divided roadway between Street B and Street K and then widen to a 6-lane roadway between Street K and Roberts Road. Between Street J and Roberts Road, the southbound/eastbound approach will start to drop a lane and taper (via striping) and continue to taper down to east of Roberts Road towards the I-10 Freeway in order to align with the existing bridge deck. Similarly, the northbound/westbound approach of Sandalwood Drive will increase from one lane west of the I-10 Freeway to three through lanes at Roberts Road, which will continue to Street K.

6.2 OPENING YEAR CUMULATIVE (2030) WITHOUT PROJECT GROWTH TRAFFIC VOLUME FORECASTS

This scenario includes Existing (2024) traffic volumes plus an ambient growth factor of 12.62% plus traffic from pending and approved but not yet constructed known development projects in the area. The weekday ADT and weekday AM and PM peak hour volumes, in actual vehicles, which can be expected for Opening Year Cumulative (2030) Without Project traffic conditions are shown in Exhibit 6-1.

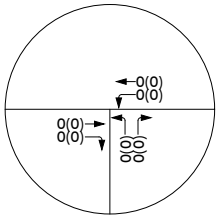
EXHIBIT 6-1 : OPENING YEAR CUMULATIVE (2030) WITHOUT PROJECT TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



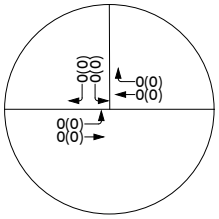
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

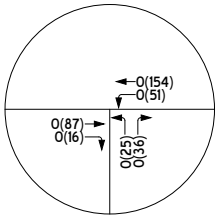
1 Street E & Street A



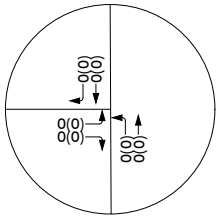
2 Street E & Street B



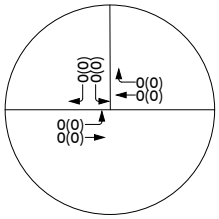
3 Street D & Street A



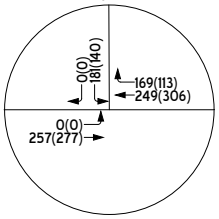
4 Street D & Street C



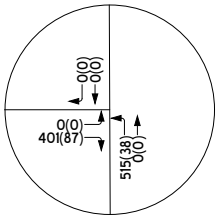
5 Street D & Street B



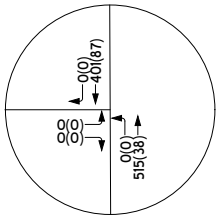
6 County Line Ln. & County Line Rd.



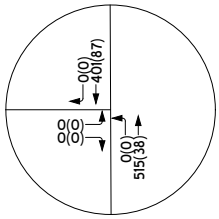
7 Sandalwood Dr. & Street B



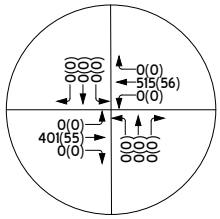
8 Sandalwood Dr. & Street K



9 Sandalwood Dr. & Street J



10 Roberts Rd. & Sandalwood Dr.



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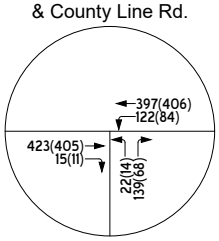

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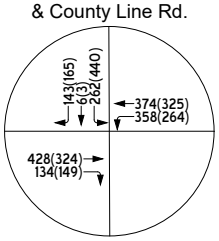

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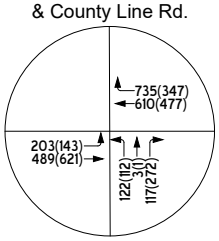
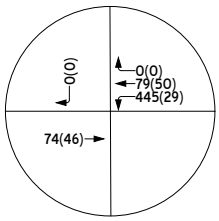


14 7th St. & Sandalwood Dr.



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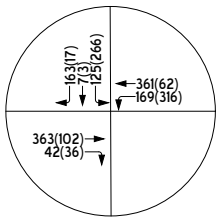

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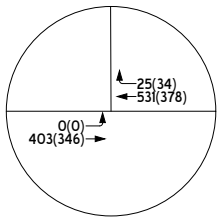
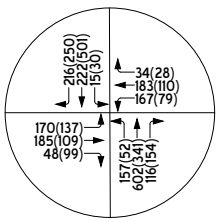
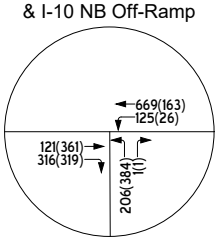


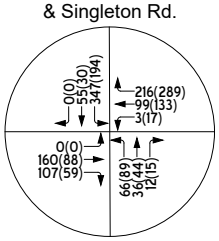
17 Calimesa Bl. & Sandalwood Dr.



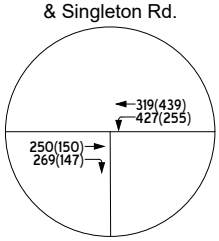
18 Calimesa Bl. & I-10 NB Off-Ramp



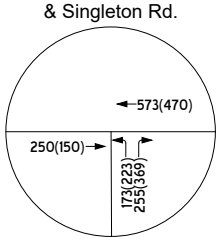
19 Roberts Rd. & Singleton Rd.



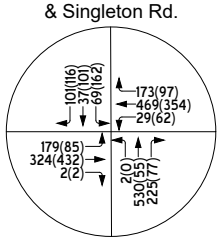
20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.



6.3 OPENING YEAR CUMULATIVE (2030) WITH PROJECT (PHASE 1) TRAFFIC VOLUME FORECASTS

This scenario includes Opening Year Cumulative (2030) Without Project traffic in conjunction with the addition of Project (Phase 1) traffic. The weekday ADT volumes and peak hour volumes which can be expected for Opening Year Cumulative (2030) With Project (Phase 1) traffic conditions are shown in Exhibit 6-2.

6.4 INTERSECTION OPERATIONS ANALYSIS

Opening Year Cumulative (2030) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 6-1 for Opening Year Cumulative (2030) traffic conditions, which indicates that the following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Cumulative (2030) Without Project traffic conditions:

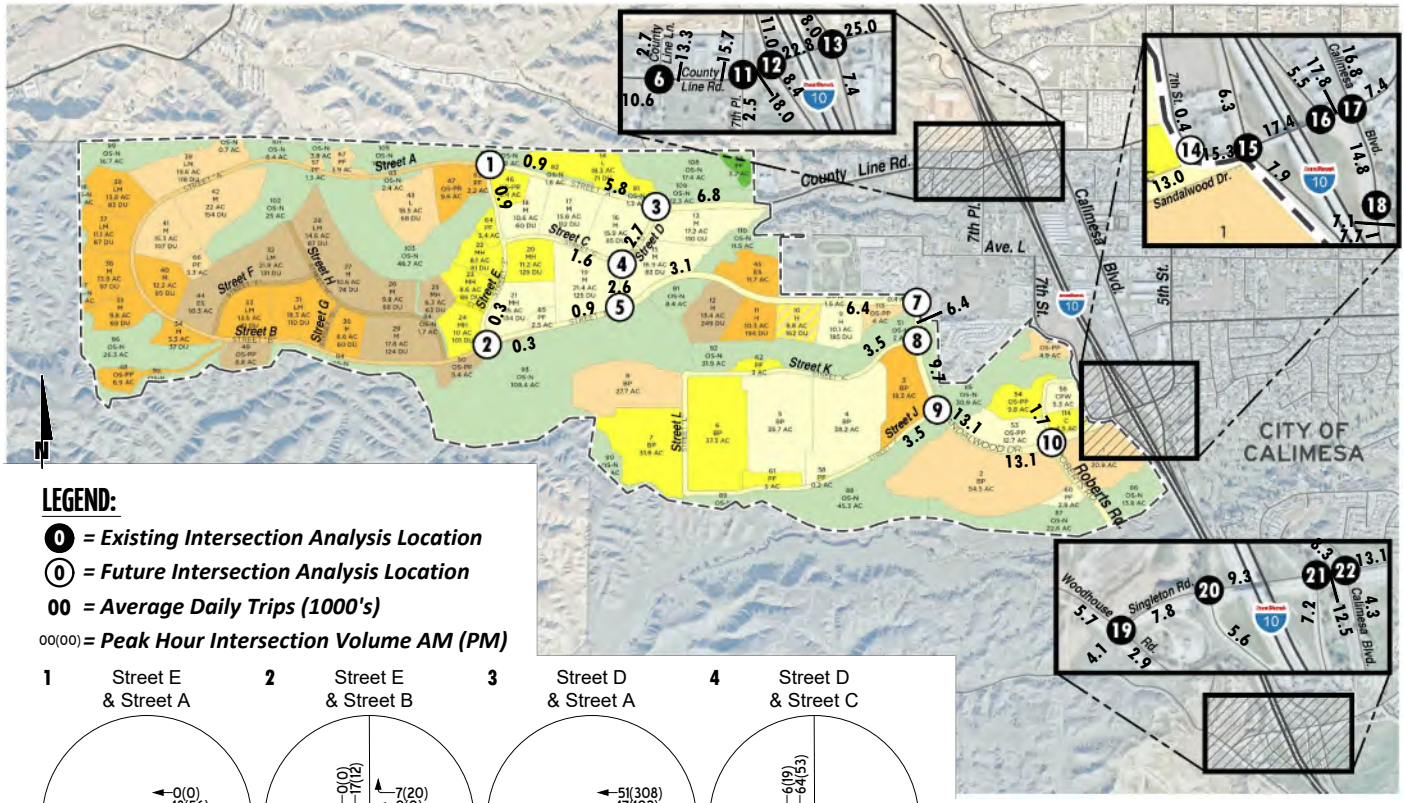
- County Line Lane & County Line Road (#6) – LOS F AM and PM peak hours
- I-10 SB Ramps & County Line Road (#12) – LOS F PM peak hour only
- I-10 NB Ramps & County Line Road (#13) – LOS F AM and PM peak hours
- 7th Street & Sandalwood Drive (#14) – LOS F AM peak hour only
- I-10 SB Ramps & Sandalwood Drive (#15) – LOS F AM peak hour only
- Calimesa Boulevard & I-10 NB Off-Ramp (#18) – LOS E AM peak hour only
- I-10 NB Ramps & Singleton Road (#21) – LOS F AM and PM peak hours
- Calimesa Boulevard & Singleton Road (#22) – LOS F AM and PM peak hours

With the addition of Project (Phase 1) traffic, the following additional study area intersection is anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Cumulative (2030) With Project (Phase 1) traffic conditions:

- Calimesa Boulevard & Sandalwood Drive (#17) – LOS F AM peak hour only

It should be noted that the intersection of 7th Street and Sandalwood Rive is anticipated to operate at an acceptable LOS with the proposed Project improvements (which include access restriction to right-in/right-tout only). The intersection operations analysis worksheets for Opening Year Cumulative (2030) Without Project and With Project traffic conditions are included in Appendices 6.1 and 6.2, respectively.

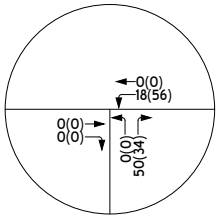
EXHIBIT 6-2 : OPENING YEAR CUMULATIVE (2030) WITH PROJECT (PHASE 1) TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



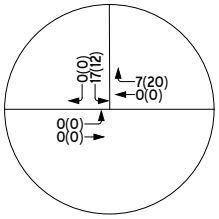
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

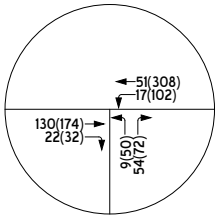
1 Street E & Street A



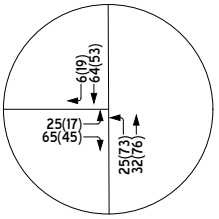
2 Street E & Street B



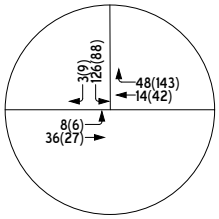
3 Street D & Street A



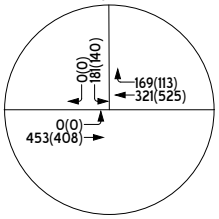
4 Street D & Street C



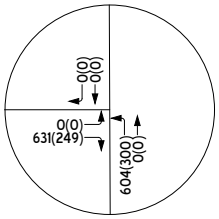
5 Street D & Street B



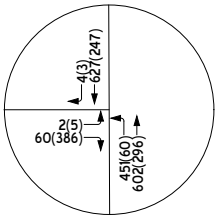
6 County Line Ln. & County Line Rd.



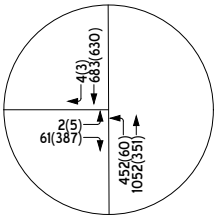
7 Sandalwood Dr. & Street B



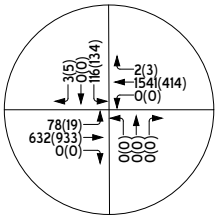
8 Sandalwood Dr. & Street K



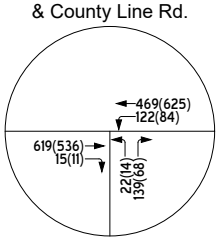
9 Sandalwood Dr. & Street J



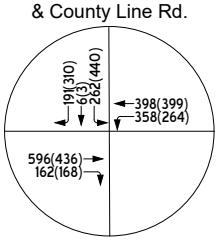
10 Roberts Rd. & Sandalwood Dr.



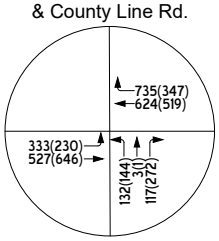
11 7th Pl. & County Line Rd.



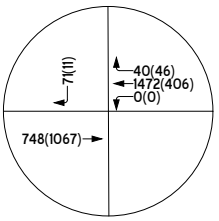
12 I-10 SB Ramps & County Line Rd.



13 I-10 NB Ramps & County Line Rd.



14 7th St. & Sandalwood Dr.



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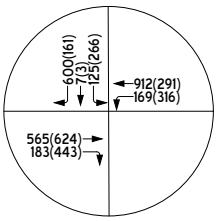
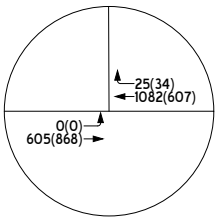
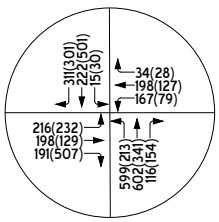


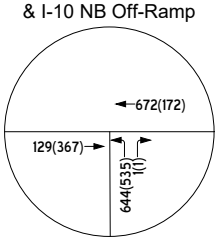
16 I-10 NB Ramps & Sandalwood Dr.



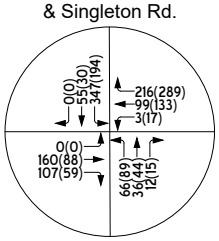
17 Calimesa Bl. & Sandalwood Dr.



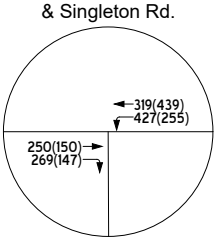
18 Calimesa Bl. & I-10 NB Off-Ramp



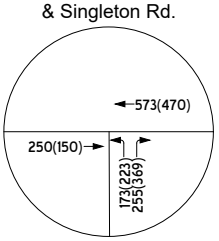
19 Roberts Rd. & Singleton Rd.



20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.

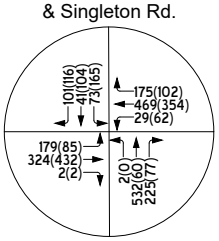


TABLE 6-1: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2030) CONDITIONS

#	Intersection	Traffic Control[2]	2030 Without Project Delay[1] (secs.) AM	PM	Level of Service AM	PM	2030 With Project Delay[1] (secs.) AM	PM	Level of Service AM	PM
1	Street E & Street A	**RA**	Future Intersection				2.9	2.9	A	A
2	Street E & Street B	**RA**	Future Intersection				2.7	2.7	A	A
3	Street D & Street A	**RA**	Future Intersection				3.5	5.2	A	A
4	Street D & Street C	**CSS**	Future Intersection				9.3	9.5	A	A
5	Street D & Street B	**RA**	Future Intersection				3.2	3.3	A	A
6	County Line Ln. & County Line Rd.	CSS	**82.5**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
7	Sandalwood Dr. & Street B	**TS**	Future Intersection				8.3	25.5	A	C
8	Sandalwood Dr. & Street K	**TS**	Future Intersection				16.3	32.6	B	C
9	Sandalwood Dr. & Street J	**TS**	Future Intersection				12.6	30.6	B	C
10	Roberts Rd. & Sandalwood Dr.	**TS**	Future Intersection				10.5	7.1	B	A
11	7th Pl. & County Line Rd.	CSS	25.0	16.9	D	C	28.4	17.7	D	C
12	I-10 SB Ramps & County Line Rd.	CSS	14.4	**>100.0**	B	**F**	17.2	**>100.0**	C	**F**
13	I-10 NB Ramps & County Line Rd.	CSS	**>100.0**	**56.7**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
14	7th St. & Sandalwood Dr.	AWS/**CSS**	**89.5**	8.1	**F**	A	14.1	10.1	B	B
15	I-10 SB Ramps & Sandalwood Dr.	AWS	**76.8**	13.9	**F**	B	**>100.0**	**>100.0**	**F**	**F**
16	I-10 NB On-Ramp & Sandalwood Dr.	UC	11.6	9.0	B	A	33.8	19.7	D	D
17	Calimesa Bl. & Sandalwood Dr.	TS	27.8	19.5	D	B	**101.8**	24.8	**F**	C
18	Calimesa Bl. & I-10 NB Off-Ramp	AWS	**>100.0**	15.0	**F**	B	**>100.0**	**50.5**	**F**	**F**
19	Roberts Rd. & Singleton Rd.	AWS	18.2	15.8	C	C	18.2	15.8	C	C
20	I-10 SB Ramps & Singleton Rd.	UC	13.1	8.7	B	A	13.1	8.7	B	A
21	I-10 NB Ramps & Singleton Rd.	CSS	**88.2**	**82.4**	**F**	**F**	**88.2**	**82.4**	**F**	**F**
22	Calimesa Bl. & Singleton Rd.	AWS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

[2] TS = Traffic Signal; AWS = All-way Stop; CSS = Cross-street Stop; UC = Uncontrolled; RA = Roundabout

6.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis for Opening Year Cumulative (2030) traffic conditions are based on the peak hour volumes or planning level ADT volume-based traffic signal warrants. The following study area intersections are anticipated to meet traffic signal warrants for Opening Year Cumulative (2030) Without Project traffic conditions, in addition to the intersections identified under previous analysis scenarios:

- I-10 SB Ramps & County Line Road (#12)
- Roberts Road & Singleton Road (#19)
- I-10 NB Ramps & Singleton Road (#21)

The following additional study area intersections anticipated to meet traffic signal warrants with the addition of Project (Phase 1) traffic for Opening Year Cumulative (2030) With Project (Phase 1) traffic condition:

- County Line Lane & County Line Road (#6)
- Sandalwood Drive & Street B (#7)
- Sandalwood Drive & Street K (#8)
- Sandalwood Drive & Street J (#9)
- Roberts Road & Sandalwood Drive (#10)
- 7th Place & County Line Road (#11)

Worksheets for Opening Year Cumulative (2030) Without Project and With Project traffic signal warrants are provided in Appendices 6.3 and 6.4, respectively.

6.6 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for Opening Year Cumulative (2030) traffic conditions are presented in Table 6-2. As shown in Table 6-2, there are no movements anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under Opening Year Cumulative (2030) Without Project and With Project traffic conditions. Worksheets for Opening Year Cumulative (2030) Without Project and With Project traffic conditions queuing analysis are provided in Appendices 6.5 and 6.6, respectively.

TABLE 6-2: PEAK HOUR QUEUING SUMMARY FOR OPENING YEAR CUMULATIVE (2030) CONDITIONS

Intersection	Movement	Available Stacking Distance (Feet)	2030 Without Project 95th Percentile Queue (Feet)		Acceptable? [1]		2030 With Project 95th Percentile Queue (Feet)		Acceptable? [1]	
			AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
I-10 SB Ramps & County Line Rd. (#12)	SBL/T	1,165	763	759	Yes	Yes	760	759	Yes	Yes
	SBR	50	145 [2]	141 [2]	Yes	Yes	59 [2]	143	Yes	No
I-10 NB Ramps & County Line Rd. (#13)	NBL/T	1,085	786	206	Yes	Yes	781	846	Yes	Yes
	NBR	50	101 [2]	112 [2]	Yes	Yes	50	123 [2]	Yes	Yes
I-10 SB Ramps & Sandalwood Dr. (#15)	SBL/T/R	1,195	102	92	Yes	Yes	732	635	Yes	Yes
Calimesa Bl. & I-10 WB Off-Ramp (#18)	NBL/T/R	770	72	103	Yes	Yes	539	724	Yes	Yes
I-10 SB Ramps & Singleton Rd. (#20)	SBL/T/R		Off-Ramp Does Not Exist				Off-Ramp Does Not Exist			
I-10 NB Ramps & Singleton Rd. (#21)	NBL/T/R	1,140	848	895	Yes	Yes	746	803	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.

6.7 IMPROVEMENT RECOMMENDATIONS TO MAINTAIN GENERAL PLAN CONSISTENCY

Improvements needed to achieve acceptable LOS have been identified at intersections or off-ramps that are anticipated to operate at a deficient LOS under Opening Year Cumulative (2030) traffic conditions.

6.7.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient under Opening Year Cumulative (2030) traffic conditions in an effort to achieve an acceptable LOS. The effectiveness of the recommended improvement strategies to address Opening Year Cumulative (2030) traffic deficiencies are presented in Table 6-3. Per the City's Guidelines, there are certain improvements that have been recommended in order to achieve the pre-project traffic condition (minimum threshold), along with the additional improvements needed to achieve acceptable LOS standards at these locations. There are other study area intersections where improvements have only been recommended to achieve acceptable peak hour operations. Lastly, County Line Road at the I-10 Freeway reflects the temporary signalization of the ramps, while Sandalwood Drive Ramps at the I-10 Freeway have been evaluated for both Interim 1A and 1B improvements (all of which achieve acceptable LOS). The Project is anticipated to contribute fewer than 50 peak hour trips to Intersections #19 and #21, and as such, no improvements have been identified for these locations. Worksheets for Opening Year Cumulative (2030) With Project traffic conditions, with improvements, HCM calculation worksheets are provided in Appendix 6.7.

TABLE 6-3: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2030) CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control [3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	Level of Service AM	PM
6	County Line Ln. & County Line Rd.																	
	Without Project:	CSS	0	0	0	0	1	0	0	1	0	0	1	0	**111.0**	**242.2**	**F**	**F**
	With Project (Threshold):	CSS	0	0	0	0	1	0	**1**	1	0	0	1	**1**	**53.0**	**246.1**	**F**	**F**
	With Project (Acceptable LOS):	**TS**	0	0	0	0	1	0	**1**	1	0	0	1	**1**	1.6	1.5	A	A
12	I-10 SB Ramps & County Line Rd.																	
	Without Project:	CSS	0	0	0	0	1	1	0	1	0	1	1	0	14.4	**1362.3**	B	**F**
	With Project (Acceptable LOS):	**TS**	0	0	0	0	1	1	0	1	0	1	1	0	48.0	43.4	D	D
13	I-10 NB Ramps & County Line Rd.																	
	Without Project:	CSS	0	1	1	0	0	0	1	1	0	0	1	1	**345.4**	**56.7**	**F**	**F**
	With Project (Acceptable LOS):	**TS**	0	1	0	0	0	0	1	1	0	0	1	1	37.4	27.0	D	C
15	I-10 SB Ramps & Sandalwood Dr.																	
	Without Project:	CSS	0	0	0	0	1	0	0	1	0	0	1	0	**76.8**	13.9	**F**	B
	With Project (Acceptable LOS):[4]	**TS**	0	0	0	0	1	**1**	0	1	**1**	**1**	1	0	37.3	36.1	D	D
17	Calimesa Bl. & Sandalwood Dr.																	
	Without Project:	TS	1	2	d	1	1	1>	1	2	0	1	1	1	27.8	19.5	D	B
	With Project Interim 1A:[4]	TS	1	2	d	1	1	1>	1	**1**	**1**	1	1	1	52.4	43.1	D	D
	With Project Interim 1B:[5]	TS	1	2	d	1	1	1>	1	**1**	**1>**	1	1	1	46.7	41.5	D	D
18	Calimesa Bl. & I-10 NB Off-Ramp																	
	Without Project:	AWS	0	1	0	0	0	0	0	1	0	0	1	0	**113.3**	15.0	**F**	B
	With Project Interim 1A:[4]	**TS**	**1**	1	0	0	0	0	0	1	0	0	1	0	33.3	26.2	C	C
	With Project Interim 1B:[5]	**TS**	**1**	1	0	0	0	0	0	1	**1>**	**1**	1	0	28.8	23.0	C	C
22	Calimesa Bl. & Singleton Rd.																	
	Without Project:	AWS	0	1	0	0	1	0	0	1	0	0	1	0	**326.4**	**123.4**	**F**	**F**
	With Project (Threshold):	AWS	**1**	1	0	**1**	1	0	**1**	1	0	**1**	1	0	**272.8**	**65.9**	**F**	**F**
	With Project (Acceptable LOS):	**TS**	**1**	1	**1**	**1**	1	0	**1**	**2**	0	**1**	1	**1**	44.6	20.9	D	C

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free Right-Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross-Street Stop; AWS = All-Way Stop; TS = Traffic Signal; **TS** = Traffic Signal

[4] Interim 1A improvements assume signalization at the I-10 SB and NB ramps on Sandalwood Dr. and the I-10 NB off-ramp on Calimesa Bl.
Improvements assume modifying the traffic signal to implement protected left turn phasing for the EB and WB approaches at Calimesa/Sandalwood.

[5] Interim 1B when the I-10 NB Hook On-Ramp on Calimesa Boulevard is assumed to be in place, it is anticipated Intersection #16 would be vacated.
Interim 1B assumes the existing bridge without any bridge widening.

6.7.2 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT OFF-RAMPS

There are no queuing issues anticipated under Opening Year Cumulative (2030) traffic conditions. As such, no improvements have been identified.

7 OPENING YEAR CUMULATIVE (2035) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Opening Year Cumulative (2035) conditions and the resulting intersection operations, traffic signal warrant, and off-ramp queuing analyses.

7.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Opening Year Cumulative (2035) conditions are consistent with those shown previously in Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for 2035 conditions only (e.g., intersection and roadway improvements at the Project's frontage and driveways).
- Interim 1B Sandalwood/I-10 Interchange improvements includes a new hook on-ramp on Calimesa Boulevard. When the I-10 Northbound Hook On-Ramp on Calimesa Boulevard is in place, Intersection #16 (I-10 WB On-Ramp at Sandalwood Drive) will be vacated. No bridge widening across Sandalwood Drive is proposed for Interim 1A and Interim 1B improvements. Note that Interim 1B improvements do not assume any widening of the existing bridge. Interim 1B improvements can be supported with up to 50 percent of the development proposed in Phase 2.
- The Sandalwood Drive bridge and interchange would need to be widened to its ultimate condition before the buildout of Phase 2.

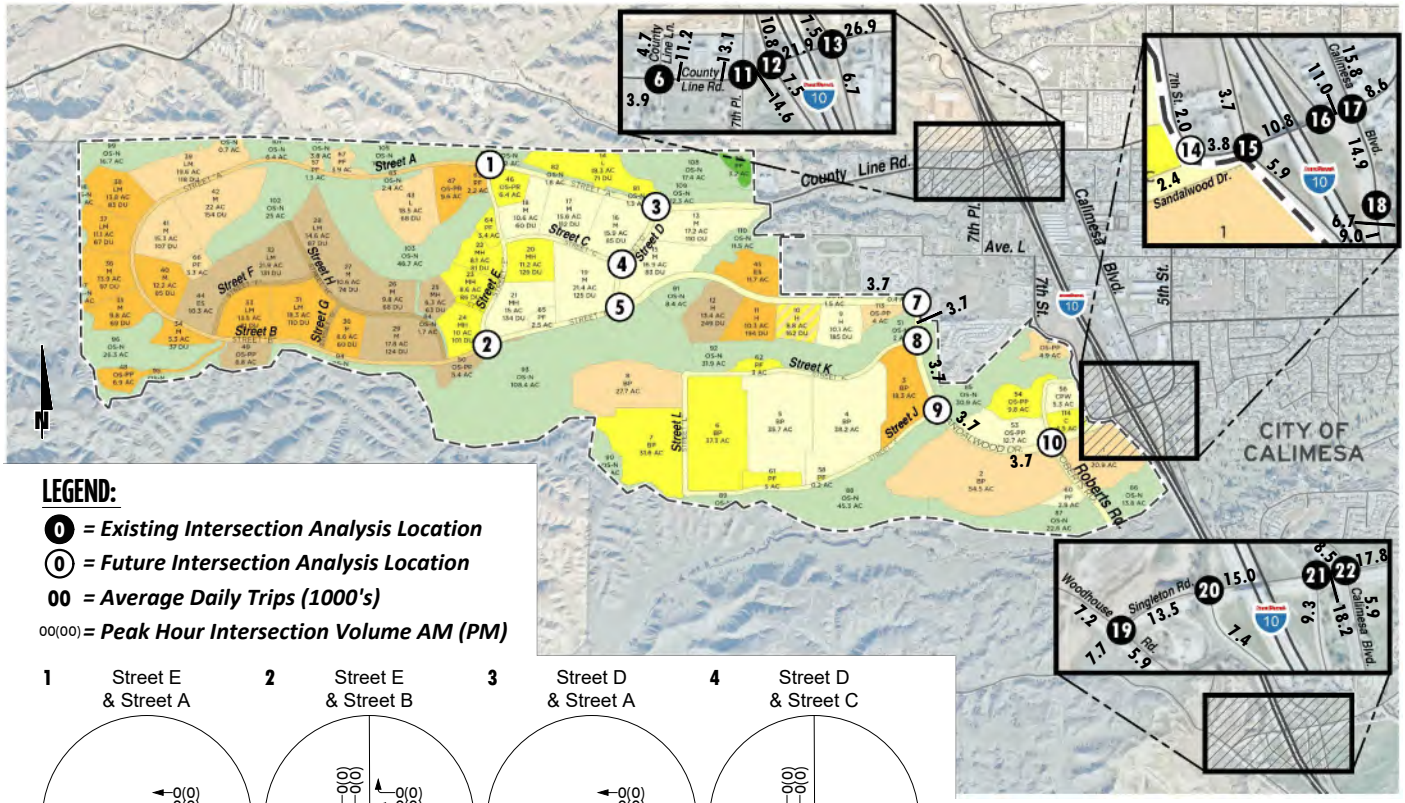
7.2 OPENING YEAR CUMULATIVE (2035) WITHOUT PROJECT GROWTH TRAFFIC VOLUME FORECASTS

This scenario includes traffic volumes that are interpolated between Opening Year Cumulative (2030) and Horizon Year (2045) for Opening Year Cumulative (2035) traffic conditions. The weekday ADT and weekday AM and PM peak hour volumes, in actual vehicles, which can be expected for Opening Year Cumulative (2035) Without Project traffic conditions are shown in Exhibit 7-1.

7.3 OPENING YEAR CUMULATIVE (2035) WITH PROJECT (PHASE 2) TRAFFIC VOLUME FORECASTS

This scenario includes Opening Year Cumulative (2035) Without Project traffic in conjunction with the addition of Project (Phase 2) traffic. The weekday ADT volumes and peak hour volumes which can be expected for Opening Year Cumulative (2035) With Project (Phase 2) traffic conditions are shown in Exhibit 7-2.

EXHIBIT 7-1 : OPENING YEAR CUMULATIVE (2035) WITHOUT PROJECT TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

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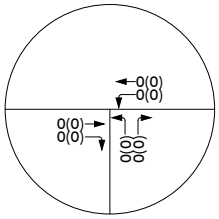
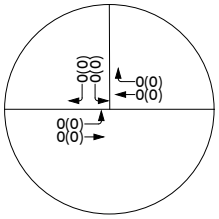
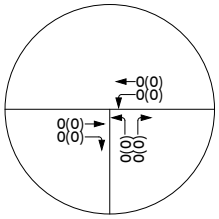


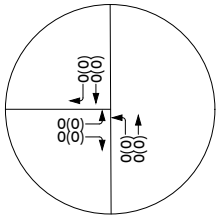
2 Street E & Street B



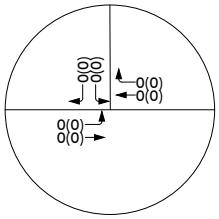
3 Street D & Street A



4 Street D & Street C



5 Street D & Street B



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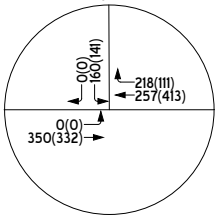
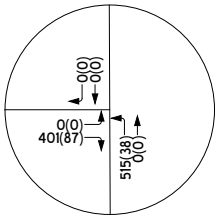
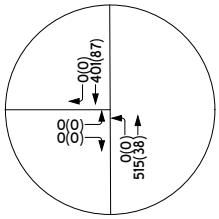


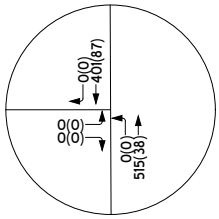
7 Sandalwood Dr. & Street B



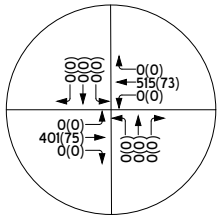
8 Sandalwood Dr. & Street K



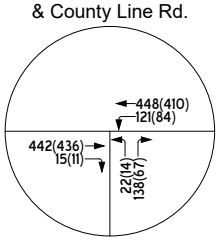
9 Sandalwood Dr. & Street J



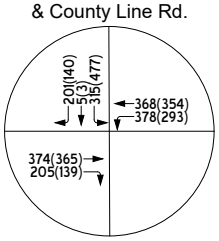
10 Roberts Rd. & Sandalwood Dr.



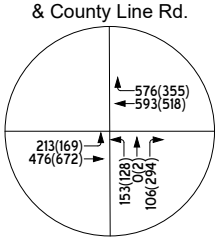
11 7th Pl. & County Line Rd.



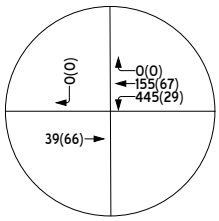
12 I-10 SB Ramps & County Line Rd.



13 I-10 NB Ramps & County Line Rd.



14 7th St. & Sandalwood Dr.



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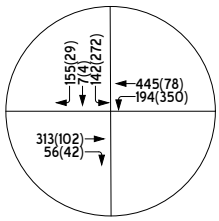
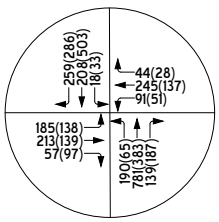


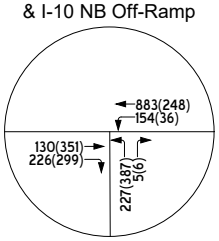
16 I-10 NB Ramps & Sandalwood Dr.

Not Applicable

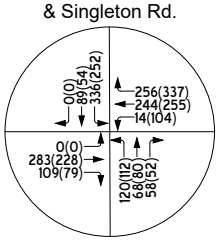
17 Calimesa Bl. & Sandalwood Dr.



18 Calimesa Bl. & I-10 NB Off-Ramp



19 Roberts Rd. & Singleton Rd.



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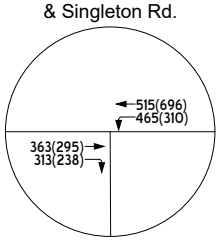

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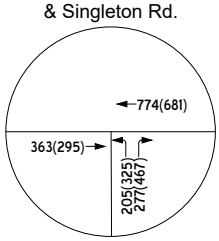


22 Calimesa Bl. & Singleton Rd.

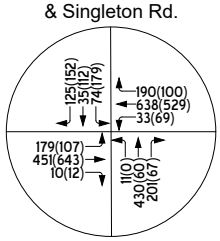
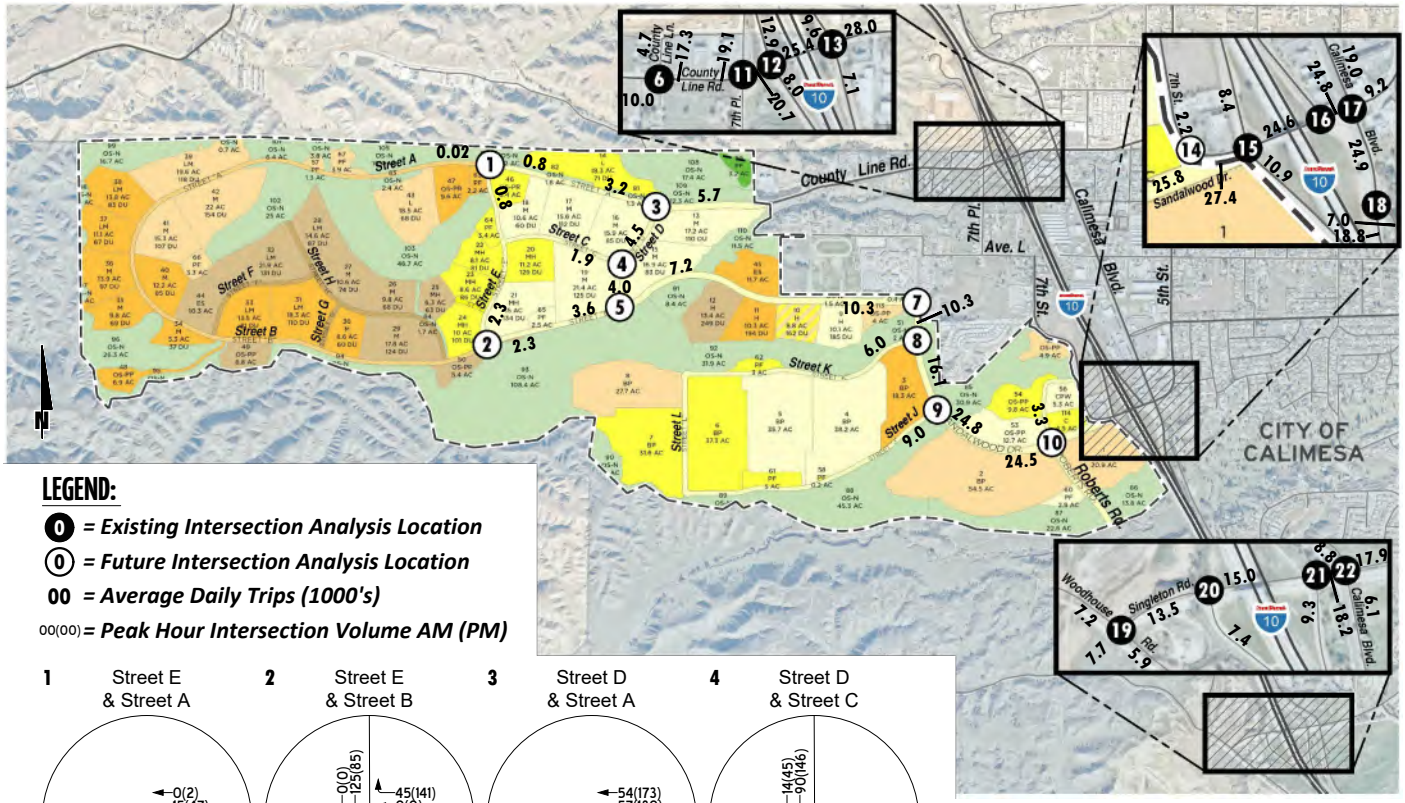


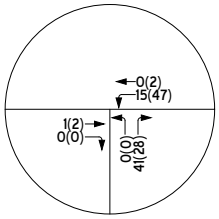
EXHIBIT 7-2 : OPENING YEAR CUMULATIVE (2035) WITH PROJECT (PHASE 2) TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- 00 = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

1 Street E & Street A



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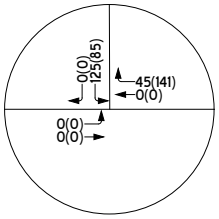
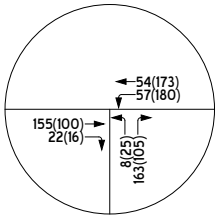
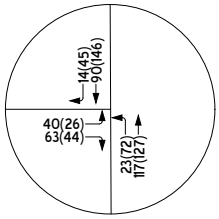


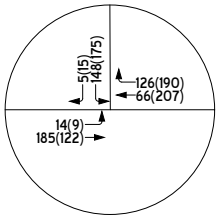
3 Street D & Street A



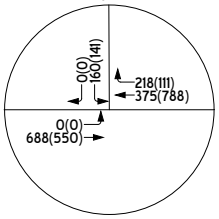
4 Street D & Street C



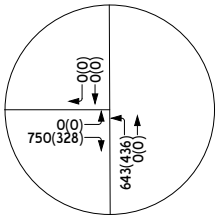
5 Street D & Street B



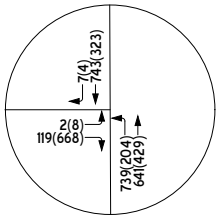
6 County Line Ln. & County Line Rd.



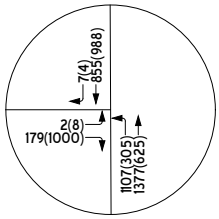
7 Sandalwood Dr. & Street B



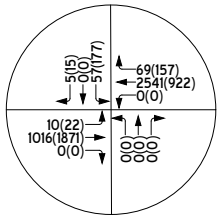
8 Sandalwood Dr. & Street K



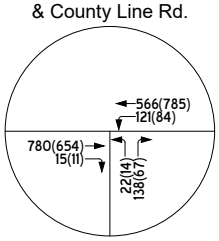
9 Sandalwood Dr. & Street J



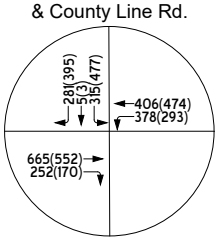
10 Roberts Rd. & Sandalwood Dr.



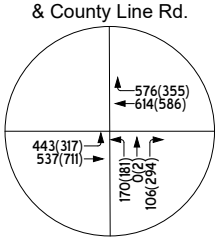
11 7th Pl. & County Line Rd.



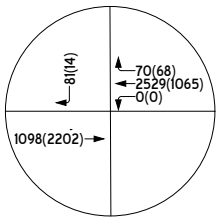
12 I-10 SB Ramps & County Line Rd.



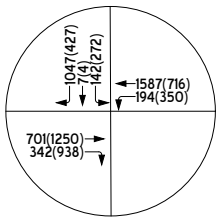
13 I-10 NB Ramps & County Line Rd.



14 7th St. & Sandalwood Dr.



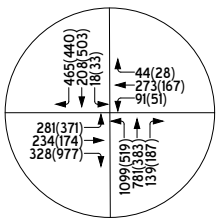
15 I-10 SB Ramps & Sandalwood Dr.



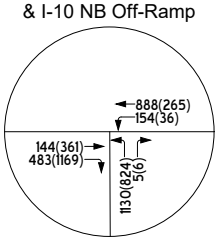
16 I-10 NB Ramps & Sandalwood Dr.

Not Applicable

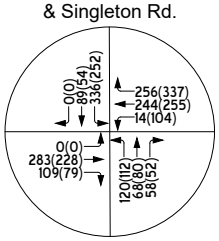
17 Calimesa Bl. & Sandalwood Dr.



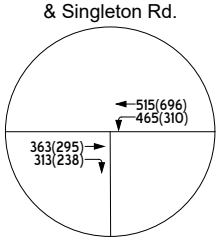
18 Calimesa Bl. & I-10 NB Off-Ramp



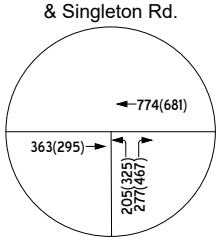
19 Roberts Rd. & Singleton Rd.



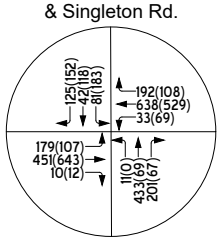
20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.



7.4 INTERSECTION OPERATIONS ANALYSIS

Opening Year Cumulative (2035) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 7-1 for Opening Year Cumulative (2035) traffic conditions, which indicates that the following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Cumulative (2035) Without Project traffic conditions:

- County Line Lane & County Line Road (#6) – LOS F AM and PM peak hours
- I-10 SB Ramps & County Line Road (#12) – LOS F PM peak hour only
- I-10 NB Ramps & County Line Road (#13) – LOS F AM and PM peak hours
- 7th Street & Sandalwood Drive (#14) – LOS F AM peak hour only
- I-10 SB Ramps & Sandalwood Drive (#15) – LOS F AM peak hour only
- Calimesa Boulevard & I-10 NB Off-Ramp (#18) – LOS F AM and PM peak hours
- Roberts Road & Singleton Road (#19) – LOS F PM peak hour only
- I-10 NB Ramps & Singleton Road (#21) – LOS F AM and PM peak hours
- Calimesa Boulevard & Singleton Road (#22) – LOS F AM and PM peak hours

With the addition of Project (Phase 2) traffic, the following additional study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Cumulative (2035) With Project (Phase 2) traffic conditions:

- 7th Place & County Line Road (#11) – LOS E AM peak hour only
- Calimesa Boulevard & Sandalwood Drive (#17) – LOS F AM and PM peak hours

It should be noted that the intersection of 7th Street and Sandalwood Rive is anticipated to operate at an acceptable LOS with the proposed Project improvements (which include access restriction to right-in/right-tout only). The intersection operations analysis worksheets for Opening Year Cumulative (2035) Without Project and With Project traffic conditions are included in Appendices 7.1 and 7.2, respectively.

7.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis for Opening Year Cumulative (2035) traffic conditions are based on the peak hour volumes or planning level ADT volume-based traffic signal warrants. All unsignalized study area intersections are anticipated to meet a traffic signal warrant under a previous analysis scenario. As such, no traffic signal warrants have been evaluated for Opening Year Cumulative (2035) Without Project traffic conditions.

There are no additional study area intersections anticipated to meet traffic signal warrants with the addition of Project (Phase 2) traffic for Opening Year Cumulative (2035) With Project (Phase 2) traffic conditions (see Appendix 7.3).

TABLE 7-1: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2035) CONDITIONS

#	Intersection	Traffic Control[2]	2035 Without Project Delay[1] (secs.) AM	2035 Without Project Delay[1] (secs.) PM	2035 Without Project Level of Service AM	2035 Without Project Level of Service PM	2035 With Project Delay[1] (secs.) AM	2035 With Project Delay[1] (secs.) PM	2035 With Project Level of Service AM	2035 With Project Level of Service PM
1	Street E & Street A	**RA**	Future Intersection				2.8	2.9	A	A
2	Street E & Street B	**RA**	Future Intersection				3.3	3.4	A	A
3	Street D & Street A	**RA**	Future Intersection				4.0	4.7	A	A
4	Street D & Street C	**CSS**	Future Intersection				10.0	10.8	A	B
5	Street D & Street B	**RA**	Future Intersection				3.8	4.1	A	A
6	County Line Ln. & County Line Rd.	CSS	**66.9**	**76.1**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
7	Sandalwood Dr. & Street B	**TS**	Future Intersection				8.9	29.1	A	C
8	Sandalwood Dr. & Street K	**TS**	Future Intersection				23.1	43.2	C	D
9	Sandalwood Dr. & Street J	**TS**	Future Intersection				19.4	40.4	B	D
10	Roberts Rd. & Sandalwood Dr.	**TS**	Future Intersection				20.1	9.1	C	A
11	7th Pl. & County Line Rd.	CSS	28.5	17.6	D	C	**48.2**	22.0	**E**	C
12	I-10 SB Ramps & County Line Rd.	CSS	16.5	**>100.0**	B	**F**	**61.7**	**>100.0**	**F**	**F**
13	I-10 NB Ramps & County Line Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
14	7th St. & Sandalwood Dr.	AWS/**CSS**	**91.0**	8.3	**F**	A	17.3	12.9	C	B
15	I-10 SB Ramps & Sandalwood Dr.	AWS	**>100.0**	15.9	**F**	C	**>100.0**	**>100.0**	**F**	**F**
16	I-10 NB On-Ramp & Sandalwood Dr.[3]	UC	Not Applicable				Not Applicable			
17	Calimesa Bl. & Sandalwood Dr.	TS	25.9	22.8	C	C	**>200.0**	**>200.0**	**F**	**F**
18	Calimesa Bl. & I-10 NB Off-Ramp	AWS	**>100.0**	**53.9**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
19	Roberts Rd. & Singleton Rd.	AWS	29.8	**87.4**	D	**F**	29.8	**87.4**	D	**F**
20	I-10 SB Ramps & Singleton Rd.	UC	19.6	10.6	C	B	19.6	10.6	C	B
21	I-10 NB Ramps & Singleton Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
22	Calimesa Bl. & Singleton Rd.	AWS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

[2] TS = Traffic Signal; AWS = All-way Stop; CSS = Cross-street Stop; UC = Uncontrolled; RA = Roundabout

[3] Starting in Phase 2 when the I-10 NB Hook On-Ramp on Calimesa Boulevard is assumed to be in place, it is anticipated this intersection would be vacated.

7.6 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for Opening Year Cumulative (2035) traffic conditions are presented in Table 7-2. As shown in Table 7-2, there are no movements anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under Opening Year Cumulative (2035) Without Project and With Project traffic conditions. Worksheets for Opening Year Cumulative (2035) Without Project and With Project traffic conditions queuing analysis are provided in Appendices 7.4 and 7.5, respectively.

TABLE 7-2: PEAK HOUR QUEUING SUMMARY FOR OPENING YEAR CUMULATIVE (2035) CONDITIONS

			2035 Without Project				2035 With Project			
			95th Percentile Queue (Feet)		Acceptable? [1]		95th Percentile Queue (Feet)		Acceptable? [1]	
Intersection	Movement	Available Stacking Distance (Feet)	AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
I-10 SB Ramps & County Line Rd. (#12)	SBL/T	1,165	764	756	Yes	Yes	877	774	Yes	Yes
	SBR	50	146 [2]	143 [2]	Yes	Yes	115 [2]	100 [2]	Yes	No
I-10 NB Ramps & County Line Rd. (#13)	NBL/T	1,085	785	621	Yes	Yes	917	914	Yes	Yes
	NBR	50	92 [2]	121 [2]	Yes	Yes	109 [2]	138 [2]	Yes	Yes
I-10 SB Ramps & Sandalwood Dr. (#15)	SBL/T/R	1,195	92	111	Yes	Yes	761	698	Yes	Yes
Calimesa Bl. & I-10 WB Off-Ramp (#18)	NBL/T	770	69	133	Yes	Yes	538	581	Yes	Yes
I-10 SB Ramps & Singleton Rd. (#20)	SBL/T/R		Off-Ramp Does Not Exist				Off-Ramp Does Not Exist			
I-10 NB Ramps & Singleton Rd. (#21)	NBL/T/R	1,140	940	728	Yes	Yes	839	762	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.

7.7 IMPROVEMENT RECOMMENDATIONS TO MAINTAIN GENERAL PLAN CONSISTENCY

Improvements needed to achieve acceptable LOS have been identified at intersections or off-ramps that are anticipated to operate at a deficient LOS under Opening Year Cumulative (2035) traffic conditions.

7.7.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient under Opening Year Cumulative (2035) traffic conditions in an effort to achieve an acceptable LOS. The effectiveness of the recommended improvement strategies to address Opening Year Cumulative (2035) traffic deficiencies are presented in Table 7-3. Per the City's Guidelines, there are certain improvements that have been recommended in order to achieve the pre-project traffic condition (minimum threshold), along with the additional improvements needed to achieve

acceptable LOS standards at these locations. There are other study area intersections where improvements have only been recommended to achieve acceptable peak hour operations.

Lastly, County Line Road at the I-10 Freeway reflects the temporary signalization of the ramps, while Sandalwood Drive Ramps at the I-10 Freeway have been evaluated for both Interim 1B and Ultimate Interchange (full interchange) improvements (all of which achieve acceptable LOS). As noted previously, Interim 1B improvements can support up to 50% of the development proposed within Phase 2 along with all of Phase 1 (no specific uses identified, just 50% of the total traffic associated with Phase 2). As such, Interim 1B improvements can support all of Phase 1 development (1,400,000 square feet of business park use, 709 single family cluster residential units, 185 multifamily/townhomes, 16,500 square foot fire station/public works facility, and 12.7 acres of parks) plus 50% of the development proposed in Phase 2 (700,000 square feet of general light industrial, 700,000 square feet of high-cube fulfillment center-sort facility, 50,000 square feet of mixed-use commercial, 468 single family cluster residential units, 81 multifamily/townhomes, and 16.2 acres of parks). These uses are equivalent to 23,010 two-way trips per day with 2,465 PCE AM peak hour trips and 2,781 PCE PM peak hour trips based on the trip generation evaluated in this TA (all of Phase 1 and 50% of Phase 2).

An alternative set of improvements have been considered at the intersection of Calimesa Boulevard and Sandalwood Drive which assumes only a single eastbound through lane. The ultimate design of the I-10 Freeway and Sandalwood Drive interchange is currently unknown and will be determined by the City of Calimesa in conjunction with Caltrans.

The Project is anticipated to contribute fewer than 50 peak hour trips to Intersections #19 and #21, and as such, no improvements have been identified for these locations. Worksheets for Opening Year Cumulative (2035) With Project traffic conditions, with improvements, HCM calculation worksheets are provided in Appendix 7.6.

7.7.2 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT OFF-RAMPS

There are no queuing issues anticipated under Opening Year Cumulative (2035) traffic conditions. As such, no improvements have been identified.

TABLE 7-3: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2035) CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control [3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	Level of Service AM	PM
6	County Line Ln. & County Line Rd.																	
	Without Project:	CSS	0	0	0	0	1	0	0	1	0	0	1	0	**149.6**	**294.1**	**F**	**F**
	With Project (Acceptable LOS):	**TS**	0	0	0	0	1	0	**1**	1	0	0	1	**1**	1.6	3.4	A	A
11	7th Pl. & County Line Rd.																	
	Without Project:	CSS	0	1	0	0	0	0	0	1	0	0	1	0	28.5	17.6	D	C
	With Project (Acceptable LOS):	CSS	0	1	0	0	0	0	0	1	0	**1**	1	0	34.1	22.7	D	C
12	I-10 SB Ramps & County Line Rd.																	
	Without Project:	CSS	0	0	0	0	1	1	0	1	0	1	1	0	16.5	**1758.1**	B	**F**
	With Project (Acceptable LOS):	**TS**	0	0	0	0	1	1	0	1	0	1	1	0	52.6	54.1	D	D
13	I-10 NB Ramps & County Line Rd.																	
	Without Project:	CSS	0	1	1	0	0	0	1	1	0	0	1	1	**400.6**	**132.1**	**F**	**F**
	With Project (Acceptable LOS):	**TS**	0	1	1	0	0	0	1	1	0	0	1	1	38.1	34.4	D	C
15	I-10 SB Ramps & Sandalwood Dr.																	
	Without Project:	CSS	0	0	0	0	1	0	0	1	0	0	1	0	**116.0**	15.9	**F**	C
	With Project Interim 1B:[4]	**TS**	0	0	0	0	1	**1**	0	1	**1**	**1**	1	0	40.3	38.6	D	D
	With Project Ultimate Interchange:[5]	**TS**	0	0	0	**1**	1	**1>>**	0	**3**	**1>>**	**2**	**3**	0	9.5	17.6	A	B
17	Calimesa Bl. & Sandalwood Dr.																	
	Without Project:	TS	1	2	d	1	1	1>	1	2	0	1	1	1	25.9	22.8	C	C
	With Project Interim 1B:[4]	TS	1	2	d	1	1	1>	1	**1**	**1>**	1	1	1	48.2	54.4	D	D
	With Project Ultimate Interchange:[5]	TS	**2**	2	**1**	1	**2**	1>	**2**	**2**	**1>>**	1	**2**	1	52.1	41.8	D	D
	Ultimate Interchange Alternative:[6]	TS	**2**	2	**1**	1	**2**	1>	**2**	**1**	**1>>**	1	**2**	1	52.5	42.0	D	D
18	Calimesa Bl. & I-10 NB Off-Ramp																	
	Without Project:	AWS	0	1	0	0	0	0	0	1	0	0	1	0	**270.9**	**53.9**	**F**	**F**
	With Project Interim 1B:[4]	**TS**	**1**	1	0	0	0	0	0	1	**1>**	**1**	1	0	52.8	36.8	D	D
	With Project Ultimate Interchange:[5]	**TS**	**1**	1	0	0	0	0	0	1	**1>>**	**1**	**2**	0	31.6	26.3	C	C
22	Calimesa Bl. & Singleton Rd.																	
	Without Project:	AWS	0	1	0	0	1	0	0	1	0	0	1	0	**423.4**	**325.6**	**F**	**F**
	With Project (Threshold):	AWS	**1**	1	0	**1**	1	0	**1**	1	0	**1**	1	0	**334.3**	**222.7**	**F**	**F**
	With Project (Acceptable LOS):	**TS**	**1**	1	**1**	**1**	1	0	**1**	**2**	0	**1**	1	**1**	49.0	23.4	D	C

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free Right-Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross-Street Stop; AWS = All-Way Stop; RA = Roundabout; TS = Traffic Signal; **TS** = Traffic Signal

[4] Note: Interim 1B improvements can only be supported by 50% of the proposed development for Phase 2.

Interim 1B improvements include a 2nd NB left turn lane at Calimesa Bl. and Sandalwood Dr. Improvements assume modifying the traffic signal to implement protected left turn phasing for the EB and WB approaches. Lastly, Phase 1B assumes the existing bridge without any bridge widening.

[5] Ultimate Interchange improvements assumes the ultimate interchange improvements through the Sandalwood Dr. and Calimesa Bl. corridors which includes bridge widening.

[6] An alternative improvement has also been considered without the addition of a 2nd EB through lane as the ultimate design for the interchange has not yet been determined by the City of Calimesa and Caltrans.

8 OPENING YEAR CUMULATIVE (2038) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Opening Year Cumulative (2038) conditions and the resulting intersection operations, traffic signal warrant, and off-ramp queuing analyses.

8.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Opening Year Cumulative (2038) conditions are consistent with those shown previously in Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for 2038 conditions only (e.g., intersection and roadway improvements at the Project's frontage and driveways).
- The Sandalwood Drive bridge and interchange would need to be widened to its ultimate condition before the buildout of Phase 2 and would also be needed to support Phase 3 (2038) traffic.

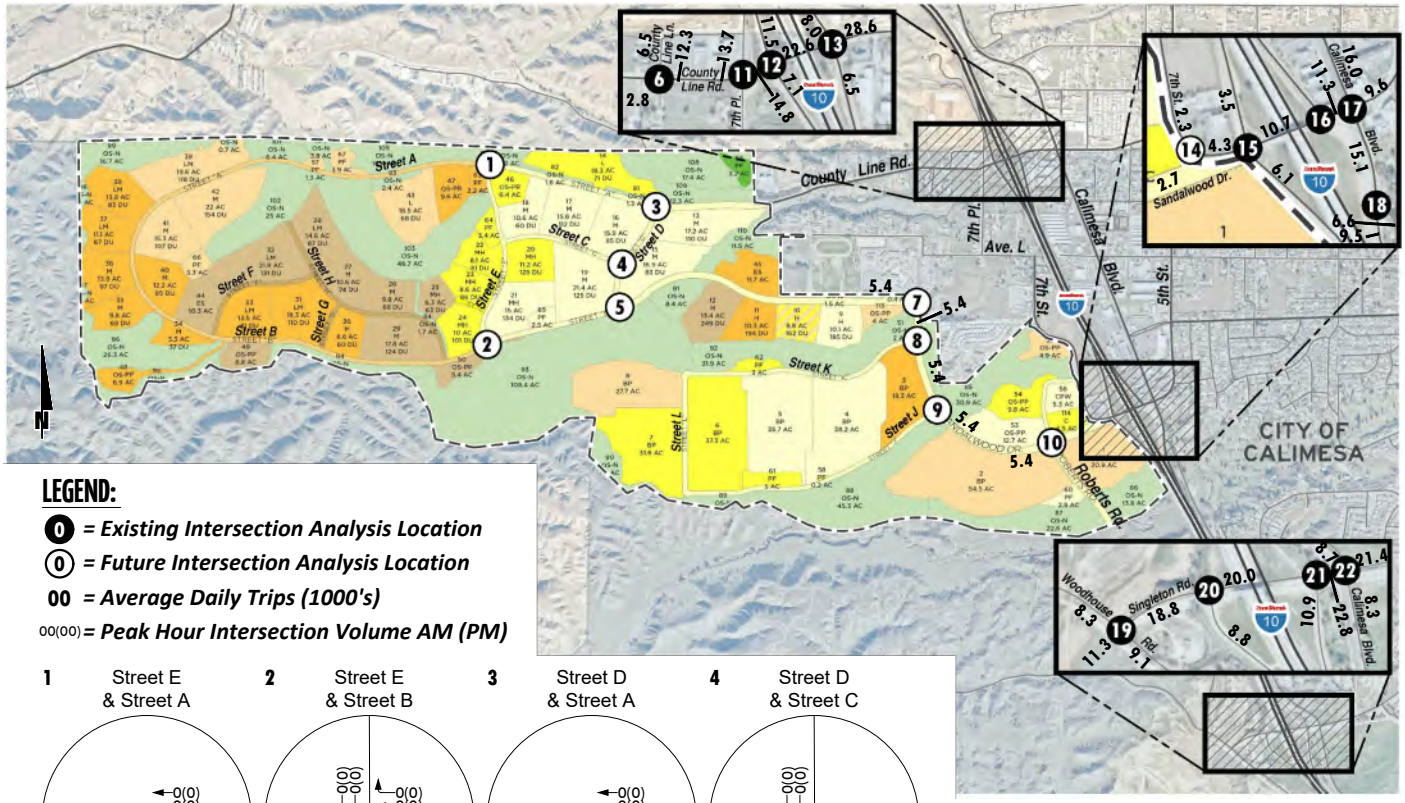
8.2 OPENING YEAR CUMULATIVE (2038) WITHOUT PROJECT GROWTH TRAFFIC VOLUME FORECASTS

This scenario includes traffic volumes that are interpolated between Opening Year Cumulative (2030) and Horizon Year (2045) for Opening Year Cumulative (2038) traffic conditions. The weekday ADT and weekday AM and PM peak hour volumes, in actual vehicles, which can be expected for Opening Year Cumulative (2038) Without Project traffic conditions are shown in Exhibit 8-1.

8.3 OPENING YEAR CUMULATIVE (2038) WITH PROJECT (PHASE 3) TRAFFIC VOLUME FORECASTS

This scenario includes Opening Year Cumulative (2038) Without Project traffic in conjunction with the addition of Project (Phase 3) traffic. The weekday ADT volumes and peak hour volumes which can be expected for Opening Year Cumulative (2038) With Project (Phase 3) traffic conditions are shown in Exhibit 8-2.

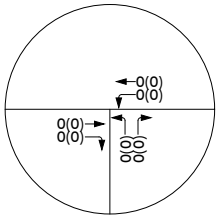
EXHIBIT 8-1 : OPENING YEAR CUMULATIVE (2038) WITHOUT PROJECT TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



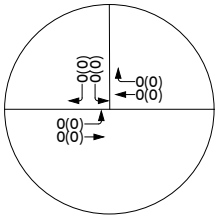
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

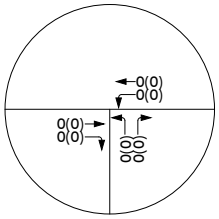
1 Street E & Street A



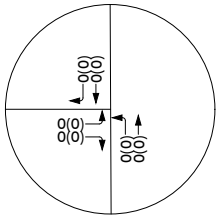
2 Street E & Street B



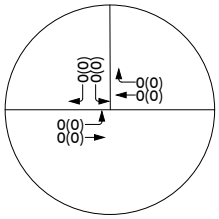
3 Street D & Street A



4 Street D & Street C



5 Street D & Street B



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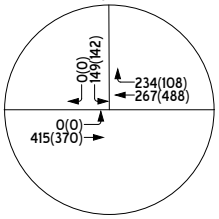
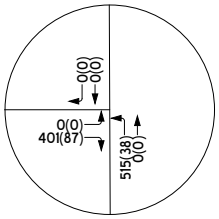
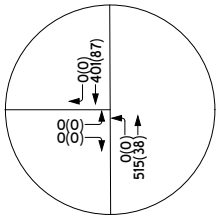


7 Sandalwood Dr. & Street B



8 Sandalwood Dr. & Street K



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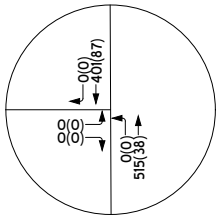

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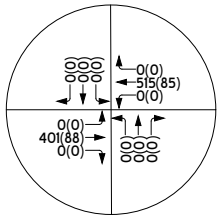

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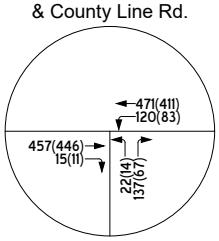

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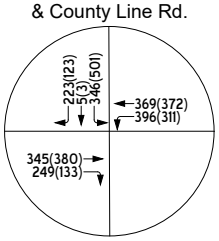

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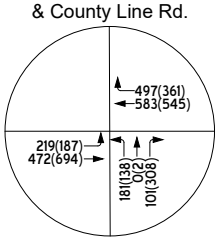
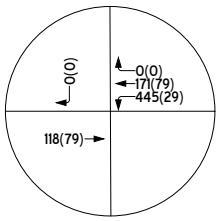


14 7th St. & Sandalwood Dr.



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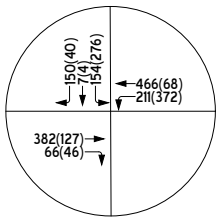
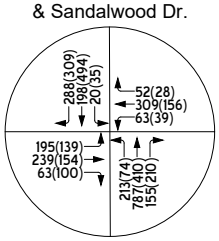


16 I-10 NB Ramps & Sandalwood Dr.

Not Applicable

17 Calimesa Bl. & Sandalwood Dr.



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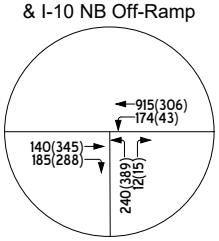
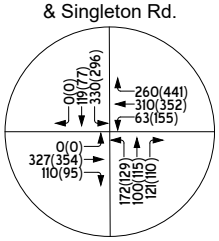


19 Roberts Rd. & Singleton Rd.



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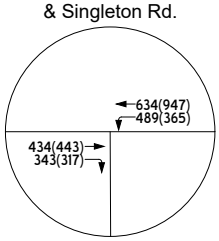

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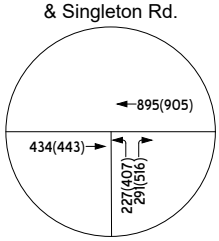

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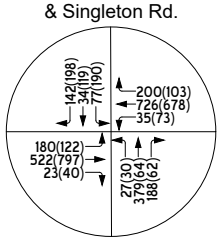
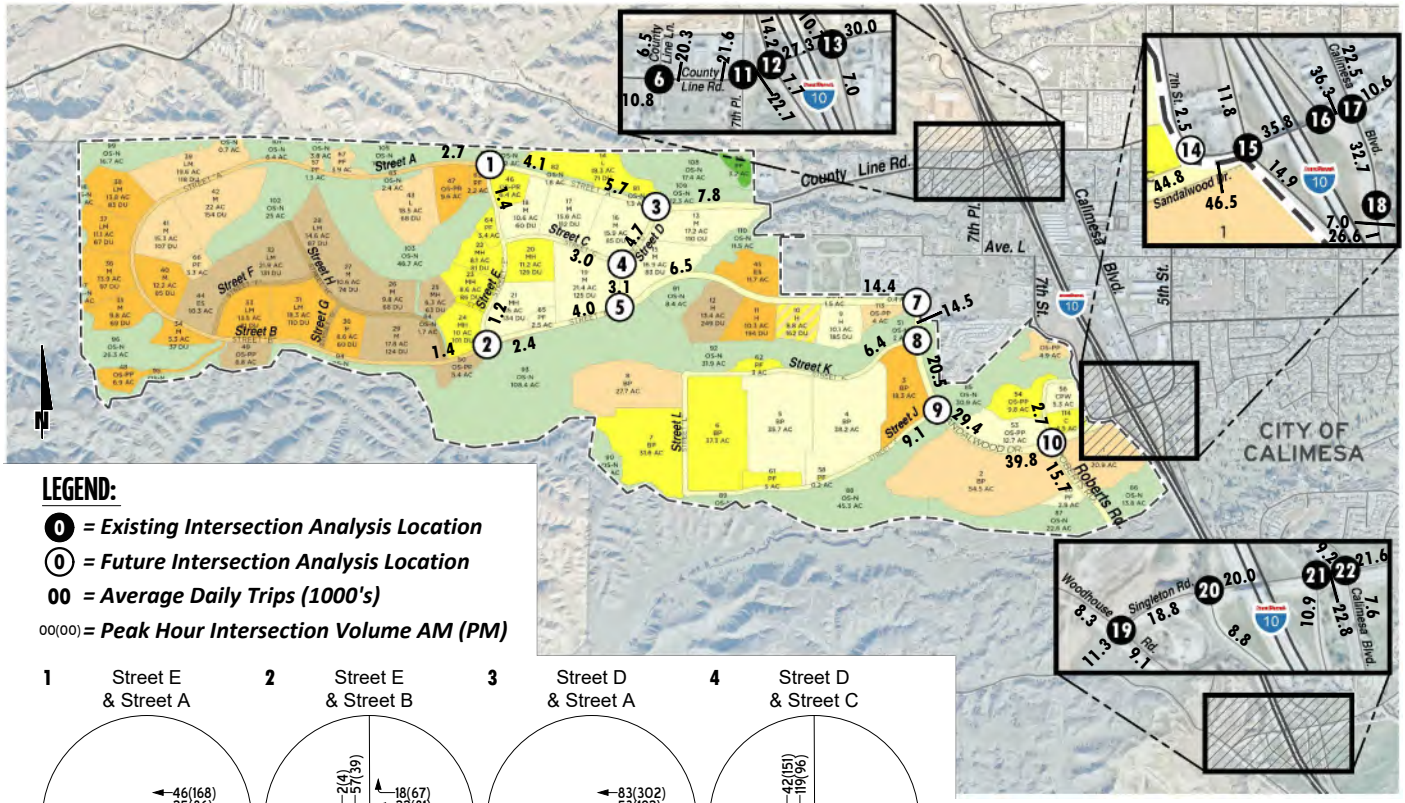


EXHIBIT 8-2 : OPENING YEAR CUMULATIVE (2038) WITH PROJECT (PHASE 3) TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



LEGEND:

- 0 = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- 00 = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

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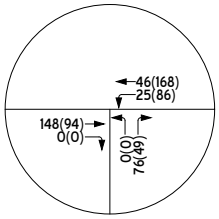

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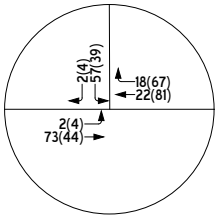

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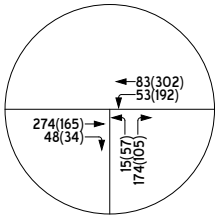

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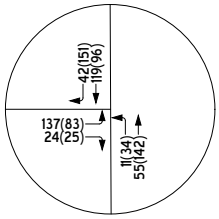
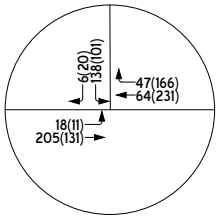
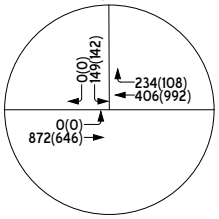


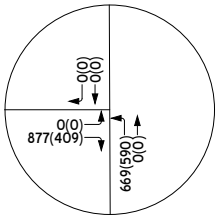
5 Street D & Street B



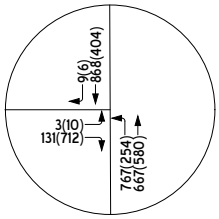
6 County Line Ln. & County Line Rd.



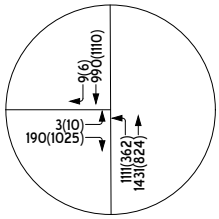
7 Sandalwood Dr. & Street B



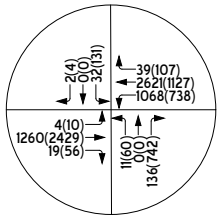
8 Sandalwood Dr. & Street K



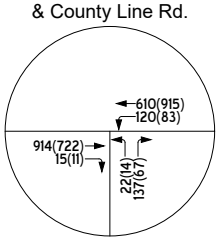
9 Sandalwood Dr. & Street J



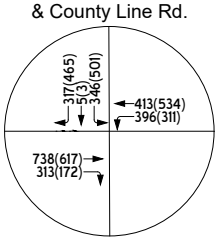
10 Roberts Rd. & Sandalwood Dr.



11 7th Pl. & County Line Rd.



12 I-10 SB Ramps & County Line Rd.



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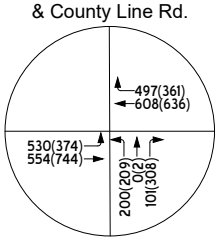
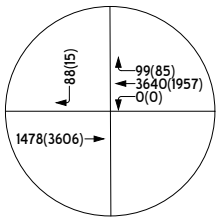


14 7th St. & Sandalwood Dr.



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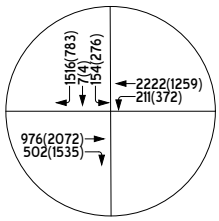
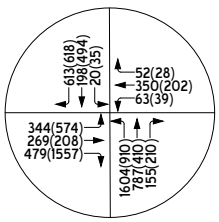


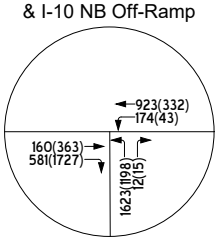
16 I-10 NB Ramps & Sandalwood Dr.

Not Applicable

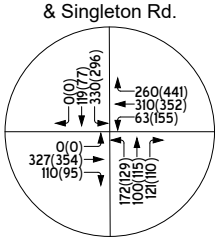
17 Calimesa Bl. & Sandalwood Dr.



18 Calimesa Bl. & I-10 NB Off-Ramp



19 Roberts Rd. & Singleton Rd.



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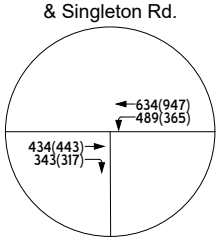

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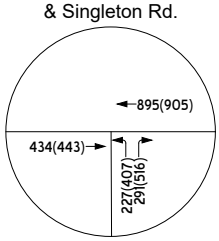
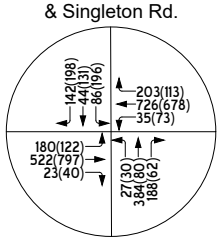


22 Calimesa Bl. & Singleton Rd.



8.4 INTERSECTION OPERATIONS ANALYSIS

Opening Year Cumulative (2038) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 8-1 for Opening Year Cumulative (2038) traffic conditions, which indicates that the following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Cumulative (2038) Without Project traffic conditions:

- County Line Lane & County Line Road (#6) – LOS F AM and PM peak hours
- I-10 SB Ramps & County Line Road (#12) – LOS F PM peak hour only
- I-10 NB Ramps & County Line Road (#13) – LOS F AM and PM peak hours
- 7th Street & Sandalwood Drive (#14) – LOS F AM peak hour only
- I-10 SB Ramps & Sandalwood Drive (#15) – LOS F AM peak hour only
- Calimesa Boulevard & I-10 NB Off-Ramp (#18) – LOS F AM peak hour; LOS E PM peak hour
- Roberts Road & Singleton Road (#19) – LOS F AM and PM peak hours
- I-10 NB Ramps & Singleton Road (#21) – LOS F AM and PM peak hours
- Calimesa Boulevard & Singleton Road (#22) – LOS F AM and PM peak hours

With the addition of Project (Phase 3) traffic, the following additional study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Cumulative (2038) With Project (Phase 3) traffic conditions:

- 7th Place & County Line Road (#11) – LOS F AM peak hour only
- Calimesa Boulevard & Sandalwood Drive (#17) – LOS F AM and PM peak hours

It should be noted that the intersection of 7th Street and Sandalwood Rive is anticipated to operate at an acceptable LOS with the proposed Project improvements (which include access restriction to right-in/right-tout only). The intersection operations analysis worksheets for Opening Year Cumulative (2038) Without Project and With Project traffic conditions are included in Appendices 8.1 and 8.2, respectively.

TABLE 8-1: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2038) CONDITIONS

#	Intersection	Traffic Control[2]	2038 Without Project Delay[1] (secs.) AM	PM	Level of Service AM	PM	2038 With Project Delay[1] (secs.) AM	PM	Level of Service AM	PM
1	Street E & Street A	**RA**	Future Intersection				3.5	4.0	A	A
2	Street E & Street B	**RA**	Future Intersection				3.1	3.4	A	A
3	Street D & Street A	**RA**	Future Intersection				4.9	5.9	A	A
4	Street D & Street C	**CSS**	Future Intersection				11.1	12.0	B	B
5	Street D & Street B	**RA**	Future Intersection				3.8	3.9	A	A
6	County Line Ln. & County Line Rd.	CSS	**65.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
7	Sandalwood Dr. & Street B	**TS**	Future Intersection				9.9	33.2	A	C
8	Sandalwood Dr. & Street K	**TS**	Future Intersection				24.1	43.5	C	D
9	Sandalwood Dr. & Street J	**TS**	Future Intersection				19.8	42.5	B	D
10	Roberts Rd. & Sandalwood Dr.	**TS**	Future Intersection				25.2	51.0	C	D
11	7th Pl. & County Line Rd.	CSS	31.2	17.8	D	C	**84.8**	26.4	**F**	D
12	I-10 SB Ramps & County Line Rd.	CSS	25.4	**>100.0**	D	**F**	**>100.0**	**>100.0**	**F**	**F**
13	I-10 NB Ramps & County Line Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
14	7th St. & Sandalwood Dr.	AWS/**CSS**	**93.2**	8.6	**F**	A	29.1	19.9	D	C
15	I-10 SB Ramps & Sandalwood Dr.	AWS	**>100.0**	17.6	**F**	C	**>100.0**	**>100.0**	**F**	**F**
16	I-10 NB On-Ramp & Sandalwood Dr.[3]	UC	Not Applicable				Not Applicable			
17	Calimesa Bl. & Sandalwood Dr.	TS	29.7	22.8	C	C	**>200.0**	**>200.0**	**F**	**F**
18	Calimesa Bl. & I-10 NB Off-Ramp	AWS	**>100.0**	**56.6**	**F**	**E**	**>100.0**	**>100.0**	**F**	**F**
19	Roberts Rd. & Singleton Rd.	AWS	**56.8**	**>100.0**	**F**	**F**	**56.8**	**>100.0**	**F**	**F**
20	I-10 SB Ramps & Singleton Rd.	UC	30.3	14.5	D	B	30.3	14.5	D	B
21	I-10 NB Ramps & Singleton Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
22	Calimesa Bl. & Singleton Rd.	AWS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

[2] TS = Traffic Signal; AWS = All-way Stop; CSS = Cross-street Stop; UC = Uncontrolled; RA = Roundabout

[3] Starting in Phase 2 when the I-10 NB Hook On-Ramp on Calimesa Boulevard is assumed to be in place, it is anticipated this intersection would be vacated.

8.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

All unsignalized study area intersections are anticipated to meet a traffic signal warrant under a previous analysis scenario. As such, no traffic signal warrants have been evaluated for Opening Year Cumulative (2038) Without Project and With Project traffic conditions.

8.6 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for Opening Year Cumulative (2038) traffic conditions are presented in Table 7-2. As shown in Table 7-2, there are no movements anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under Opening Year Cumulative (2038) Without Project and With Project traffic conditions. Worksheets for Opening Year Cumulative (2038) Without Project and With Project traffic conditions queuing analysis are provided in Appendices 8.3 and 8.4, respectively.

TABLE 8-2: PEAK HOUR QUEUING SUMMARY FOR OPENING YEAR CUMULATIVE (2038) CONDITIONS

Intersection	Movement	Available Stacking Distance (Feet)	2038 Without Project 95th Percentile Queue (Feet)		Acceptable? [1]		2038 With Project 95th Percentile Queue (Feet)		Acceptable? [1]	
			AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
I-10 SB Ramps & County Line Rd. (#12)	SBL/T	1,165	764	758	Yes	Yes	756	756	Yes	Yes
	SBR	50	140 [2]	142 [2]	Yes	Yes	71 [2]	29	Yes	Yes
I-10 NB Ramps & County Line Rd. (#13)	NBL/T	1,085	982	752	Yes	Yes	781	782	Yes	Yes
	NBR	50	143 [2]	121 [2]	Yes	Yes	47	89 [2]	Yes	Yes
I-10 SB Ramps & Sandalwood Dr. (#15)	SBL/T/R	1,195	105	101	Yes	Yes	762	762	Yes	Yes
Calimesa Bl. & I-10 WB Off-Ramp (#18)	NBL/T	770	89	150	Yes	Yes	545	546	Yes	Yes
I-10 SB Ramps & Singleton Rd. (#20)	SBL/T/R		Off-Ramp Does Not Exist				Off-Ramp Does Not Exist			
I-10 NB Ramps & Singleton Rd. (#21)	NBL/T/R	1,140	723	734	Yes	Yes	713	709	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.

8.7 IMPROVEMENT RECOMMENDATIONS TO MAINTAIN GENERAL PLAN CONSISTENCY

Improvements needed to achieve acceptable LOS have been identified at intersections or off-ramps that are anticipated to operate at a deficient LOS under Opening Year Cumulative (2038) traffic conditions.

8.7.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient under Opening Year Cumulative (2038) traffic conditions in an effort to achieve an acceptable LOS. The effectiveness of the recommended improvement strategies to address Opening Year Cumulative (2038) traffic deficiencies are presented in Table 8-3. Per the City's Guidelines, there are certain improvements that have been recommended in order to achieve the pre-project traffic condition (minimum threshold), along with the additional improvements needed to achieve acceptable LOS standards at these locations. There are other study area intersections where improvements have only been recommended to achieve acceptable peak hour operations.

An alternative set of improvements have been considered at the intersection of Calimesa Boulevard and Sandalwood Drive which assumes only a single eastbound through lane. The ultimate design of the I-10 Freeway and Sandalwood Drive interchange is currently unknown and will be determined by the City of Calimesa in conjunction with Caltrans.

Lastly, County Line Road at the I-10 Freeway reflects the temporary signalization of the ramps, while Sandalwood Drive Ramps at the I-10 Freeway have been evaluated assuming ultimate interchange improvements (all of which achieve acceptable LOS). The Project is anticipated to contribute fewer than 50 peak hour trips to Intersections #19 and #21, and as such, no improvements have been identified for these locations. Worksheets for Opening Year Cumulative (2038) With Project traffic conditions, with improvements, HCM calculation worksheets are provided in Appendix 8.5.

8.7.2 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT OFF-RAMPS

There are no queuing issues anticipated under Opening Year Cumulative (2038) traffic conditions. As such, no improvements have been identified.

TABLE 8-3: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2038) CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control [3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	Level of Service AM	PM
6	County Line Ln. & County Line Rd.																	
	Without Project:	CSS	0	0	0	0	1	0	0	1	0	0	1	0	**177.2**	**310.4**	**F**	**F**
	With Project (Acceptable LOS):	**TS**	0	0	0	0	1	0	**1**	1	0	0	1	**1**	1.5	17.7	A	B
11	7th Pl. & County Line Rd.																	
	Without Project:	CSS	0	1	0	0	0	0	0	1	0	0	1	0	31.2	17.8	D	C
	With Project (Acceptable LOS):	CSS	0	1	0	0	0	0	0	**2**	0	**1**	**2**	0	21.7	14.8	C	B
12	I-10 SB Ramps & County Line Rd.																	
	Without Project:	CSS	0	0	0	0	1	1	0	1	0	1	1	0	25.4	**3142.4**	D	**F**
	With Project (Acceptable LOS):	**TS**	0	0	0	0	1	1	0	1	**1**	1	1	0	49.7	47.9	D	D
13	I-10 NB Ramps & County Line Rd.																	
	Without Project:	CSS	0	1	1	0	0	0	1	1	0	0	1	1	**488.9**	**215.1**	**F**	**F**
	With Project (Acceptable LOS):	**TS**	0	1	1	0	0	0	1	1	0	0	1	1	49.8	47.3	D	D
15	I-10 SB Ramps & Sandalwood Dr.																	
	Without Project:	CSS	0	0	0	0	1	0	0	1	0	0	1	0	**162.4**	17.6	**F**	C
	With Project (Acceptable LOS):[4]	**TS**	0	0	0	**1**	1	**1>>**	0	**3**	**1>>**	**2**	**3**	0	15.7	20.6	B	C
17	Calimesa Bl. & Sandalwood Dr.																	
	Without Project:	TS	1	2	d	1	1	1>	1	2	0	1	1	1	29.7	22.8	C	C
	With Project (Acceptable LOS):[4]	TS	**2**	2	**1**	1	**2**	1>	**2**	**2**	**1>>**	1	**2**	1	54.4	50.5	D	D
	With Project Alternative:[5]	TS	**2**	2	**1**	1	**2**	1>	**2**	**1**	**1>>**	1	**2**	1	**56.1**	54.0	**E**	D
18	Calimesa Bl. & I-10 NB Off-Ramp																	
	Without Project:	AWS	0	1	0	0	0	0	0	1	0	0	1	0	**318.0**	**56.6**	**F**	**E**
	With Project Ultimate Interchange:[4]	**TS**	**1**	1	0	0	0	0	0	**2**	**1>>**	**1**	1	0	42.1	24.3	D	C
22	Calimesa Bl. & Singleton Rd.																	
	Without Project:	AWS	0	1	0	0	1	0	0	1	0	0	1	0	**510.0**	**524.3**	**F**	**F**
	With Project (Threshold):	AWS	**1**	1	0	**1**	1	0	**1**	1	0	**1**	1	0	**394.3**	**393.6**	**F**	**F**
	With Project (Acceptable LOS):	**TS**	**1**	1	**1**	**1**	1	0	**1**	**2**	0	**1**	1	**1**	44.2	26.0	D	C

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free Right-Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross-Street Stop; AWS = All-Way Stop; RA = Roundabout; TS = Traffic Signal; **TS** = Traffic Signal

[4] Assumes the ultimate interchange improvements through the Sandalwood Dr. and Calimesa Bl. corridors which includes bridge widening.

[5] An alternative improvement has also been considered without the addition of a 2nd EB through lane as the ultimate design for the interchange has not yet been determined by the City of Calimesa and Caltrans.

9 OPENING YEAR CUMULATIVE (2040) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Opening Year Cumulative (2040) conditions and the resulting intersection operations, traffic signal warrant, and off-ramp queuing analyses.

9.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Opening Year Cumulative (2040) conditions are consistent with those shown previously in Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for 2040 conditions only (e.g., intersection and roadway improvements at the Project's frontage and driveways).
- County Line Road interchange at the I-10 Freeway requires additional improvements to future proposed roundabouts. Although roundabouts are assumed at the I-10 Freeway ramps along with additional through lane improvements along County Line Road, 7th Place at County Line Road continues to be evaluated as a full access intersection for the purposes of this TA (see Table 9-3). However, it is possible that a future interchange study for the I-10 Freeway at County Line Road could ultimately modify or eliminate access at 7th Place on County Line Road due to its proximity to the interchange. In order for the elimination to occur, an alternative route would need to be accommodated to the north to County Line Road.
- The Sandalwood Drive bridge and interchange would need to be widened to its ultimate condition before the buildout of Phase 2 and is necessary to support Phase 4 (2040) traffic.
- This analysis scenario assumes County Line Road interchange at the I-10 Freeway is improved with 2-lane roundabouts at both ramp locations and modifications to the striping to accommodate 4-lanes under the I-10 Freeway.

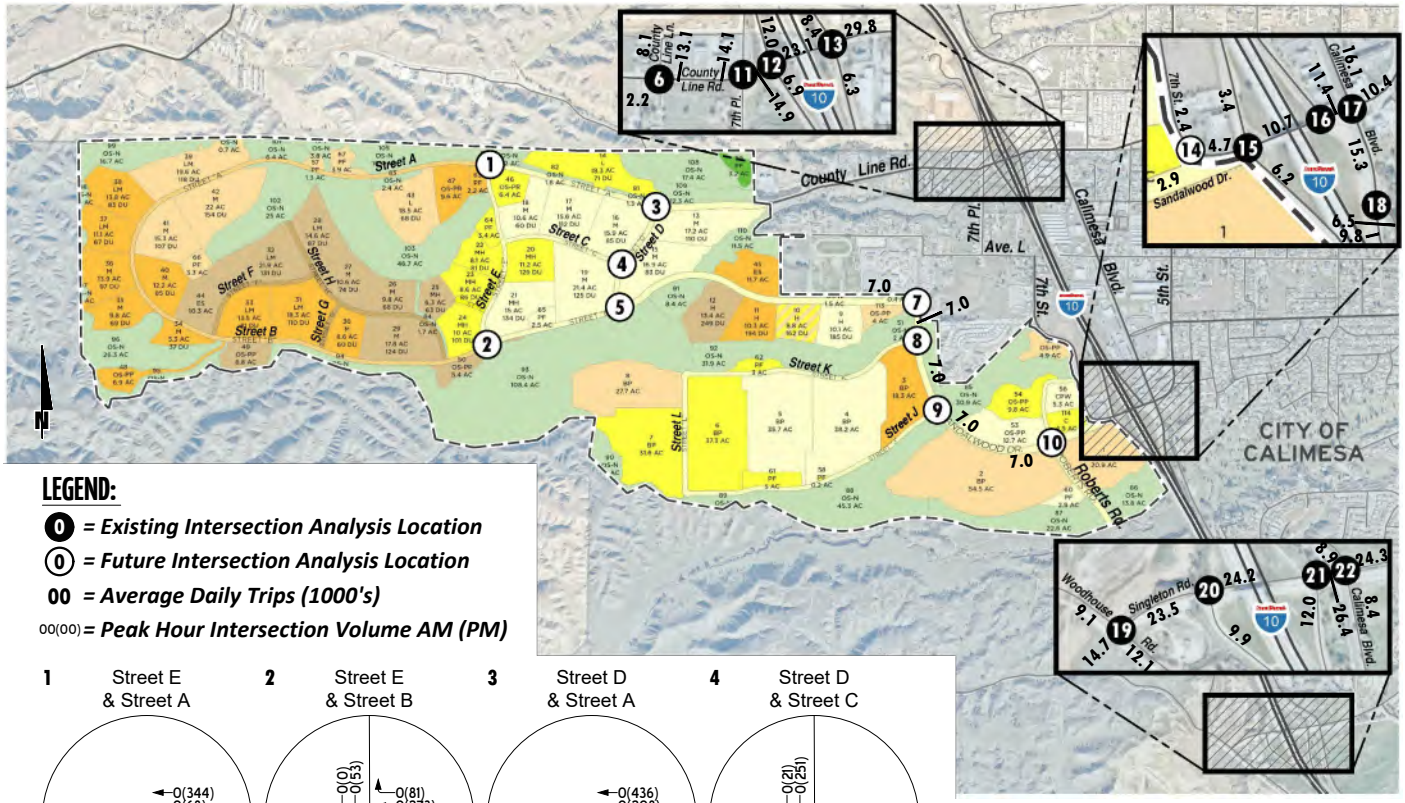
9.2 OPENING YEAR CUMULATIVE (2040) WITHOUT PROJECT GROWTH TRAFFIC VOLUME FORECASTS

This scenario includes traffic volumes that are interpolated between Opening Year Cumulative (2030) and Horizon Year (2045) to Opening Year Cumulative (2040) traffic conditions. The weekday ADT and weekday AM and PM peak hour volumes, in actual vehicles, which can be expected for Opening Year Cumulative (2040) Without Project traffic conditions are shown in Exhibit 9-1.

9.3 OPENING YEAR CUMULATIVE (2040) WITH PROJECT (PHASE 4) TRAFFIC VOLUME FORECASTS

This scenario includes Opening Year Cumulative (2040) Without Project traffic in conjunction with the addition of Project (Phase 4) traffic. The weekday ADT volumes and peak hour volumes which can be expected for Opening Year Cumulative (2040) With Project (Phase 4) traffic conditions are shown in Exhibit 9-2.

EXHIBIT 9-1 : OPENING YEAR CUMULATIVE (2040) WITHOUT PROJECT TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



LEGEND:

- (0) = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- 00 = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

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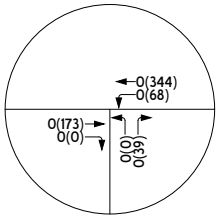
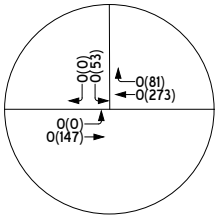
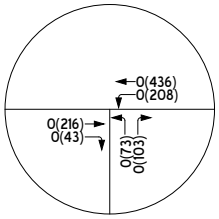


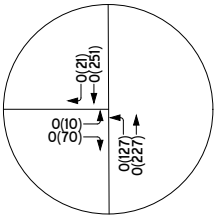
2 Street E & Street B



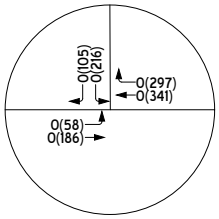
3 Street D & Street A



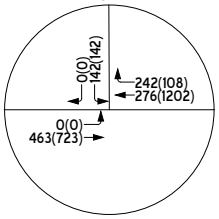
4 Street D & Street C



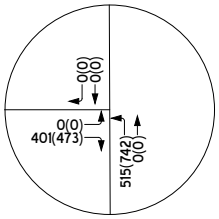
5 Street D & Street B



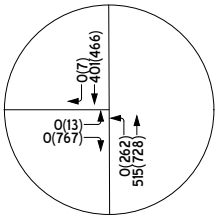
6 County Line Ln. & County Line Rd.



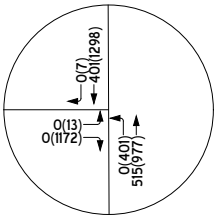
7 Sandalwood Dr. & Street B



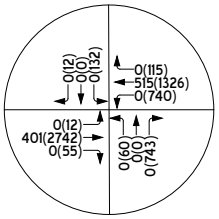
8 Sandalwood Dr. & Street K



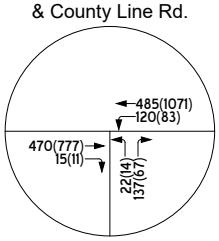
9 Sandalwood Dr. & Street J



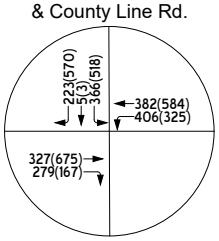
10 Roberts Rd. & Sandalwood Dr.



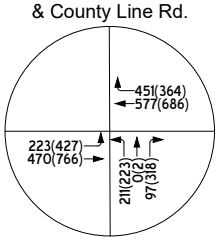
11 7th Pl. & County Line Rd.



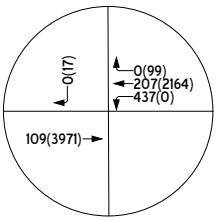
12 I-10 SB Ramps & County Line Rd.



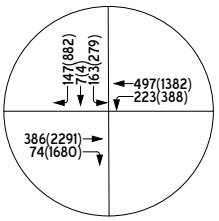
13 I-10 NB Ramps & County Line Rd.



14 7th St. & Sandalwood Dr.



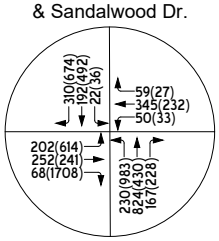
15 I-10 SB Ramps & Sandalwood Dr.



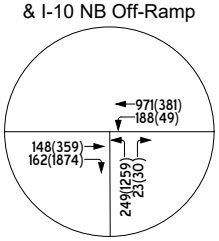
16 I-10 NB Ramps & Sandalwood Dr.

Not Applicable

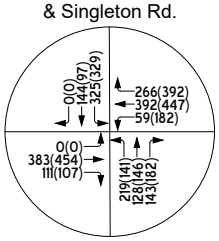
17 Calimesa Bl. & Sandalwood Dr.



18 Calimesa Bl. & I-10 NB Off-Ramp



19 Roberts Rd. & Singleton Rd.



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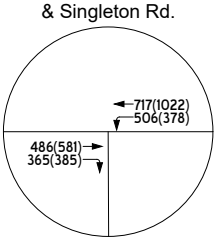

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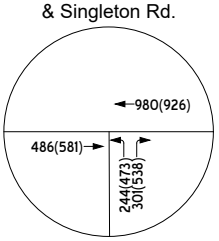

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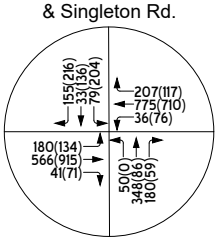
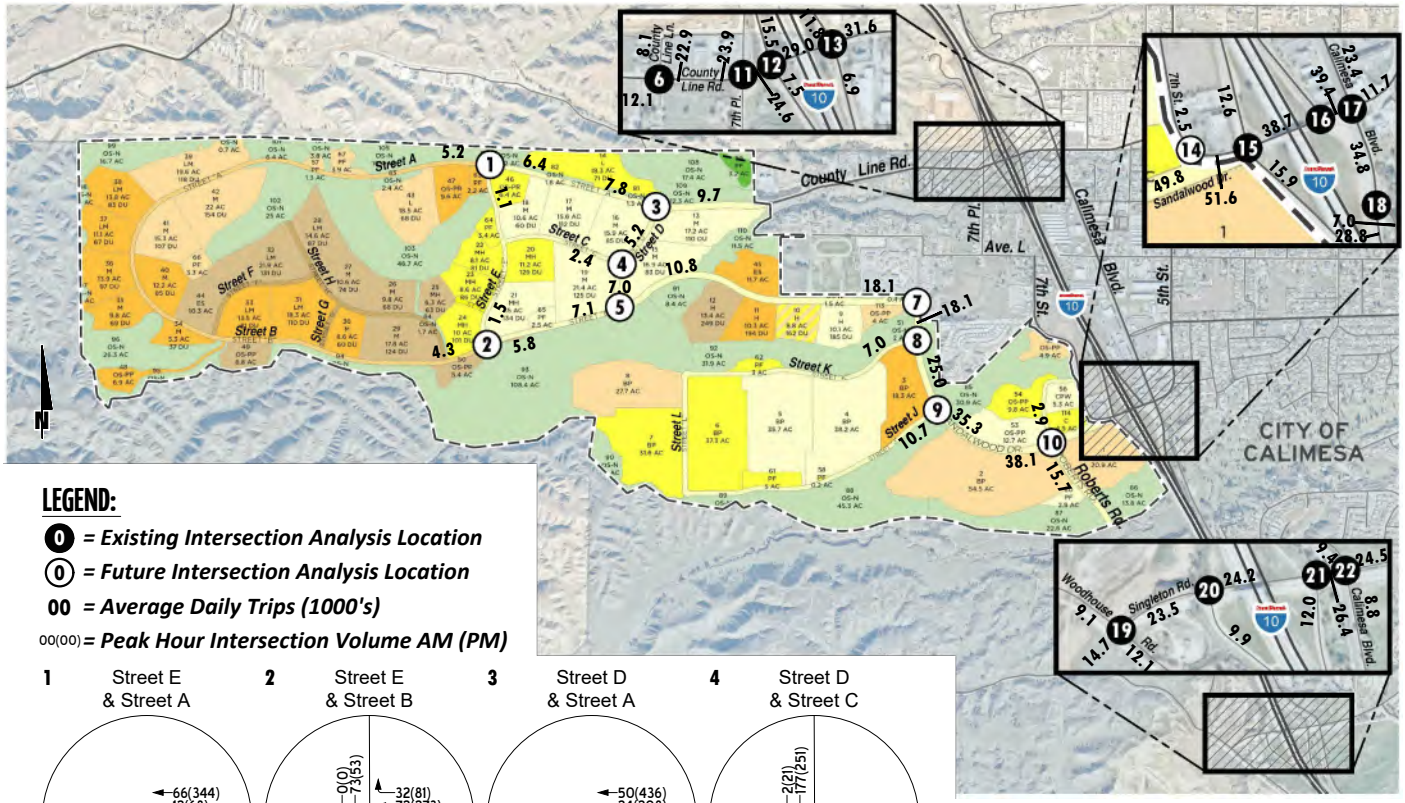


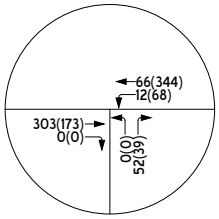
EXHIBIT 9-2 : OPENING YEAR CUMULATIVE (2040) WITH PROJECT (PHASE 4) TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



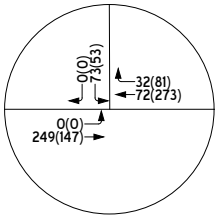
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

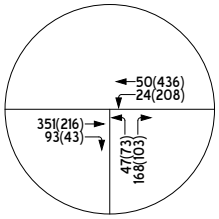
1 Street E & Street A



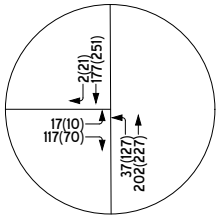
2 Street E & Street B



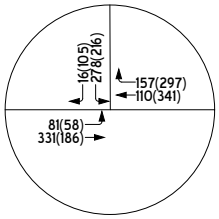
3 Street D & Street A



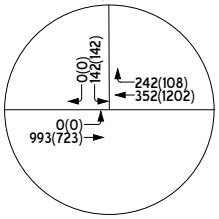
4 Street D & Street C



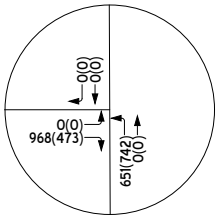
5 Street D & Street B



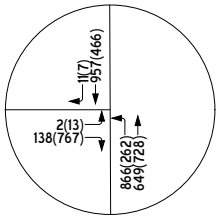
6 County Line Ln. & County Line Rd.



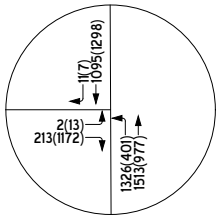
7 Sandalwood Dr. & Street B



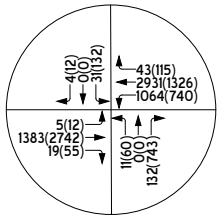
8 Sandalwood Dr. & Street K



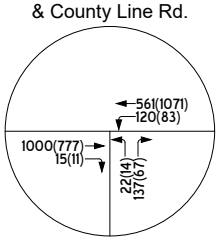
9 Sandalwood Dr. & Street J



10 Roberts Rd. & Sandalwood Dr.



11 7th Pl. & County Line Rd.



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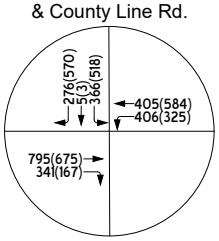
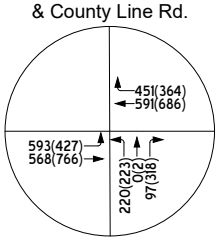
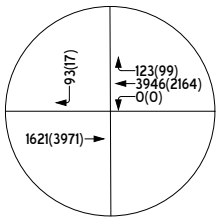


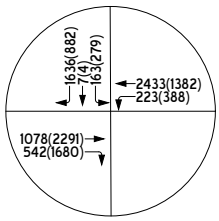
13 I-10 NB Ramps & County Line Rd.



14 7th St. & Sandalwood Dr.



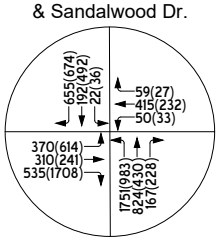
15 I-10 SB Ramps & Sandalwood Dr.



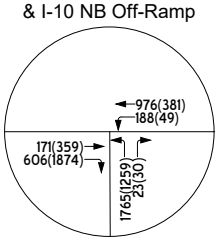
16 I-10 NB Ramps & Sandalwood Dr.

Not Applicable

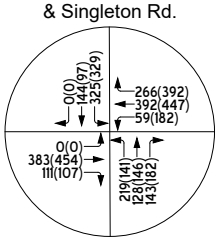
17 Calimesa Bl. & Sandalwood Dr.



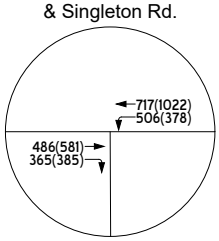
18 Calimesa Bl. & I-10 NB Off-Ramp



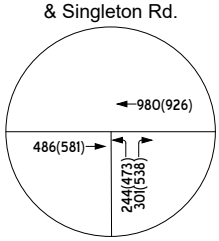
19 Roberts Rd. & Singleton Rd.



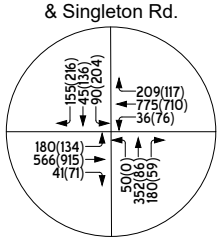
20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.



9.4 INTERSECTION OPERATIONS ANALYSIS

Opening Year Cumulative (2040) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 9-1 for Opening Year Cumulative (2040) traffic conditions, which indicates that the following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Cumulative (2040) Without Project traffic conditions:

- County Line Lane & County Line Road (#6) – LOS F AM and PM peak hours
- I-10 SB Ramps & County Line Road (#12) – LOS F AM and PM peak hours
- I-10 NB Ramps & County Line Road (#13) – LOS F AM and PM peak hours
- 7th Street & Sandalwood Drive (#14) – LOS F AM peak hour only
- I-10 SB Ramps & Sandalwood Drive (#15) – LOS F AM peak hour only
- Calimesa Boulevard & I-10 NB Off-Ramp (#18) – LOS F AM and PM peak hours
- Roberts Road & Singleton Road (#19) – LOS F AM and PM peak hours
- I-10 SB Ramps & Singleton Road (#20) – LOS E Am peak hour only
- I-10 NB Ramps & Singleton Road (#21) – LOS F AM and PM peak hours
- Calimesa Boulevard & Singleton Road (#22) – LOS F AM and PM peak hours

With the addition of Project (Phase 3) traffic, the following additional study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Cumulative (2038) With Project (Phase 3) traffic conditions:

- 7th Place & County Line Road (#11) – LOS F AM peak hour; LOS E PM peak hour
- Calimesa Boulevard & Sandalwood Drive (#17) – LOS F AM and PM peak hours

It should be noted that the intersection of 7th Street and Sandalwood Rive is anticipated to operate at an acceptable LOS with the proposed Project improvements (which include access restriction to right-in/right-tout only). The intersection operations analysis worksheets for Opening Year Cumulative (2040) Without Project and With Project traffic conditions are included in Appendices 9.1 and 9.2, respectively.

TABLE 9-1: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2040) CONDITIONS

#	Intersection	Traffic Control[2]	2040 Without Project Delay[1] (secs.) AM	2040 Without Project Delay[1] (secs.) PM	2040 Without Project Level of Service AM	2040 Without Project Level of Service PM	2040 With Project Delay[1] (secs.) AM	2040 With Project Delay[1] (secs.) PM	2040 With Project Level of Service AM	2040 With Project Level of Service PM
1	Street E & Street A	**RA**	Future Intersection				4.1	5.0	A	A
2	Street E & Street B	**RA**	Future Intersection				4.3	4.6	A	A
3	Street D & Street A	**RA**	Future Intersection				5.8	7.5	A	A
4	Street D & Street C	**CSS**	Future Intersection				10.6	11.4	B	B
5	Street D & Street B	**RA**	Future Intersection				5.2	5.6	A	A
6	County Line Ln. & County Line Rd.	CSS	**65.5**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
7	Sandalwood Dr. & Street B	**TS**	Future Intersection				10.4	44.2	B	D
8	Sandalwood Dr. & Street K	**TS**	Future Intersection				26.5	51.3	C	D
9	Sandalwood Dr. & Street J	**TS**	Future Intersection				28.2	50.8	C	D
10	Roberts Rd. & Sandalwood Dr.	**TS**	Future Intersection				28.9	52.7	C	D
11	7th Pl. & County Line Rd.	CSS	32.0	17.9	D	C	**112.2**	**35.4**	**F**	**E**
12	I-10 SB Ramps & County Line Rd.	CSS	**97.2**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
13	I-10 NB Ramps & County Line Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
14	7th St. & Sandalwood Dr.	AWS/**CSS**	**>100.0**	8.7	**F**	A	32.8	21.9	D	C
15	I-10 SB Ramps & Sandalwood Dr.	AWS	**>100.0**	19.4	**F**	C	**>100.0**	**>100.0**	**F**	**F**
16	I-10 NB On-Ramp & Sandalwood Dr.[3]	UC	Not Applicable				Not Applicable			
17	Calimesa Bl. & Sandalwood Dr.	TS	33.2	23.0	C	C	**>200.0**	**>200.0**	**F**	**F**
18	Calimesa Bl. & I-10 NB Off-Ramp	AWS	**>100.0**	**64.1**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
19	Roberts Rd. & Singleton Rd.	AWS	**78.0**	**>100.0**	**F**	**F**	**78.0**	**>100.0**	**F**	**F**
20	I-10 SB Ramps & Singleton Rd.	UC	**48.0**	21.6	**E**	C	**48.0**	21.6	**E**	C
21	I-10 NB Ramps & Singleton Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
22	Calimesa Bl. & Singleton Rd.	AWS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

[2] TS = Traffic Signal; AWS = All-way Stop; CSS = Cross-street Stop; UC = Uncontrolled; RA = Roundabout

[3] Starting in Phase 2 when the I-10 NB Hook On-Ramp on Calimesa Boulevard is assumed to be in place, it is anticipated this intersection would be vacated.

9.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

All unsignalized study area intersections are anticipated to meet a traffic signal warrant under a previous analysis scenario. As such, no traffic signal warrants have been evaluated for Opening Year Cumulative (2040) Without Project and With Project traffic conditions.

9.6 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for Opening Year Cumulative (2040) traffic conditions are presented in Table 9-2. As shown in Table 9-2, there are no movements anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under Opening Year Cumulative (2040) Without Project and With Project traffic conditions. Worksheets for Opening Year Cumulative (2040) Without Project and With Project traffic conditions queuing analysis are provided in Appendices 9.3 and 9.4, respectively.

TABLE 9-2: PEAK HOUR QUEUING SUMMARY FOR OPENING YEAR CUMULATIVE (2040) CONDITIONS

			2040 Without Project				2040 With Project			
			95th Percentile Queue (Feet)		Acceptable? [1]		95th Percentile Queue (Feet)		Acceptable? [1]	
Intersection	Movement	Available Stacking Distance (Feet)	AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
I-10 SB Ramps & County Line Rd. (#12)	SBL/T	1,165	764	760	Yes	Yes	752	761	Yes	Yes
	SBR	50	139 [2]	138 [2]	Yes	Yes	34	139 [2]	Yes	No
I-10 NB Ramps & County Line Rd. (#13)	NBL/T	1,085	933	889	Yes	Yes	777	783	Yes	Yes
	NBR	50	144 [2]	117 [2]	Yes	Yes	21	145 [2]	Yes	No
I-10 SB Ramps & Sandalwood Dr. (#15)	SBL/T/R	1,195	109	109	Yes	Yes	703	703	Yes	Yes
Calimesa Bl. & I-10 WB Off-Ramp (#18)	NBL/T	770	87	152	Yes	Yes	540	546	Yes	Yes
I-10 SB Ramps & Singleton Rd. (#20)	SBL/T/R		Off-Ramp Does Not Exist				Off-Ramp Does Not Exist			
I-10 NB Ramps & Singleton Rd. (#21)	NBL/T/R	1,140	726	712	Yes	Yes	727	725	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.

9.7 IMPROVEMENT RECOMMENDATIONS TO MAINTAIN GENERAL PLAN CONSISTENCY

Improvements needed to achieve acceptable LOS have been identified at intersections or off-ramps that are anticipated to operate at a deficient LOS under Opening Year Cumulative (2040) traffic conditions.

9.7.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient under Opening Year Cumulative (2040) traffic conditions in an effort to achieve an acceptable LOS. The effectiveness of the recommended improvement strategies to address Opening Year Cumulative (2040) traffic deficiencies are presented in Table 9-3. Per the City's Guidelines, there are certain improvements that have been recommended in order to achieve the pre-project traffic condition (minimum threshold), along with the additional improvements needed to achieve acceptable LOS standards at these locations. There are other study area intersections where improvements have only been recommended to achieve acceptable peak hour operations.

An alternative set of improvements have been considered at the intersection of Calimesa Boulevard and Sandalwood Drive which assumes only a single eastbound through lane. The ultimate design of the I-10 Freeway and Sandalwood Drive interchange is currently unknown and will be determined by the City of Calimesa in conjunction with Caltrans.

Lastly, County Line Road at the I-10 Freeway reflects the proposed roundabouts at both ramps, while Sandalwood Drive Ramps at the I-10 Freeway have been evaluated assuming ultimate interchange improvements (all of which achieve acceptable LOS). Although roundabouts are assumed at the I-10 Freeway ramps along with additional through lane improvements along County Line Road, 7th Place at County Line Road continues to be evaluated as a full access intersection for the purposes of this TA (see Table 9-3). However, it is possible that a future interchange study for the I-10 Freeway at County Line Road could ultimately modify or eliminate access at 7th Place on County Line Road due to its proximity to the interchange. In order for the elimination to occur, an alternative route would need to be accommodated to the north to County Line Road. The Project is anticipated to contribute fewer than 50 peak hour trips to Intersections #19, #20, and #21, and as such, no improvements have been identified for these locations. Worksheets for Opening Year Cumulative (2040) With Project traffic conditions, with improvements, HCM calculation worksheets are provided in Appendix 9.5.

9.7.2 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT OFF-RAMPS

There are no queuing issues anticipated under Opening Year Cumulative (2040) traffic conditions. As such, no improvements have been identified.

TABLE 9-3: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2040) CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control [3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	Level of Service AM	PM
6	County Line Ln. & County Line Rd.																	
	Without Project:	CSS	0	0	0	0	1	0	0	1	0	0	1	0	**199.5**	**321.2**	**F**	**F**
	With Project (Acceptable LOS):	**TS**	0	0	0	0	1	0	**1**	1	0	0	1	**1**	2.4	52.0	A	D
11	7th Pl. & County Line Rd.																	
	Without Project:	CSS	0	1	0	0	0	0	0	1	0	0	1	0	32.0	17.9	D	C
	With Project (Acceptable LOS):	CSS	0	1	0	0	0	0	0	**2**	0	**1**	**2**	0	23.6	15.6	C	C
12	I-10 SB Ramps & County Line Rd.																	
	Without Project:	CSS	0	0	0	0	1	1	0	1	0	1	1	0	**97.2**	**6439.9**	**F**	**F**
	With Project (Acceptable LOS):	**RA**	0	0	0	**1**	1	**0**	0	**2**	0	**0**	**2**	0	21.6	13.7	C	B
13	I-10 NB Ramps & County Line Rd.																	
	Without Project:	CSS	0	1	1	0	0	0	1	1	0	0	1	1	**600.6**	**291.3**	**F**	**F**
	With Project (Acceptable LOS):	**RA**	0	1	1	0	0	0	**0**	**2**	0	0	**2**	**0**	12.9	13.7	B	B
15	I-10 SB Ramps & Sandalwood Dr.																	
	Without Project:	CSS	0	0	0	0	1	0	0	1	0	0	1	0	**192.8**	19.4	**F**	C
	With Project (Acceptable LOS):[4]	**TS**	0	0	0	**1**	1	**1>>**	0	**3**	**1>>**	**2**	**3**	0	16.7	22.1	B	C
17	Calimesa Bl. & Sandalwood Dr.																	
	Without Project:	TS	1	2	d	1	1	1>	1	2	0	1	1	1	33.2	23.0	C	C
	With Project (Acceptable LOS):[4]	TS	**2**	2	**1**	1	**2**	1>	**2**	**2**	**1>>**	1	**2**	1	54.7	54.9	D	D
	With Project Alternative:[5]	TS	**2**	2	**1**	1	**2**	1>	**2**	**1**	**1>>**	1	**2**	1	**55.8**	**56.0**	**E**	**E**
18	Calimesa Bl. & I-10 NB Off-Ramp																	
	Without Project:	AWS	0	1	0	0	0	0	0	1	0	0	1	0	**374.5**	**64.1**	**F**	**F**
	With Project Ultimate Interchange:[4]	**TS**	**1**	1	0	0	0	0	0	**2**	**1>>**	**1**	1	0	45.4	24.2	D	C
22	Calimesa Bl. & Singleton Rd.																	
	Without Project:	AWS	0	1	0	0	1	0	0	1	0	0	1	0	**574.4**	**620.3**	**F**	**F**
	With Project (Threshold):	AWS	**1**	1	0	**1**	1	0	**1**	1	0	**1**	1	0	**437.0**	**500.0**	**F**	**F**
	With Project (Acceptable LOS):	**TS**	**1**	1	**1**	**1**	1	0	**1**	**2**	0	**1**	1	**1**	38.9	24.4	D	C

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free Right-Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross-Street Stop; AWS = All-Way Stop; RA = Roundabout; TS = Traffic Signal; **TS** = Traffic Signal

[4] Assumes the ultimate interchange improvements through the Sandalwood Dr. and Calimesa Bl. corridors which includes bridge widening.

[5] An alternative improvement has also been considered without the addition of a 2nd EB through lane as the ultimate design for the interchange has not yet been determined by the City of Calimesa and Caltrans.

10 HORIZON YEAR (2045) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Horizon Year (2045) conditions and the resulting intersection operations, traffic signal warrant, and off-ramp queuing analyses.

10.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Horizon Year (2045) conditions are consistent with those shown previously in Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for 2045 conditions only (e.g., intersection and roadway improvements at the Project's frontage and driveways).
- County Line Road interchange at the I-10 Freeway requires additional improvements to future proposed roundabouts. Although roundabouts are assumed at the I-10 Freeway ramps along with additional through lane improvements along County Line Road, 7th Place at County Line Road continues to be evaluated as a full access intersection for the purposes of this TA (see Table 10-3). However, it is possible that a future interchange study for the I-10 Freeway at County Line Road could ultimately modify or eliminate access at 7th Place on County Line Road due to its proximity to the interchange. In order for the elimination to occur, an alternative route would need to be accommodated to the north to County Line Road.
- The Sandalwood Drive bridge and interchange would need to be widened to its ultimate condition before the buildout of Phase 2 and is necessary to support Phase 4 (2040) traffic.
- This analysis scenario assumes County Line Road interchange at the I-10 Freeway is improved with 2-lane roundabouts at both ramp locations and modifications to the striping to accommodate 4-lanes under the I-10 Freeway.
- The I-10 Freeway/Singleton Road interchange northbound on-ramp and southbound off-ramp are assumed to be in place (completing a diamond interchange).
- The future extension of Roberts Road south of the Project's southern boundary is assumed to be in place (to be constructed by others).
- The future extension of Sandalwood Drive up to County Line Road is assumed to be in place (to be constructed by others).
- Other parallel facilities, that although not evaluated for the purposes of this analysis, are anticipated to be in place for Horizon Year traffic conditions and would affect the travel patterns within the study area.

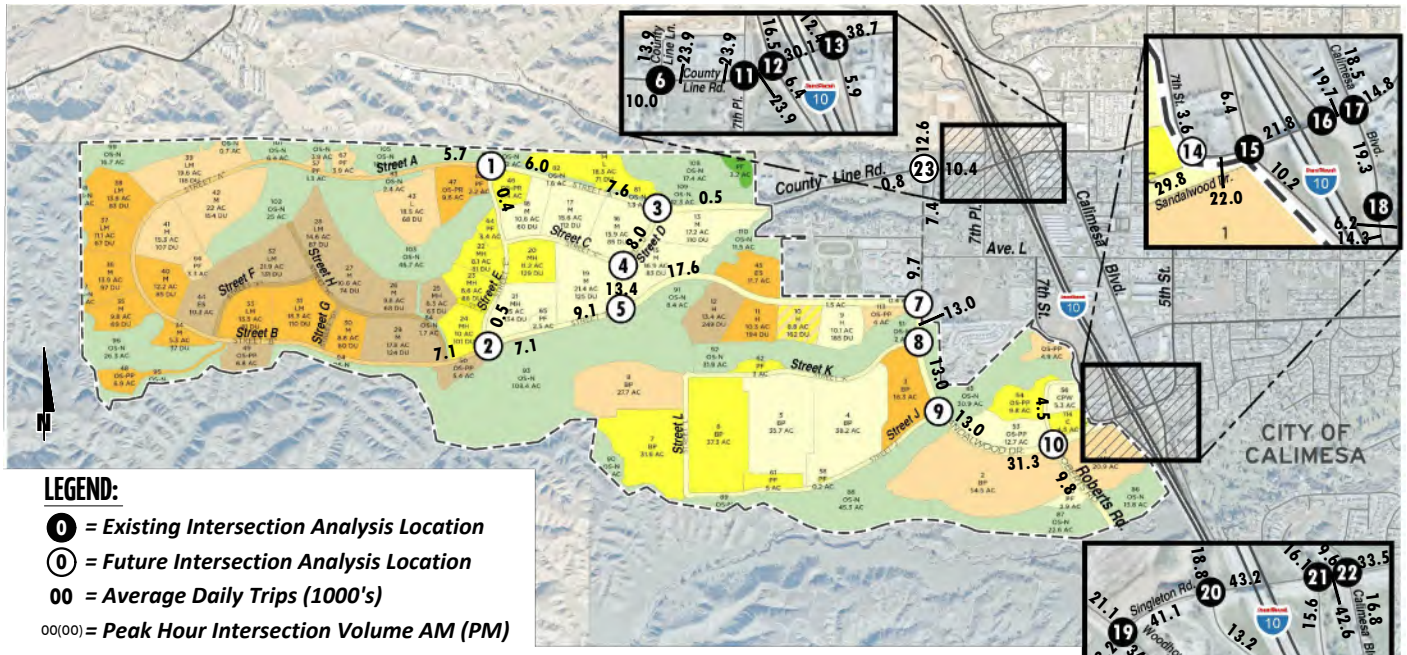
10.2 HORIZON YEAR (2045) WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-process volumes obtained from the RIVCOM and includes the development of the currently approved Mesa Verde Specific Plan. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Horizon Year (2045) With Project (Project Buildout) traffic conditions are shown in Exhibit 10-1.

10.3 HORIZON YEAR (2045) WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-process volumes obtained from the RIVCOM plus the traffic generated by the buildout of the proposed Project. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Horizon Year (2045) With Project (Project Buildout) traffic conditions are shown in Exhibit 10-2.

EXHIBIT 10-1 : HORIZON YEAR (2045)
WITHOUT PROJECT TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- 00 = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

1 Street E & Street A
124(376) / 8(29) / 326(217) / 0(0) / 0(0) / 24(17)

2 Street E & Street B
9(17) / 11(9) / 4(14) / 155(455) / 18(10) / 387(269)

3 Street D & Street A
0(0) / 24(18) / 0(0) / 427(288) / 147(506) / 10(29)

4 Street D & Street C
0(0) / 0(0) / 0(0) / 0(0) / 0(0) / 0(0)

5 Street D & Street B
54(164) / 606(418) / 214(726) / 130(444) / 137(96) / 371(225)

6 County Line Ln. & County Line Rd.
5(39) / 199(154) / 254(104) / 333(895) / 75(65) / 706(633)

7 Sandalwood Dr. & Street B
10(39) / 356(282) / 10(10) / 401(87) / 515(38) / 161(399)

8 Sandalwood Dr. & Street K
0(0) / 757(369) / 0(0) / 0(0) / 0(0) / 676(437)

9 Sandalwood Dr. & Street J
0(0) / 757(369) / 0(0) / 0(0) / 0(0) / 676(437)

10 Roberts Rd. & Sandalwood Dr.
33(56) / 40(116) / 39(41) / 15(58) / 646(636) / 298(557) / 39(49) / 494(228) / 346(266) / 170(399) / 56(105) / 532(389)

11 7th Pl. & County Line Rd.
566(985) / 119(83) / 890(776) / 15(11) / 22(14) / 136(66)

12 I-10 SB Ramps & County Line Rd.
283(475) / 5(3) / 387(561) / 402(593) / 432(360) / 805(721) / 221(121)

13 I-10 NB Ramps & County Line Rd.
353(373) / 608(787) / 546(481) / 646(802) / 225(166) / 0(3) / 88(343)

14 7th St. & Sandalwood Dr.
12(73) / 101(67) / 947(1178) / 0(0) / 1065(658)

15 I-10 SB Ramps & Sandalwood Dr.
255(448) / 7(5) / 184(286) / 793(797) / 256(403) / 603(315) / 462(343)

16 I-10 NB Ramps & Sandalwood Dr.
250(185) / 1049(1200) / 787(601)

17 Calimesa Bl. & Sandalwood Dr.
406(501) / 244(352) / 27(39) / 77(27) / 493(348) / 183(87) / 315(219) / 392(289) / 80(93) / 400(536) / 943(492) / 200(277)

18 Calimesa Bl. & I-10 NB Off-Ramp
1127(467) / 231(68) / 391(467) / 116(264) / 416(828) / 101(152)

19 Roberts Rd. & Singleton Rd.
150(108) / 558(589) / 315(428) / 294(456) / 496(794) / 249(471) / 72(183) / 426(724) / 112(144) / 399(178) / 440(785) / 353(644)

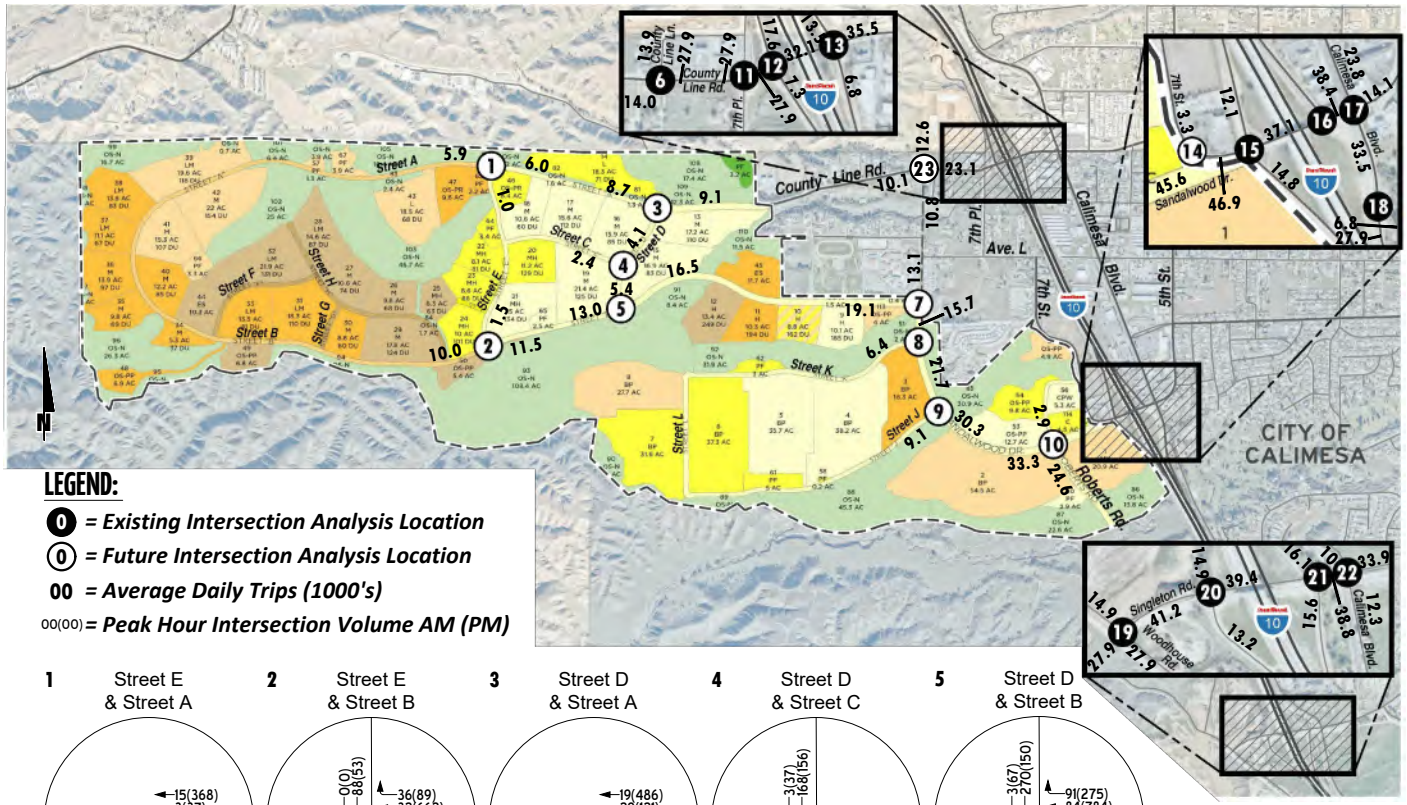
20 I-10 SB Ramps & Singleton Rd.
650(1106) / 637(509) / 669(1174) / 425(622)

21 I-10 NB Ramps & Singleton Rd.
997(926) / 969(1497) / 289(689) / 406(723)

22 Calimesa Bl. & Singleton Rd.
192(259) / 55(168) / 84(217) / 226(108) / 1108(956) / 62(114) / 180(168) / 676(1249) / 518(802) / 623(532) / 310(188) / 185(65)

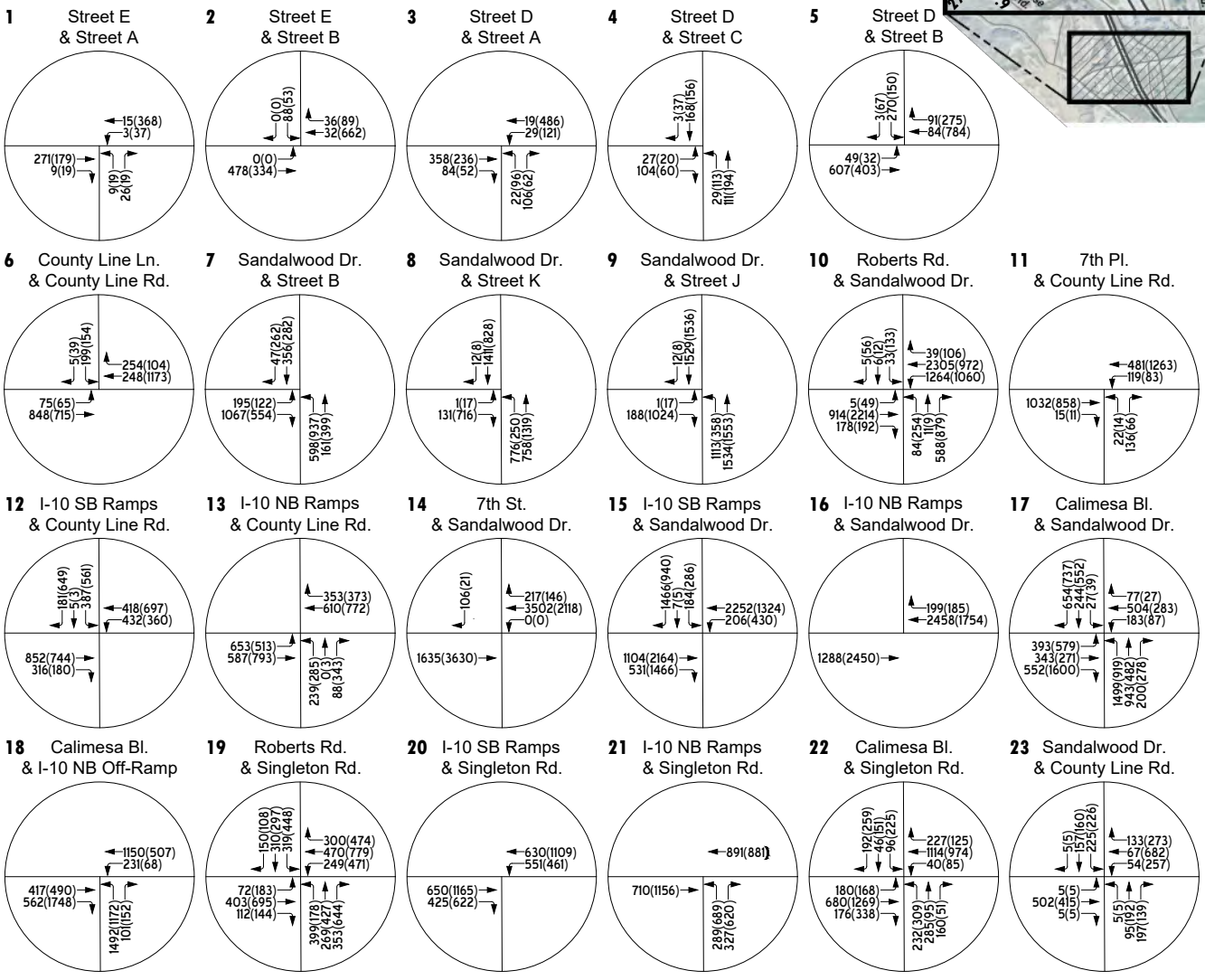
23 Sandalwood Dr. & County Line Rd.
5(5) / 255(360) / 225(226) / 133(273) / 170(553) / 35(108) / 5(5) / 452(408) / 5(5) / 5(5) / 95(92) / 104(64)

EXHIBIT 10-2 : HORIZON YEAR (2045)
WITH PROJECT (PROJECT BUILDOUT) TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*



10.4 INTERSECTION OPERATIONS ANALYSIS

Horizon Year (2045) traffic conditions peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 10-1 for Horizon Year (2045) traffic conditions, which indicates that the following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Horizon Year (2045) Without Project traffic conditions:

- County Line Lane & County Line Road (#6) – LOS F AM and PM peak hours
- 7th Place & County Line Road (#11) – LOS F AM and PM peak hours
- I-10 SB Ramps & County Line Road (#12) – LOS F AM and PM peak hours
- I-10 NB Ramps & County Line Road (#13) – LOS F AM and PM peak hours
- I-10 SB Ramps & Sandalwood Drive (#15) – LOS F AM and PM peak hours
- Calimesa Boulevard & Sandalwood Drive (#17) – LOS F AM and PM peak hours
- Calimesa Boulevard & I-10 NB Off-Ramp (#18) – LOS F AM and PM peak hours
- Roberts Road & Singleton Road (#19) – LOS F AM and PM peak hours
- I-10 SB Ramps & Singleton Road (#20) – LOS F AM and PM peak hours
- I-10 NB Ramps & Singleton Road (#21) – LOS F AM and PM peak hours
- Calimesa Boulevard & Singleton Road (#22) – LOS F AM and PM peak hours

With the addition of Project (Project Buildout) traffic, there are no additional study area intersections anticipated to operate at an unacceptable LOS during the peak hours under Horizon Year (2045) With Project (Project Buildout) traffic conditions, in addition to those listed previously under Horizon Year (2045) Without Project traffic conditions. The intersection operations analysis worksheets for Horizon Year (2045) Without Project and With Project traffic conditions are included in Appendices 10.1 and 10.2, respectively.

TABLE 10-1: INTERSECTION ANALYSIS FOR HORIZON YEAR (2045) CONDITIONS

#	Intersection	Traffic Control[2]	2045 Without Project Delay[1] (secs.) AM	2045 Without Project Delay[1] (secs.) PM	2045 Without Project Level of Service AM	2045 Without Project Level of Service PM	2045 With Project Delay[1] (secs.) AM	2045 With Project Delay[1] (secs.) PM	2045 With Project Level of Service AM	2045 With Project Level of Service PM
1	Street E & Street A	**RA**	Not Applicable				4.3	5.0	A	A
2	Street E & Street B	**RA**	Not Applicable				6.0	8.0	A	A
3	Street D & Street A	**RA**	Not Applicable				5.6	7.3	A	A
4	Street D & Street C	**CSS**	Not Applicable				10.5	11.2	B	B
5	Street D & Street B	**RA**	Not Applicable				8.1	8.4	A	A
6	County Line Ln. & County Line Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
7	Sandalwood Dr. & Street B	**TS**	Not Applicable				23.6	21.5	C	C
8	Sandalwood Dr. & Street K	**TS**	Not Applicable				24.4	48.1	C	D
9	Sandalwood Dr. & Street J	**TS**	Not Applicable				25.2	41.3	C	D
10	Roberts Rd. & Sandalwood Dr.	**TS**	17.2	25.7	B	C	25.5	54..4	C	D
11	7th Pl. & County Line Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
12	I-10 SB Ramps & County Line Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
13	I-10 NB Ramps & County Line Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
14	7th St. & Sandalwood Dr.	**CSS**	9.6	10.2	A	B	27.6	16.7	D	C
15	I-10 SB Ramps & Sandalwood Dr.	AWS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
16	I-10 NB On-Ramp & Sandalwood Dr.[3]	UC	Not Applicable				Not Applicable			
17	Calimesa Bl. & Sandalwood Dr.	TS	**87.0**	**150.9**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**
18	Calimesa Bl. & I-10 NB Off-Ramp	AWS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
19	Roberts Rd. & Singleton Rd.	AWS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
20	I-10 SB Ramps & Singleton Rd.	UC	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
21	I-10 NB Ramps & Singleton Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
22	Calimesa Bl. & Singleton Rd.	AWS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane)

[2] TS = Traffic Signal; AWS = All-way Stop; CSS = Cross-street Stop; UC = Uncontrolled; RA = Roundabout

[3] Starting in Phase 2 when the I-10 NB Hook On-Ramp on Calimesa Boulevard is assumed to be in place, it is anticipated this intersection would be vacated.

10.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

All unsignalized study area intersections are anticipated to meet a traffic signal warrant under a previous analysis scenario. As such, no traffic signal warrants have been evaluated for Horizon Year (2045) Without Project and With Project traffic conditions.

10.6 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for Horizon Year (2045) traffic conditions are presented in Table 10-2. As shown in Table 10-2, there are no movements anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under Horizon Year (2045) Without Project and With Project traffic conditions. Worksheets for Horizon Year (2045) Without Project and With Project traffic conditions queuing analysis are provided in Appendices 10.3 and 10.4, respectively.

TABLE 10-2: PEAK HOUR QUEUING SUMMARY FOR HORIZON YEAR (2045) CONDITIONS

			2045 Without Project				2045 With Project			
			95th Percentile Queue (Feet)		Acceptable? [1]		95th Percentile Queue (Feet)		Acceptable? [1]	
Intersection	Movement	Available Stacking Distance (Feet)	AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
I-10 SB Ramps & County Line Rd. (#12)	SBL/T	1,165	763	747	Yes	Yes	747	757	Yes	Yes
	SBR	50	144 [2]	26	Yes	Yes	25	126 [2]	Yes	Yes
I-10 NB Ramps & County Line Rd. (#13)	NBL/T	1,085	785	779	Yes	Yes	782	784	Yes	Yes
	NBR	50	82 [2]	25	No	Yes	14	140 [2]	Yes	Yes
I-10 SB Ramps & Sandalwood Dr. (#15)	SBL/T/R	1,195	96	762	Yes	Yes	696	703	Yes	Yes
Calimesa Bl. & I-10 WB Off-Ramp (#18)	NBL/T	770	64	548	Yes	Yes	537	545	Yes	Yes
I-10 SB Ramps & Singleton Rd. (#20)	SBL/T/R	1,000	0	680	Yes	Yes	682	679	Yes	Yes
I-10 NB Ramps & Singleton Rd. (#21)	NBL/T/R	1,140	916	735	Yes	Yes	736	736	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.

10.7 IMPROVEMENT RECOMMENDATIONS TO MAINTAIN GENERAL PLAN CONSISTENCY

Improvements needed to achieve acceptable LOS have been identified at intersections or off-ramps that are anticipated to operate at a deficient LOS under Horizon Year (2045) traffic conditions.

10.7.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient under Horizon Year (2045) traffic conditions in an effort to achieve an acceptable LOS. The effectiveness of the recommended improvement strategies to address Horizon Year (2045) traffic deficiencies are presented in Table 10-3. Improvements are shown for Without Project (which evaluates the currently approved Mesa Verde Specific Plan) and the improvements needed for With Project traffic conditions. Notable differences include:

- Second eastbound and second westbound through lanes at County Line Lane and County Line Road (#6).
- Third eastbound and third westbound through lanes along Sandalwood Drive at the I-10 SB Ramps (#15) along with an eastbound free-right turn lane.
- Additional lane enhancements including an eastbound free-right turn lane at Calimesa Boulevard and Sandalwood Drive (#17).
- Second eastbound and second westbound through along Calimesa Boulevard at the I-10 NB Off-ramp (#18).

An alternative set of improvements have been considered at the intersection of Calimesa Boulevard and Sandalwood Drive which assumes only a single eastbound through lane. The ultimate design of the I-10 Freeway and Sandalwood Drive interchange is currently unknown and will be determined by the City of Calimesa in conjunction with Caltrans.

An additional summary of improvement comparisons to the prior 2016 Traffic Study and mitigation measures can be found in Table 1-6. Worksheets for Horizon Year (2045) With Project traffic conditions, with improvements, HCM calculation worksheets are provided in Appendix 10.5.

10.7.2 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT OFF-RAMPS

There are no queuing issues anticipated under Horizon Year (2045) traffic conditions. As such, no improvements have been identified.

TABLE 10-3: INTERSECTION ANALYSIS FOR HORIZON YEAR (2045) CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control [3]	Intersection Approach Lanes[1] Northbound L	NB T	NB R	Southbound L	SB T	SB R	Eastbound L	EB T	EB R	Westbound L	WB T	WB R	Delay[2] (secs.) AM	Delay[2] (secs.) PM	Level of Service AM	Level of Service PM
6	County Line Ln. & County Line Rd.																	
	Without Project:	**TS**	0	0	0	**1.5**	0	**1.5**	**1**	**2**	0	0	**2**	**1**	11.1	13.9	B	B
	With Project:	**TS**	0	0	0	**1.5**	0	**1.5**	**1**	**2**	0	0	**2**	**1**	11.4	20.3	B	C
11	7th Pl. & County Line Rd.																	
	Without Project:	CSS	0	0	0	0	1	0	0	**2**	0	**1**	**2**	0	19.0	15.4	C	C
	With Project:	CSS	0	0	0	0	1	0	0	**2**	0	**1**	**2**	0	23.9	17.0	C	C
12	I-10 SB Ramps & County Line Rd.																	
	Without Project:	**RA**	0	0	0	**1**	1	0	0	**2**	0	0	**2**	0	24.8	15.6	C	C
	With Project:	**RA**	0	0	0	**1**	1	0	0	**2**	0	0	**2**	0	28.0	22.6	D	C
13	I-10 NB Ramps & County Line Rd.																	
	Without Project:	**RA**	0	1	**1**	0	0	0	0	**2**	0	0	**2**	0	11.9	17.5	B	C
	With Project:	**RA**	0	1	**1**	0	0	0	0	**2**	0	0	**2**	0	14.6	23.3	B	C
15	I-10 SB Ramps & Sandalwood Dr.																	
	Without Project:	**TS**	0	0	0	**1**	1	**1>>**	0	**2**	**1**	**2**	**2**	0	17.4	19.6	B	B
	With Project:	**TS**	0	0	0	**1**	1	**1>>**	0	**3**	**1>>**	**2**	**3**	0	16.0	27.4	B	C
17	Calimesa Bl. & Sandalwood Dr.																	
	Without Project [4]:	TS	**2**	2	0	1	1	**1>**	1	2	**1**	1	**2**	**0**	45.9	52.7	D	D
	With Project[4]:	TS	**2**	2	**1**	1	**2**	**1>**	**2**	2	**1>>**	1	**2**	**1**	53.4	54.5	D	D
	With Project Alternative:[6]	TS	**2**	2	**1**	1	**2**	1>	**2**	**1**	**1>>**	1	**2**	1	**60.3**	**57.2**	**E**	**E**
18	Calimesa Bl. & I-10 NB Off-Ramp																	
	Without Project [5]:	**TS**	**1.5**	0	**0.5**	0	0	0	0	1	**1**	**1**	1	0	42.2	37.0	D	D
	With Project[5]:	**TS**	**1.5**	0	**0.5**	0	0	0	0	**2**	**1>>**	**1**	**2**	0	47.5	27.3	D	C
19	Roberts Rd. & Singleton Rd.																	
	Without Project:	**TS**	**2**	**2**	**1>**	**2**	**2**	**1**	**2**	**2**	**1**	**2**	**2**	**1>**	43.2	53.8	D	D
	With Project:	**TS**	**2**	**2**	**1>**	**2**	**2**	**1**	**2**	**2**	**1**	**2**	**2**	**1>**	44.4	53.5	D	D
20	I-10 SB Ramps & Singleton Rd.																	
	Without Project:	**TS**	0	0	0	0	**1**	**2**	0	**2**	**1**	**2**	**2**	0	34.3	49.5	C	D
	With Project:	**TS**	0	0	0	0	**1**	**2**	0	**2**	**1**	**2**	**2**	0	44.3	54.0	D	D
21	I-10 NB Ramps & Singleton Rd.																	
	Without Project:	**TS**	**1**	**1**	**1**	0	0	0	**2**	**2**	0	0	**2**	**1**	38.5	53.8	D	D
	With Project:	**TS**	**1**	**1**	**1**	0	0	0	**2**	**2**	0	0	**2**	**1**	36.9	51.6	D	D
22	Calimesa Bl. & Singleton Rd.																	
	Without Project:	**TS**	**2**	**2**	0	**1**	**2**	**1**	**2**	**2**	**1**	**1**	**2**	0	47.2	46.0	D	D
	With Project:	**TS**	**2**	**2**	0	**1**	**2**	**1**	**2**	**2**	**1**	**1**	**2**	0	35.2	33.6	C	C
23	Sandalwood Dr. & County Line Rd.																	
	Without Project:	**TS**	**1**	**1**	0	**1**	**1**	0	**1**	1	0	**1**	1	**1**	23.8	29.6	C	C
	With Project:	**TS**	**1**	**1**	0	**1**	**1**	0	**1**	1	0	**1**	1	**1**	35.1	50.5	D	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free Right-Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; UC = Uncontrolled; **TS** = Traffic Signal

[4] Improvement includes modifying the traffic signal to implement protected left turn phasing for the eastbound and westbound approaches.

[5] Improvements consist of a reconfigured interchange that provides an on-ramp to the I-10 Freeway Northbound.

[6] An alternative improvement has also been considered without the addition of a 2nd EB through lane as the ultimate design for the interchange has not yet been determined by the City of Calimesa and Caltrans.

11 VEHICLE MILES TRAVELED (VMT) ANALYSIS

The California Environmental Quality Act (CEQA) requires all lead agencies to adopt VMT as the measure for identifying transportation impacts for land use projects. To comply with CEQA, the City of Calimesa adopted analytical procedures, screening tools, and impact thresholds for VMT, which are documented in their Final City of Calimesa Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (May 2020) (**City Guidelines**). (1) This analysis has been developed based on these adopted City Guidelines. The full VMT analysis can be found in Appendix 11.1.

11.1 TRANSPORTATION IMPACT ANALYSIS

This assessment addresses the following Transportation thresholds stated in CEQA Guidelines Appendix G:

- T-1: Potential to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
- T-2: Potential to conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) regarding policies to reduce vehicle miles traveled (VMT).
- T-3: Potential to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- T-4: Potential to result in inadequate emergency access.

11.1.1 T-1 ASSESSMENT

The analysis presented here evaluates Project consistency with regional goals and City policies addressing the circulation system. Project design features (Bicycle and Pedestrian Access, Transit Access and Amenities) that would support use of alternative transportation modes and thereby further mobility within the City are also discussed.

Regional Transportation/Mobility Goals

The Southern California Association of Governments (SCAG) Regional Council formally adopted the Connect SoCal 2024 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal 2024, RTP/SCS) in April 2024. Connect SoCal 2024 is a long-range regional plan that balances future mobility and housing needs with economic, environmental, and public health goals. Regional goals addressing growth and development and related implications on the regional transportation system are presented in Connect SoCal 2024. Table 7 of Appendix 11.1 summarizes Project consistency with Connect SoCal 2024 Goals.[1]

[1] **Note:** While Connect SoCal 2024 strives to align with local plans and input, the potential for incompatibilities with existing general plans is acknowledged and expected due to the advisory nature of the regional plan and the ongoing process of local plan updates. SCAG has no land use authority to adopt, approve, implement, or otherwise regulate local land use plans or transportation projects identified in the Plan. Local governments reserve their land use authority and may incorporate, as appropriate, the recommended policies and strategies included in the Plan. See also *Connect SoCal 2024 – 2050 Final Program Environmental Impact Report*, Certified April 4, 2024 (SCAG), SCH # 2022100337.

City of Calimesa Transportation and Mobility Policies

The City of Calimesa General Plan Chapter 3, *Transportation and Mobility* presents policies addressing General Circulation, Regional Mobility, Trip Reduction/Transportation Demand Management, and Muli-use Trails. Project consistency with General Plan Transportation and Mobility Policies is presented at Table 8 of Appendix 11.1.

Project Design Features: Bicycle and Pedestrian Access

The Project does not propose or require facilities or operations that would conflict with or obstruct planning, development, or implementation of bicycle access or pedestrian access. As discussed in the Draft SEIR Project Description, **"**[t]he circulation system for the Specific Plan Area provides multi-modal access serving vehicles, bicycles, and pedestrians. These components are designed to provide safe and efficient access to the residential neighborhoods, Business Park land use, natural open space, and recreational amenities within open space areas. [DSEIR] Figure 3-6, *Roadway Cross-Sections*, provides numerous example cross-sections of roadway widths, sidewalk, curb/gutter, median, and bicycle lane standards for all roadways within the Project area" (Draft SEIR, p. 3-12).

Additionally, per the Specific Plan Amendment, "larger roadways would be developed with bicycle lanes. 'Enhanced major streets' would include 6-foot-wide Class II bicycle lanes on both sides of the street; "major streets", 'secondary streets,' 'divided collector streets,' and 'modified collector streets' would include 6-foot bike lanes on both sides of the street" (Draft SEIR, p. 3-13).

The Project would construct sidewalks and bicycle access as part of the required improvement of rights-of-way serving the Project facilities. Pedestrian and bicycle access implemented by the Project would be required to conform to standards and specifications identified in the City Municipal Code and the Specific Plan Amendment.

Project Design Features: Transit Access and Amenities

The Project does not propose or require facilities or operations that would conflict with or obstruct planning, development, or implementation of area transit services. Bus service to the Project area is currently provided by Omnitrans. At present, the only proximate serving Omnitrans route is Route 319, located east of the Project site. The nearest bus stops are on County Line Road, approximately one mile northeast of the Project site, and on 54th Street, approximately one mile east of the Project site. It is noted here that the Project scope, mix of land uses, and development intensity would provide a potential ridership base that would support future expansion of public transit service to the Project. The Project Applicant would coordinate final Project designs with the City and Omnitrans to potentially accommodate bus service and supporting amenities (e.g., bus stops, bus shelters) serving the Project.

Project Design Features: Summary

Based on the preceding discussions and detailed information presented in the Specific Plan Amendment, the potential for the Project to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities would be **less than significant**.

11.1.2 T-2 ASSESSMENT

The Project is consistent with CEQA Guidelines section 15064.3, subdivision (b) regarding policies to reduce VMT. The City of Calimesa has adopted the following thresholds of significance related to VMT for land use plans:

1. The baseline project-generated VMT per service population exceeds the City of Calimesa General Plan Buildout VMT per service population, or
2. The cumulative project-generated VMT per service population exceeds the City of Calimesa General Plan Buildout VMT per service population.

The Project's effect on VMT would be considered significant if it results in the following condition to be satisfied:

3. The cumulative link-level boundary Citywide VMT per service population increases under the plus project condition compared to the no project condition.

Based on the VMT analysis previously presented in this technical memorandum, Project-generated Buildout (Phase 5) VMT per service population was found to be less than the City of Calimesa VMT per service population under General Plan Buildout Conditions in 1) baseline and 2) cumulative conditions. Additionally, 3) the total daily VMT per service population within the City is forecast to be lower "With Project" for cumulative conditions as compared to the "no project" condition. The Project therefore results in a **less than significant** VMT impact.

11.1.3 T-3 ASSESSMENT

The Project does not propose or require facilities or operations that would substantially increase hazards due to a geometric design feature. Final designs of Project plans and all Project traffic improvements would be subject to review and approval by the City, thereby ensuring conformance of improvements with City and design and safety standards. On-site traffic signing and striping would be implemented in conjunction with detailed construction plans for the Project site. Sight distance at each Project access point would be reviewed to ensure conformance with City sight distance standards at the time of preparation of final grading, landscape and street improvement plans. It is noted here that this analysis is predicated on preliminary Project design concepts. Should final Project designs propose or require non-standard features or designs, this analysis will be revised accordingly.

Traffic generated by the Project, and traffic accessing the Project site would comprise conventional autos and trucks. Uses requiring incompatible vehicle types (e.g., farm equipment) are not proposed by the Project. Further, given the Project's urban context, it is not anticipated that such incompatible vehicle types would comprise a substantial proportion of traffic accessing the Project site.

Based on the preceding, the potential for the Project to substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) would be **less-than-significant.**

11.1.4 T-4 ASSESSMENT

The Project does not propose or require facilities or operations that would restrict or otherwise interfere with emergency access. The Draft SEIR Project Description specifically addresses emergency access provisions, as excerpted below:

Emergency Access

The Specific Plan considers provisions for interim and alternative emergency access. As discussed at Specific Plan Section 6, *Infrastructure*, there is opportunity to use an existing driveway from the proposed Sandalwood Drive alignment that could connect to West Avenue L if agreements could be made. It appears Mesa View Middle School also has a street right of way along its eastern edge of the

property. Further investigation would be necessary but it could be a viable option for a permanent emergency access. It may also be a possible road connection between an extended Sandalwood Drive and West Avenue L.

In addition, representatives of the Calimesa Fire Department (CFD) and Riverside County Sheriff's Department would review the Project's plans to ensure that emergency access is provided consistent with Department(s) requirements. Efficient and safe access within, and access to, the Project is provided by the Specific Plan Amendment design concepts, site access improvements, and site adjacent roadway improvements included as components of the Project.

This analysis is predicated on preliminary Project designs. Based on final Project designs, the City of Calimesa may require further analysis and incorporation of additional Project design features. This may include but would not be limited to analysis of truck movements within the Project site and development of truck routing plans to ensure proper routing of traffic.

Other Considerations

It is also recognized that temporary and interim traffic detours and traffic disruptions could occur during Project construction. To minimize effects of Project construction on area traffic patterns it is recommended the following or similar Construction Area Traffic Management Plan (Plan) be implemented as a Project Condition of Approval. Typical elements and information incorporated in the Plan would include, but not be limited to:

- Name of on-site construction superintendent and contact phone number.
- Identification of Construction Contract Responsibilities - For example, for excavation and grading activities, describe the approximate depth of excavation, and quantity of soil import/export (if any).
- Identification and Description of Truck Routes - to include the number of trucks and their staging location(s) (if any).
- Identification and Description of Material Storage Locations (if any).
- Location and Description of Construction Trailer (if any).
- Identification and Description of Traffic Controls - Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of-way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the City for review and approval. All right-of-way encroachments would require permitting through the City.
- Identification and Description of Parking - Estimate the number of workers and identify parking areas for their vehicles.
- Identification and Description of Maintenance Measures - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control).

The Plan would be reviewed and approved by the City prior to the issuance of the first building permit. The Plan and its requirements would also be required to be provided to all contractors as one component of building plan/contract document packages.

Based on the preceding, the potential for the Project to result in inadequate emergency access would be **less than significant.**

12 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements within the City of Calimesa are funded through a combination of improvements constructed by the City, those constructed by private development, and those funded through local and regional development impact fee programs. Fee programs applicable to the Project are described below.

12.1 RIVERSIDE COUNTY TRANSPORTATION UNIFORM MITIGATION FEE (TUMF)

The TUMF program is administered by the Western Riverside Council of Governments (WRCOG) based upon a regional Nexus Study most recently updated in 2024 to address major changes in right of way acquisition and improvement cost factors. (4) This regional program was put into place to ensure that development pays its fair share, and that funding is in place for construction of facilities needed to maintain the requisite level of service and critical to mobility in the region. TUMF is a truly regional mitigation fee program imposed and implemented in every jurisdiction in Western Riverside County.

12.2 CITY OF CALIMESA DEVELOPMENT IMPACT FEE (DIF) PROGRAM

The City of Calimesa has created its own local DIF program to impose and collect fees from new residential, commercial, and industrial development for the purpose of funding roadways and intersections necessary to accommodate City growth as identified in the City's General Plan Circulation Element. The City's DIF includes a Regional Circulation System Fee to comply with Measure "A" and a Local Circulation System Fee to address transportation improvements which are locally significant. The fee schedule was updated in April 2022 and is adjusted based upon changes in the construction cost index. Under the City's DIF program, the City may grant developers a credit against specific components of fees when those developers construct certain facilities and landscaped medians identified in the list of improvements funded by the DIF program.

The timing to use the DIF is established through periodic capital improvement programs which are overseen by the City's Public Works Department. Periodic traffic counts, review of traffic accidents, and a review of traffic trends throughout the City are also periodically performed by City staff and consultants. The City uses this data to determine the timing of implementing the improvements listed in its facilities list. The City also uses this data to ensure that the improvements listed on the facilities list are constructed before the LOS falls below the LOS performance standards adopted by the City. In this way, the improvements are constructed before the LOS falls below the City's LOS performance thresholds.

The Project Applicant will be subject to the City's DIF program and will pay the requisite DIF at the rates then in effect; payment of the requisite DIF will mitigate impacts to DIF-funded facilities. After the City's DIF are collected, they are placed in a separate interest-bearing account pursuant to the requirements of Government Code § 66000 *et seq*. The timing to use the DIF is established through periodic capital improvement programs which are overseen by the City's Public Works Department.

12.3 MEASURE A

Measure A, Riverside County's half-cent sales tax for transportation, was adopted by voters in 1988 and extended in 2002. It will continue to fund transportation improvements through 2039. Measure A funds a wide variety of transportation projects and services throughout the County. RCTC is responsible for administering the program. Measure A dollars are spent in accordance with a voter-approved expenditure plan that was adopted as part of the 1988 election.

12.4 FAIR SHARE CONTRIBUTION

Project improvements may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development that are constructed to ultimate conditions may be eligible for a fee credit or reimbursement through the fee program where the facility is included (to be determined at the City's discretion). When off-site improvements are identified with a proportional share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. Detailed fair share calculations, for each peak hour, have been provided in Table 12-1. Although certain intersections include improvements within a pre-existing fee program, the fair share calculations in Table 12-1 have been provided for every deficient study area intersection in the event there are necessary improvements that are not covered by the fee programs. Any future improvements identified which are not covered by a pre-existing fee program (i.e., City DIF or regional TUMF), or constructed by the Project, would be subject to the fair share percentages shown.

In addition, the Project's fair share has also been calculated for the segment of Sandalwood Drive Extension south of County Line Road, and County Line Road east of Sandalwood Drive Extension based on ADT along each applicable segment. The calculations and results are summarized in Table 12-2.

The Project's fair share contribution is determined based on the following equation, which is the ratio of Project traffic to net new traffic (where net new traffic is the future traffic less existing traffic) (consistent with Section 2.7 of the report):

Project Fair Share % = Project Buildout Traffic / (2045 With Project Total Traffic – Existing Traffic)

TABLE 12-1: PROJECT FAIR SHARE CALCULATIONS – INTERSECTIONS

#	Intersection		Existing (2024)	Project Buildout	2045 With Project	Total New Traffic	Project % of New Traffic[1]
6	County Line Ln. & County Line Rd.						
		AM:	97	747	1,768	1,671	44.7%
		PM:	51	1,264	2,312	2,261	**55.9%**
11	7th Pl. & County Line Rd.						
		AM:	443	747	1,932	1,489	50.2%
		PM:	316	1,264	2,370	2,054	**61.5%**
12	I-10 SB Ramps & County Line Rd.						
		AM:	1,003	746	2,800	1,797	41.5%
		PM:	947	1,264	3,339	2,392	**52.8%**
13	I-10 NB Ramps & County Line Rd.						
		AM:	1,644	630	2,720	1,076	**58.6%**
		PM:	1,377	637	3,266	1,889	33.7%
15	I-10 SB Ramps & Sandalwood Dr.						
		AM:	1,187	4,221	5,889	4,702	89.8%
		PM:	768	5,619	6,734	5,966	**94.2%**
16	I-10 NB On-Ramp & Sandalwood Dr.						
		AM:	1,368	2,417	4,041	2,673	90.4%
		PM:	900	3,311	4,466	3,566	**92.8%**
17	Calimesa Bl. & Sandalwood Dr.						
		AM:	2,045	2,416	5,779	3,734	64.7%
		PM:	1,572	3,311	5,965	4,393	**75.4%**
18	Calimesa Bl. & I-10 NB Off-Ramp						
		AM:	1,105	1,836	4,071	2,966	61.9%
		PM:	900	2,367	4,229	3,329	**71.1%**
19	Roberts Rd. & Singleton Rd.						
		AM:	26	116	3,577	3,551	3.3%
		PM:	37	321	5,271	5,234	**6.1%**
20	I-10 SB Ramps & Singleton Rd.						
		AM:	416	10	3,268	2,852	0.4%
		PM:	271	38	4,965	4,694	**0.8%**
21	I-10 NB Ramps & Singleton Rd.						
		AM:	662	10	3,452	2,790	0.4%
		PM:	610	38	5,002	4,392	**0.9%**
22	Calimesa Bl. & Singleton Rd.						
		AM:	1,623	40	3,622	1,999	2.0%
		PM:	1,116	101	4,363	3,247	**3.1%**
23	Sandalwood Dr. Ext. & County Line Rd.						
		AM:	71	747	1,533	1,462	51.1%
		PM:	46	1,265	2,400	2,354	**53.7%**

[1] **BOLD =** Highest fair share percentage is highlighted.

TABLE 12-2: PROJECT FAIR SHARE CALCULATIONS – SEGMENTS

#	Roadway Segment	Existing (2024)	Project Buildout	2045 With Project	Total New Traffic	Project % of New Traffic
1	Sandalwood Dr. Ext., County Line Rd. to Street B					
	ADT:	0	3,392	10,822	10,822	31.3%
2	County Line Rd., Sandwood Dr. Ext. to County Line Ln.					
	ADT:	618	12,734	23,136	22,518	56.6%

12 REFERENCES

1. **City of Calimesa.** *Final City of Calimesa Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment.* Calimesa : s.n., May 2020.
2. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.
3. **San Diego.** *San Diego Municipal Code Land Development Code Trip Generation Manual.* San Diego : s.n., May 2003.
4. **Western Riverside Council of Governments.** *TUMF Nexus Study, 2016 Program Update.* July 2017.
5. **VRPA Technologies, Inc. for Riverside County Transportation Commission.** *Riverside County Long Range Transportation Study.* County of Riverside : VRPA Technologies, Inc., December 2019.
6. **Transportation Research Board.** *Highway Capacity Manual (HCM).* 7th Edition. s.l. : National Academy of Sciences, 2022.
7. **California Department of Transportation.** California Manual on Uniform Traffic Control Devices (CA MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CA MUTCD).* 2014, Updated March 30, 2021 (Revision 6).

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APPENDIX 1.1: TRAFFIC STUDY SCOPING AGREEMENT

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MEMORANDUM

URBAN | CROSSROADS

Approved with comments 2/26/24

DATE: February 7, 2024
TO: Kelly Lucia, City of Calimesa
FROM: Charlene So, Urban Crossroads, Inc.
JOB NO: 15218-09 TA Scope

MESA VERDE SPECIFIC PLAN AMENDMENT NO. 23-01 LEVEL OF SERVICE ANALYSIS SCOPING AGREEMENT (REVISED)

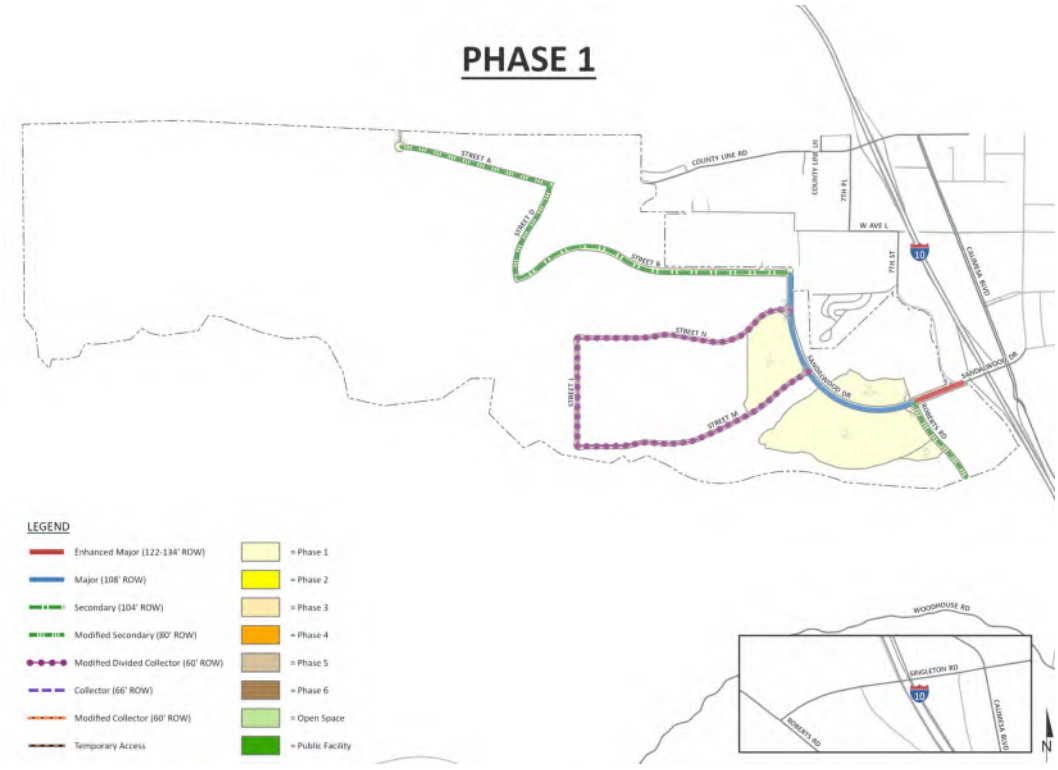
Urban Crossroads, Inc. has prepared the following Level of Service (**LOS**) Analysis Scope of Work (Revised) for the Mesa Verde Specific Plan Amendment No. 23-01 (**Project**) that is generally located west of the Sandalwood Drive at the I-10 Freeway interchange in the City of Calimesa. The scope of work has been prepared in accordance with the City's Final Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (dated May 2020) and has been revised based on comments (both written and verbal) received from City of Calimesa Public Works.

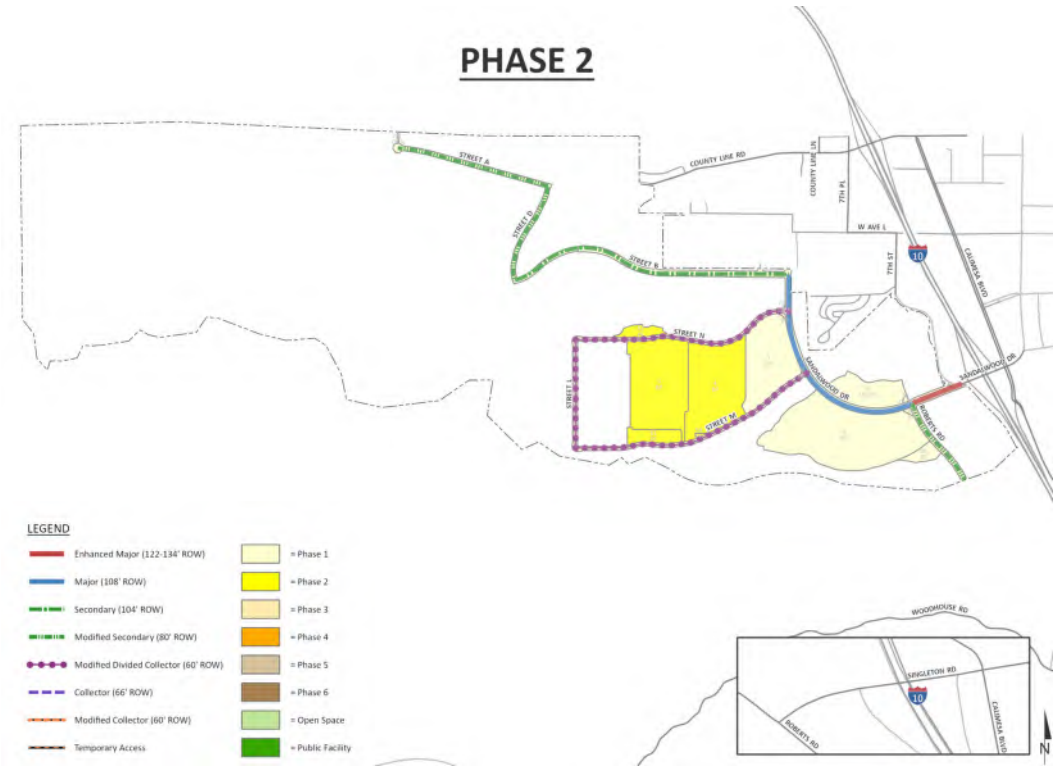
PROJECT DESCRIPTION

The Mesa Verde Specific Plan (**Specific Plan**) was initially approved in 2007 and included the development of 3,450 dwelling units (3,092 single family dwelling units and 358 multifamily dwelling units) and 350,000 square feet of commercial use (plus other ancillary uses include schools, parks, open space, and a recreation center). The Specific Plan was amended in 2017 to include 3,650 dwelling units, 250,000 square feet of commercial use and ancillary uses such as schools, parks, open space, and a recreation center.

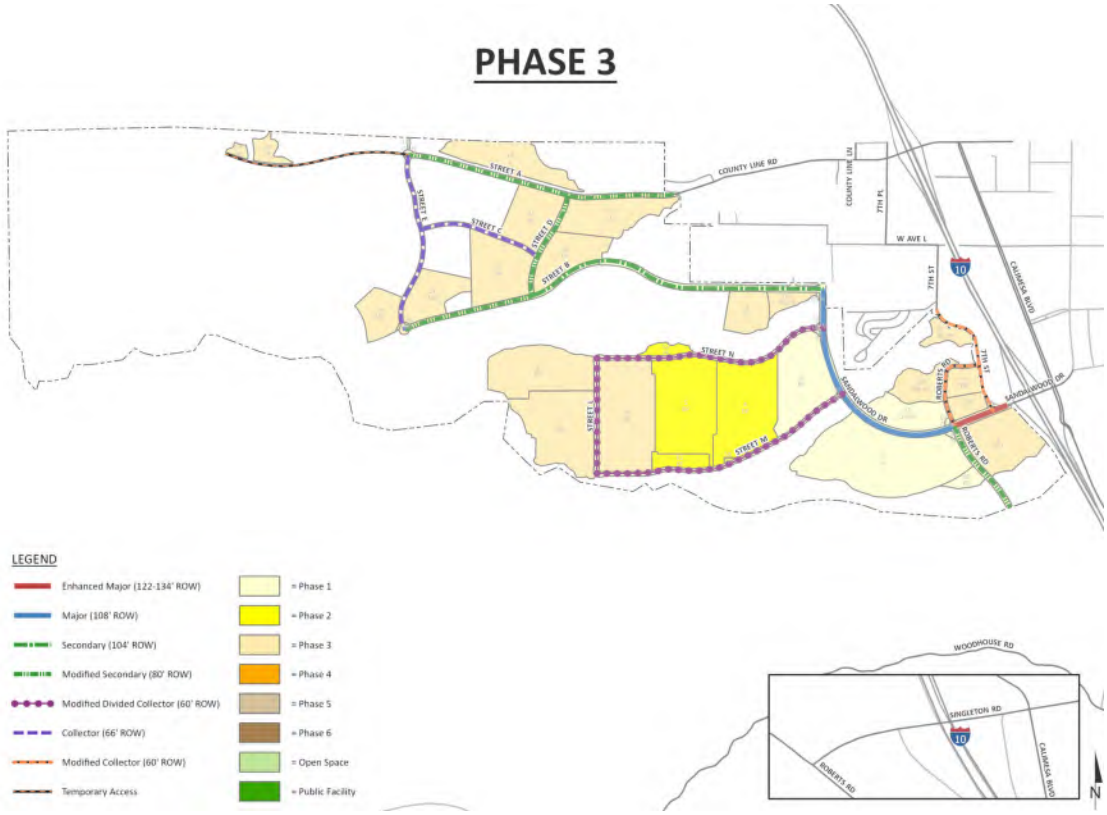
The Project proposes to amend the Specific Plan to include 4,900,000 square feet of Business Park use, 3,650 residential dwelling units, 390,000 square feet of commercial retail use, 1,200 elementary school students (2 proposed schools), and 66.5 acres of public park use within six development phases as defined below. The proposed Project Buildout occurs in Year 2045. A preliminary phasing plan is provided on Exhibit 1 where the roadway network and development areas are highlighted for each applicable phase. Table 1 summarizes the land uses and Opening Years for each development phase.

EXHIBIT 1: PRELIMINARY PHASING PLAN





PHASE 3



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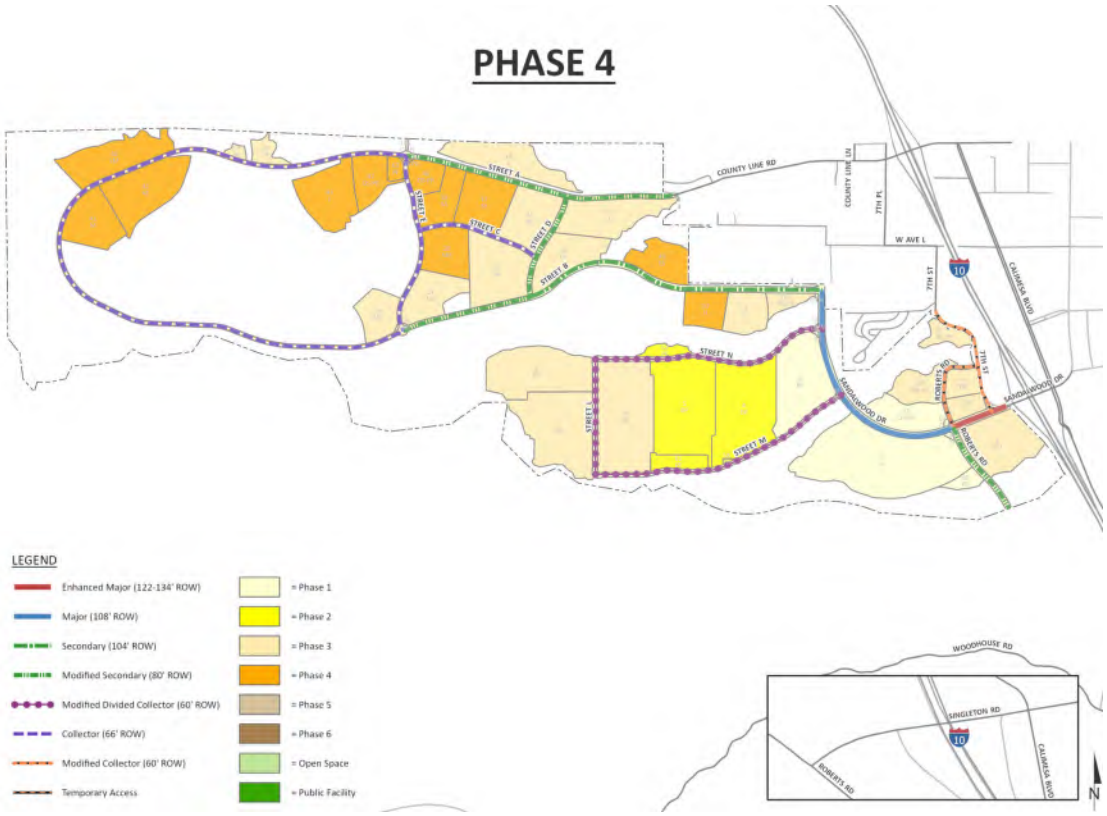

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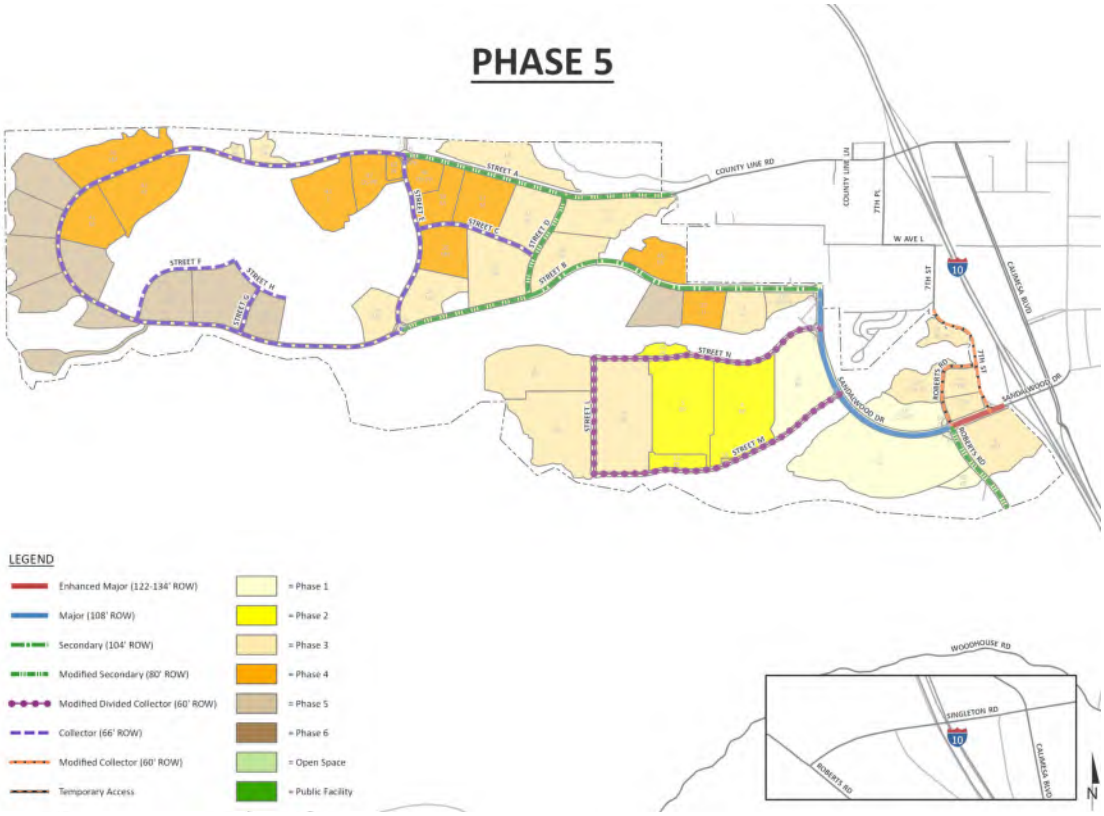


PHASE 6

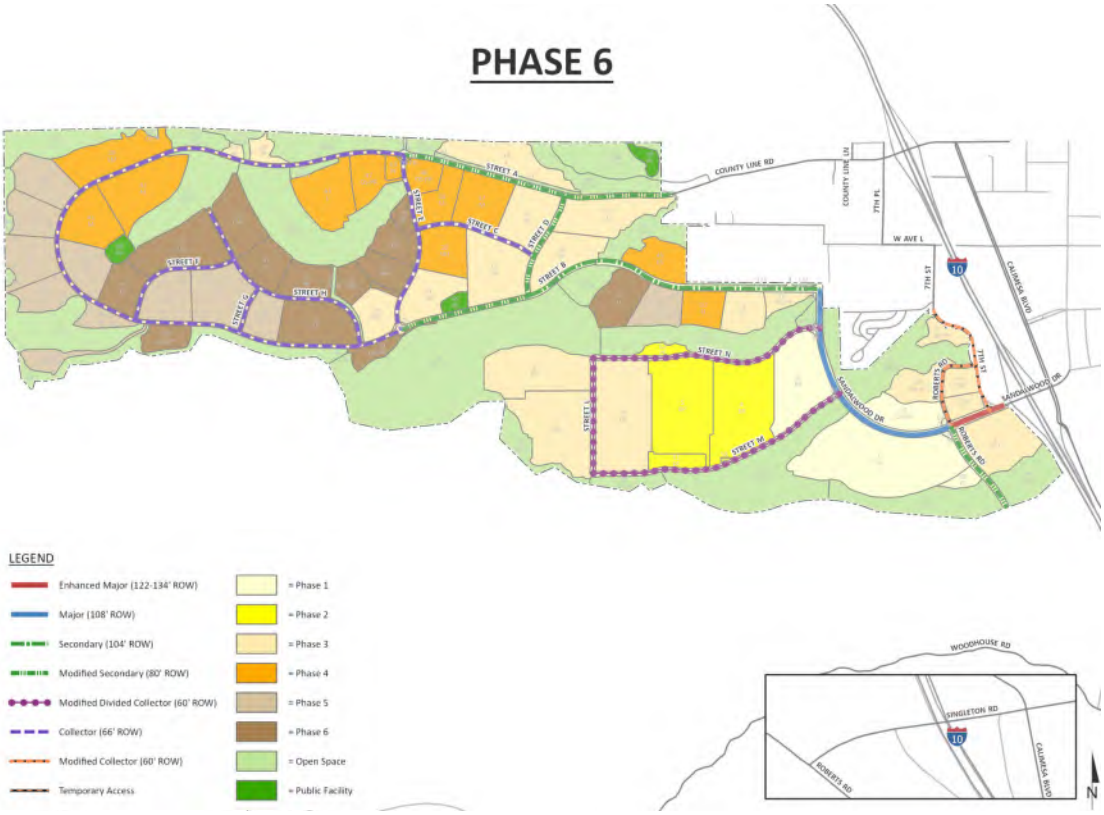


TABLE 1: LAND USE SUMMARY

Phase	Year	Land Use	Quantity	Unit[1]
1	2026	High-Cube Fulfillment Center (Sort)	1,400.000	TSF
		Parks	12.7	AC
2	2028	General Light Industrial	1,400.000	TSF
3	2031	General Light Industrial	2,100.000	TSF
		Single Family Detached Residential	709	DU
		Multifamily (Low-Rise) Residential	185	DU
		Mixed Use (Commercial)	390.000	TSF
		Fire and Rescue Station/Public Works Facility	16.500	TSF
		Parks	18.7	AC
4	2036	Single Family Detached Residential	748	DU
		Multifamily (Low-Rise) Residential	162	DU
		Elementary School	600	Students
		Parks	16.0	AC
5	2040	Single Family Detached Residential	689	DU
		Multifamily (Low-Rise) Residential	194	DU
		Parks	6.9	AC
6	2045	Single Family Detached Residential	714	DU
		Multifamily (Low-Rise) Residential	249	DU
		Elementary School	600	Students
		Parks	12.2	AC

[1] TSF = Thousand Square Feet; DU = Dwelling Units; AC = Acres

STUDY AREA

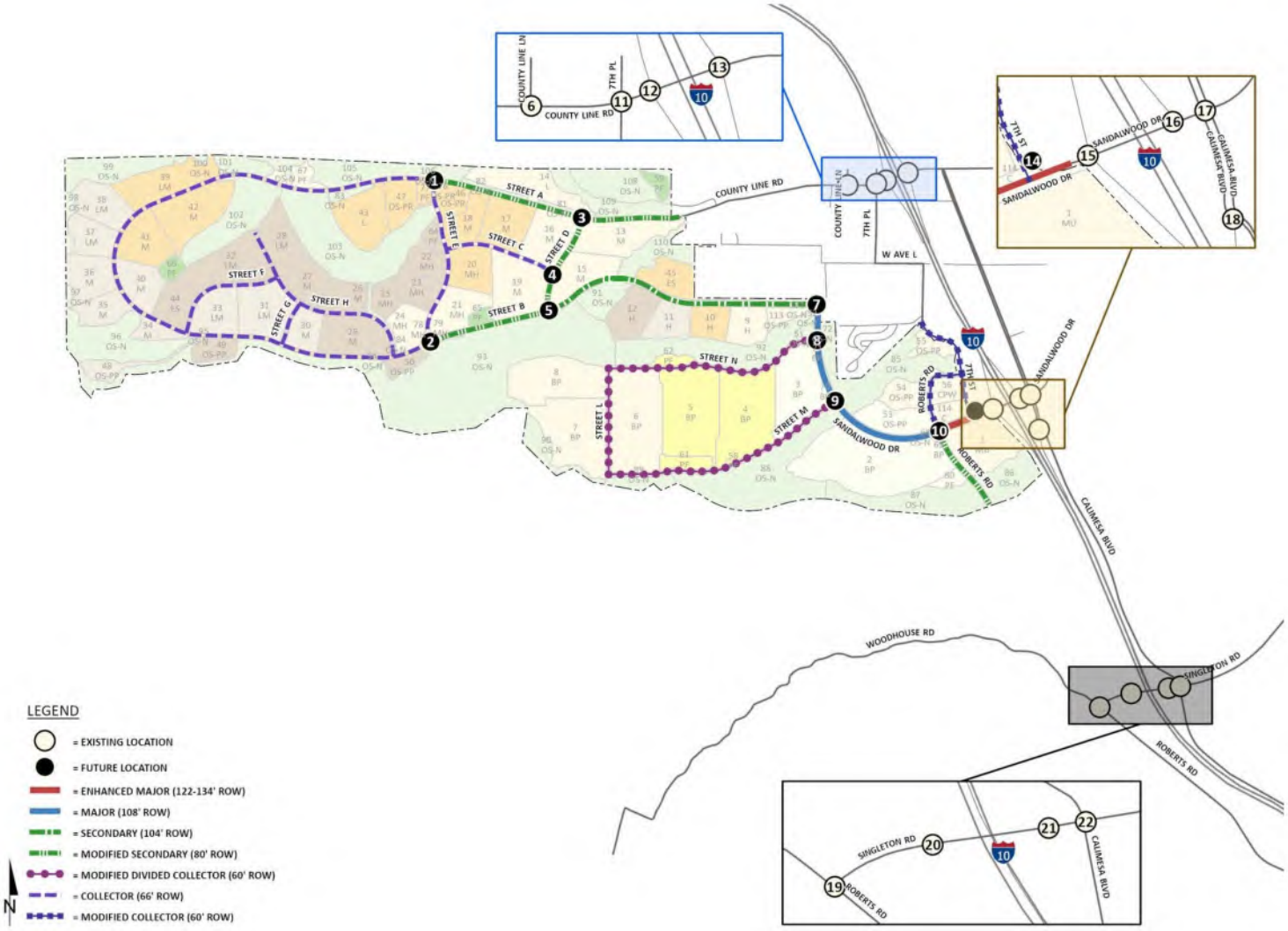
The purpose of this LOS analysis is to evaluate peak hour operations at study area intersections based on the distribution of Project traffic. Table 2 provides a list of the study area intersection locations that have been selected for analysis based on the City's analysis criteria of 50 or more peak hour trips. Exhibit 2 presents the study area locations. The study area intersections will be evaluated using the Highway Capacity Manual (**HCM**) 6th Edition methodology.

This could not be confirmed without trip assignment figures which were not provided. It is likely sufficient if the 50 trip criteria is followed but cannot be confirmed. The City reserves the right to further comment

TABLE 2: STUDY AREA INTERSECTIONS

#	Intersection	#	Intersection
1	Street E & Street A	12	I-10 EB Ramps & County Line Rd.
2	Street E & Street B	13	I-10 WB Ramps & County Line Rd.
3	Street D & Street A	14	7th St. & Sandalwood Dr.
4	Street D & Street C	15	I-10 EB Ramps & Sandalwood Dr.
5	Street D & Street B	16	I-10 WB On-Ramp & Sandalwood Dr.
6	County Line Ln. & County Line Rd.	17	Calimesa Bl. & Sandalwood Dr.
7	Sandalwood Dr. & Street B	18	Calimesa Bl. & I-10 WB Off-Ramp
8	Sandalwood Dr. & Street N	19	Roberts Rd. & Singleton Rd.
9	Sandalwood Dr. & Street M	20	I-10 EB Ramps & Singleton Rd.
10	Roberts Rd. & Sandalwood Dr.	21	I-10 WB Ramps & Singleton Rd.
11	7th Pl. & County Line Rd.	22	Calimesa Bl. & Singleton Rd.

EXHIBIT 2: STUDY AREA



ANALYSIS SCENARIOS

as previously discussed, this should include a scenario with full project buildout against a baseline condition (Plan-to-ground comparison)

Intersection capacity analysis will be prepared for each scenarios:

- Existing (2024) Conditions
- Background (2026) Conditions
- Background (2026 – Phase 1) With Project Con
- Background (2028) Conditions
- Background (2028 – Phase 1 + Phase 2) With P
- Background (2031) Conditions
- Background (2031 – Phase 1 through Phase 3) With Project Conditions
- Background (2036) Conditions
- Background (2036 – Phase 1 through Phase 4) With Project Conditions
- Background (2040) Conditions
- Background (2040 – Phase 1 through Phase 5) With Project Conditions
- Cumulative No Project Conditions (2045)
    - The Riverside County Transportation Model (**RIVCOM**) traffic model for Without Project conditions assumes the approved Mesa Verde Specific Plan (with 3,450 dwelling units).
    - Assumes completion of Roberts Road extension to the south towards Singleton Road, which is to be constructed by others.
    - Assumes the future extension of Sandalwood Drive north of Street B to County Line Road is in place.
- Cumulative With Project Conditions (2045 – Project Buildout)

The RIVCOM traffic model will be used for the purposes of developing long-rage forecasts for Cumulative (2045) traffic conditions. For each of the future traffic analysis scenarios listed above, the following roadway connections will also be evaluated as noted below:

County Line Road Extension: The Project will construct County Line Road, from the Project's eastern boundary to the existing western terminus of County Line Road as a 2-lane roadway. This connection will be available starting with Phase 3, which is the first phase with residential development proposed, and will provide access to the I-10 Freeway/County Line Road interchange. The analysis will determine under which subsequent Project phase County Line Road needs to be widened to a four-lane roadway (provided a four-lane facility is needed or alternative design as determined once traffic demand is confirmed).

Roberts Road Extension: Roberts Road would terminate as a cul-de-sac at the Project's southern property line abutting Garden Air Wash without extending to the south for Phase 1. The Roberts Road Bridge, consistent with the City's currently adopted General Plan Circulation Element and Mesa Verde's Development Agreement, is assumed to be in place under Cumulative traffic conditions only. The improvement is to be constructed by others and the timing of the implementation of the future is not certain at this time. Therefore, the Roberts Road Extension has only been considered for Cumulative traffic conditions. The traffic study will document this condition and identify that the treatment of Roberts Road Extension is a conservative assumption.

Sandalwood Drive Extension: The Cumulative (2045) traffic conditions will be evaluated with the future extension of Sandalwood Drive between Street B and County Line Road as noted above. The alignment is the future extension is currently unknown at this time. The future extension is not proposed as part of the Project but is anticipated to be needed at such a time in the future when the I-10 Freeway and County Line Road interchange requires improvements beyond signalization. Additional comprehensive interchange improvements are anticipated to result in the closure of 7th Place on County Line Road. Additional discussions with City staff will be necessary to determine the alignment that is to be evaluated in the Traffic Study.

EXISTING COUNT DATA

New traffic count data for the study area intersections will be collected in January 2024 during typical weekday AM (7-9AM) and weekday PM (4-6PM) peak hour traffic conditions (Tuesday, Wednesday, or Thursday only). Counts will be conducted when local schools are in session and operating on normal bell schedules. The raw count data will be volume balancing between closely spaced intersections to ensure no loss of vehicles.

TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

CURRENTLY APPROVED LAND USES

The Mesa Verde Estates Focused Traffic Study (October 10, 2016) (**2016 Traffic Study**) was previously prepared in support of the Mesa Verde Specific Plan Amendment No. 13-01 adopted in 2017. As noted previously, approved Specific Plan included 3,292 single family dwelling units, 358 multifamily dwelling units, 47.9 acres of active park, 8,000 square foot recreation community center on 8.2-acres, 2 elementary schools with 1,200 students, and 250,000 square feet of commercial retail use. Trip generation estimates from the 2016 Traffic Study are presented in Table 3. The currently adopted Specific Plan was estimated to generate a net total of 35,991 daily vehicle trips (two-way) with 2,569 AM peak hour trips and 3,676 PM peak hour trips (external off-site trips).

TABLE 3: CURRENTLY APPROVED TRIP GENERATION SUMMARY

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Single Family Detached Residential	3,292	DU	624	1,843	2,467	2,074	1,218	3,292	31,340
Multifamily Residential	358	DU	36	147	183	143	78	221	2,381
Parks	47.9	AC	39	34	73	102	102	204	1,795
Recreational Community Center	8.000	TSF	10	6	16	10	11	21	271
Elementary School	1,200	STU	300	240	540	84	96	180	1,548
Shopping Center	250.000	TSF	170	102	272	532	576	1,108	12,320
Internal Capture Trip Reductions			-469	-469	-938	-587	-587	-1,174	-11,692
Commercial Pass-by/Diverted Trips			-22	-22	-44	-88	-88	-176	-1,972
Total External (Off-Site) Trips			**688**	**1,881**	**2,569**	**2,270**	**1,406**	**3,676**	**35,991**

Note: Trip generation rates used are based on Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition, 2012).

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = Students

PROPOSED PROJECT

Trip Generation estimates for the proposed Project are based upon information collected by the ITE as provided in their latest Trip Generation Manual, 11th Edition, 2021. Attachment A contains the trip generation rates and the Project's trip generation summary. Table A-1 in Attachment A summarizes the trip generation rates used for the proposed Project. The proposed Project trip generation summary is provided in Attachment A and is shown in the following tables:

- Table A-2 for Phase 1 (both actual vehicles and passenger car equivalent (**PCE**)
- Table A-3 for Phase 2 (both actual vehicles and PCE)
- Table A-4 for Phase 3 (actual vehicles)
- Table A-5 for Phase 3 (PCE)
- Table A-6 for Phase 4 (actual vehicles)
- Table A-7 for Phase 4 (PCE)
- Table A-8 for Phase 5 (actual vehicles)
- Table A-9 for Phase 5 (PCE)
- Table A-10 for Project Buildout (actual vehicles)
- Table A-11 for Project Buildout (PCE)

A condensed summary of the Project's trip generation is shown on Table 4 (see below) that summarizes the detailed trip generation information provided in Attachment A.

Consistent with CEQA requirements, vehicle trip generation within the Business Park Land Areas are based on the highest trip generation land use category as allowed by the Specific Plan. The Specific Plan will limit the development of high-cube fulfillment center (sort facility) use to 1,400,000 square feet. The remaining 3,500,000 square feet of industrial use will be evaluated assuming the general light industrial land use category which is the next highest trip generation land use category after high-cube fulfillment (sort facility).

remove the NCHRP 684 reports which were not used for internalization.

applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-
the typical "real-world" mix of vehicle types to be represented as a single,
standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in the City Guidelines.

Internal capture percentages are based on the Riverside County Transportation Model (**RIVCOM**) traffic model based on the land uses and intensities proposed for the Project. Additional internal capture reductions have been applied for the residential and school uses to account for students walking/biking to and from school. Based on the Yucaipa-Calimesa Unified School District service area, there are approximately 9,130 students and 20,613 households within the school district which equates to approximately 0.44 students per household. Based on the anticipate total dwelling unit count it is anticipated all students for the proposed elementary school sites could be fulfilled by the dwelling units proposed, however, in an effort to conduct a conservative analysis and based on the service area of the existing schools, it is assumed that 81% of the school would be served within the Project boundary, while 19% of the school service area would lie outside of the Project boundary. As such, internal capture has only been applied to the residential uses served internally by the school site.

Trip generation estimates for the proposed Project are presented in Table 4. The Project is anticipated to generate a total of 63,260 two-way trips per day with 5,307 AM peak hour trips and 7,615 PM peak hour trips. The Project trip generation summarized on Table 4 is reflected in actual vehicles. Consistent with City Guidelines, the intersection capacity analysis will be based on PCE volumes (existing conditions, Project only volumes, cumulative volumes, etc.). The City Guidelines also allow the use of count data or data provided by the City Traffic Engineer to utilize a heavy vehicle factor to be applied to the HCM analysis. However, it is proposed to use PCE volumes, consistent with the methodology from the City Guidelines.

TABLE 4: PROJECT TRIP GENERATION SUMMARY

			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
High-Cube Fulfillment Center (Sort)	1,400.000	TSF	987	231	1,218	655	1,025	1,680	9,018
General Light Industrial	3,500.000	TSF	2,280	311	2,591	320	1,956	2,276	17,046
Single Family Detached Residential	2,860	DU	521	1,481	2,002	1,694	995	2,689	26,970
Multifamily Residential	790	DU	76	240	316	254	149	403	5,326
Fire Station/Public Works Facility	16.5	AC	13	3	16	3	12	15	114
Parks	66.5	AC	67	67	133	133	133	266	3,326
Elementary School	1,200	STU	480	408	888	88	104	192	2,724
Shopping Center	390.000	TSF	269	164	433	803	870	1,673	17,488
Internal Capture Trip Reductions			-1,145	-1,145	-2,290	-790	-790	-1,580	-18,752
Total Project Buildout Trips (Actual Vehicles)			**3,548**	**1,760**	**5,307**	**3,160**	**4,454**	**7,615**	**63,260**

Note: Trip generation rates used are based on Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021).

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = students

TRIP GENERATION COMPARISON

Table 5 provides a comparison between the trip generation estimates used for the currently adopted Specific Plan Traffic Study and those estimated for the proposed Project. As shown in Table 5, the proposed Project is estimated to generate an additional 29,029 daily vehicle trips as compared to the adopted Specific Plan.

TABLE 5: TRIP GENERATION COMPARISON

	AM Peak Hour			PM Peak Hour			
Land Use	In	Out	Total	In	Out	Total	Daily
2017 Adopted Specific Plan	688	1,881	2,569	2,270	1,406	3,676	35,991
Proposed Project Buildout (PCE)	3,601	1,803	5,403	3,206	4,504	7,711	65,020
Variance	**2,913**	**-78**	**2,834**	**936**	**3,098**	**4,035**	**29,029**

TRIP DISTRIBUTION

The trip distribution and assignment process represent the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. In addition, heavy truck travel patterns are identified as the most direct routes to the State Highway system.

Trip distribution patterns for Project passenger trips are based on select-zone runs from the RIVCOM. Select-zone analysis for each land use type has been conducted using the RIVCOM cumulative model, which represents the anticipated travel patterns for passenger cars under Cumulative (2045 conditions. Opening Year distribution patterns have been modified accordingly based on the available roadway connections for each phase of development while staying consistent with the regional distributions determined by the select-zone analysis. Project trip distribution patterns are provided in Attachment B by land use and phase. Attachment C includes the select-zone model plots.

LEVEL OF SERVICE (LOS) CRITERIA

The definitions of an operational deficiency for the various agencies are as follows:

- According to the City of Calimesa, LOS C is the minimum acceptable condition that should be maintained during the peak commute hours. However, a peak hour LOS of D, or lower, may be allowed on City-maintained roadway segments in commercial and employment areas or any combination of major highways, urban arterials, secondary highways, or freeway ramp intersections. For the purposes of the traffic study, LOS D will be the minimum acceptable condition.

- Caltrans has shifted to vehicle miles traveled as the transportation metric for determining traffic impacts. However, consistent with the City's guidelines, LOS D will be used as the minimum acceptable condition during the peak hours.

DEFICIENCY CRITERIA – INTERSECTIONS

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies. The following criteria will be considered in order to determine when infrastructure improvements are required to provide acceptable peak hour operations in order to demonstrate General Plan consistency.

Collector and Local Road Signalized Intersection Operating Requirements:

- Any signalized study intersections consisting of 2 or more collector or local roads that is operating at an acceptable LOS C or better without the project traffic in which the addition of project traffic causes the intersection to degrade to a LOS D or worse shall identify improvements needed to improve operations to LOS C or better.
- Any signalized study intersection consisting of 2 or more collector or local roads that is operating at LOS D, LOS E or LOS F without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

Highway and Arterial Signalized Intersection Operating Requirements:

- Any signalized study intersections consisting of one or more highway or arterial road that is operating at an acceptable LOS D or better without the project traffic in which the addition of project traffic causes the intersection to degrade to a LOS E or LOS F shall identify improvements needed to improve operations to LOS D or better.
- Any signalized study intersection consisting of one or more highway or arterial road that is operating at LOS E or LOS F without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

For unsignalized intersections, an operational improvement would be required if the study determines that either section a) or both sections b) and c) occur:

a) The addition of project related traffic causes the intersection to degrade from an acceptable LOS C or better to LOS D or worse.

OR

b) The project adds 5.0 seconds or more of delay to an intersection that is already projected to operate without project traffic at LOS D or worse,

AND

c) The intersection meets the peak hour traffic signal warrant after the addition of project traffic

If the conditions above are satisfied, improvements should be identified that achieve LOS C or better for case a) above or to pre-project LOS and delay for case b) above.

AMBIENT GROWTH

Consistent with other studies performed in the area, an ambient growth rate of 2% per year is proposed for the study area intersections to approximate background traffic growth not identified by nearby cumulative development projects. The ambient growth rate will be compounded over a 2-year period for Year 2026 (i.e., $1.02^{2\ year}$ = 1.04 or 4.04%).

Background (2028), Background (2031), Background (2036), Background (2040), and Cumulative (2045) volumes will be determined based on forecasts from the RIVCOM traffic model, and Background (2028, 2031, 2036, and 2040) volumes will be interpolated between the Background (2026) and Cumulative (2045) volumes. This is to ensure that traffic forecasts are not grossly overstating the potential growth by applying a compounded growth factor over the next 7, 12, 16, and 21 years, respectively. The RIVCOM traffic model will be adjusted to account for future cumulative projects within the study area.

SPECIAL ISSUES

The following special issues will also be addressed as part of the focused traffic assessment:

- Conduct traffic signal warrant analysis for all existing and future unsignalized study area intersections with full access (no signal warrants for intersections with restricted access as traffic signal installation would not be applicable).
- The intersection and roadway improvement recommendations, by phase, will be compared to those identified in the mitigation measures and conditions of approval for the currently adopted Mesa Verde Specific Plan. Specifically, the original transportation conditions of approval and the original mitigation section from the original traffic study will be listed and used to compare to the proposed rephasing of improvements to identify changes. This comparison will be used to demonstrate consistency or modifications with the Specific Plan. Any desired changes or alterations to the conditions of approval/mitigation assumptions with appropriate analysis, justification, and documentation will be provided.
- It is understood that additional special issues or requests may be forthcoming due to the complexity of the analysis and plan. This may not be an all-inclusive list. For example, Caltrans design standards or coordination may become a special issue.

CUMULATIVE DEVELOPMENT PROJECTS

A cumulative development map is provided on Exhibit 3 and the projects are listed on Table 6. It is requested that the City provide a current list of cumulative projects so the attached list and map can be updated. Cumulative projects in the immediate area along County Line Road and Sandalwood Drive will be manually accounted for in the forecasting while other regional projects will be accounted for by ensuring the land uses are adequately represented in the long-range traffic modeling tool.

SIGNAL TIMING

It is requested that the City provide any signal timing that should be considered for signalized study area intersections within the City. Signal timing for the I-10 Freeway Ramps have been received from Caltrans District 8.

If you have any questions or comments, I can be reached at cso@urbanxroads.com.

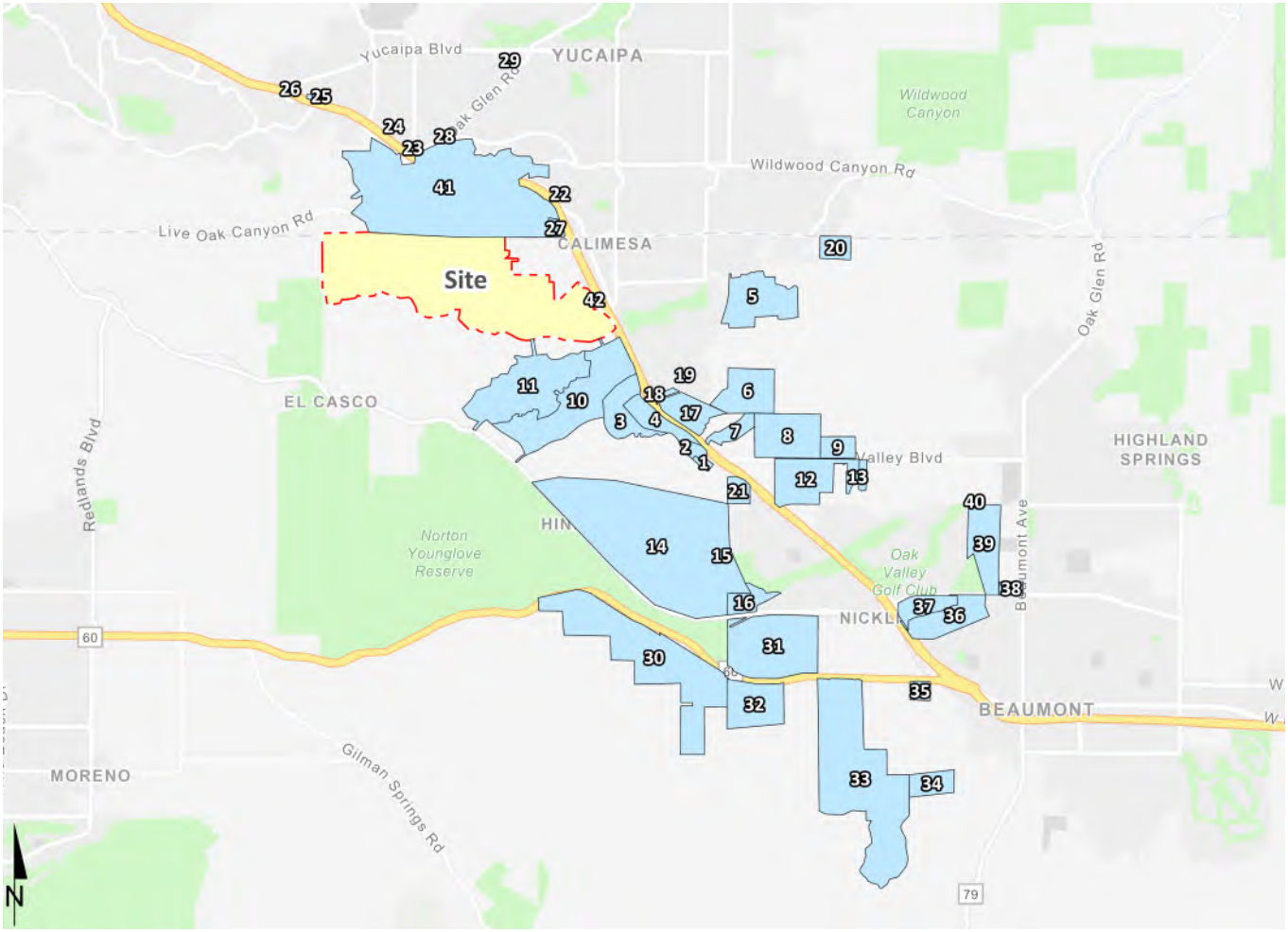
TABLE 6: SUMMARY OF CUMULATIVE DEVELOPMENT PROJECTS

#	Project	Land Use	2034 Quantity[1]	2038 Quantity[1]	2039/2045 Quantity[1]
1	Calimesa II	Health/Fitness Club	20.000 TSF	*20.000 TSF*	*20.000 TSF*
		Clinic	12.000 TSF	*12.00 TSF*	*12.00 TSF*
		Animal Hospital/Veterinary Clinic	9.900 TSF	*9.90 TSF*	*9.90 TSF*
		Medical-Dental Office	5.000 TSF	*5.00 TSF*	*5.00 TSF*
		Shopping Center (>150k)	8.500 TSF	*8.50 TSF*	*8.50 TSF*
		High Turnover (Sit-Down) Restaurant	8.500 TSF	*8.50 TSF*	*8.50 TSF*
		Fast-Food Restaurant w/ Drive-Through Window	7.500 TSF	*7.50 TSF*	*7.50 TSF*
		Super Convenience Market/Gas Station	16 VFP	*16.00 VFP*	*16.00 VFP*
2	Summerwind Commons II	Single Family Detached	168 DU	*168.0 DU*	*168.0 DU*
3	Oak Valley Town Center	High Cube Warehouse	2,250.000 TSF	*2,250.000 TSF*	*2,250.000 TSF*
		Truck/trailer Parking Lot	10.07 AC	*10.07 AC*	*10.07 AC*
4	Oak Valley Town Commercial	Commercial Retail	--	200.000 TSF	751.800 TSF
5	JP Ranch (Tract No. 30387)	Single Family Residential	--	345 DU	689 DU
		Shopping Center	--	36.00 SF	72.70 SF
6	Holly Hills (within RIVCOM TAZ 140)	Single Family Detached	--	520 DU	1,039 DU
		Multifamily Housing (Low-Rise)	--	133 DU	266 DU
		Parks/Recreation	--	6.0 AC	11.6 AC
7	Holly Hills (within RIVCOM TAZ 143)	Single Family Detached	--	235 DU	470 DU
		Multifamily Housing (Low-Rise)	--	237 DU	473 DU
		Parks/Recreation	--	5.0 AC	10.3 AC
8	I-10 Gateway	High-Cube Warehouse	960.000 TSF	1,600.000 TSF	2,560.000 TSF
9	Borstein Property	Single Family Residential	209 DU	*209 DU*	*209 DU*
10	Summerwind Trails (Phases 2 & 3)	Single Family Residential	--	1,747 DU	*1,747 DU*
		Single Family Residential - Attached	--	411 DU	*411 DU*
		Parks	--	25.6 AC	*25.6 AC*
11	Summerwind Trails (Phases 4 & 5)	Single Family Residential	--	--	790 DU
		Parks	--	--	29.5 AC
12	Sunny-Cal Specific Plan	Single Family Residential	571 DU	*571 DU*	*571 DU*
13	Beaumont Tract 31966	Single Family Residential	60 DU	*60 DU*	*60 DU*
14	Fairway Canyon SCPGA	Single Family Residential	500 DU	1,000 DU	1,650 DU
15	Beyond Beaumont Commercial	Shopping Center	6.580 TSF	*6.580 TSF*	*6.580 TSF*
16	Tournament Hills 3, TM 36307	Single Family Residential	279 DU	*279 DU*	*279 DU*
17	Oak Valley North Specific Plan	High-Cube Warehouse	1,288.505 TSF	1,288.505 TSF	1,288.505 TSF
		High-Cube Cold Storage	227.383 TSF	227.383 TSF	2,560.000 TSF
		Multifamily Housing	126 DU	396 DU	396 DU
18	Oak Valley Commercial 1 (SWC of Calimesa Bl./Singleton Rd.)	Shopping Center	--	64.033 TSF	64.033 TSF
19	Oak Valley Commercial 2 (SEC of Calimesa Bl./Singleton Rd.)	Shopping Center	--	128.067 TSF	128.067 TSF
20	Heritage Oaks Specific Plan	Single Family Residential	45 DU	*45 DU*	*45 DU*
21	Riedman Subdivision	Single Family Residential	179 DU	*179 DU*	*179 DU*
22	Advantage Paving	Metal Office and Shop	5.000 TSF	*5.000 TSF*	*5.000 TSF*
23	Yucaipa Gateway Plaza	Hotel	92 RM	*92 RM*	*92 RM*
		Restaurant and Office	11.250 TSF	*11.250 TSF*	*11.250 TSF*
		Drive-Thru Restaurant	3.677 TSF	*3.677 TSF*	*3.677 TSF*
24	Dunlap	Office Building	2.419 TSF	*2.419 TSF*	*2.419 TSF*
25	Pop Top	Metal Office Building/Auto Repair	2.520 TSF	*2.520 TSF*	*2.520 TSF*
26	Commercial Building	Commercial	7.500 TSF	*7.500 TSF*	*7.500 TSF*
27	Warehouse	Warehouse	363.000 TSF	*363.00 TSF*	*363.000 TSF*

#	Project	Land Use	2028 Quantity[1]	2038 Quantity[1]	2039/2045 Quantity[1]
28	Opal Hotel and Fuel Station	Convenience Store	4.500 TSF	*4.500 TSF*	*4.500 TSF*
		Fuel Station	24 VFP	*24 TSF*	*24 TSF*
		Hotel	90 RM	*90 RM*	*90 RM*
29	Construction Equipment Storage	Office	2.080 TSF	*2.080 TSF*	*2.080 TSF*
30	Beaumont Pointe	High-Cube Fulfillment	4,500.000 TSF	*4,500.000 TSF*	*4,500.000 TSF*
		General Light Industrial	500.000 TSF	*500 TSF*	*500 TSF*
		Hotel	125 RM	*125 RM*	*125 RM*
		Restaurant/Retail	251.000 TSF	*251.000 TSF*	*251.000 TSF*
31	Heartland (Olivewood)	Single Family Residential	981 DU	*981 DU*	*981 DU*
32	Hidden Canyon Industrial	High-Cube Warehouse	2,890.000 TSF	*2,890.000 TSF*	*2,890.000 TSF*
33	Legacy Highlands	High-Cube Warehouse	18,365.400 TSF	*18,365.400 TSF*	*18,365.400 TSF*
		High-Cube Cold Storage	2,040.600 TSF	*2,040.600 TSF*	*2,040.600 TSF*
		Commercial	143.000 TSF	*143.000 TSF*	*143.000 TSF*
34	Taurek (Tract no. 31162)	Single Family Residential	244 DU	*244 DU*	*244 DU*
35	Orchard Logistics	High-Cube Fulfillment/Cold Storage	610.000 TSF	*610.000 TSF*	*610.000 TSF*
36	Kirkwood Ranch	Single Family Residential	403 DU	*403 DU*	*403 DU*
37	Oak Valley Village (Mountain Bridge)	Commercial	441.709 TSF	*441.709 TSF*	*441.709 TSF*
38	Beaumont Village	Commercial	50.810 TSF	*50.810 TSF*	*50.810 TSF*
39	Noble Creek Vistas	Single Family Residential	648 DU	*648 DU*	*648 DU*
40	CUP 03629	Mini-Warehouse	90.000 TSF	*90.000 TSF*	*90.000 TSF*
41	Yucaipa Freeway Corridor Specific Plan	Commercial Retail	174.1 AC	*174.1 AC*	*174.1 AC*
		Business Park	44.7 AC	*44.7 AC*	*44.7 AC*
		Single Family Residential	458 DU	*458 DU*	*458 DU*
42	Sandalwood Travel Center	Gasoline Service Station	8 VFP	*8 VFP*	*8 VFP*
		Diesal Service Station	12 VFP	*12 VFP*	*12 VFP*

[1] AC = Acres; DU = Dwelling Units; RM = Rooms; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions

EXHIBIT 3: CUMULATIVE DEVELOPMENT PROJECT LOCATION MAP



Approved: Justin P. Schlaefli 2/26/24
City Traffic Engineer

Attachment A: Project Scoping Form

This scoping form shall be submitted to the City of Calimesa to assist in identifying infrastructure improvements that may be required to support traffic from the proposed project.

Project Identification:

Case Number:	
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	Mesa Verde Specific Plan Amendment No. 23-01
Project Address:	west of Sandalwood Drive and I-10 Freeway
Project Opening Year:	Ph1=2026, Ph2=2028, Ph3=2031, Ph4=2036, Ph5=2040, Ph6=2045
Project Description:	4,900,000 SF of Business Park use, 3,650 residential dwelling units, 390,000 SF commercial retail use, 1,200 elementary school students, 66.5 acres of public parks

	Consultant:	**Developer:**
Name:	Urban Crossroads - Charlene So	Mesa Verde Owner, LLC - David Graves
Address:	1133 Camelback St, #8329	18565 Jamboree Rd., Suite 200
	Newport Beach, CA 92658	Irvine, CA 92612
Telephone:	949-861-0177	
Fax/Email:	cso@urbanxroads.com	

Trip Generation Information:

Trip Generation Data Source: ITE Trip Generation Manual (11th Edition, 2021)

Current General Plan Land Use: Specific Plan

Proposed General Plan Land Use: Specific Plan

Current Zoning: Specific Plan

Proposed Zoning: Specific Plan

	Existing Trip Generation			Proposed Trip Generation (PCE)		
	In	Out	Total	In	Out	Total
AM Trips				3,601	1,803	5,404
PM Trips				3,076	4,374	7,450

Trip Internalization: ☒ Yes ☐ No (_____% Trip Discount) Varies by Phase - per RIVCOM

Pass-By Allowance: ☐ Yes ☒ No (_____% Trip Discount)

Potential Screening Checks

Is your project screened from specific analyses (see Page 11 of the guidelines related to LOS assessment and Pages 24-26).

Is the project screened from LOS assessment? ☐ Yes ☑ No

LOS screening justification (see Page 11 of the guidelines): _____

Is the project screened from VMT assessment? ☐ Yes ☑ No

VMT screening justification (see Pages 24-26 of the guidelines): _____

Level of Service Scoping

- Proposed Trip Distribution (Attach Graphic for Detailed Distribution): See attached memo

North	South	East	West
varies %	varies %	varies %	varies %

- Attach list of Approved and Pending Projects that need to be considered (provided by the City Traffic Engineer and adjacent agencies)
- Attach list of study intersections/roadway segments See attached memo
- Attach site plan See attached memo
- Note other specific items to be addressed:
  - Site access
  - On-site circulation
  - Parking
  - Consistency with Plans supporting Bikes/Peds/Transit
  - Other _____
- Date of Traffic Counts New counts to be conducted January 2024
- Attach proposed analysis scenarios (years plus proposed forecasting approach)
- Attach proposed phasing approach (if the project is phased)

VMT Scoping

For projects that are not screened, identify the following:

- Travel Demand Forecasting Model Used RIVCOM 4.0.1
- Attach WRCOG Screening VMT Assessment output or describe why it is not appropriate for use
- Attach proposed Model Land Use Inputs and Assumed Conversion Factors (attach)

Land Use Conversion

Land Use	Factor	Source	Population	Employee	Students
Residential	2.5 person per household	State of California Department of Finance; May 2023	9125	0	0
Business Park	600 sf per employee	Riverside County General Plan Appendix E-2	0	8167	0
Commercial	500 sf per employee	Riverside County General Plan Appendix E-2	0	780	0
School	"1:1"	-	0	0	1200

WRCOG screenshot is not available. Project is too large to run screening tool.

ATTACHMENT A: DETAILED PROJECT TRIP GENERATION

TABLE A-1: PROJECT TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
High-Cube Fulfillment Center (Sort)[3,4]	TSF	156	0.705	0.165	0.870	0.468	0.732	1.200	6.440
Passenger Cars			0.695	0.155	0.850	0.458	0.722	1.180	6.250
2-Axle Trucks			0.002	0.001	0.003	0.002	0.001	0.003	0.032
3-Axle Trucks			0.002	0.002	0.004	0.002	0.002	0.004	0.039
4+-Axle Trucks			0.006	0.007	0.013	0.006	0.007	0.013	0.119
General Light Industrial[3]	TSF	110	0.651	0.089	0.740	0.091	0.559	0.650	4.870
Passenger Cars (AM=98.6%, PM=98.5%, Daily=94.9%)			0.645	0.085	0.730	0.086	0.554	0.640	4.620
2-Axle Trucks (AM=0.23%, PM=0.25%, Daily=0.85%)			0.001	0.001	0.002	0.001	0.001	0.002	0.042
3-Axle Trucks (AM=0.29%, PM=0.31%, Daily=1.05%)			0.001	0.001	0.002	0.001	0.001	0.002	0.052
4+-Axle Trucks (AM=0.88%, PM=0.94%, Daily=3.20%)			0.004	0.002	0.006	0.003	0.003	0.006	0.157
Single Family Detached Residential	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Multifamily (Low-Rise) Residential	DU	220	0.10	0.30	0.40	0.32	0.19	0.51	6.74
Parks	AC	--[5]	1.00	1.00	2.00	2.00	2.00	4.00	50.00
Elementary School	STU	520	0.40	0.34	0.74	0.07	0.09	0.16	2.27
Fire and Rescue Station[7]	TSF	575	0.34	0.14	0.48	0.14	0.34	0.48	4.80
Utility	TSF	170	2.03	0.30	2.33	0.39	1.77	2.16	12.29
Shopping Center (>150,000 SF, Regression Equation)	TSF	820	0.69	0.42	1.11	2.06	2.23	4.29	44.84
Passenger Car Equivalent (PCE) Trip Generation Rates[6]									
High-Cube Fulfillment Center (Sort)[3,4]	TSF	156	0.705	0.165	0.870	0.468	0.732	1.200	6.440
Passenger Cars			0.695	0.155	0.850	0.458	0.722	1.180	6.250
2-Axle Trucks (PCE = 1.5)			0.003	0.002	0.005	0.003	0.002	0.005	0.048
3-Axle Trucks (PCE = 2.0)			0.004	0.004	0.008	0.004	0.004	0.008	0.079
4+-Axle Trucks (PCE = 3.0)			0.018	0.020	0.038	0.018	0.020	0.038	0.357
General Light Industrial[3]	TSF	110	0.651	0.089	0.740	0.091	0.559	0.650	4.870
Passenger Cars			0.645	0.085	0.730	0.086	0.554	0.640	4.620
2-Axle Trucks (PCE = 1.5)			0.002	0.001	0.003	0.002	0.001	0.003	0.063
3-Axle Trucks (PCE = 2.0)			0.002	0.002	0.004	0.002	0.002	0.004	0.104
4+-Axle Trucks (PCE = 3.0)			0.012	0.007	0.019	0.009	0.010	0.019	0.470

[1] Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

[2] TSF = thousand square feet; DU = dwelling units; AC = Acres; STU = Students
Inbound and outbound split source: ITE Trip Generation Manual, Eleventh Edition (2021) for ITE Land Use Code 154.

[3] Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.
Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks.

[4] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition Supplement (February 2020).

[5] Trip Generation Source: San Diego Municipal Code Land Development Code Trip Generation Manual, May 2003.

[6] PCE factors: 2-axle = 1.5; 3-axle = 2.0; 4+-axle = 3.0.

[7] AM peak hour and daily rates are not available in the ITE Trip Generation Manual. As such, the AM peak hour trip generations have been estimated utilizing the PM peak hour data, while the daily rate has been estimated at 10 times the PM peak hour rate.

TABLE A-2: PROJECT TRIP GENERATION SUMMARY (PHASE 1)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 1 (2026):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			3	2	5	3	2	5	44
3-axle Trucks:			3	3	6	3	3	6	56
4+-axle Trucks:			8	9	17	8	9	17	168
Total Truck Trips (Actual Vehicles):			14	14	28	14	14	28	268
High-Cube Fulfillment Center (Sort) Total Trips (Actual Vehicles)			987	231	1,218	655	1,025	1,680	9,018
Parks	12.7	AC	13	13	26	25	25	50	636
Phase 1 Total Passenger Cars			986	230	1,216	666	1,036	1,702	9,386
Phase 1 Total Trucks (Actual Vehicles)			14	14	28	14	14	28	268
Phase 1 Total External Trips (Actual Vehicles)			**1,000**	**244**	**1,244**	**680**	**1,050**	**1,730**	**9,654**
Passenger Car Equivalent:									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			4	3	7	4	3	7	68
3-axle Trucks:			6	6	12	6	6	12	110
4+-axle Trucks:			25	27	52	25	27	52	500
Total Truck Trips (PCE):			35	36	71	35	36	71	678
High-Cube Fulfillment Center (Sort) Total Trips (PCE)			1,008	253	1,261	676	1,047	1,723	9,428
Parks	12.7	AC	13	13	26	25	25	50	636
Phase 1 Total Passenger Cars			986	230	1,216	666	1,036	1,702	9,386
Phase 1 Total Trucks (PCE)			35	36	71	35	36	71	678
Phase 1 Total External Trips (PCE)			**1,021**	**266**	**1,287**	**701**	**1,072**	**1,773**	**10,064**

[1] TSF = thousand square feet; AC = acres

TABLE A-3: PROJECT TRIP GENERATION SUMMARY (PHASE 2)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 2 (2028):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			3	2	5	3	2	5	44
3-axle Trucks:			3	3	6	3	3	6	56
4+-axle Trucks:			8	9	17	8	9	17	168
Total Truck Trips (Actual Vehicles):			14	14	28	14	14	28	268
High-Cube Fulfillment Center (Sort) Total Trips (Actual Vehicles)			987	231	1,218	655	1,025	1,680	9,018
General Light Industrial	1,400.000	TSF							
Passenger Cars:			903	119	1,022	120	776	896	6,468
2-axle Trucks:			1	1	2	1	1	2	58
3-axle Trucks:			1	1	2	1	1	2	72
4+-axle Trucks:			6	3	9	4	5	9	220
Total Truck Trips (Actual Vehicles):			8	5	13	6	7	13	350
General Light Industrial Total Trips (Actual Vehicles)			911	124	1,035	126	783	909	6,818
Parks	12.7	AC	13	13	26	25	25	50	636
Phase 1 & 2 Total Passenger Cars			1,889	349	2,238	786	1,812	2,598	15,854
Phase 1 & 2 Total Trucks (Actual Vehicles)			22	19	41	20	21	41	618
Phases 1 & 2 Total External Trips (Actual Vehicles)			**1,911**	**368**	**2,279**	**806**	**1,833**	**2,639**	**16,472**
Passenger Car Equivalent:									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			4	3	7	4	3	7	68
3-axle Trucks:			6	6	12	6	6	12	110
4+-axle Trucks:			25	27	52	25	27	52	500
Total Truck Trips (PCE):			35	36	71	35	36	71	678
High-Cube Fulfillment Center (Sort) Total Trips (PCE)			1,008	253	1,261	676	1,047	1,723	9,428
General Light Industrial	1,400.000	TSF							
Passenger Cars:			903	119	1,022	120	776	896	6,468
2-axle Trucks:			2	1	3	2	1	3	88
3-axle Trucks:			3	3	6	3	3	6	146
4+-axle Trucks:			17	9	26	13	14	27	658
Total Truck Trips (PCE):			22	13	35	18	18	36	892
General Light Industrial Total Trips (PCE)			925	132	1,057	138	794	932	7,360
Parks	12.7	AC	13	13	26	25	25	50	636
Phase 1 & 2 Total Passenger Cars			1,889	349	2,238	786	1,812	2,598	15,854
Phase 1 & 2 Total Trucks (PCE)			57	49	106	53	54	107	1,570
Phases 1 & 2 Total External Trips (PCE)			**1,946**	**398**	**2,344**	**839**	**1,866**	**2,705**	**17,424**

[1] TSF = thousand square feet; AC = acres

TABLE A-4: PROJECT TRIP GENERATION SUMMARY (PHASE 3 – ACTUAL VEHICLES)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 3 (2031):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			3	2	5	3	2	5	44
3-axle Trucks:			3	3	6	3	3	6	56
4+-axle Trucks:			8	9	17	8	9	17	168
Total Truck Trips (Actual Vehicles):			14	14	28	14	14	28	268
High-Cube Fulfillment Center (Sort) Total Trips (Actual Vehicles)			987	231	1,218	655	1,025	1,680	9,018
General Light Industrial	3,500.000	TSF							
Passenger Cars:			2,258	297	2,555	301	1,939	2,240	16,170
2-axle Trucks:			4	2	6	4	2	6	146
3-axle Trucks:			4	4	8	4	4	8	182
4+-axle Trucks:			14	8	22	11	11	22	548
Total Truck Trips (Actual Vehicles):			22	14	36	19	17	36	876
General Light Industrial Total Trips (Actual Vehicles)			2,280	311	2,591	320	1,956	2,276	17,046
Phase 3 Internal Trip Capture Reduction - Industrial to Residential			-9	-3	-12	-6	-10	-16	-162
Phase 3 Internal Trip Capture Reduction - Industrial to Retail			-10	-16	-26	-52	-48	-100	-1,050
Parks	31.4	AC	31	31	63	63	63	126	1,570
Phase 3 Internal Trip Capture Reduction - Parks to Residential			-16	-16	-32	-32	-32	-64	-802
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	709	DU	129	367	496	420	247	667	6,686
Multifamily (Low-Rise) Residential	185	DU	18	56	74	59	35	94	1,248
Phase 3 Internal Trip Capture Reduction - Residential to Industrial[3]			-3	-9	-12	-10	-6	-16	-162
Phase 3 Internal Trip Capture Reduction - Residential to Retail			-22	-8	-29	-15	-24	-39	-422
Phase 3 Internal Trip Capture Reduction - Residential to Parks			-16	-16	-32	-32	-32	-64	-802
Mixed Use (Commercial)	390.000	TSF	269	164	433	803	870	1,673	17,488
Phase 3 Internal Trip Capture Reduction - Retail to Industrial[3]			-16	-10	-26	-48	-52	-100	-1,050
Phase 3 Internal Trip Capture Reduction - Retail to Residential[3]			-8	-22	-29	-24	-15	-39	-422
Phases 1, 2 & 3 Passenger Cars			3,692	1,135	4,827	2,290	4,177	6,467	52,026
Internal Trip Capture Reduction[2]			-99	-99	-198	-218	-218	-437	-4,872
Phases 1, 2 & 3 Trucks (Actual Vehicles)			36	28	64	33	31	64	1,144
Phases 1, 2 & 3 Total External Trips (Actual Vehicles)			**3,629**	**1,064**	**4,693**	**2,105**	**3,989**	**6,094**	**48,298**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

TABLE A-5: PROJECT TRIP GENERATION SUMMARY (PHASE 3 – PCE)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 3 (2031):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			4	3	7	4	3	7	68
3-axle Trucks:			6	6	12	6	6	12	110
4+-axle Trucks:			25	27	52	25	27	52	500
Total Truck Trips (PCE):			35	36	71	35	36	71	678
High-Cube Fulfillment Center (Sort) Total Trips (PCE)			1,008	253	1,261	676	1,047	1,723	9,428
General Light Industrial	3,500.000	TSF							
Passenger Cars:			2,258	297	2,555	301	1,939	2,240	16,170
2-axle Trucks:			5	4	9	5	4	9	220
3-axle Trucks:			7	7	14	7	7	14	362
4+-axle Trucks:			42	24	66	32	34	66	1,644
Total Truck Trips (PCE):			54	35	89	44	45	89	2,226
General Light Industrial Total Trips (PCE)			2,312	332	2,644	345	1,984	2,329	18,396
Phase 3 Internal Trip Capture Reduction - Industrial to Residential			-9	-3	-12	-6	-10	-16	-162
Phase 3 Internal Trip Capture Reduction - Industrial to Retail			-10	-16	-26	-52	-48	-100	-1,050
Parks	31.4	AC	31	31	63	63	63	126	1,570
Phase 3 Internal Trip Capture Reduction - Parks to Residential			-16	-16	-32	-32	-32	-64	-802
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	709	DU	129	367	496	420	247	667	6,686
Multifamily (Low-Rise) Residential	185	DU	18	56	74	59	35	94	1,248
Phase 3 Internal Trip Capture Reduction - Residential to Industrial[3]			-3	-9	-12	-10	-6	-16	-162
Phase 3 Internal Trip Capture Reduction - Residential to Retail			-22	-8	-29	-15	-24	-39	-422
Phase 3 Internal Trip Capture Reduction - Residential to Parks			-16	-16	-32	-32	-32	-64	-802
Mixed Use (Commercial)	390.000	TSF	269	164	433	803	870	1,673	17,488
Phase 3 Internal Trip Capture Reduction - Retail to Industrial[3]			-16	-10	-26	-48	-52	-100	-1,050
Phase 3 Internal Trip Capture Reduction - Retail to Residential[3]			-8	-22	-29	-24	-15	-39	-422
Phases 1, 2 & 3 Passenger Cars			3,692	1,135	4,827	2,290	4,177	6,467	52,026
Internal Trip Capture Reduction[2]			-99	-99	-198	-218	-218	-437	-4,872
Phases 1, 2 & 3 Trucks (PCE)			89	71	160	79	81	160	2,904
Phases 1, 2 & 3 Total External Trips (PCE)			**3,682**	**1,107**	**4,789**	**2,151**	**4,039**	**6,190**	**50,058**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

TABLE A-6: PROJECT TRIP GENERATION SUMMARY (PHASE 4 – ACTUAL VEHICLES)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 4 (2036):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			3	2	5	3	2	5	44
3-axle Trucks:			3	3	6	3	3	6	56
4+-axle Trucks:			8	9	17	8	9	17	168
Total Truck Trips (Actual Vehicles):			14	14	28	14	14	28	268
High-Cube Fulfillment Center (Sort) Total Trips (Actual Vehicles)			987	231	1,218	655	1,025	1,680	9,018
General Light Industrial	3,500.000	TSF							
Passenger Cars:			2,258	297	2,555	301	1,939	2,240	16,170
2-axle Trucks:			4	2	6	4	2	6	146
3-axle Trucks:			4	4	8	4	4	8	182
4+-axle Trucks:			14	8	22	11	11	22	548
Total Truck Trips (Actual Vehicles):			22	14	36	19	17	36	876
General Light Industrial Total Trips (Actual Vehicles)			2,280	311	2,591	320	1,956	2,276	17,046
Phase 4 Internal Trip Capture Reduction - Industrial to Residential			-17	-6	-23	-12	-20	-31	-324
Phase 4 Internal Trip Capture Reduction - Industrial to Retail			-3	-5	-9	-17	-16	-33	-350
Parks	47.4	AC	47	47	95	95	95	190	2,372
Phase 4 Internal Trip Capture Reduction - Parks to Residential			-27	-27	-54	-53	-53	-106	-1,328
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	1,457	DU	265	755	1,020	863	507	1,370	13,740
Multifamily (Low-Rise) Residential	347	DU	33	105	138	111	65	176	2,340
Phase 4 Internal Trip Capture Reduction - Residential to Industrial[3]			-6	-17	-23	-20	-12	-31	-324
Phase 4 Internal Trip Capture Reduction - Residential to Retail			-86	-30	-116	-57	-96	-153	-1,670
Phase 4 Internal Trip Capture Reduction - Residential to Parks			-27	-27	-54	-53	-53	-106	-1,328
Phase 4 Internal Trip Capture Reduction - Residential to School			-165	-194	-359	-42	-36	-78	-1,104
Elementary School	600	STU	240	204	444	44	52	96	1,362
Phase 4 Internal Trip Capture Reduction - School to Residential[3,4]			-194	-165	-359	-36	-42	-78	-1,104
Mixed Use (Commercial)	390.000	TSF	269	164	433	803	870	1,673	17,488
Phase 4 Internal Trip Capture Reduction - Retail to Industrial[3]			-5	-3	-9	-16	-17	-33	-350
Phase 4 Internal Trip Capture Reduction - Retail to Residential[3]			-30	-86	-116	-96	-57	-153	-1,670
Phases 1, 2, 3 & 4 Passenger Cars			4,099	1,792	5,891	2,861	4,551	7,412	62,336
Internal Trip Capture Reduction[2]			-561	-561	-1,122	-402	-402	-804	-9,552
Phases 1, 2, 3 & 4 Trucks (Actual Vehicles)			36	28	64	33	31	64	1,144
Phases 1, 2, 3 & 4 Total External Trips (Actual Vehicles)			**3,573**	**1,259**	**4,833**	**2,492**	**4,180**	**6,673**	**53,928**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = students

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

[4] Includes internal capture between residential and elementary school based on the guidance from the American Planning Association (PAS) Report

TABLE A-7: PROJECT TRIP GENERATION SUMMARY (PHASE 4 – PCE)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 4 (2036):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			4	3	7	4	3	7	68
3-axle Trucks:			6	6	12	6	6	12	110
4+-axle Trucks:			25	27	52	25	27	52	500
Total Truck Trips (PCE):			35	36	71	35	36	71	678
High-Cube Fulfillment Center (Sort) Total Trips (PCE)			1,008	253	1,261	676	1,047	1,723	9,428
General Light Industrial	3,500.000	TSF							
Passenger Cars:			2,258	297	2,555	301	1,939	2,240	16,170
2-axle Trucks:			5	4	9	5	4	9	220
3-axle Trucks:			7	7	14	7	7	14	362
4+-axle Trucks:			42	24	66	32	34	66	1,644
Total Truck Trips (PCE):			54	35	89	44	45	89	2,226
General Light Industrial Total Trips (PCE)			2,312	332	2,644	345	1,984	2,329	18,396
Phase 4 Internal Trip Capture Reduction - Industrial to Residential			-17	-6	-23	-12	-20	-31	-324
Phase 4 Internal Trip Capture Reduction - Industrial to Retail			-3	-5	-9	-17	-16	-33	-350
Parks	47.4	AC	47	47	95	95	95	190	2,372
Phase 4 Internal Trip Capture Reduction - Parks to Residential			-27	-27	-54	-53	-53	-106	-1,328
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	1,457	DU	265	755	1,020	863	507	1,370	13,740
Multifamily (Low-Rise) Residential	347	DU	33	105	138	111	65	176	2,340
Phase 4 Internal Trip Capture Reduction - Residential to Industrial[3]			-6	-17	-23	-20	-12	-31	-324
Phase 4 Internal Trip Capture Reduction - Residential to Retail			-86	-30	-116	-57	-96	-153	-1,670
Phase 4 Internal Trip Capture Reduction - Residential to Parks			-27	-27	-54	-53	-53	-106	-1,328
Phase 4 Internal Trip Capture Reduction - Residential to School			-165	-194	-359	-42	-36	-78	-1,104
Elementary School	600	STU	240	204	444	44	52	96	1,362
Phase 4 Internal Trip Capture Reduction - School to Residential[3,4]			-194	-165	-359	-36	-42	-78	-1,104
Mixed Use (Commercial)	390.000	TSF	269	164	433	803	870	1,673	17,488
Phase 4 Internal Trip Capture Reduction - Retail to Industrial[3]			-5	-3	-9	-16	-17	-33	-350
Phase 4 Internal Trip Capture Reduction - Retail to Residential[3]			-30	-86	-116	-96	-57	-153	-1,670
Phases 1, 2, 3 & 4 Passenger Cars			4,099	1,792	5,891	2,861	4,551	7,412	62,336
Internal Trip Capture Reduction[2]			-561	-561	-1,122	-402	-402	-804	-9,552
Phases 1, 2, 3 & 4 Trucks (PCE)			89	71	160	79	81	160	2,904
Phases 1, 2, 3 & 4 Total External Trips (PCE)			**3,626**	**1,302**	**4,929**	**2,538**	**4,230**	**6,769**	**55,688**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = students

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

[4] Includes internal capture between residential and elementary school based on the guidance from the American Planning Association (PAS) Report 210 School Enrollment by Housing Type. The internal capture reduction assumes 81% service area from within the project site and 19% from outside of the Project.

TABLE A-8: PROJECT TRIP GENERATION SUMMARY (PHASE 5 – ACTUAL VEHICLES)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 5 (2040):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			3	2	5	3	2	5	44
3-axle Trucks:			3	3	6	3	3	6	56
4+-axle Trucks:			8	9	17	8	9	17	168
Total Truck Trips (Actual Vehicles):			14	14	28	14	14	28	268
High-Cube Fulfillment Center (Sort) Total Trips (Actual Vehicles)			987	231	1,218	655	1,025	1,680	9,018
General Light Industrial	3,500.000	TSF							
Passenger Cars:			2,258	297	2,555	301	1,939	2,240	16,170
2-axle Trucks:			4	2	6	4	2	6	146
3-axle Trucks:			4	4	8	4	4	8	182
4+-axle Trucks:			14	8	22	11	11	22	548
Total Truck Trips (Actual Vehicles):			22	14	36	19	17	36	876
General Light Industrial Total Trips (Actual Vehicles)			2,280	311	2,591	320	1,956	2,276	17,046
Phase 5 Internal Trip Capture Reduction - Industrial to Residential			-26	-9	-35	-17	-29	-46	-480
Phase 5 Internal Trip Capture Reduction - Industrial to Retail			-3	-5	-9	-17	-16	-33	-350
Parks	54.3	AC	54	54	109	109	109	217	2,716
Phase 5 Internal Trip Capture Reduction - Parks to Residential			-30	-30	-60	-61	-61	-122	-1,522
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	2,146	DU	391	1,112	1,503	1,271	746	2,017	20,238
Multifamily (Low-Rise) Residential	541	DU	52	164	216	174	102	276	3,646
Phase 5 Internal Trip Capture Reduction - Residential to Industrial[3]			-9	-26	-35	-29	-17	-46	-480
Phase 5 Internal Trip Capture Reduction - Residential to Retail			-161	-56	-217	-106	-180	-286	-3,130
Phase 5 Internal Trip Capture Reduction - Residential to Parks			-30	-30	-60	-61	-61	-122	-1,522
Phase 5 Internal Trip Capture Reduction - Residential to School			-165	-194	-359	-42	-36	-78	-1,104
Elementary School	600	STU	240	204	444	44	52	96	1,362
Phase 5 Internal Trip Capture Reduction - School to Residential[3,4]			-194	-165	-359	-36	-42	-78	-1,104
Mixed Use (Commercial)	390.000	TSF	269	164	433	803	870	1,673	17,488
Phase 5 Internal Trip Capture Reduction - Retail to Industrial[3]			-5	-3	-9	-16	-17	-33	-350
Phase 5 Internal Trip Capture Reduction - Retail to Residential[3]			-56	-161	-217	-180	-106	-286	-3,130
Phases 1, 2, 3, 4 & 5 Passenger Cars			4,251	2,215	6,466	3,346	4,841	8,187	70,484
Internal Trip Capture Reduction[2]			-679	-679	-1,358	-566	-566	-1,131	-13,172
Phases 1, 2, 3, 4 & 5 Trucks (Actual Vehicles)			36	28	64	33	31	64	1,144
Phases 1, 2, 3, 4 & 5 Total External Trips (Actual Vehicles)			**3,607**	**1,564**	**5,172**	**2,813**	**4,306**	**7,119**	**58,456**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = students

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

[4] Includes internal capture between residential and elementary school based on the guidance from the American Planning Association (PAS) Report 210 School Enrollment by Housing Type. The internal capture reduction assumes 81% service area from within the project site and 19% from outside of the Project.

TABLE A-9: PROJECT TRIP GENERATION SUMMARY (PHASE 5 – PCE)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 5 (2040):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			4	3	7	4	3	7	68
3-axle Trucks:			6	6	12	6	6	12	110
4+-axle Trucks:			25	27	52	25	27	52	500
Total Truck Trips (PCE):			35	36	71	35	36	71	678
High-Cube Fulfillment Center (Sort) Total Trips (PCE)			1,008	253	1,261	676	1,047	1,723	9,428
General Light Industrial	3,500.000	TSF							
Passenger Cars:			2,258	297	2,555	301	1,939	2,240	16,170
2-axle Trucks:			5	4	9	5	4	9	220
3-axle Trucks:			7	7	14	7	7	14	362
4+-axle Trucks:			42	24	66	32	34	66	1,644
Total Truck Trips (PCE):			54	35	89	44	45	89	2,226
General Light Industrial Total Trips (PCE)			2,312	332	2,644	345	1,984	2,329	18,396
Phase 5 Internal Trip Capture Reduction - Industrial to Residential			-26	-9	-35	-17	-29	-46	-480
Phase 5 Internal Trip Capture Reduction - Industrial to Retail			-3	-5	-9	-17	-16	-33	-350
Parks	54.3	AC	54	54	109	109	109	217	2,716
Phase 5 Internal Trip Capture Reduction - Parks to Residential			-30	-30	-60	-61	-61	-122	-1,522
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	2,146	DU	391	1,112	1,503	1,271	746	2,017	20,238
Multifamily (Low-Rise) Residential	541	DU	52	164	216	174	102	276	3,646
Phase 5 Internal Trip Capture Reduction - Residential to Industrial[3]			-9	-26	-35	-29	-17	-46	-480
Phase 5 Internal Trip Capture Reduction - Residential to Retail			-161	-56	-217	-106	-180	-286	-3,130
Phase 5 Internal Trip Capture Reduction - Residential to Parks			-30	-30	-60	-61	-61	-122	-1,522
Phase 5 Internal Trip Capture Reduction - Residential to School			-165	-194	-359	-42	-36	-78	-1,104
Elementary School	600	STU	240	204	444	44	52	96	1,362
Phase 5 Internal Trip Capture Reduction - School to Residential[3,4]			-194	-165	-359	-36	-42	-78	-1,104
Mixed Use (Commercial)	390.000	TSF	269	164	433	803	870	1,673	17,488
Phase 5 Internal Trip Capture Reduction - Retail to Industrial[3]			-5	-3	-9	-16	-17	-33	-350
Phase 5 Internal Trip Capture Reduction - Retail to Residential[3]			-56	-161	-217	-180	-106	-286	-3,130
Phases 1, 2, 3, 4 & 5 Passenger Cars			4,251	2,215	6,466	3,346	4,841	8,187	70,484
Internal Trip Capture Reduction[2]			-679	-679	-1,358	-566	-566	-1,131	-13,172
Phases 1, 2, 3, 4 & 5 Trucks (PCE)			89	71	160	79	81	160	2,904
Phases 1, 2, 3, 4 & 5 Total External Trips (PCE)			**3,660**	**1,607**	**5,268**	**2,859**	**4,356**	**7,215**	**60,216**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = students

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

[4] Includes internal capture between residential and elementary school based on the guidance from the American Planning Association (PAS) Report 210 School Enrollment by Housing Type. The internal capture reduction assumes 81% service area from within the project site and 19% from outside of the Project.

TABLE A-10: PROJECT TRIP GENERATION SUMMARY (PROJECT BUILDOUT – ACTUAL VEHICLES)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project Buildout (2045):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			3	2	5	3	2	5	44
3-axle Trucks:			3	3	6	3	3	6	56
4+-axle Trucks:			8	9	17	8	9	17	168
Total Truck Trips (Actual Vehicles):			14	14	28	14	14	28	268
High-Cube Fulfillment Center (Sort) Total Trips (Actual Vehicles)			987	231	1,218	655	1,025	1,680	9,018
General Light Industrial	3,500.000	TSF							
Passenger Cars:			2,258	297	2,555	301	1,939	2,240	16,170
2-axle Trucks:			4	2	6	4	2	6	146
3-axle Trucks:			4	4	8	4	4	8	182
4+-axle Trucks:			14	8	22	11	11	22	548
Total Truck Trips (Actual Vehicles):			22	14	36	19	17	36	876
General Light Industrial Total Trips (Actual Vehicles)			2,280	311	2,591	320	1,956	2,276	17,046
Internal Trip Capture Reduction - Industrial to Residential			-34	-12	-47	-23	-39	-62	-650
Internal Trip Capture Reduction - Industrial to Retail			-3	-5	-9	-17	-16	-33	-350
Parks	66.5	AC	67	67	133	133	133	266	3,326
Internal Trip Capture Reduction - Parks to Residential			-37	-37	-74	-74	-74	-148	-1,864
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	2,860	DU	521	1,481	2,002	1,694	995	2,689	26,970
Multifamily (Low-Rise) Residential	790	DU	76	240	316	254	149	403	5,326
Internal Trip Capture Reduction - Residential to Industrial[3]			-12	-34	-47	-39	-23	-62	-650
Internal Trip Capture Reduction - Residential to Retail			-220	-76	-297	-145	-246	-391	-4,306
Internal Trip Capture Reduction - Residential to Parks			-37	-37	-74	-74	-74	-148	-1,864
Internal Trip Capture Reduction - Residential to School			-330	-389	-719	-84	-71	-155	-2,206
Elementary School	1,200	STU	480	408	888	88	104	192	2,724
Internal Trip Capture Reduction - School to Residential[3,4]			-389	-330	-719	-71	-84	-155	-2,206
Mixed Use (Commercial)	390.000	TSF	269	164	433	803	870	1,673	17,488
Internal Trip Capture Reduction - Retail to Industrial[3]			-5	-3	-9	-16	-17	-33	-350
Internal Trip Capture Reduction - Retail to Residential[3]			-76	-220	-297	-246	-145	-391	-4,306
Project Buildout Passenger Cars			4,657	2,877	7,533	3,917	5,213	9,130	80,868
Internal Trip Capture Reduction[2]			-1,145	-1,145	-2,290	-790	-790	-1,580	-18,752
Project Buildout Trucks (Actual Vehicles)			36	28	64	33	31	64	1,144
Project Buildout Total External Trips (Actual Vehicles)			**3,548**	**1,760**	**5,307**	**3,160**	**4,454**	**7,615**	**63,260**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = students

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

[4] Includes internal capture between residential and elementary school based on the guidance from the American Planning Association (PAS) Report 210 School Enrollment by Housing Type. The internal capture reduction assumes 81% service area from within the project site and 19% from outside of the Project.

TABLE A-11: PROJECT TRIP GENERATION SUMMARY (PROJECT BUILDOUT – PCE)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project Buildout (2045):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			4	3	7	4	3	7	68
3-axle Trucks:			6	6	12	6	6	12	110
4+-axle Trucks:			25	27	52	25	27	52	500
Total Truck Trips (PCE):			35	36	71	35	36	71	678
High-Cube Fulfillment Center (Sort) Total Trips (PCE)			1,008	253	1,261	676	1,047	1,723	9,428
General Light Industrial	3,500.000	TSF							
Passenger Cars:			2,258	297	2,555	301	1,939	2,240	16,170
2-axle Trucks:			5	4	9	5	4	9	220
3-axle Trucks:			7	7	14	7	7	14	362
4+-axle Trucks:			42	24	66	32	34	66	1,644
Total Truck Trips (PCE):			54	35	89	44	45	89	2,226
General Light Industrial Total Trips (PCE)			2,312	332	2,644	345	1,984	2,329	18,396
Internal Trip Capture Reduction - Industrial to Residential			-34	-12	-47	-23	-39	-62	-650
Internal Trip Capture Reduction - Industrial to Retail			-3	-5	-9	-17	-16	-33	-350
Parks	66.5	AC	67	67	133	133	133	266	3,326
Internal Trip Capture Reduction - Parks to Residential			-37	-37	-74	-74	-74	-148	-1,864
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	2,860	DU	521	1,481	2,002	1,694	995	2,689	26,970
Multifamily (Low-Rise) Residential	790	DU	76	240	316	254	149	403	5,326
Internal Trip Capture Reduction - Residential to Industrial[3]			-12	-34	-47	-39	-23	-62	-650
Internal Trip Capture Reduction - Residential to Retail			-220	-76	-297	-145	-246	-391	-4,306
Internal Trip Capture Reduction - Residential to Parks			-37	-37	-74	-74	-74	-148	-1,864
Internal Trip Capture Reduction - Residential to School			-330	-389	-719	-84	-71	-155	-2,206
Elementary School	1,200	STU	480	408	888	88	104	192	2,724
Internal Trip Capture Reduction - School to Residential[3,4]			-389	-330	-719	-71	-84	-155	-2,206
Mixed Use (Commercial)	390.000	TSF	269	164	433	803	870	1,673	17,488
Internal Trip Capture Reduction - Retail to Industrial[3]			-5	-3	-9	-16	-17	-33	-350
Internal Trip Capture Reduction - Retail to Residential[3]			-76	-220	-297	-246	-145	-391	-4,306
Project Buildout Passenger Cars			4,657	2,877	7,533	3,917	5,213	9,130	80,868
Internal Trip Capture Reduction[2]			-1,145	-1,145	-2,290	-790	-790	-1,580	-18,752
Project Buildout Trucks (PCE)			89	71	160	79	81	160	2,904
Project Buildout Total External Trips (PCE)			**3,601**	**1,803**	**5,403**	**3,206**	**4,504**	**7,711**	**65,020**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = students

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

[4] Includes internal capture between residential and elementary school based on the guidance from the American Planning Association (PAS) Report 210 School Enrollment by Housing Type. The internal capture reduction assumes 81% service area from within the project site and 19% from outside of the Project.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Mesa Verde	**Organization:**	Urban Crossroads, Inc.
Project Location:		**Performed By:**	CP
Scenario Description:	Phase 3	**Date:**	12/4/2023
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				433	269	164
Restaurant				0		
Cinema/Entertainment				0		
Residential				570	147	423
Hotel				0		
All Other Land Uses[2]				0		
				1,003	416	587

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	3	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	4	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,003	416	587
Internal Capture Percentage	1%	2%	1%
External Vehicle-Trips[5]	989	409	580
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	1%	2%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	2%	1%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Mesa Verde	**Organization:**	Urban Crossroads, Inc.
Project Location:		**Performed By:**	CP
Scenario Description:	Phase 3	**Date:**	12/4/2023
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				1,673	803	870
Restaurant				0		
Cinema/Entertainment				0		
Residential				761	479	282
Hotel				0		
All Other Land Uses[2]				0		
				2,434	1,282	1,152

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	220	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	80	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	2,434	1,282	1,152
Internal Capture Percentage	25%	23%	26%
External Vehicle-Trips[5]	1,834	982	852
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	10%	25%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	46%	28%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Mesa Verde	**Organization:**	Urban Crossroads, Inc.
Project Location:		**Performed By:**	CP
Scenario Description:	Phase 4	**Date:**	12/4/2023
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				433	269	164
Restaurant				0		
Cinema/Entertainment				0		
Residential				1,158	299	859
Hotel				0		
All Other Land Uses[2]				0		
				1,591	568	1,023

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	6	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	9	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,591	568	1,023
Internal Capture Percentage	2%	3%	1%
External Vehicle-Trips[5]	1,561	553	1,008
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	3%	4%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	2%	1%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Mesa Verde	**Organization:**	Urban Crossroads, Inc.
Project Location:		**Performed By:**	CP
Scenario Description:	Phase 4	**Date:**	12/4/2023
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				1,673	803	870
Restaurant				0		
Cinema/Entertainment				0		
Residential				1,547	974	573
Hotel				0		
All Other Land Uses[2]				0		
				3,220	1,777	1,443

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	226	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	80	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	3,220	1,777	1,443
Internal Capture Percentage	19%	17%	21%
External Vehicle-Trips[5]	2,608	1,471	1,137
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	10%	26%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	23%	14%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Mesa Verde	**Organization:**	Urban Crossroads, Inc.
Project Location:		**Performed By:**	CP
Scenario Description:	Phase 5	**Date:**	12/5/2023
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				433	269	164
Restaurant				0		
Cinema/Entertainment				0		
Residential				1,718	443	1,275
Hotel				0		
All Other Land Uses[2]				0		
				2,151	712	1,439

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	9	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	13	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	2,151	712	1,439
Internal Capture Percentage	2%	3%	2%
External Vehicle-Trips[5]	2,107	690	1,417
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	5%	5%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	2%	1%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Mesa Verde	**Organization:**	Urban Crossroads, Inc.
Project Location:		**Performed By:**	CP
Scenario Description:	Phase 5	**Date:**	12/5/2023
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				1,673	803	870
Restaurant				0		
Cinema/Entertainment				0		
Residential				2,294	1,444	850
Hotel				0		
All Other Land Uses[2]				0		
				3,967	2,247	1,720

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	226	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	80	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	3,967	2,247	1,720
Internal Capture Percentage	15%	14%	18%
External Vehicle-Trips[5]	3,355	1,941	1,414
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	10%	26%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	16%	9%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Mesa Verde	**Organization:**	Urban Crossroads, Inc.
Project Location:		**Performed By:**	CP
Scenario Description:	Phase 6	**Date:**	12/5/2023
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				1,673	803	870
Restaurant				0		
Cinema/Entertainment				0		
Residential				3,092	1,947	1,145
Hotel				0		
All Other Land Uses[2]				0		
				4,765	2,750	2,015

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	226	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	80	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	4,765	2,750	2,015
Internal Capture Percentage	13%	11%	15%
External Vehicle-Trips[5]	4,153	2,444	1,709
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	10%	26%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	12%	7%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

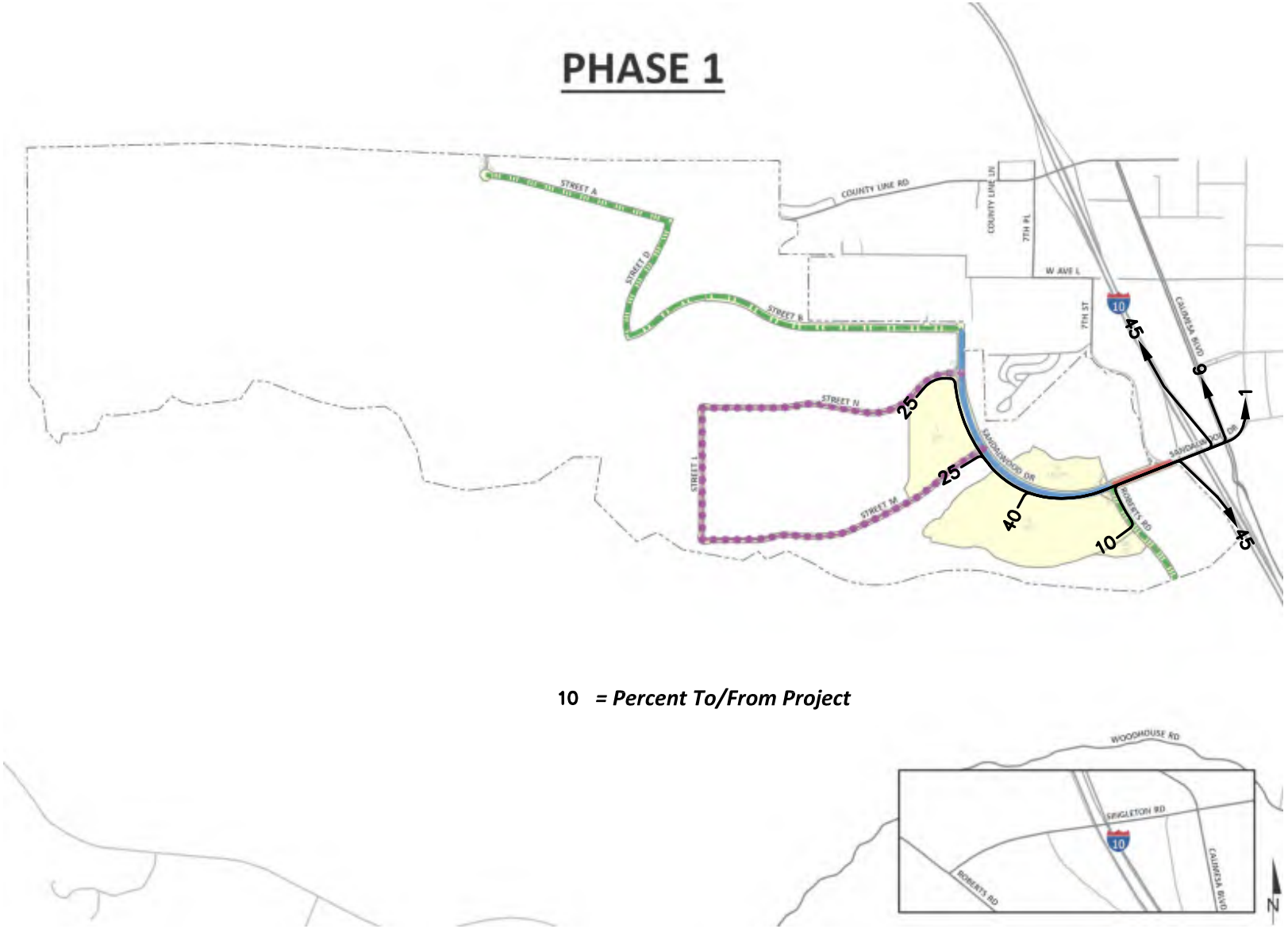
[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

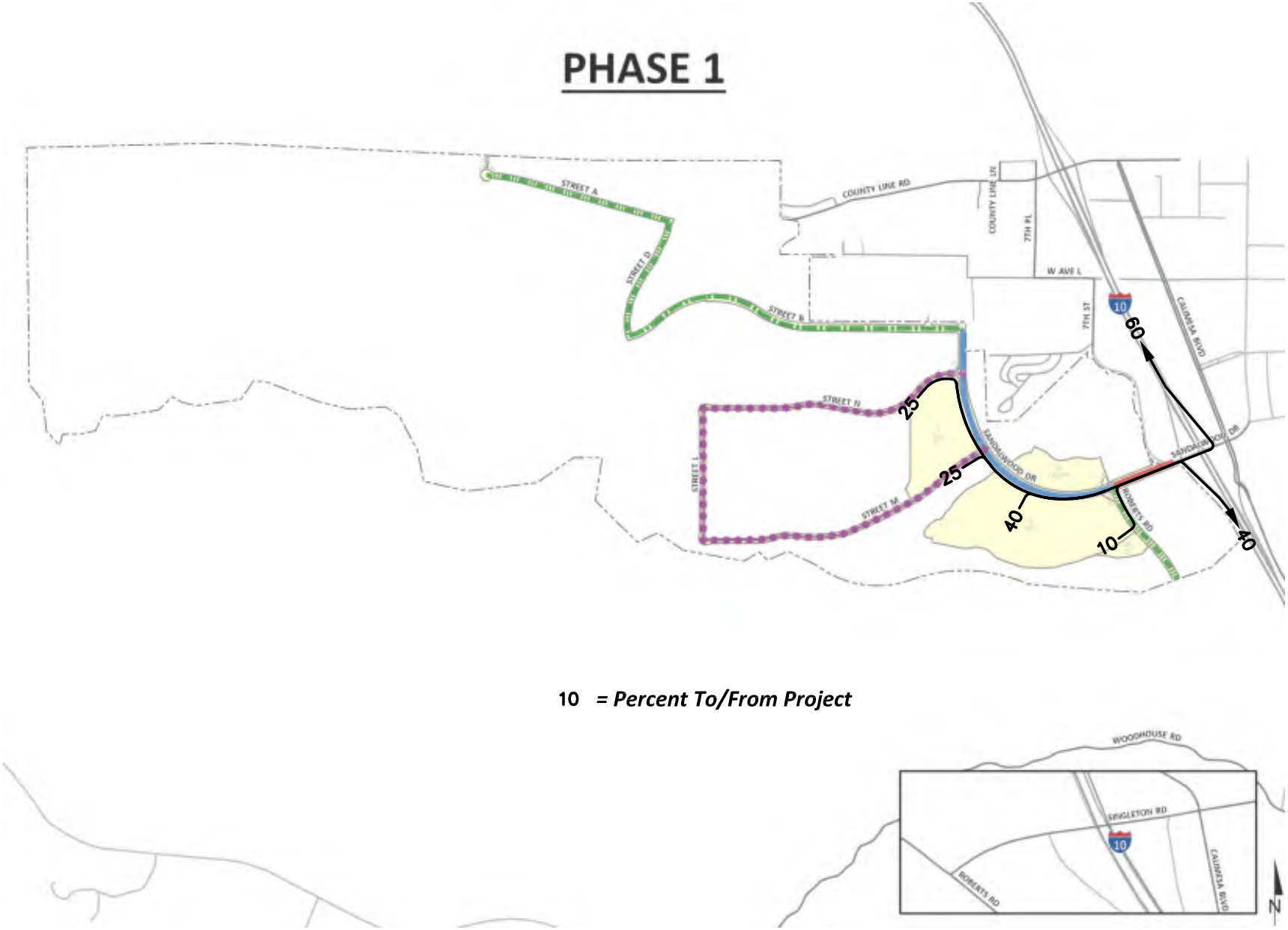
ATTACHMENT B: PROJECT TRIP DISTRIBUITON EXHIBITS

EXHIBIT B-1: PHASE 1 INDUSTRIAL (CARS) TRIP DISTRIBUTION



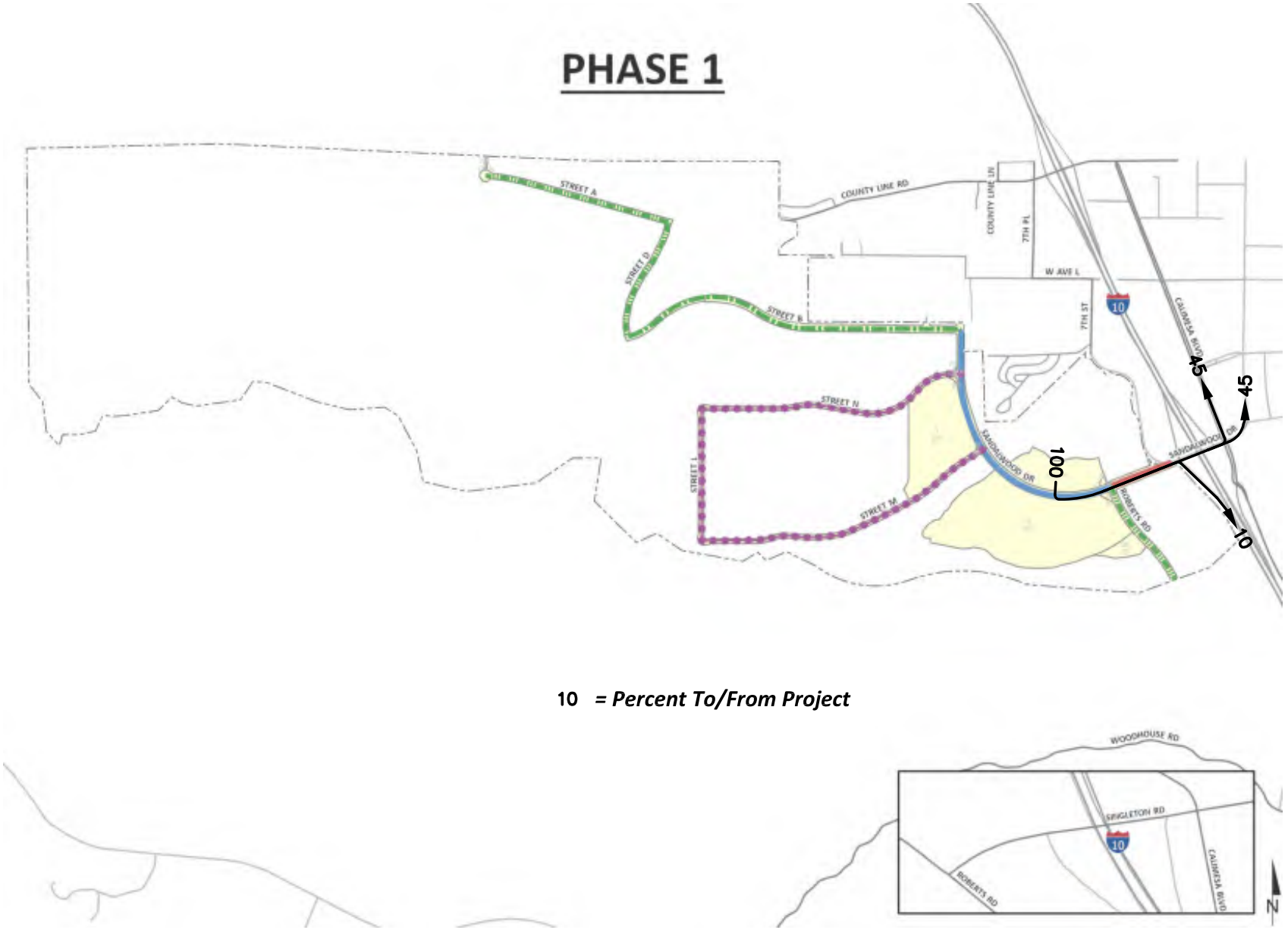
10 ***= Percent To/From Project***

EXHIBIT B-2: PHASE 1 INDUSTRIAL (TRUCK) TRIP DISTRIBUTION



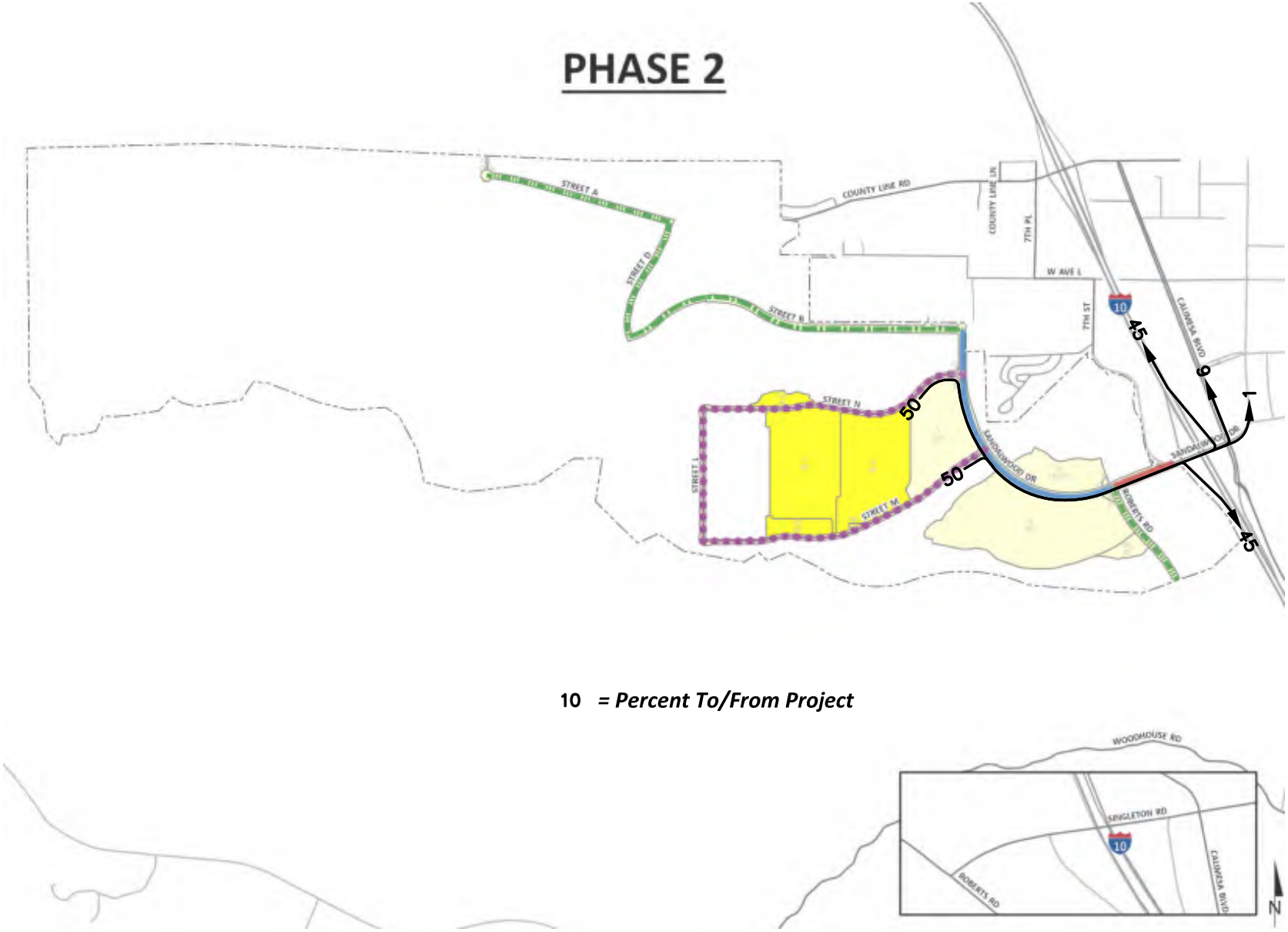
10 ***= Percent To/From Project***

EXHIBIT B-3: PHASE 1 & PHASE 2 PARK TRIP DISTRIBUTION



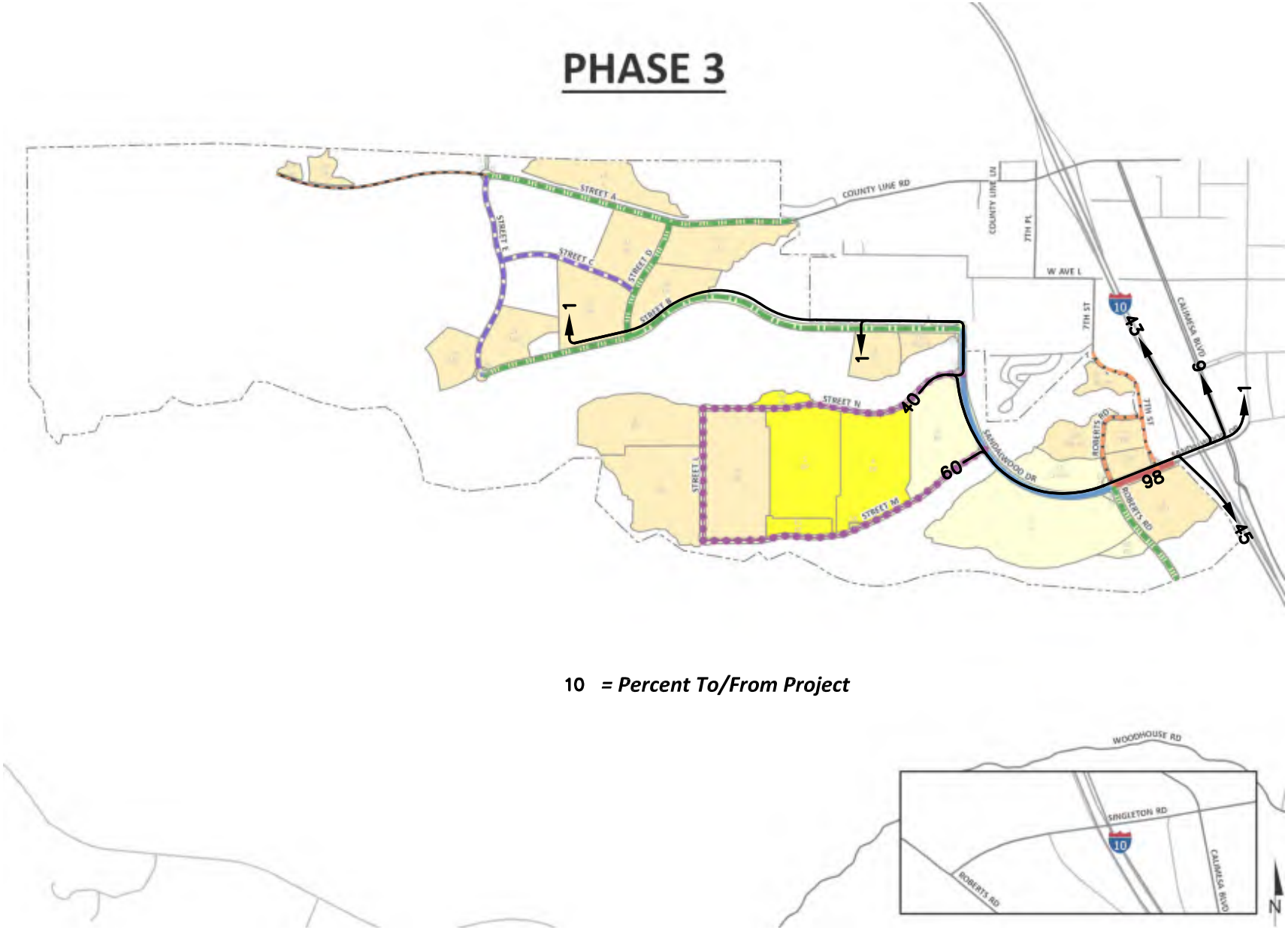
10 ***= Percent To/From Project***

EXHIBIT B-4: PHASE 2 INDUSTRIAL (CARS) TRIP DISTRIBUTION



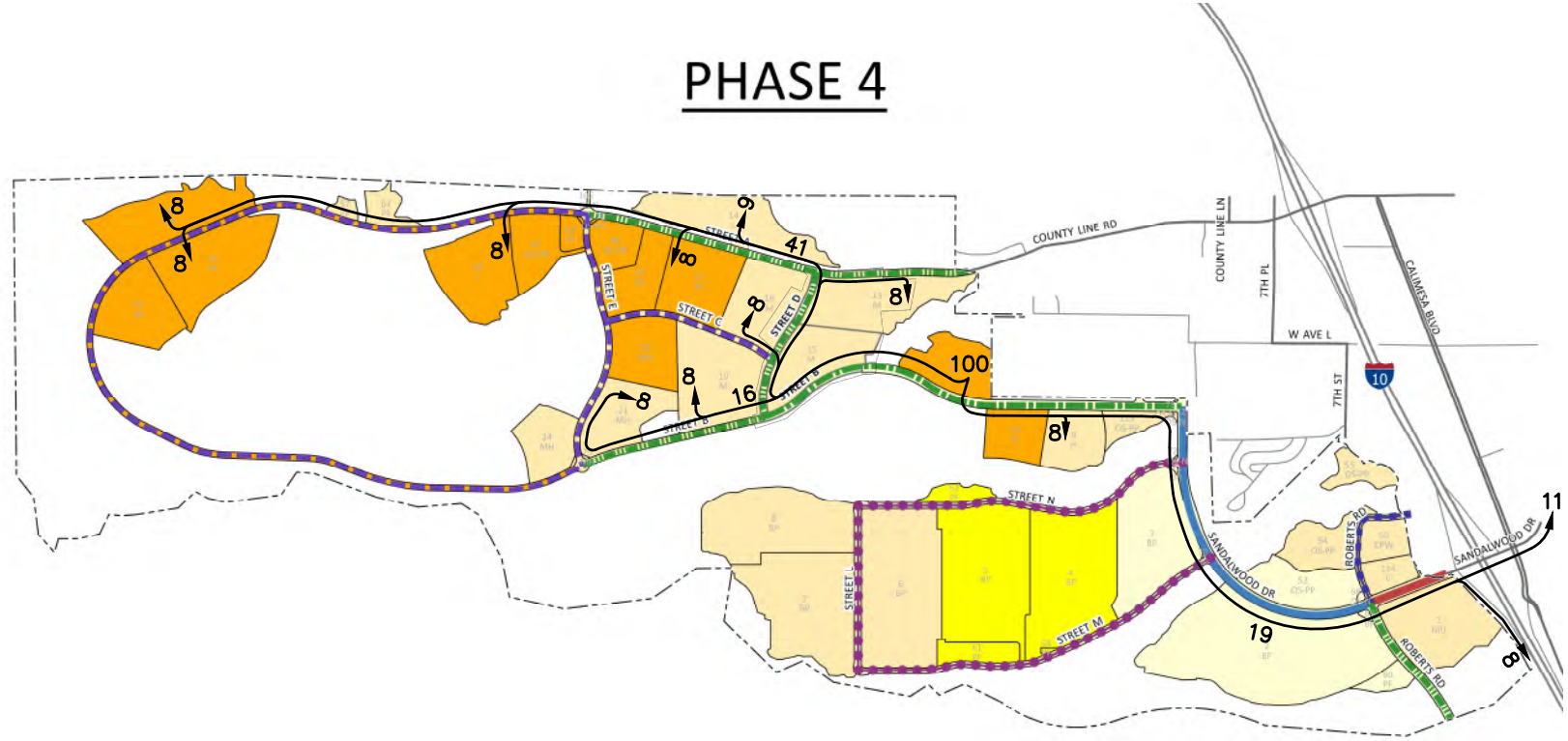
10 ***= Percent To/From Project***

EXHIBIT B-5: PHASE 2 INDUSTRIAL (TRUCK) TRIP DISTRIBUTION



10 ***= Percent To/From Project***

EXHIBIT B-6: PHASE 3 INDUSTRIAL (CARS) TRIP DISTRIBUTION



N

10 = PERCENT FROM PROJECT

EXHIBIT B-7: PHASE 3 INDUSTRIAL (TRUCK) TRIP DISTRIBUTION

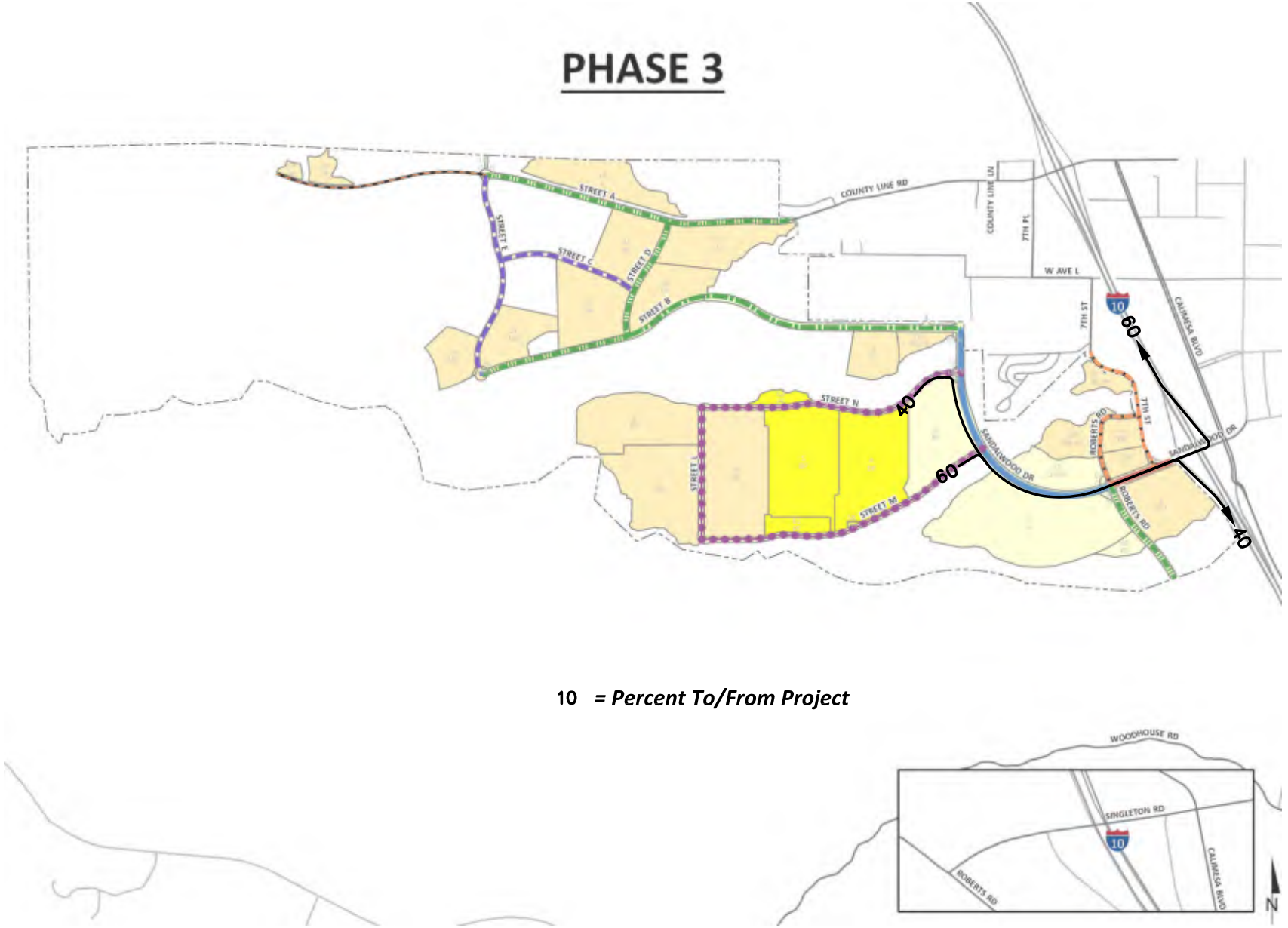
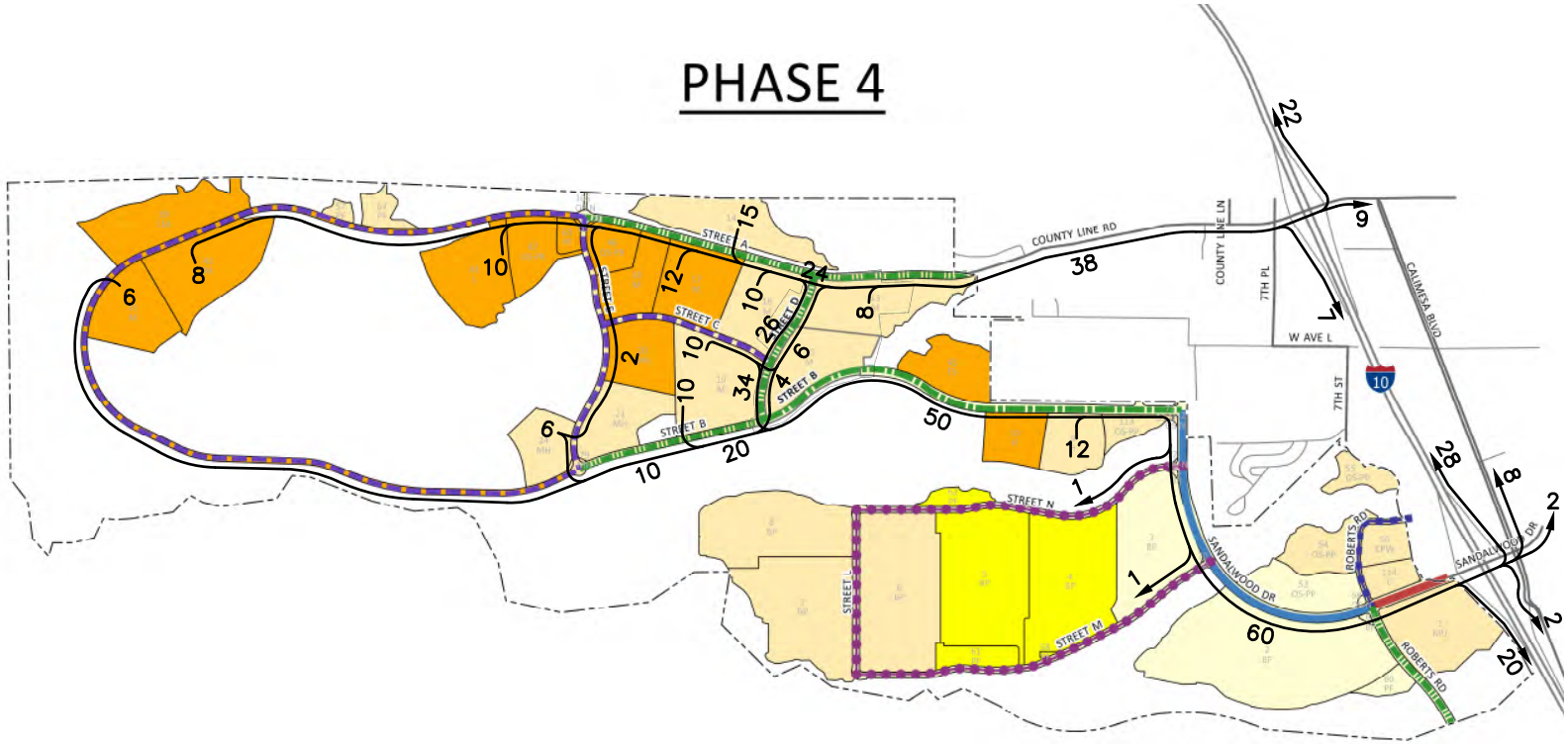


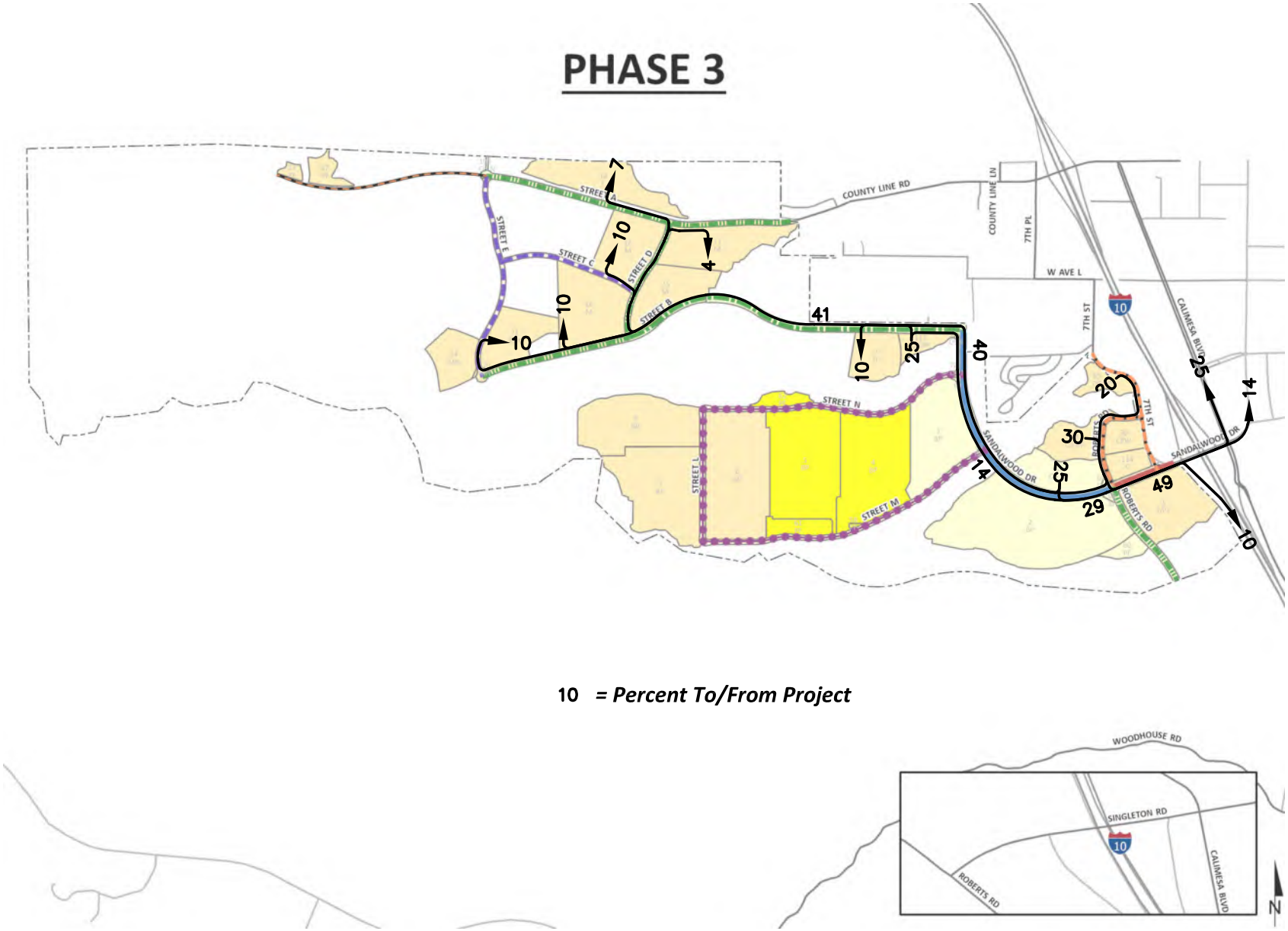
EXHIBIT B-8: PHASE 3 RESIDENTIAL TRIP DISTRIBUTION



N

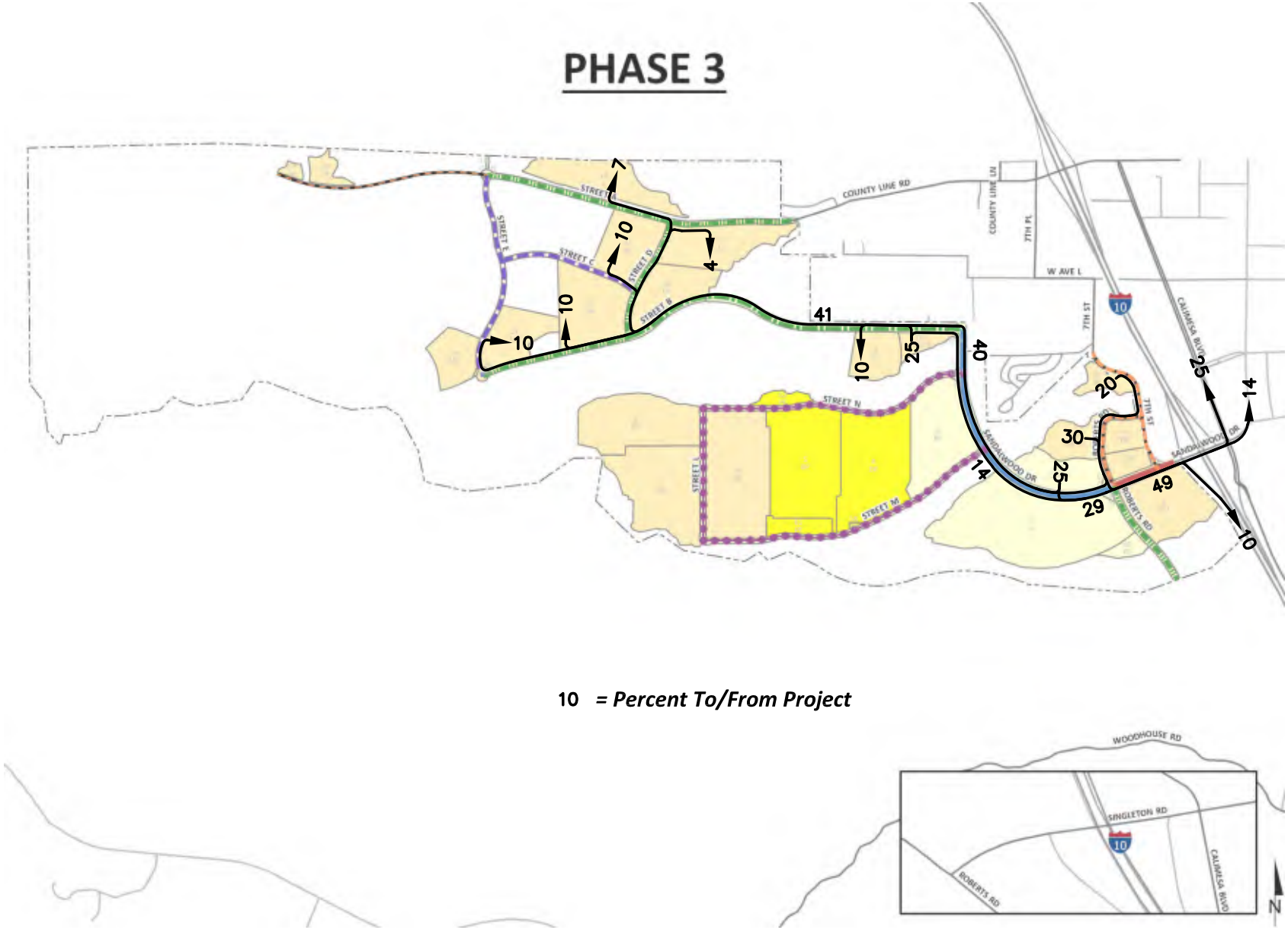
10 = PERCENT TO/FROM PROJECT

EXHIBIT B-9: PHASE 3 RETAIL TRIP DISTRIBUTION



10 ***= Percent To/From Project***

EXHIBIT B-10: PHASE 3 PARK TRIP DISTRIBUTION



10 ***= Percent To/From Project***

EXHIBIT B-11: PHASE 4 RESIDENTIAL TRIP DISTRIBUTION

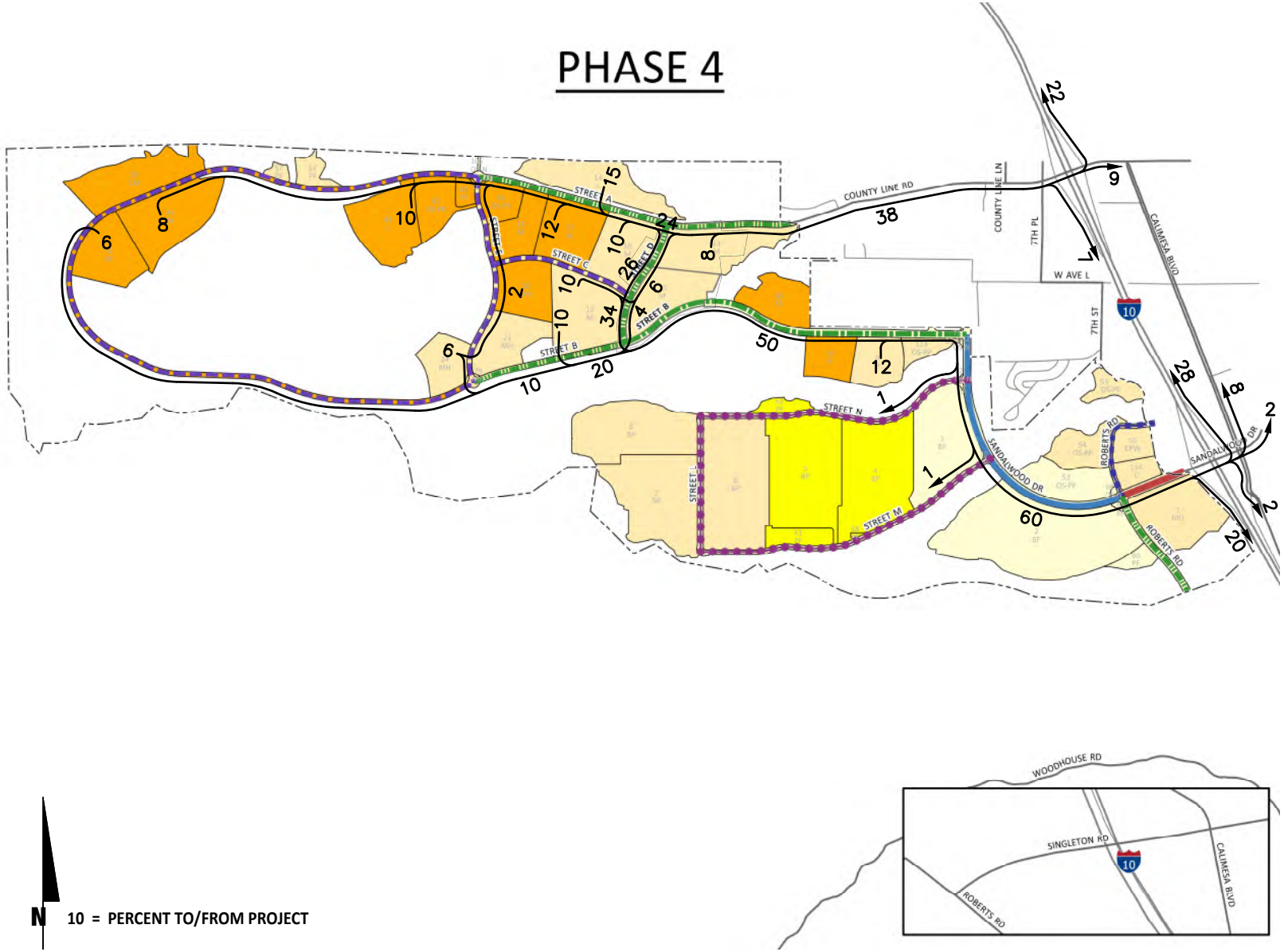


EXHIBIT B-12: PHASE 4 RETAIL TRIP DISTRIBUTION

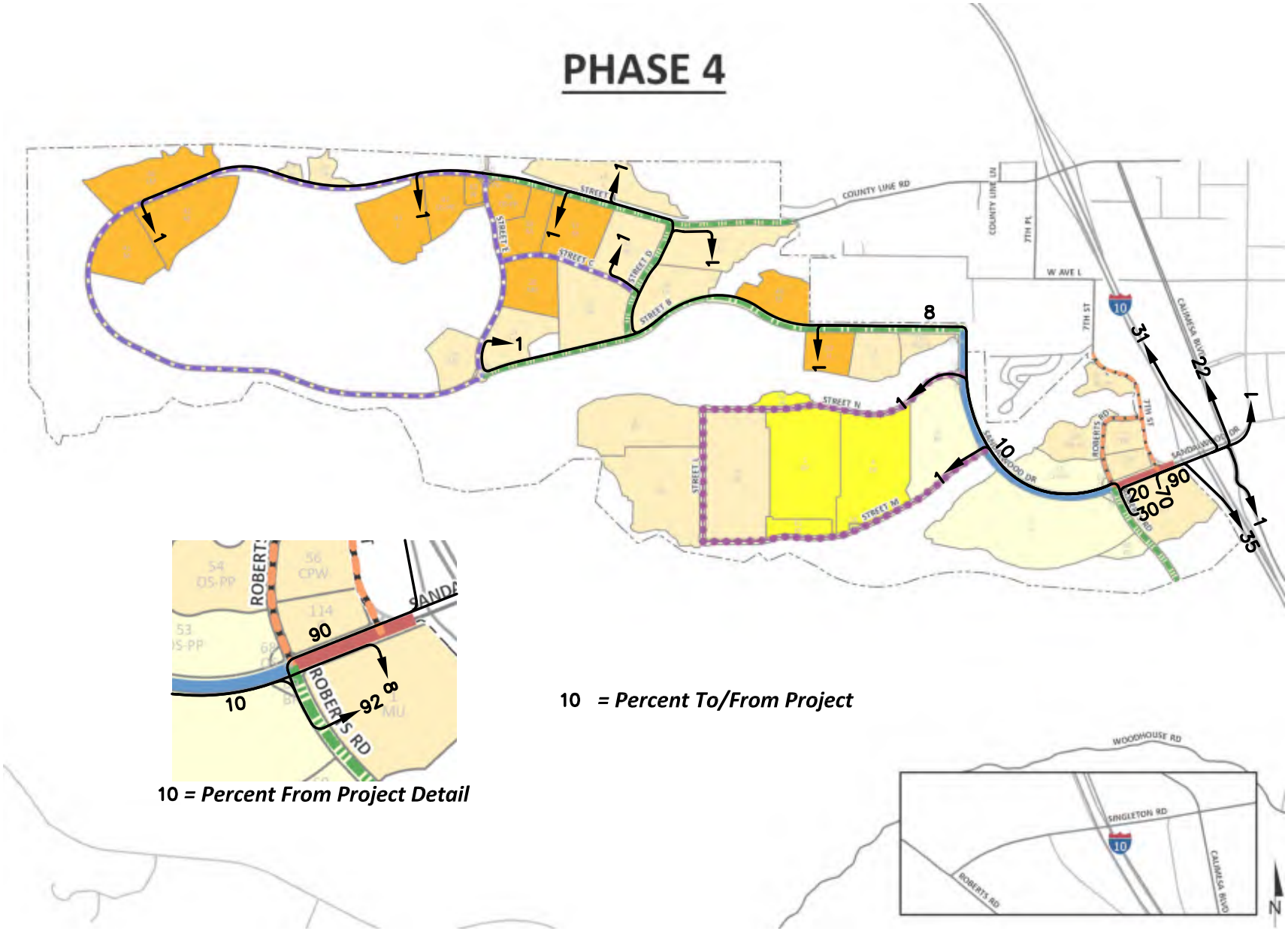
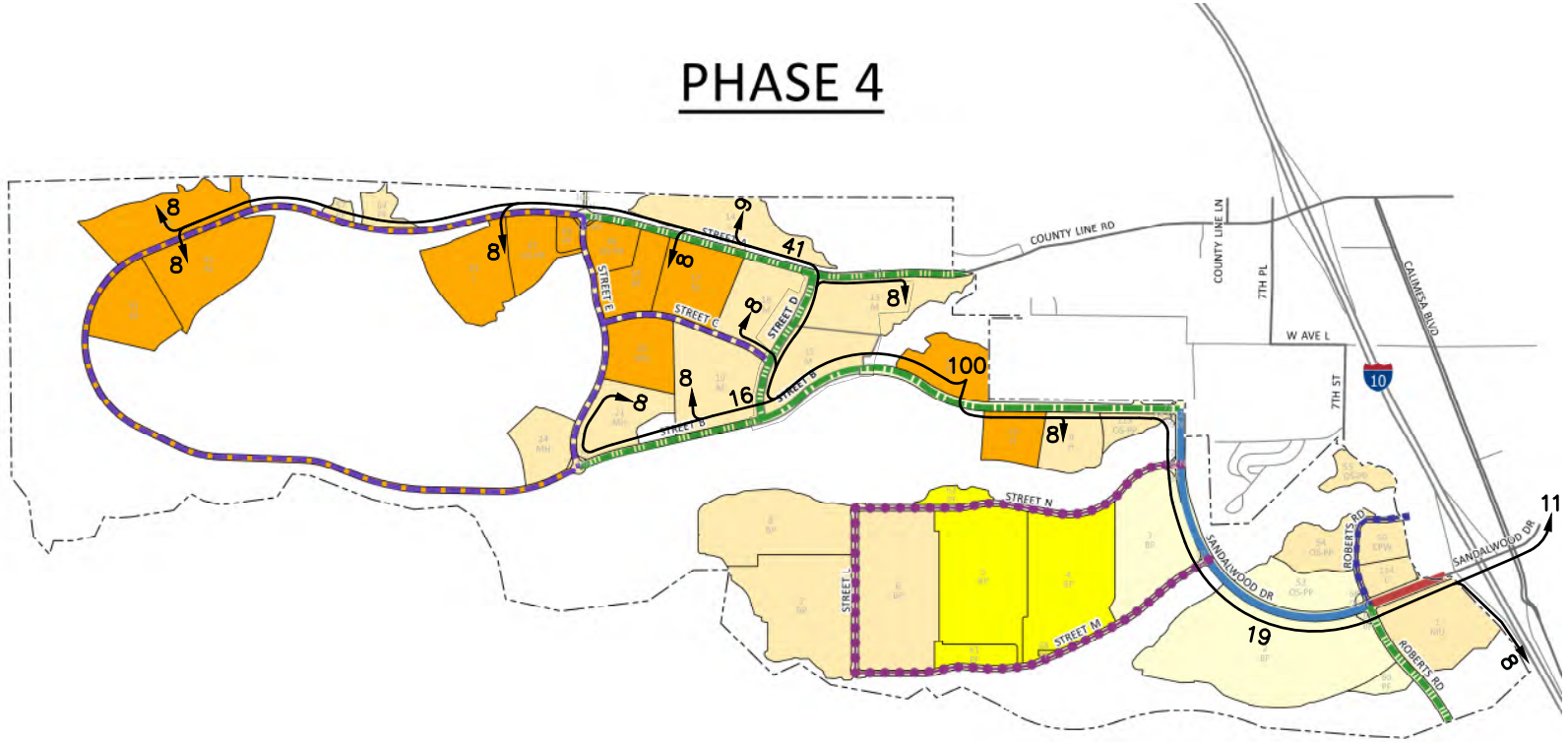


EXHIBIT B-13: PHASE 4 ELEMENTARY SCHOOL TRIP DISTRIBUTION



N

10 = PERCENT FROM PROJECT

EXHIBIT B-14: PHASE 4 PARK TRIP DISTRIBUTION

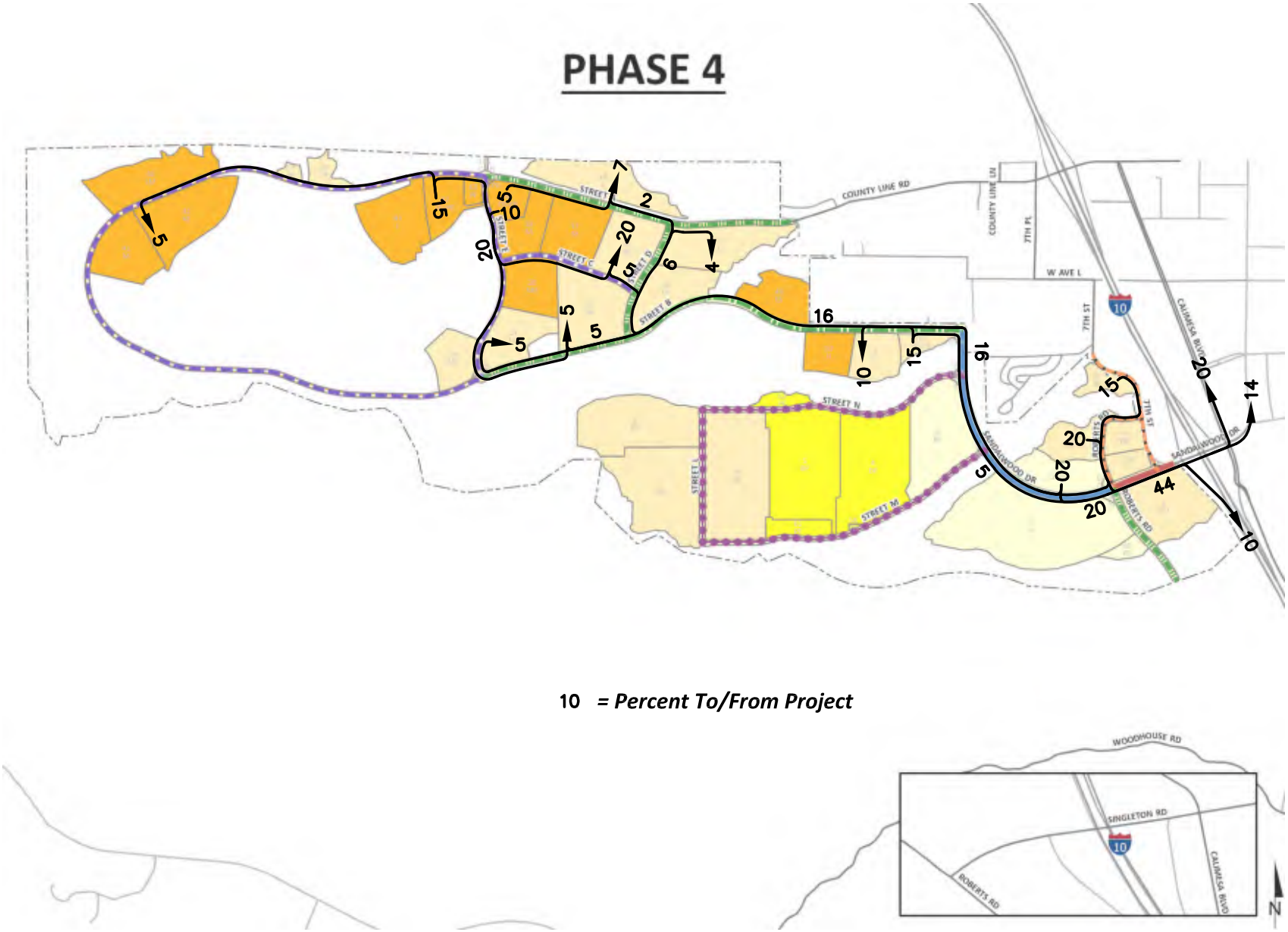
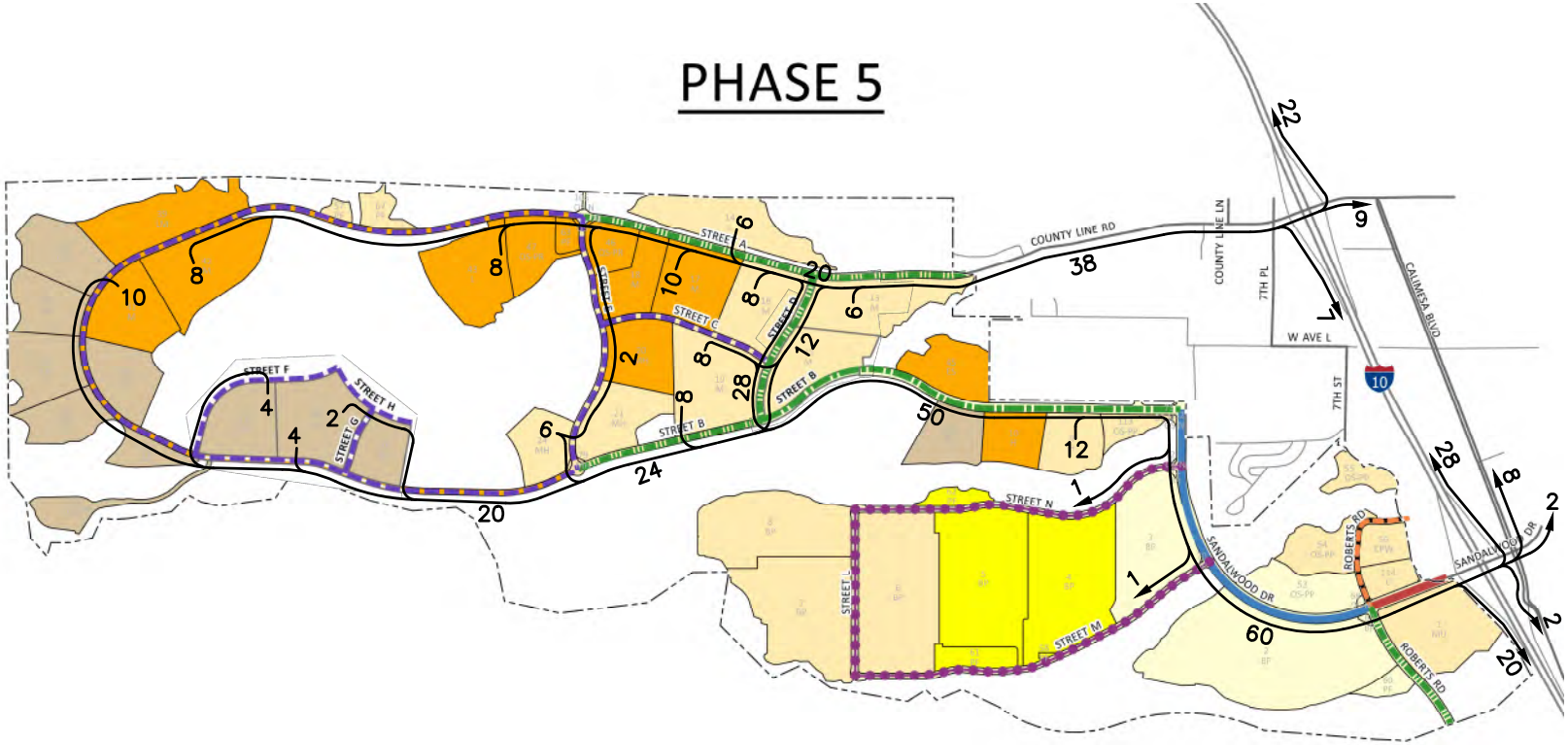


EXHIBIT B-15: PHASE 5 RESIDENTIAL TRIP DISTRIBUTION



N

10 = PERCENT TO/FROM PROJECT

EXHIBIT B-16: PHASE 5 RETAIL TRIP DISTRIBUTION

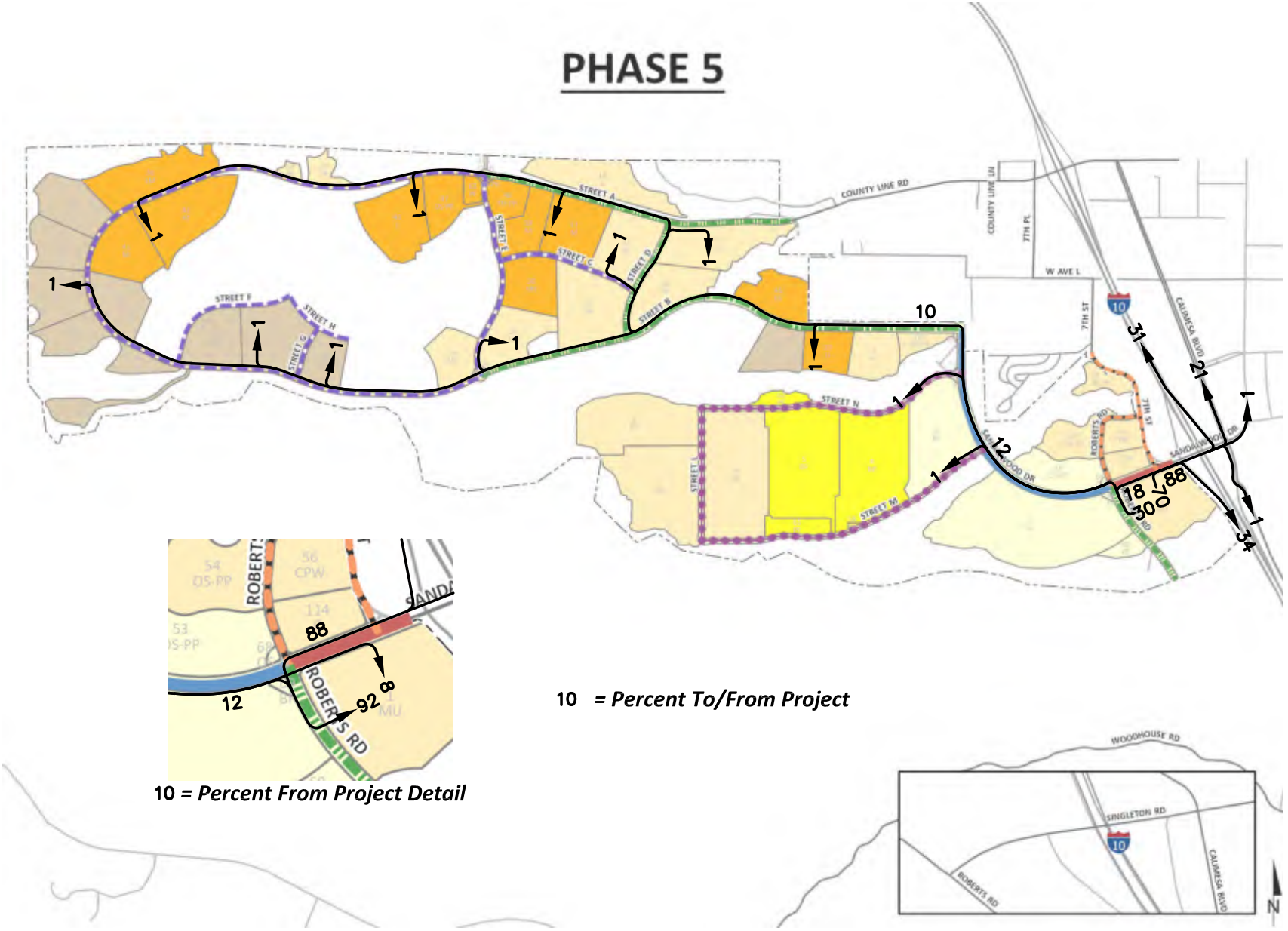
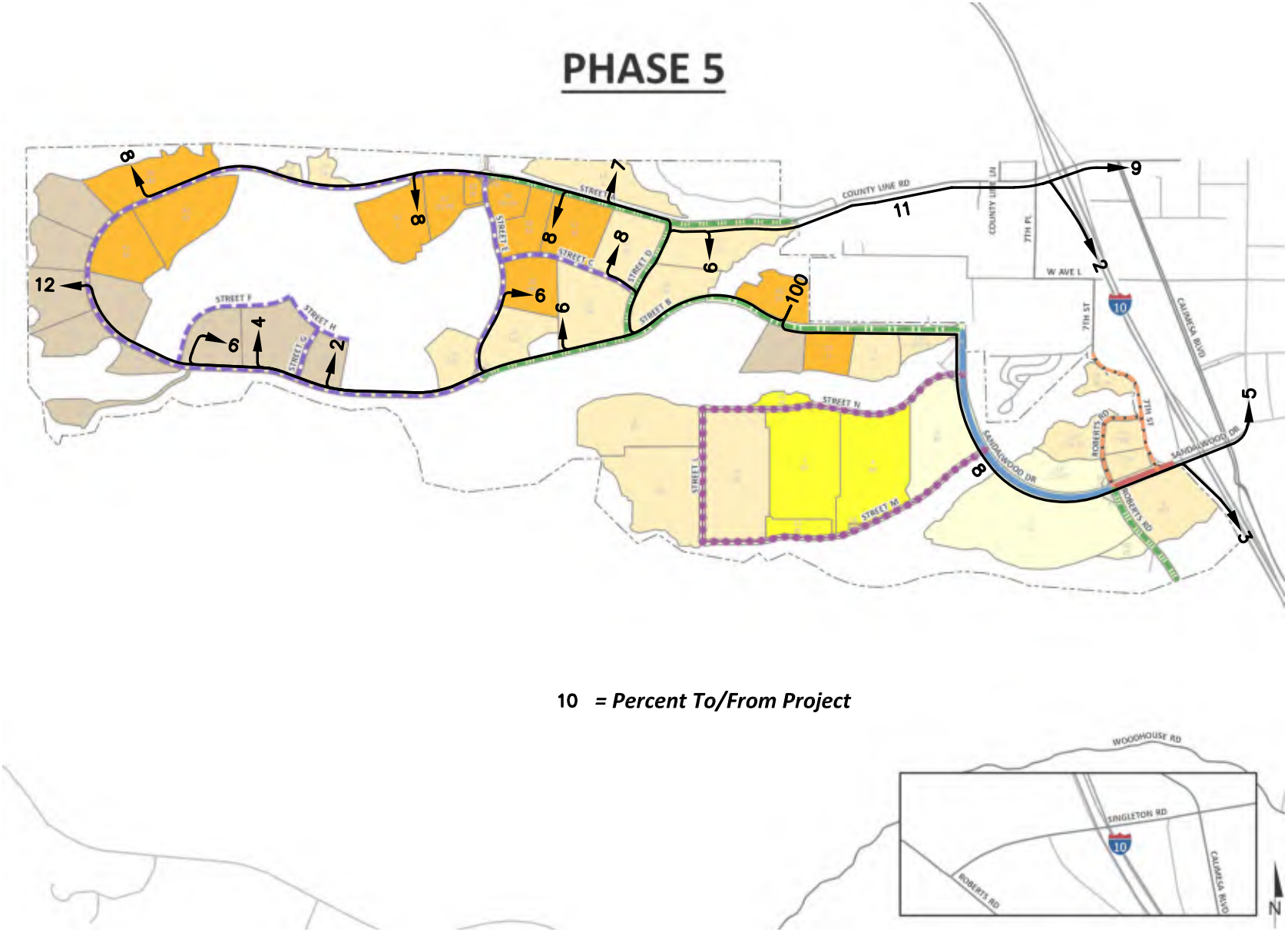


EXHIBIT B-17: PHASE 5 ELEMENTARY SCHOOL TRIP DISTRIBUTION



10 ***= Percent To/From Project***

EXHIBIT B-18: PHASE 5 PARK TRIP DISTRIBUTION

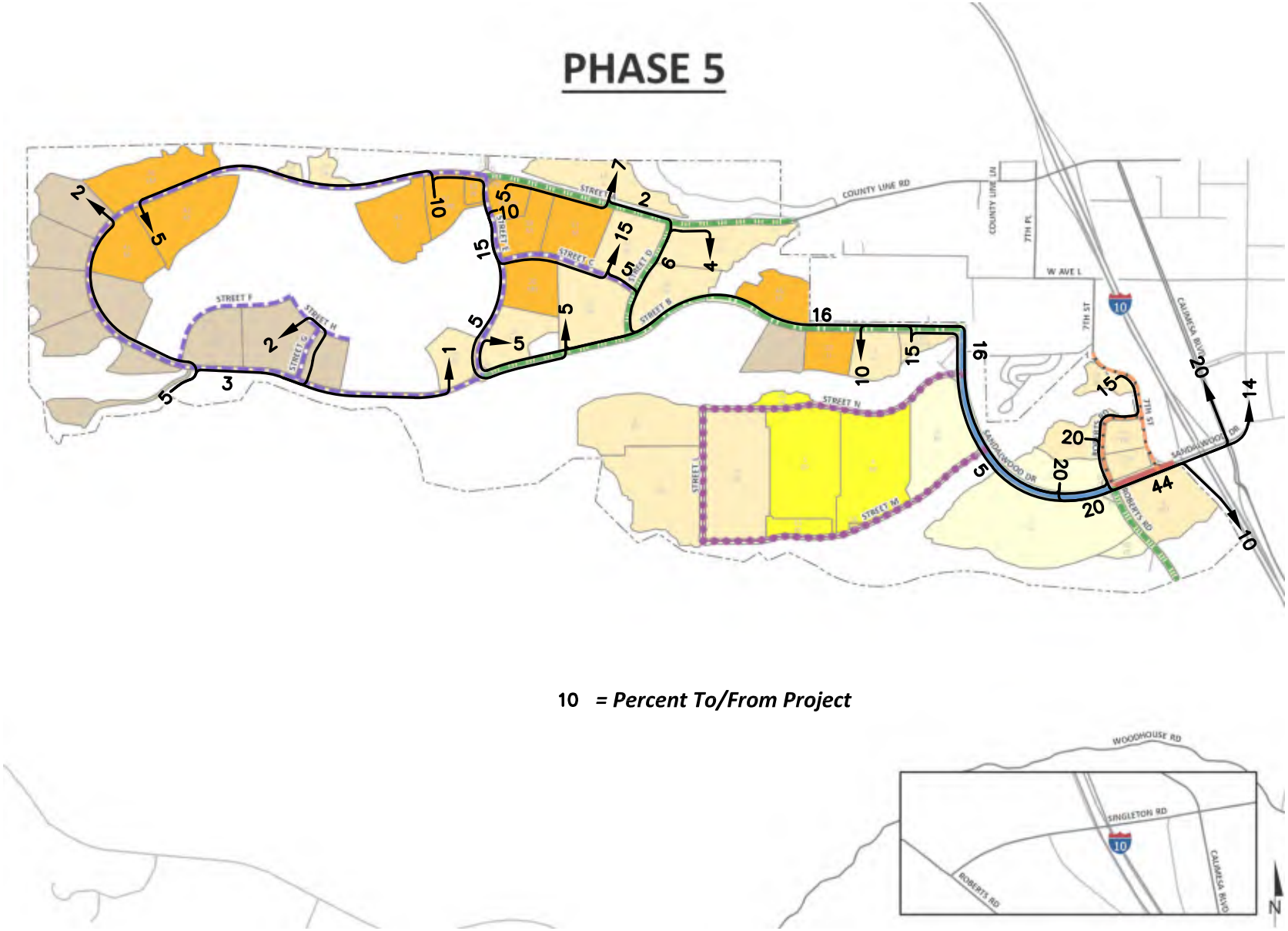
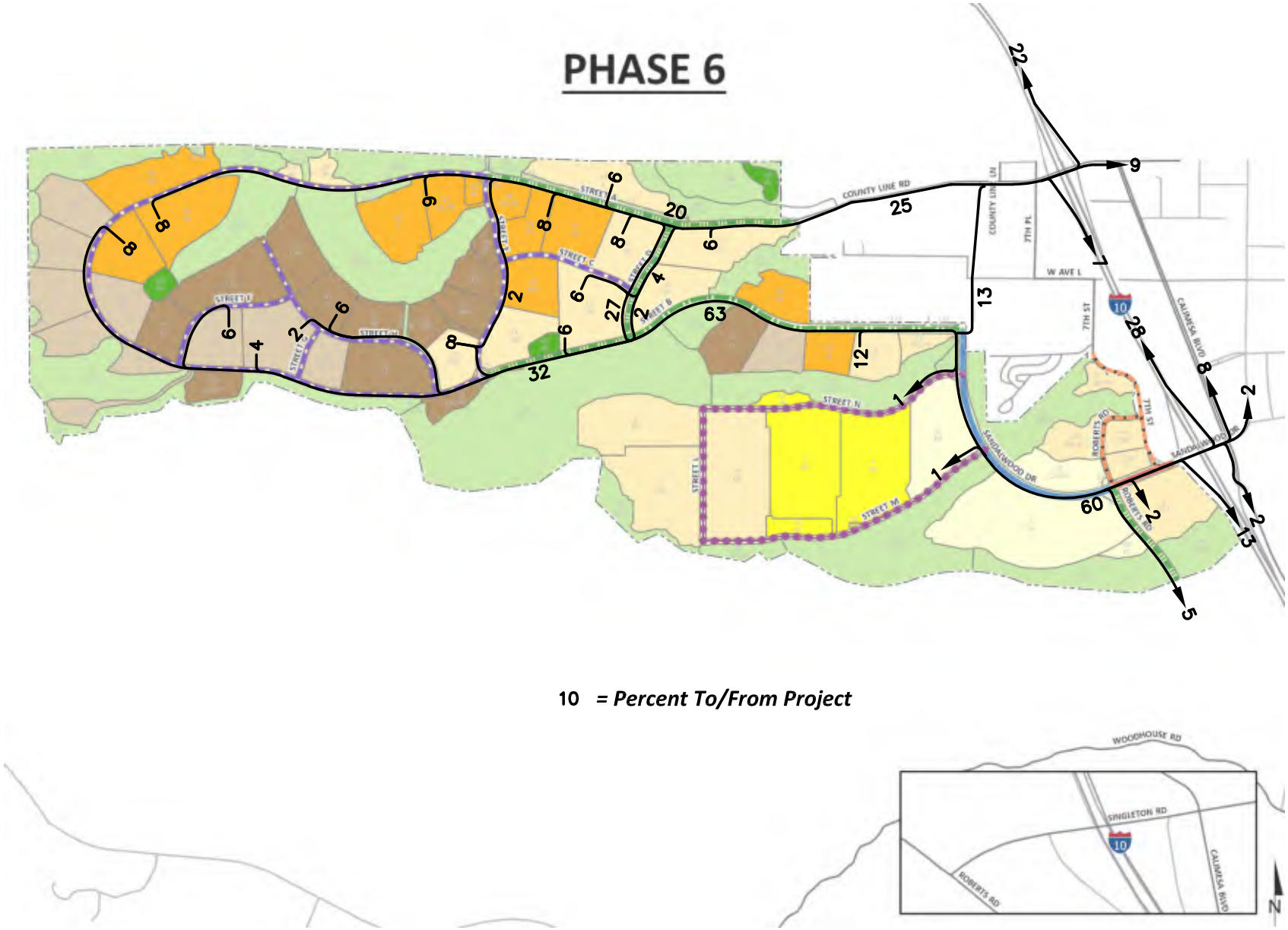


EXHIBIT B-19: PHASE 6 RESIDENTIAL TRIP DISTRIBUTION



10 ***= Percent To/From Project***

EXHIBIT B-20: PHASE 6 RETAIL TRIP DISTRIBUTION

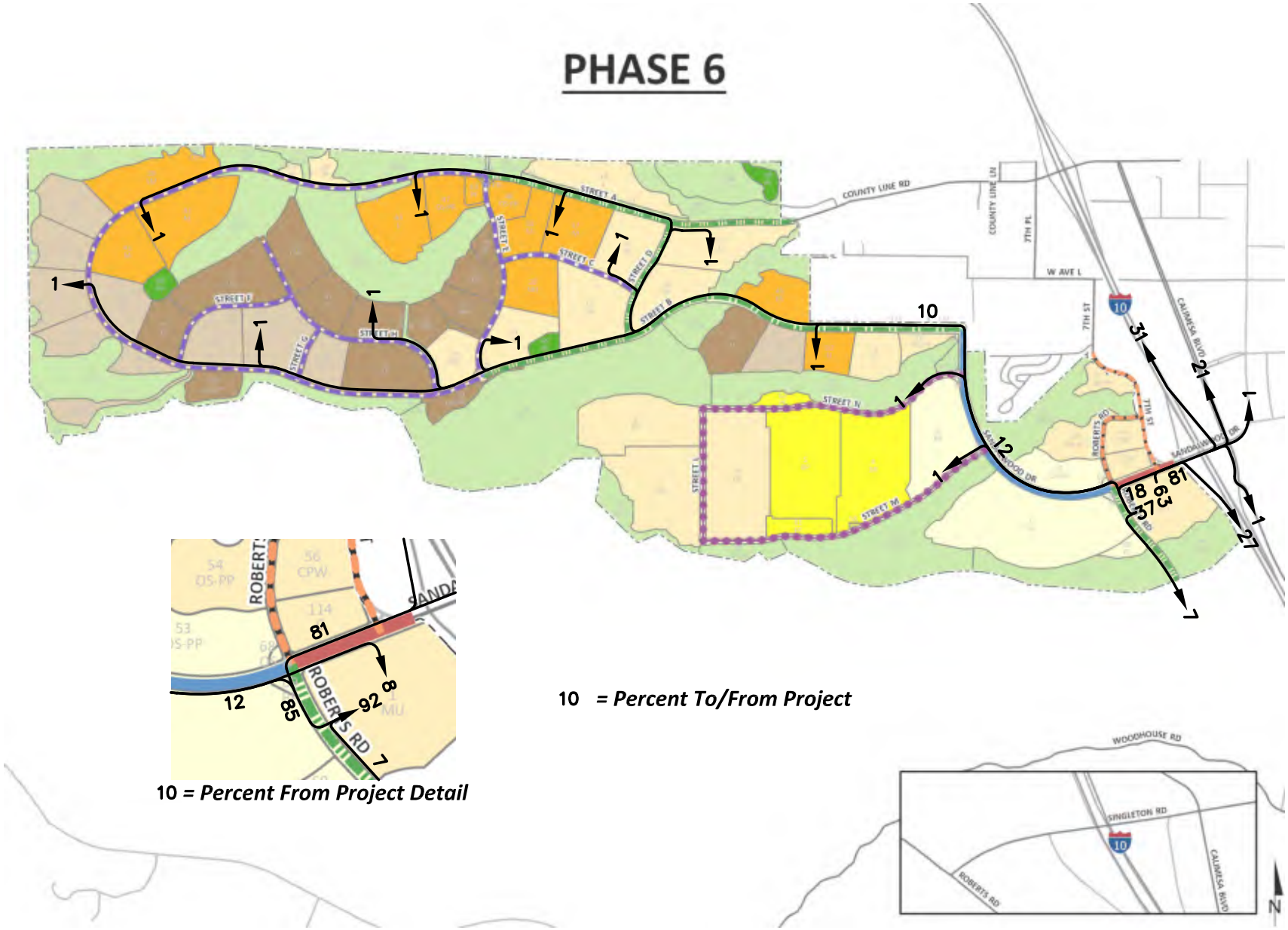
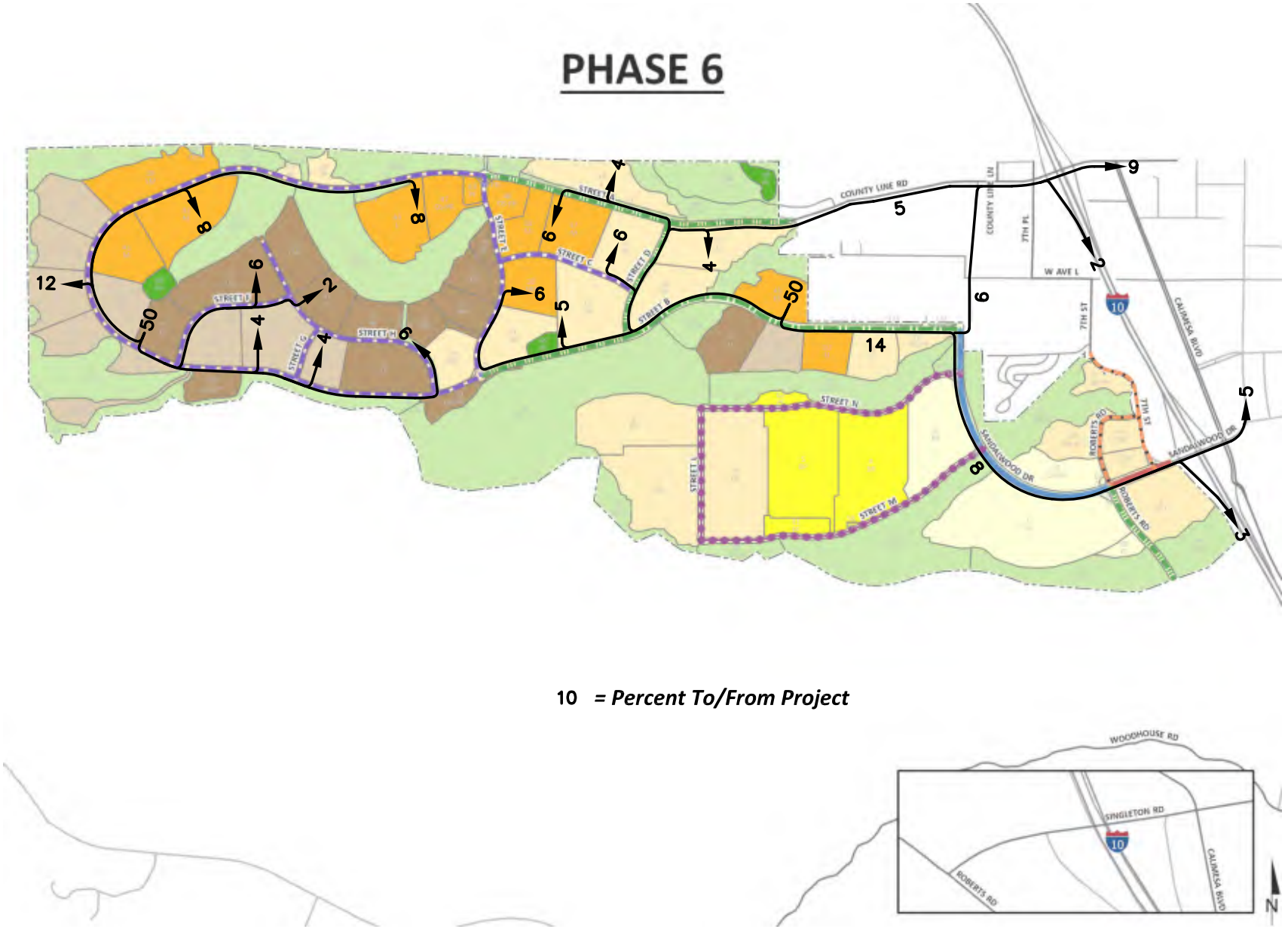
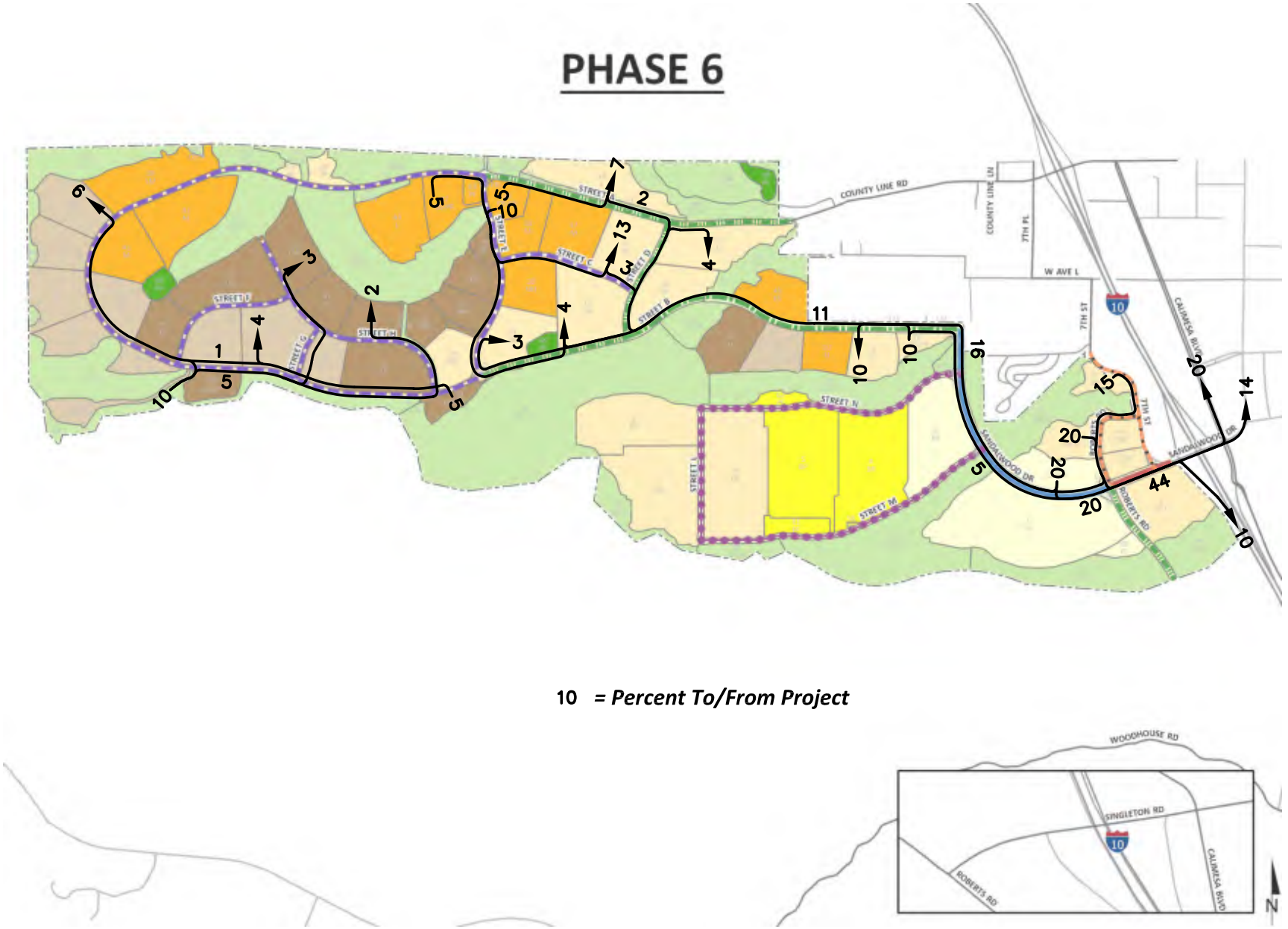


EXHIBIT B-21: PHASE 6 ELEMENTARY SCHOOL TRIP DISTRIBUTION



10 ***= Percent To/From Project***

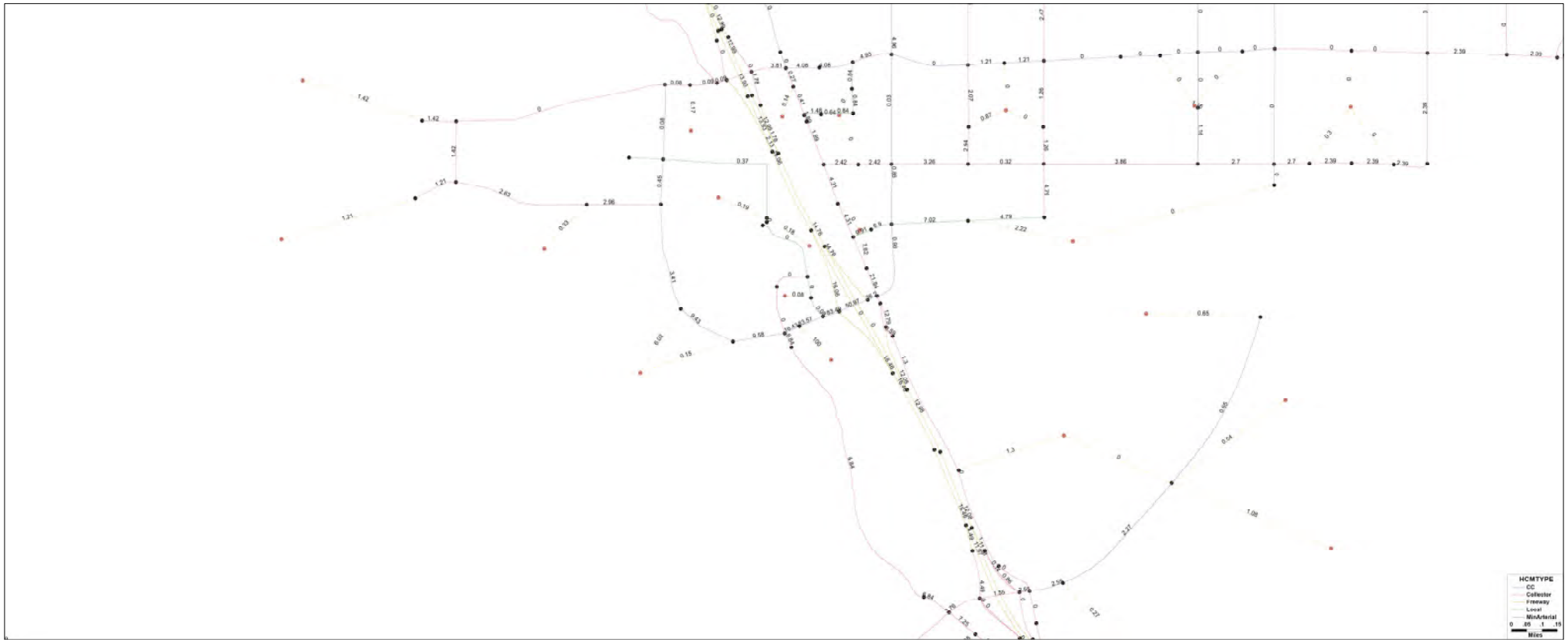
EXHIBIT B-22: PHASE 6 PARK TRIP DISTRIBUTION



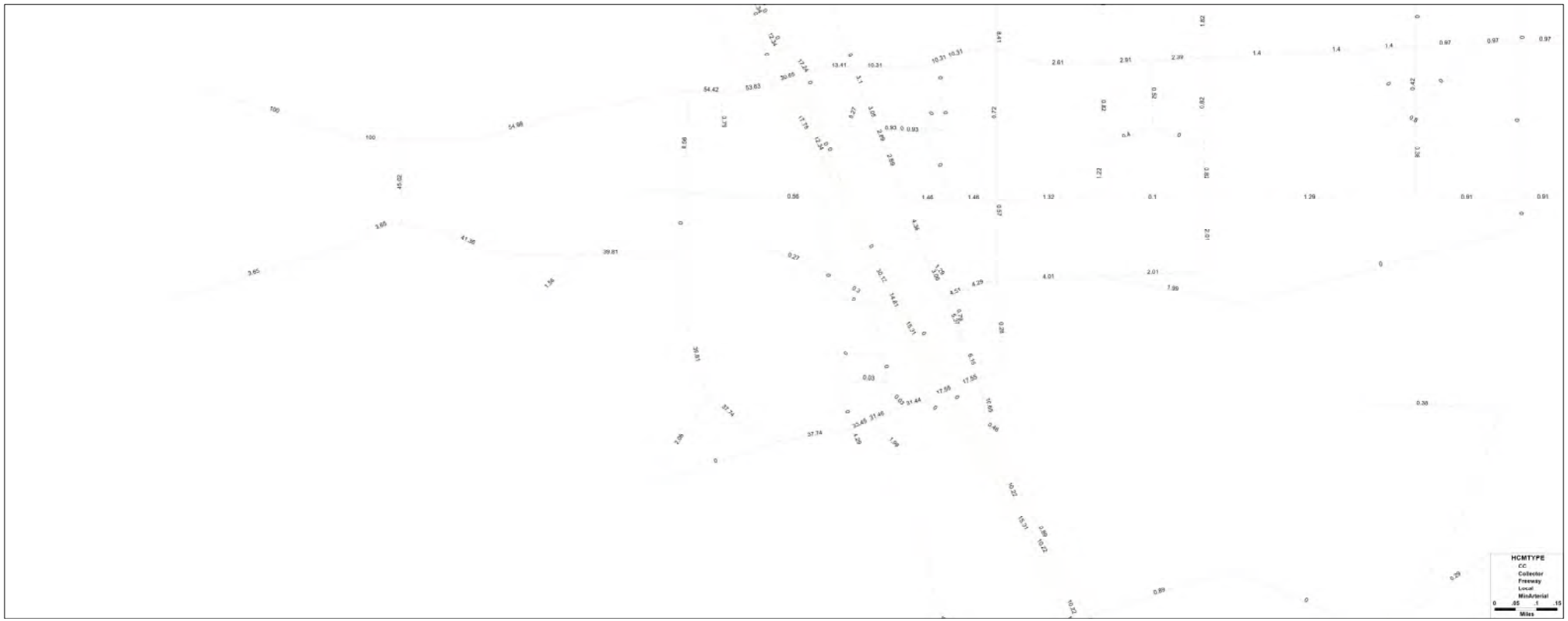
ATTACHMENT C: RIVCOM SELECT ZONE

Industrial - Select Zone Run

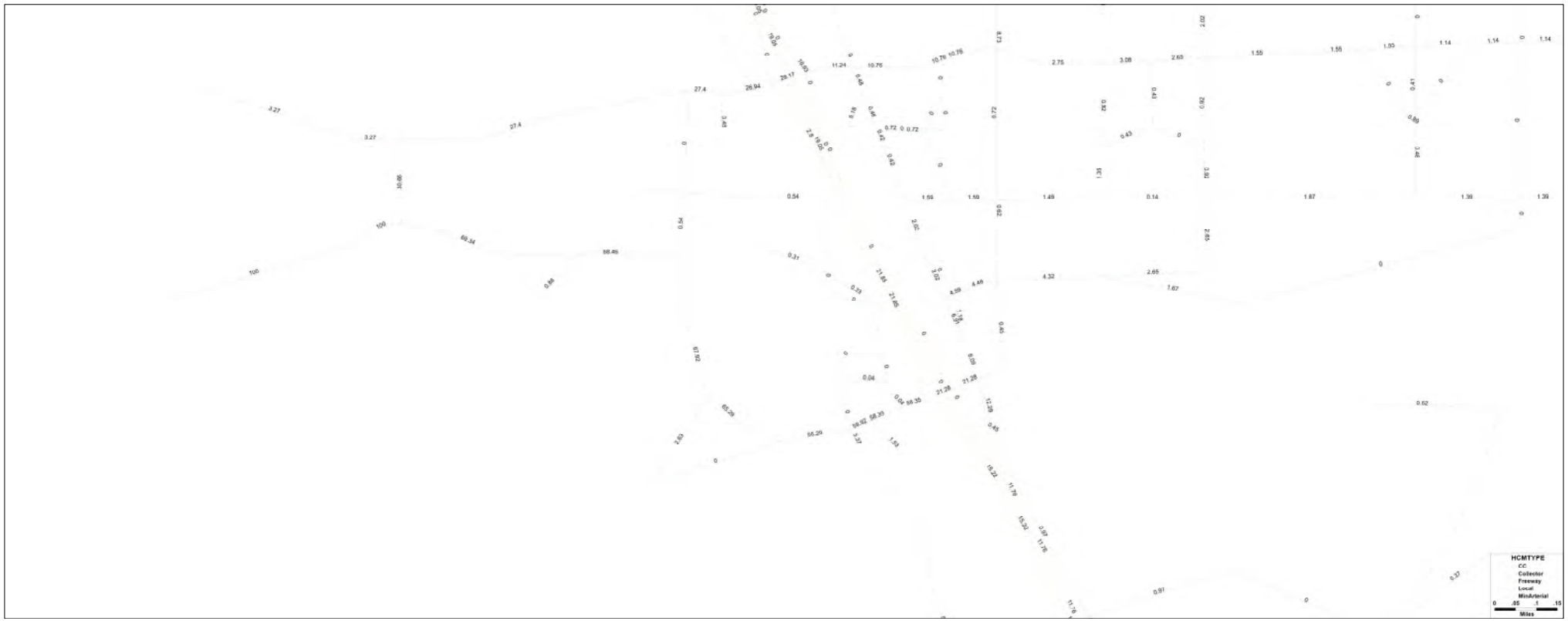
Retail - Select Zone Run



Residential (Northern Area) - Select Zone Run



Residential (Southern Area) - Select Zone Run



Multifamily Residential (Southern Area) - Select Zone Run

Residential (Total Area) - Select Zone Run

APPENDIX 1.2: SITE ADJACENT QUEUES

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Intersection: 1: Street E & Street A

Movement	EB	NB
Directions Served	TR	LR
Maximum Queue (ft)	28	24
Average Queue (ft)	1	2
95th Queue (ft)	12	15
Link Distance (ft)	1076	1762
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Street B & Street E

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	74	35
Average Queue (ft)	20	7
95th Queue (ft)	59	29
Link Distance (ft)	1034	1762
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Street D & Street A

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	50	12	58
Average Queue (ft)	10	0	13
95th Queue (ft)	37	6	41
Link Distance (ft)	1415	1374	548
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Street D & Street C

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	63	31
Average Queue (ft)	37	4
95th Queue (ft)	54	22
Link Distance (ft)	650	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Street B & Street D

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	R	LR
Maximum Queue (ft)	106	290	45	46	54
Average Queue (ft)	21	93	3	4	17
95th Queue (ft)	91	236	20	23	46
Link Distance (ft)		1518	2879	2879	662
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		11			
Queuing Penalty (veh)		5			

Intersection: 7: Sandalwood Dr. & Street B

Movement	EB	EB	EB	NB	NB	NB	SB
Directions Served	L	R	R	L	L	T	TR
Maximum Queue (ft)	154	127	145	160	182	74	94
Average Queue (ft)	61	72	82	95	116	19	39
95th Queue (ft)	117	114	122	147	169	53	75
Link Distance (ft)		2879	2879			510	952
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	300			300	300		
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 8: Sandalwood Dr. & Street K

Movement	EB	EB	NB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	T	TR
Maximum Queue (ft)	6	134	332	330	145	29	294	310
Average Queue (ft)	0	52	178	201	22	2	143	162
95th Queue (ft)	6	96	289	304	88	15	250	270
Link Distance (ft)		1132			1110	1110	510	510
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	200		350	350				
Storage Blk Time (%)		0	0	0				
Queuing Penalty (veh)		0	0	0				

Intersection: 9: Sandalwood Dr. & Street J

Movement	EB	EB	NB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	T	TR
Maximum Queue (ft)	18	96	374	394	583	410	410	425
Average Queue (ft)	1	51	248	267	61	38	191	214
95th Queue (ft)	10	83	357	367	329	253	373	393
Link Distance (ft)		1211			1726	1726	1110	1110
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	200		350	350				
Storage Blk Time (%)			0	2	0			
Queuing Penalty (veh)			3	12	6			

Intersection: 10: Roberts Rd. & Sandalwood Dr.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	B28	B28	B28
Directions Served	L	T	T	TR	L	L	T	T	TR	T	T	T
Maximum Queue (ft)	58	401	432	449	312	325	397	398	395	399	364	224
Average Queue (ft)	2	227	251	272	215	308	363	275	230	281	103	26
95th Queue (ft)	35	367	395	413	325	367	470	430	399	493	313	141
Link Distance (ft)		1726	1726	1726			326	326	326	366	366	366
Upstream Blk Time (%)					0	2	21	8	5	6	0	0
Queuing Penalty (veh)					0	0	256	93	57	75	1	0
Storage Bay Dist (ft)	200				300	300						
Storage Blk Time (%)		14			1	3	25					
Queuing Penalty (veh)		0			6	23	257					

Intersection: 10: Roberts Rd. & Sandalwood Dr.

Movement	NB	NB	NB	NB	SB	SB
Directions Served	L	L	T	R	L	TR
Maximum Queue (ft)	39	35	12	90	77	16
Average Queue (ft)	8	3	1	35	26	1
95th Queue (ft)	29	18	8	73	62	9
Link Distance (ft)			973			353
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	200	200		300	200	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 14: Sandalwood Dr. & 7th St.

Movement	EB	WB	WB	WB	WB	SB
Directions Served	T	T	T	T	R	R
Maximum Queue (ft)	4	340	340	337	336	889
Average Queue (ft)	0	339	295	191	43	851
95th Queue (ft)	3	341	399	383	203	980
Link Distance (ft)	366	324	324	324	324	880
Upstream Blk Time (%)		80	12	1	1	85
Queuing Penalty (veh)		0	0	0	0	0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 793

Intersection: 1: Street E & Street A

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	31	54	15
Average Queue (ft)	4	7	1
95th Queue (ft)	21	34	7
Link Distance (ft)	1076	1415	1762
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Street B & Street E

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	55	52
Average Queue (ft)	8	12
95th Queue (ft)	35	39
Link Distance (ft)	1034	1762
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Street D & Street A

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	78	123	53
Average Queue (ft)	21	25	14
95th Queue (ft)	58	77	41
Link Distance (ft)	1415	1374	548
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Street D & Street C

Movement	EB	NB	SB
Directions Served	LR	L	TR
Maximum Queue (ft)	75	53	11
Average Queue (ft)	31	17	0
95th Queue (ft)	54	47	5
Link Distance (ft)	650		548
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		100	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Street B & Street D

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	R	LR
Maximum Queue (ft)	31	56	702	409	75
Average Queue (ft)	5	21	278	122	34
95th Queue (ft)	23	55	559	321	64
Link Distance (ft)		1518	2885	2885	662
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Sandalwood Dr. & Street B

Movement	EB	EB	EB	NB	NB	NB	SB
Directions Served	L	R	R	L	L	T	TR
Maximum Queue (ft)	122	76	88	298	307	53	161
Average Queue (ft)	47	50	59	168	182	9	89
95th Queue (ft)	97	73	82	280	303	33	148
Link Distance (ft)		2885	2885			520	1014
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	300			300	300		
Storage Blk Time (%)				0	0		
Queuing Penalty (veh)				0	0		

Intersection: 8: Sandalwood Dr. & Street K

Movement	EB	EB	NB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	T	TR
Maximum Queue (ft)	160	433	238	400	730	692	195	216
Average Queue (ft)	20	222	83	188	372	258	111	124
95th Queue (ft)	95	346	161	413	637	542	191	208
Link Distance (ft)		1132			1110	1110	520	520
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	200		350	350				
Storage Blk Time (%)		13	0	0	20			
Queuing Penalty (veh)		2	0	0	51			

Intersection: 9: Sandalwood Dr. & Street J

Movement	EB	EB	NB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	T	TR
Maximum Queue (ft)	249	1225	167	181	145	959	414	409
Average Queue (ft)	42	1011	68	90	20	72	273	285
95th Queue (ft)	169	1419	143	160	88	617	388	392
Link Distance (ft)		1210			1726	1726	1110	1110
Upstream Blk Time (%)		34				0		
Queuing Penalty (veh)		0				1		
Storage Bay Dist (ft)	200		350	350				
Storage Blk Time (%)		56						
Queuing Penalty (veh)		10						

Intersection: 10: Roberts Rd. & Sandalwood Dr.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	B54	B54	B54
Directions Served	L	T	T	TR	L	L	T	T	TR	T	T	T
Maximum Queue (ft)	250	1206	1267	1247	308	312	384	381	381	405	388	305
Average Queue (ft)	78	962	997	1013	294	310	384	208	206	386	187	63
95th Queue (ft)	222	1282	1321	1335	313	313	384	367	355	398	431	225
Link Distance (ft)		1726	1726	1726			312	312	312	378	378	378
Upstream Blk Time (%)					2	31	49	4	4	27	0	
Queuing Penalty (veh)					0	0	358	26	28	200	2	
Storage Bay Dist (ft)	200				300	300						
Storage Blk Time (%)		54			6	51	34					
Queuing Penalty (veh)		27			27	241	221					

Intersection: 10: Roberts Rd. & Sandalwood Dr.

Movement	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	T	R	L	L	TR
Maximum Queue (ft)	92	105	987	350	141	151	80
Average Queue (ft)	40	44	987	350	18	80	24
95th Queue (ft)	78	84	987	350	89	144	56
Link Distance (ft)			972				348
Upstream Blk Time (%)			91				
Queuing Penalty (veh)			0				
Storage Bay Dist (ft)	200	200		300	200	200	
Storage Blk Time (%)				87			
Queuing Penalty (veh)				127			

Intersection: 14: Sandalwood Dr. & 7th St.

Movement	WB	WB	WB	WB	SB
Directions Served	T	T	T	R	R
Maximum Queue (ft)	340	339	339	233	615
Average Queue (ft)	334	262	157	42	313
95th Queue (ft)	385	373	357	175	662
Link Distance (ft)	324	324	324	324	884
Upstream Blk Time (%)	74	3	1	0	
Queuing Penalty (veh)	0	0	0	0	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 1321

APPENDIX 3.1: TRAFFIC COUNTS

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INTERSECTION TURNING MOVEMENT COUNTS

T101823

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Jan 30, 24

LOCATION: Calimesa
NORTH & SOUTH: Sandalwood Dr
EAST & WEST: 7th

PROJECT #: SC4429
LOCATION #: 1
CONTROL: STOP ALL

NOTES:
Dwy was closed all-day

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

		NORTHBOUND (Sandalwood Dr)			SOUTHBOUND (Dwy)			EASTBOUND (7th)			WESTBOUND (Sandalwood Dr)			
	LANES:	NL 1	NT X	NR 1	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	3	0	32	0	0	0	0	9	4	51	7	0	106
	7:15 AM	12	0	59	0	0	0	0	11	15	128	9	0	234
	7:30 AM	23	0	119	0	0	0	0	8	33	146	10	0	339
	7:45 AM	33	0	118	0	0	0	0	6	18	120	13	0	308
	8:00 AM	8	0	35	0	0	0	0	11	3	27	10	0	94
	8:15 AM	1	0	4	0	0	0	0	8	0	17	6	0	36
	8:30 AM	0	0	7	0	0	0	0	4	0	14	5	0	30
	8:45 AM	1	0	3	0	0	0	0	11	0	14	5	0	34
	VOLUMES	81	0	377	0	0	0	0	68	73	517	65	0	1,182
	APPROACH %	18%	0%	82%	0%	0%	0%	0%	48%	52%	89%	11%	0%	
	APP/DEPART	458	/	0	0	/	590	141	/	446	583	/	146	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	71	0	328	0	0	0	0	34	70	445	39	0	987
	APPROACH %	18%	0%	82%	0%	0%	0%	0%	33%	67%	92%	8%	0%	
	PEAK HR FACTOR		0.661			0.000			0.634			0.776		0.728
	APP/DEPART	399	/	0	0	/	515	104	/	362	484	/	110	0
PM	4:00 PM	0	0	11	0	0	0	0	12	0	7	6	0	36
	4:15 PM	1	0	10	0	0	0	0	10	2	11	8	0	42
	4:30 PM	1	0	35	0	0	0	0	10	6	10	8	0	70
	4:45 PM	4	0	29	0	0	0	0	11	1	5	12	0	62
	5:00 PM	0	0	7	0	0	0	0	15	0	3	14	0	39
	5:15 PM	1	0	5	0	0	0	0	8	1	6	18	0	39
	5:30 PM	0	0	2	0	0	0	0	12	3	25	12	0	54
	5:45 PM	1	0	14	0	0	0	0	10	1	26	7	0	59
	VOLUMES	8	0	113	0	0	0	0	88	14	93	85	0	401
	APPROACH %	7%	0%	93%	0%	0%	0%	0%	86%	14%	52%	48%	0%	
	APP/DEPART	121	/	0	0	/	107	102	/	201	178	/	93	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	6	0	81	0	0	0	0	46	9	29	42	0	213
	APPROACH %	7%	0%	93%	0%	0%	0%	0%	84%	16%	41%	59%	0%	
	PEAK HR FACTOR		0.604			0.000			0.859			0.934		0.761
	APP/DEPART	87	/	0	0	/	38	55	/	127	71	/	48	0

U-TURNS

NB 0	SB 0	EB 0	WB 0	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	
0	0	0	0	0
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0	0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
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0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
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0	0	0	0
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0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Dwy

NORTH LEG

7th WEST LEG — EAST LEG **Sandalwood Dr**

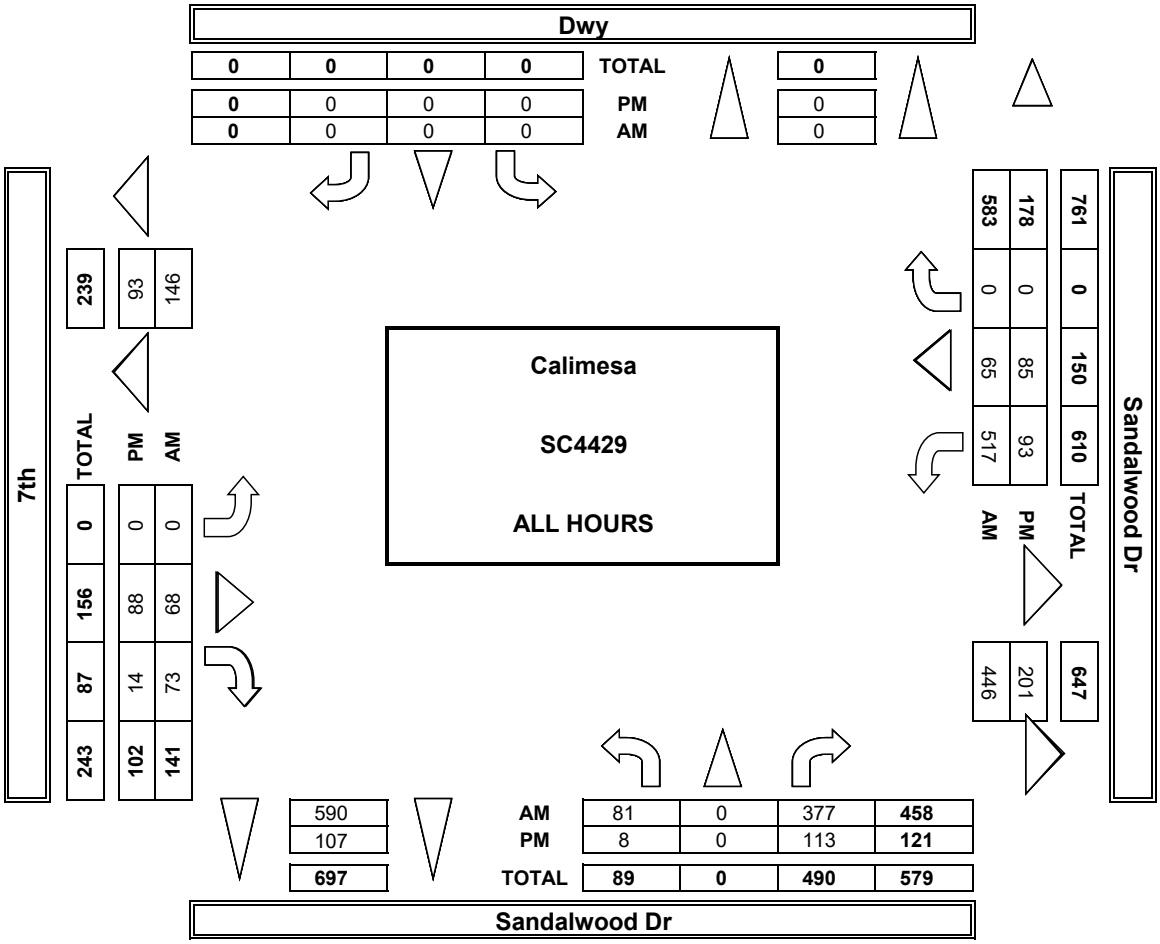
SOUTH LEG

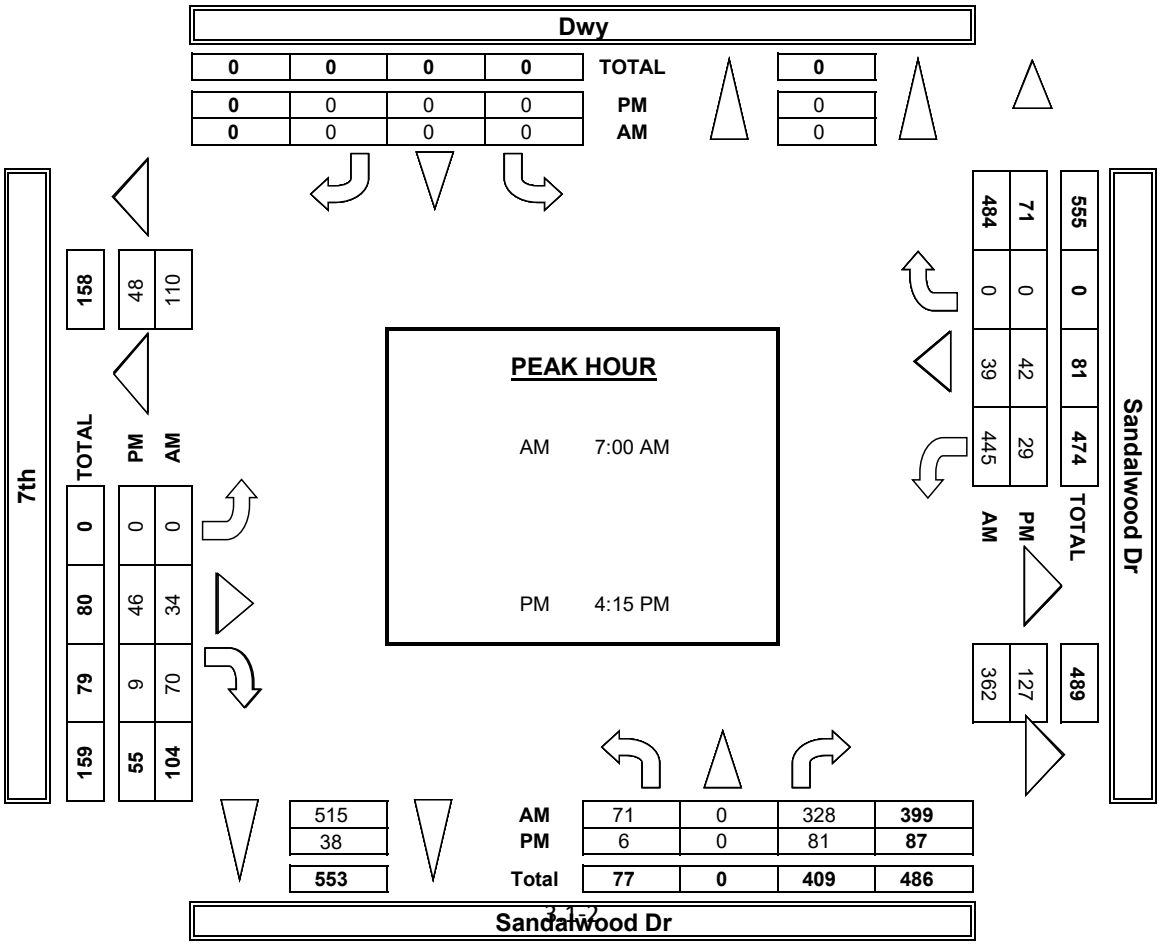
Sandalwood Dr

		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	1	0	1	2	0	0	0	0	0	0	1	0	1	2
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	1	0	2	3	0	0	0	0	0	0	1	0	2	3
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0
	TOTAL	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TUR

PREPARED BY: AimTD LI

DATE:	LOCATION:	Calimesa
1/30/24	NORTH & SOUTH:	Sandalwood Dr
TUESDAY	EAST & WEST:	7th

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

		NORTHBOUND Sandalwood Dr			SOUTHBOUNI Dwy	
	LANES:	NL 1	NT X	NR 1	SL 0	ST 1
AM	7:00 AM	4	0	32	0	0
	7:15 AM	12	0	60	0	0
	7:30 AM	23	0	120	0	0
	7:45 AM	35	0	120	0	0
	8:00 AM	8	0	36	0	0
	8:15 AM	1	0	5	0	0
	8:30 AM	0	0	8	0	0
	8:45 AM	1	0	3	0	0
	VOLUMES	84	0	382	0	0
	APPROACH %	18%	0%	82%	0%	0%
	APP/DEPART	466	/	0	0	/
	BEGIN PEAK HR		7:00 AM			
	VOLUMES	74	0	332	0	0
	APPROACH %	18%	0%	82%	0%	0%
	PEAK HR FACTOR		0.653			0.000
	APP/DEPART	405	/	0	0	/
PM	4:00 PM	0	0	11	0	0
	4:15 PM	1	0	10	0	0
	4:30 PM	1	0	36	0	0
	4:45 PM	4	0	29	0	0
	5:00 PM	0	0	7	0	0
	5:15 PM	1	0	5	0	0
	5:30 PM	0	0	3	0	0
	5:45 PM	1	0	14	0	0
	VOLUMES	8	0	115	0	0
	APPROACH %	7%	0%	93%	0%	0%
	APP/DEPART	123	/	0	0	/

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Sandalwood Dr	LOCATION #:	1
TUESDAY	EAST & WEST:	7th	CONTROL:	STOP ALL

CLASS 1: PASSENGER VEHICLES

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (Sandalwood Dr)			SOUTHBOUND (Dwy)			EASTBOUND (7th)			WESTBOUND (Sandalwood Dr)			
	LANES:	NL 1	NT X	NR 1	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	2	0	32	0	0	0	0	8	4	50	7	0	103
	7:15 AM	12	0	57	0	0	0	0	10	15	125	8	0	227
	7:30 AM	23	0	118	0	0	0	0	7	33	141	9	0	331
	7:45 AM	31	0	115	0	0	0	0	4	18	120	10	0	298
	8:00 AM	8	0	34	0	0	0	0	8	3	23	6	0	82
	8:15 AM	1	0	3	0	0	0	0	6	0	16	6	0	32
	8:30 AM	0	0	6	0	0	0	0	3	0	6	4	0	19
	8:45 AM	1	0	3	0	0	0	0	9	0	9	4	0	26
	VOLUMES	78	0	368	0	0	0	0	55	73	490	54	0	1,119
	APPROACH %	17%	0%	83%	0%	0%	0%	0%	43%	57%	90%	10%	0%	
	APP/DEPART	446	/	0	0	/	563	128	/	424	545	/	132	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	68	0	322	0	0	0	0	29	70	436	34	0	959
	APPROACH %	17%	0%	83%	0%	0%	0%	0%	29%	71%	93%	7%	0%	
	PEAK HR FACTOR		0.668			0.000			0.619			0.783		0.724
	APP/DEPART	390	/	0	0	/	506	99	/	351	470	/	102	0
PM	4:00 PM	0	0	11	0	0	0	0	11	0	7	5	0	34
	4:15 PM	1	0	10	0	0	0	0	10	2	10	7	0	40
	4:30 PM	1	0	34	0	0	0	0	10	5	10	8	0	68
	4:45 PM	4	0	29	0	0	0	0	11	1	5	12	0	62
	5:00 PM	0	0	7	0	0	0	0	15	0	3	14	0	39
	5:15 PM	1	0	5	0	0	0	0	8	1	6	16	0	37
	5:30 PM	0	0	1	0	0	0	0	12	3	23	11	0	50
	5:45 PM	1	0	14	0	0	0	0	9	1	26	7	0	58
	VOLUMES	8	0	111	0	0	0	0	86	13	90	80	0	388
	APPROACH %	7%	0%	93%	0%	0%	0%	0%	87%	13%	53%	47%	0%	
	APP/DEPART	119	/	0	0	/	103	99	/	197	170	/	88	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	6	0	80	0	0	0	0	46	8	28	41	0	209
	APPROACH %	7%	0%	93%	0%	0%	0%	0%	85%	15%	41%	59%	0%	
	PEAK HR FACTOR		0.614			0.000			0.900			0.958		0.768
	APP/DEPART	86	/	0	0	/	36	54	/	126	69	/	47	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
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0	0	0	0
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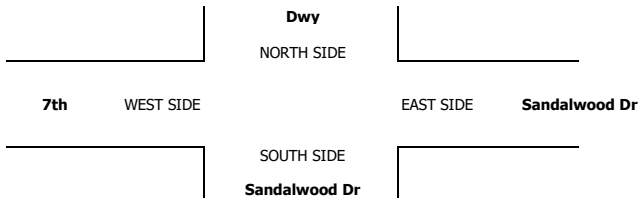
0	0	0	0
0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Sandalwood Dr	LOCATION #:	1
TUESDAY	EAST & WEST:	7th	CONTROL:	STOP ALL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM / PM / MD / OTHER / OTHER	▲ N / ◄ W / E ► / S ▼

		NORTHBOUND Sandalwood Dr			SOUTHBOUND Dwy			EASTBOUND 7th			WESTBOUND Sandalwood Dr			
	LANES:	NL 1	NT X	NR 1	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	1	0	0	0	0	0	0	1	0	1	0	0	3
	7:15 AM	0	0	2	0	0	0	0	1	0	3	1	0	7
	7:30 AM	0	0	1	0	0	0	0	1	0	2	1	0	5
	7:45 AM	0	0	2	0	0	0	0	2	0	0	3	0	7
	8:00 AM	0	0	1	0	0	0	0	3	0	4	3	0	11
	8:15 AM	0	0	1	0	0	0	0	2	0	0	0	0	3
	8:30 AM	0	0	1	0	0	0	0	1	0	1	0	0	3
	8:45 AM	0	0	0	0	0	0	0	1	0	3	1	0	5
	VOLUMES	1	0	8	0	0	0	0	12	0	14	9	0	44
	APPROACH %	11%	0%	89%	0%	0%	0%	0%	100%	0%	61%	39%	0%	
	APP/DEPART	9	/	0	0	/	14	12	/	20	23	/	10	0
	BEGIN PEAK HR	7:00 AM												
	VOLUMES	1	0	5	0	0	0	0	5	0	6	5	0	22
	APPROACH %	17%	0%	83%	0%	0%	0%	0%	100%	0%	55%	45%	0%	
	PEAK HR FACTOR		0.750			0.000			0.625			0.688		0.786
	APP/DEPART	6	/	0	0	/	6	5	/	10	11	/	6	0
PM	4:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	1	0	0	0	0	0	1	0	0	0	2
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	1	0	0	0	0	1	1	0	3	0	6
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	50%	50%	0%	100%	0%	
	APP/DEPART	1	/	0	0	/	1	2	/	2	3	/	3	0
	BEGIN PEAK HR	4:15 PM												
	VOLUMES	0	0	1	0	0	0	0	0	1	0	0	0	2
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	
	PEAK HR FACTOR		0.250			0.000			0.250			0.000		0.250
	APP/DEPART	1	/	0	0	/	1	1	/	1	0	/	0	0

U-TURNS NB	SB	EB	WB	TTL	RTOR NRR X	SRR X	ERR X	WRR X
0	0	0	0	0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Sandalwood Dr	LOCATION #:	1
TUESDAY	EAST & WEST:	7th	CONTROL:	STOP ALL

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Sandalwood Dr			SOUTHBOUND Dwy			EASTBOUND 7th			WESTBOUND Sandalwood Dr			
	LANES:	NL 1	NT X	NR 1	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	VOLUMES	0	0	0	0	0	0	0	1	0	0	1	0	2
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	0	/	0	1	/	1	1	/	1	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	1	0	0	0	0	0	0	1	0	0	2
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	1	0	0	0	0	0	0	2	0	0	3
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
	APP/DEPART	1	/	0	0	/	2	0	/	1	2	/	0	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	1	0	0	1
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.250		0.250
	APP/DEPART	0	/	0	0	/	1	0	/	0	1	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Dwy

NORTH SIDE

7th WEST SIDE EAST SIDE **Sandalwood Dr**

SOUTH SIDE

Sandalwood Dr

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Sandalwood Dr	LOCATION #:	1
TUESDAY	EAST & WEST:	7th	CONTROL:	STOP ALL

CLASS 4:	NOTES:
4 OR MORE AXLE TRUCKS	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Sandalwood Dr			SOUTHBOUND Dwy			EASTBOUND 7th			WESTBOUND Sandalwood Dr			
	LANES:	NL 1	NT X	NR 1	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	1	0	1
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	1	/	1	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
	5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	VOLUMES	0	0	0	0	0	0	0	1	0	1	2	0	4
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	33%	67%	0%	
	APP/DEPART	0	/	0	0	/	1	1	/	1	3	/	2	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	1	0	1
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.250		0.250
	APP/DEPART	0	/	0	0	/	0	0	/	0	1	/	1	0

U-TURNS					RTOR			
NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
0	0	0	0	0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Sandalwood Dr	LOCATION #:	1
TUESDAY	EAST & WEST:	7th	CONTROL:	STOP ALL

CLASS 5: RV

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND (Sandalwood Dr)			SOUTHBOUND (Dwy)			EASTBOUND (7th)			WESTBOUND (Sandalwood Dr)			
LANES:	NL 1	NT X	NR 1	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1	TOTAL
AM 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
BEGIN PEAK HR		7:00 AM											
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
BEGIN PEAK HR		4:15 PM											
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Sandalwood Dr	LOCATION #:	1
TUESDAY	EAST & WEST:	7th	CONTROL:	STOP ALL

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Sandalwood Dr			SOUTHBOUND Dwy			EASTBOUND 7th			WESTBOUND Sandalwood Dr				U-TURNS					RTOR			
	LANES:	NL 1	NT X	NR 1	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0
	7:45 AM	2	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0
	VOLUMES	2	0	1	0	0	0	0	0	0	13	0	0	16	0	0	0	0	0	0	0	0	0
	APPROACH %	67%	0%	33%	0%	0%	0%	0%	0%	0%	100%	0%	0%										
	APP/DEPART	3	/	0	0	/	13	0	/	1	13	/	2	0									
	BEGIN PEAK HR		7:00 AM																				
	VOLUMES	2	0	1	0	0	0	0	0	0	3	0	0	6	0	0	0	0		0	0	0	0
	APPROACH %	67%	0%	33%	0%	0%	0%	0%	0%	0%	100%	0%	0%										
	PEAK HR FACTOR		0.250			0.000			0.000			0.250		0.500									
	APP/DEPART	3	/	0	0	/	3	0	/	1	3	/	2	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									
	BEGIN PEAK HR		4:15 PM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000									
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									

Dwy

NORTH SIDE

7th WEST SIDE EAST SIDE **Sandalwood Dr**

SOUTH SIDE

Sandalwood Dr

INTERSECTION TURNING MOVEMENT COUNTS

T101823

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Jan 30, 24

LOCATION: Calimesa
NORTH & SOUTH: I-10 EB Ramps
EAST & WEST: Sandalwood Dr

PROJECT #: SC4429
LOCATION #: 2
CONTROL: STOP ALL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 EB Ramps)			SOUTHBOUND (I-10 EB Ramps)			EASTBOUND (Sandalwood Dr)			WESTBOUND (Sandalwood Dr)			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	14	0	15	0	35	6	43	43	0	156
	7:15 AM	0	0	0	33	2	49	0	58	8	33	88	0	271
	7:30 AM	0	0	0	22	0	46	0	108	19	36	113	0	344
	7:45 AM	0	0	0	27	2	48	0	114	10	48	85	0	334
	8:00 AM	0	0	0	29	2	13	0	42	5	52	25	0	168
	8:15 AM	0	0	0	29	1	16	0	6	6	44	7	0	109
	8:30 AM	0	0	0	40	1	12	0	9	2	60	7	0	131
	8:45 AM	0	0	0	24	0	6	0	10	4	46	13	0	103
	VOLUMES	0	0	0	218	8	205	0	382	60	362	381	0	1,616
	APPROACH %	0%	0%	0%	51%	2%	48%	0%	86%	14%	49%	51%	0%	
	APP/DEPART	0	/	0	431	/	430	442	/	600	743	/	586	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	111	6	156	0	322	42	169	311	0	1,117
	APPROACH %	0%	0%	0%	41%	2%	57%	0%	88%	12%	35%	65%	0%	
	PEAK HR FACTOR		0.000			0.813			0.717			0.805		0.812
	APP/DEPART	0	/	0	273	/	217	364	/	433	480	/	467	0
PM	4:00 PM	0	0	0	68	0	1	0	16	7	58	12	0	162
	4:15 PM	0	0	0	54	1	6	0	15	5	69	13	0	163
	4:30 PM	0	0	0	53	2	6	0	30	15	76	12	0	194
	4:45 PM	0	0	0	53	0	4	0	27	13	79	13	0	189
	5:00 PM	0	0	0	76	0	1	0	17	3	82	16	0	195
	5:15 PM	0	0	0	46	0	3	0	11	2	64	21	0	147
	5:30 PM	0	0	0	58	0	19	0	9	5	72	18	0	181
	5:45 PM	0	0	0	44	2	11	0	18	6	64	23	0	168
	VOLUMES	0	0	0	452	5	51	0	143	56	564	128	0	1,399
	APPROACH %	0%	0%	0%	89%	1%	10%	0%	72%	28%	82%	18%	0%	
	APP/DEPART	0	/	0	508	/	625	199	/	595	692	/	179	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	236	3	17	0	89	36	306	54	0	741
	APPROACH %	0%	0%	0%	92%	1%	7%	0%	71%	29%	85%	15%	0%	
	PEAK HR FACTOR		0.000			0.831			0.694			0.918		0.950
	APP/DEPART	0	/	0	256	/	345	125	/	325	360	/	71	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

I-10 EB Ramps

NORTH LEG

Sandalwood Dr WEST LEG EAST LEG **Sandalwood Dr**

SOUTH LEG

I-10 EB Ramps

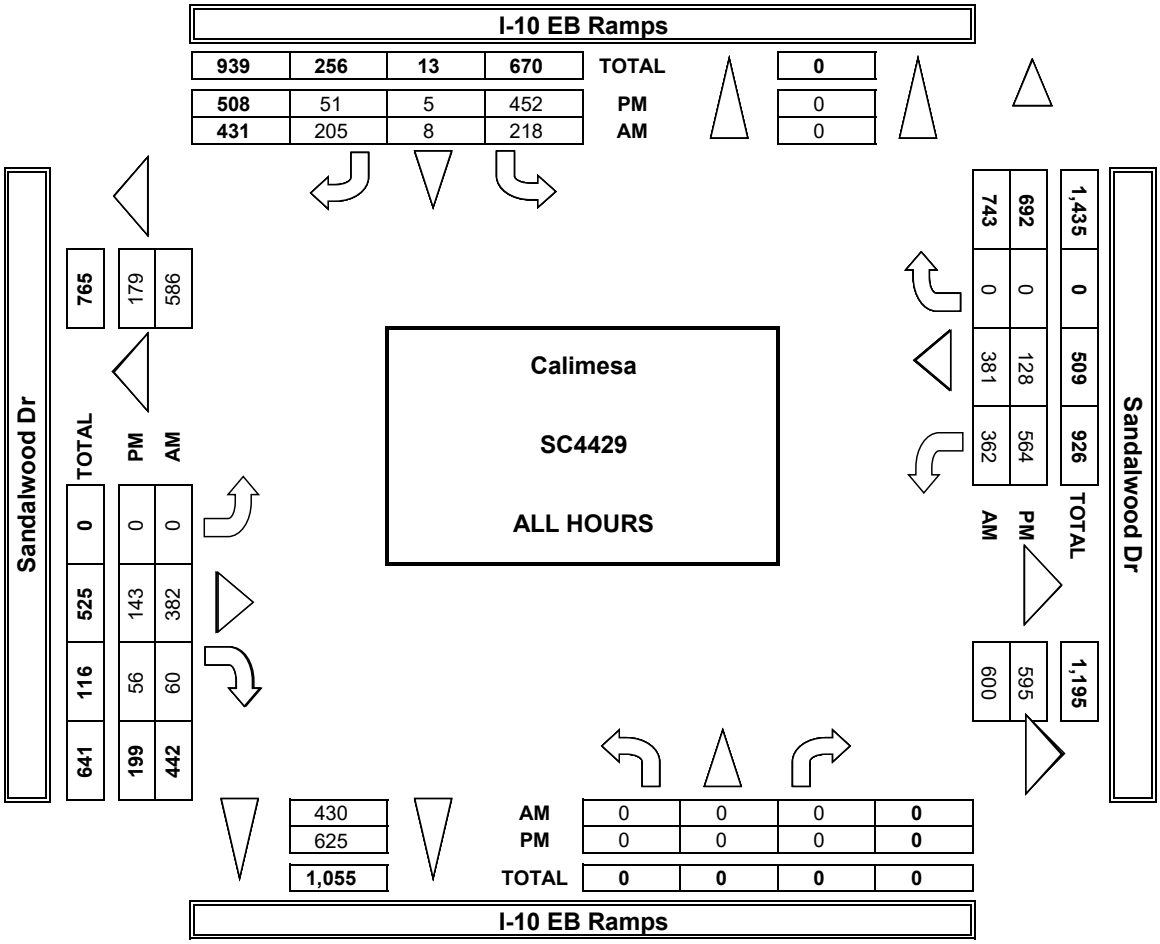
		ALL PED + BIKE & SCOOTER				
		E LEG	W LEG	S LEG	N LEG	TOTAL
AM	7:00 AM	0	0	0	0	0
	7:15 AM	0	0	0	1	1
	7:30 AM	0	0	0	0	0
	7:45 AM	0	0	0	1	1
	8:00 AM	0	0	0	0	0
	8:15 AM	0	0	0	1	1
	8:30 AM	0	0	0	1	1
	8:45 AM	0	1	0	0	1
	TOTAL	0	1	0	4	5
PM	4:00 PM	0	0	0	0	0
	4:15 PM	0	1	0	0	1
	4:30 PM	0	0	0	0	0
	4:45 PM	0	0	0	0	0
	5:00 PM	0	0	0	0	0
	5:15 PM	0	0	0	0	0
	5:30 PM	0	0	0	0	0
	5:45 PM	0	0	0	1	1
	TOTAL	0	1	0	1	2

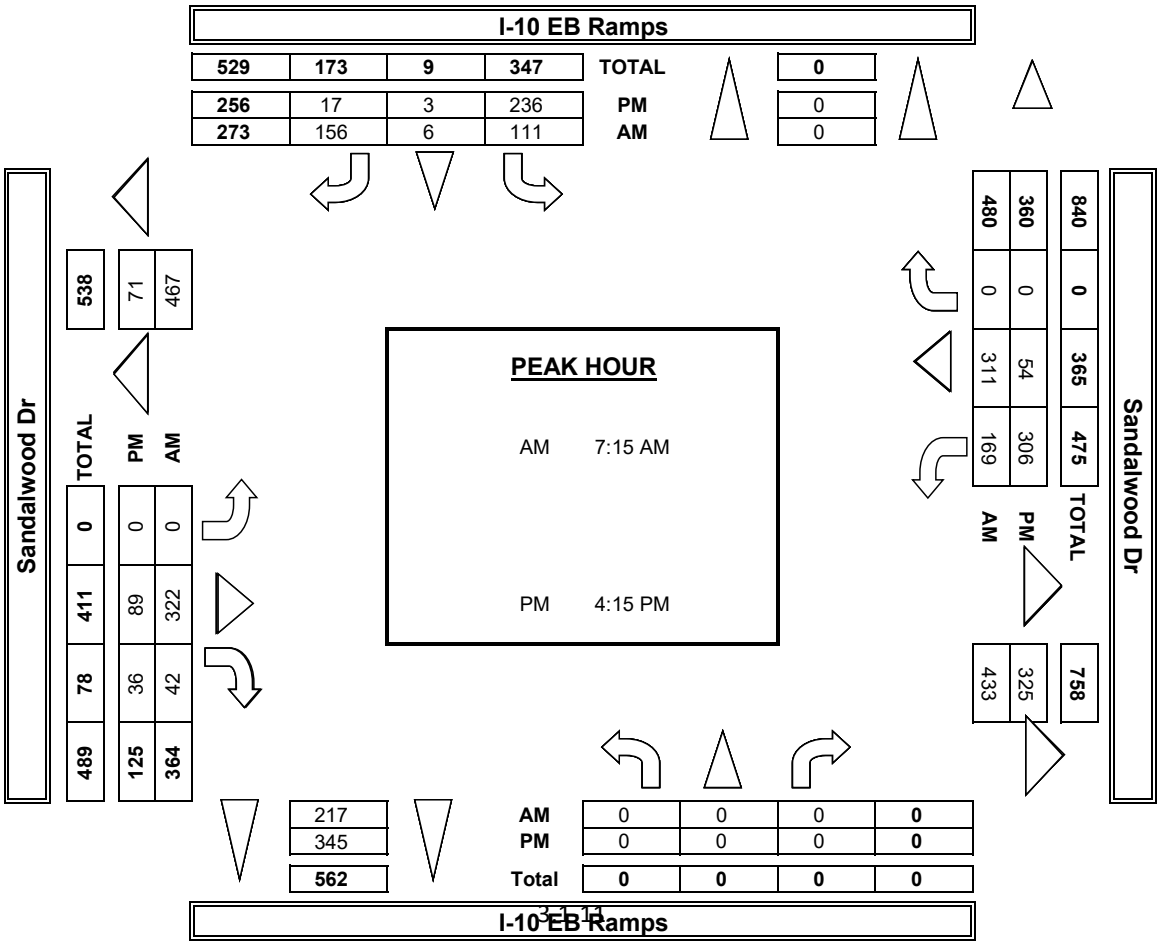
	PEDESTRIAN CROSSINGS				
	E LEG	W LEG	S LEG	N LEG	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	1	1
8:30 AM	0	0	0	1	1
8:45 AM	0	1	0	0	1
TOTAL	0	1	0	2	3
4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	1	1
TOTAL	0	1	0	1	2

	BICYCLE & SCOOTER CROSSINGS				
	EL	WL	SL	NL	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	1	1
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	1	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL	0	0	0	2	2
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL	0	0	0	0	0

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB Ramps	LOCATION #:	2
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	STOP ALL

CLASS 1:	NOTES:
PASSENGER VEHICLES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 EB Ramps)			SOUTHBOUND (I-10 EB Ramps)			EASTBOUND (Sandalwood Dr)			WESTBOUND (Sandalwood Dr)			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	14	0	15	0	35	5	41	42	0	152
	7:15 AM	0	0	0	29	1	48	0	57	6	29	85	0	255
	7:30 AM	0	0	0	17	0	45	0	106	19	33	108	0	328
	7:45 AM	0	0	0	24	0	46	0	110	9	45	84	0	318
	8:00 AM	0	0	0	28	0	12	0	38	5	42	18	0	143
	8:15 AM	0	0	0	28	0	15	0	5	4	42	7	0	101
	8:30 AM	0	0	0	38	0	4	0	7	2	58	6	0	115
	8:45 AM	0	0	0	24	0	3	0	8	4	44	10	0	93
	VOLUMES	0	0	0	202	1	188	0	366	54	334	360	0	1,505
	APPROACH %	0%	0%	0%	52%	0%	48%	0%	87%	13%	48%	52%	0%	
	APP/DEPART	0	/	0	391	/	389	420	/	568	694	/	548	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	98	1	151	0	311	39	149	295	0	1,044
	APPROACH %	0%	0%	0%	39%	0%	60%	0%	89%	11%	34%	66%	0%	
	PEAK HR FACTOR		0.000			0.801			0.700			0.787		0.796
	APP/DEPART	0	/	0	250	/	189	350	/	409	444	/	446	0
PM	4:00 PM	0	0	0	61	0	1	0	15	7	55	11	0	150
	4:15 PM	0	0	0	51	1	6	0	15	5	65	11	0	154
	4:30 PM	0	0	0	51	0	6	0	29	15	75	12	0	188
	4:45 PM	0	0	0	51	0	4	0	27	13	77	13	0	185
	5:00 PM	0	0	0	73	0	1	0	17	3	79	16	0	189
	5:15 PM	0	0	0	44	0	3	0	11	2	63	19	0	142
	5:30 PM	0	0	0	55	0	17	0	9	4	68	17	0	170
	5:45 PM	0	0	0	42	0	11	0	18	5	63	23	0	162
	VOLUMES	0	0	0	428	1	49	0	141	54	545	122	0	1,340
	APPROACH %	0%	0%	0%	90%	0%	10%	0%	72%	28%	82%	18%	0%	
	APP/DEPART	0	/	0	478	/	600	195	/	569	667	/	171	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	226	1	17	0	88	36	296	52	0	716
	APPROACH %	0%	0%	0%	93%	0%	7%	0%	71%	29%	85%	15%	0%	
	PEAK HR FACTOR		0.000			0.824			0.705			0.916		0.947
	APP/DEPART	0	/	0	244	/	333	124	/	314	348	/	69	0

U-TURNS						RTOR			
NB	SB	EB	WB	TTL		NRR X	SRR X	ERR X	WRR X
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0			0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0

I-10 EB Ramps

NORTH SIDE

Sandalwood Dr WEST SIDE EAST SIDE **Sandalwood Dr**

SOUTH SIDE

I-10 EB Ramps

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB Ramps	LOCATION #:	2
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	STOP ALL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 EB Ramps			SOUTHBOUND I-10 EB Ramps			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	1	1	1	0	3
	7:15 AM	0	0	0	1	0	1	0	1	2	3	3	0	11
	7:30 AM	0	0	0	5	0	0	0	2	0	1	3	0	11
	7:45 AM	0	0	0	3	0	2	0	3	1	2	1	0	12
	8:00 AM	0	0	0	1	0	1	0	4	0	9	6	0	21
	8:15 AM	0	0	0	1	0	0	0	1	2	1	0	0	5
	8:30 AM	0	0	0	1	0	1	0	2	0	2	0	0	6
	8:45 AM	0	0	0	0	0	1	0	1	0	0	3	0	5
	VOLUMES	0	0	0	12	0	6	0	14	6	19	17	0	74
	APPROACH %	0%	0%	0%	67%	0%	33%	0%	70%	30%	53%	47%	0%	
	APP/DEPART	0	/	0	18	/	25	20	/	26	36	/	23	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	10	0	4	0	10	3	15	13	0	55
	APPROACH %	0%	0%	0%	71%	0%	29%	0%	77%	23%	54%	46%	0%	
	PEAK HR FACTOR		0.000			0.700			0.813			0.467		0.655
	APP/DEPART	0	/	0	14	/	18	13	/	20	28	/	17	0
PM	4:00 PM	0	0	0	6	0	0	0	1	0	3	1	0	11
	4:15 PM	0	0	0	3	0	0	0	0	0	3	0	0	6
	4:30 PM	0	0	0	2	0	0	0	1	0	1	0	0	4
	4:45 PM	0	0	0	2	0	0	0	0	0	2	0	0	4
	5:00 PM	0	0	0	1	0	0	0	0	0	3	0	0	4
	5:15 PM	0	0	0	2	0	0	0	0	0	1	1	0	4
	5:30 PM	0	0	0	3	0	0	0	0	0	4	1	0	8
	5:45 PM	0	0	0	2	0	0	0	0	0	1	0	0	3
	VOLUMES	0	0	0	21	0	0	0	2	0	18	3	0	44
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	100%	0%	86%	14%	0%	
	APP/DEPART	0	/	0	21	/	18	2	/	23	21	/	3	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	8	0	0	0	1	0	9	0	0	18
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	
	PEAK HR FACTOR		0.000			0.667			0.250			0.750		0.750
	APP/DEPART	0	/	0	8	/	9	1	/	9	9	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB Ramps	LOCATION #:	2
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	STOP ALL

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 EB Ramps			SOUTHBOUND I-10 EB Ramps			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
	7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
	7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
	8:00 AM	0	0	0	0	0	0	0	0	0	1	1	0	2
	8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
	8:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
	8:45 AM	0	0	0	0	0	0	0	1	0	2	0	0	3
	VOLUMES	0	0	0	1	0	0	0	1	0	7	1	0	10
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	100%	0%	88%	13%	0%	
	APP/DEPART	0	/	0	1	/	7	1	/	2	8	/	1	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	4	1	0	5
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	80%	20%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.625		0.625
	APP/DEPART	0	/	0	0	/	4	0	/	0	5	/	1	0
PM	4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
	4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	1	0	0	1	0	0	0	2
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	2	0	1	0	0	1	0	1	0	5
	APPROACH %	0%	0%	0%	67%	0%	33%	0%	0%	100%	0%	100%	0%	
	APP/DEPART	0	/	0	3	/	1	1	/	2	1	/	2	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	1	0	0	0	0	0	0	1	0	2
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.250			0.000			0.250		0.500
	APP/DEPART	0	/	0	1	/	0	0	/	1	1	/	1	0

U-TURNS NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

I-10 EB Ramps

NORTH SIDE

Sandalwood Dr WEST SIDE EAST SIDE **Sandalwood Dr**

SOUTH SIDE

I-10 EB Ramps

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB Ramps	LOCATION #:	2
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	STOP ALL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 EB Ramps)			SOUTHBOUND (I-10 EB Ramps)			EASTBOUND (Sandalwood Dr)			WESTBOUND (Sandalwood Dr)			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
	7:15 AM	0	0	0	3	1	0	0	0	0	0	0	0	4
	7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
	7:45 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
	8:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
	8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	8:30 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	3	7	0	0	0	0	2	1	0	13
	APPROACH %	0%	0%	0%	30%	70%	0%	0%	0%	0%	67%	33%	0%	
	APP/DEPART	0	/	0	10	/	9	0	/	3	3	/	1	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	3	5	0	0	0	0	1	0	0	9
	APPROACH %	0%	0%	0%	38%	63%	0%	0%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR		0.000			0.500			0.000			0.250		0.563
	APP/DEPART	0	/	0	8	/	6	0	/	3	1	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	2
	4:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
	5:45 PM	0	0	0	0	2	0	0	0	1	0	0	0	3
	VOLUMES	0	0	0	1	4	1	0	0	1	1	2	0	10
	APPROACH %	0%	0%	0%	17%	67%	17%	0%	0%	100%	33%	67%	0%	
	APP/DEPART	0	/	0	6	/	6	1	/	1	3	/	3	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	1	2	0	0	0	0	1	1	0	5
	APPROACH %	0%	0%	0%	33%	67%	0%	0%	0%	0%	50%	50%	0%	
	PEAK HR FACTOR		0.000			0.375			0.000			0.250		0.625
	APP/DEPART	0	/	0	3	/	3	0	/	1	2	/	1	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB Ramps	LOCATION #:	2
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	STOP ALL

CLASS 5: RV

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 EB Ramps)			SOUTHBOUND (I-10 EB Ramps)			EASTBOUND (Sandalwood Dr)			WESTBOUND (Sandalwood Dr)			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

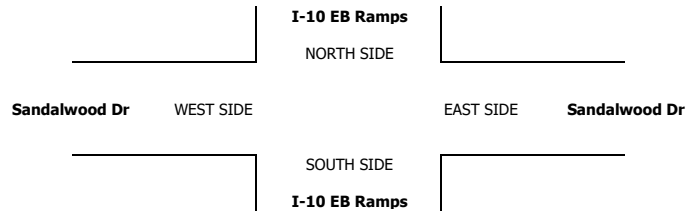
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB Ramps	LOCATION #:	2
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	STOP ALL

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 EB Ramps			SOUTHBOUND I-10 EB Ramps			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr				U-TURNS					RTOR			
	LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL	NRR	SRR	ERR	WRR
		X	X	X	0	1	0	X	1	0	0	1	X							X	X	X	X
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	1	0	0	0	0	2	0	3	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	11	0	1	0	0	2	0	14	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	100%	0%										
	APP/DEPART	0	/	0	11	/	0	1	/	1	2	/	13	0									
	BEGIN PEAK HR		7:15 AM																				
	VOLUMES	0	0	0	0	0	1	0	1	0	0	2	0	4	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	100%	0%										
	PEAK HR FACTOR		0.000			0.250			0.250			0.250		0.333									
	APP/DEPART	0	/	0	1	/	0	1	/	1	2	/	3	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									
	BEGIN PEAK HR		4:15 PM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000									
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									



INTERSECTION TURNING MOVEMENT COUNTS

T101823

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Jan 30, 24	LOCATION:	Calimesa	PROJECT #: SC4429
	NORTH & SOUTH:	I-10 WB On Ramp	LOCATION #: 3
	EAST & WEST:	Sandalwood Dr	CONTROL: NO CONTROL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

		NORTHBOUND I-10 WB On Ramp			SOUTHBOUND I-10 WB On Ramp			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL 0	ET 1	ER X	WL X	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	12	37	0	0	86	120	255
	7:15 AM	0	0	0	0	0	0	13	78	0	0	121	107	319
	7:30 AM	0	0	0	0	0	0	22	108	0	0	149	89	368
	7:45 AM	0	0	0	0	0	0	24	117	0	0	133	76	350
	8:00 AM	0	0	0	0	0	0	17	54	0	0	79	93	243
	8:15 AM	0	0	0	0	0	0	3	32	0	0	51	59	145
	8:30 AM	0	0	0	0	0	0	3	40	0	0	67	77	187
	8:45 AM	0	0	0	0	0	0	1	33	0	0	59	64	157
	VOLUMES	0	0	0	0	0	0	95	499	0	0	745	685	2,024
	APPROACH %	0%	0%	0%	0%	0%	0%	16%	84%	0%	0%	52%	48%	
	APP/DEPART	0	/	780	0	/	0	594	/	499	1,430	/	745	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	0	0	0	71	340	0	0	489	392	1,292
	APPROACH %	0%	0%	0%	0%	0%	0%	17%	83%	0%	0%	56%	44%	
	PEAK HR FACTOR		0.000			0.000			0.729			0.925		0.878
	APP/DEPART	0	/	463	0	/	0	411	/	340	881	/	489	0
PM	4:00 PM	0	0	0	0	0	0	3	81	0	0	70	42	196
	4:15 PM	0	0	0	0	0	0	2	67	0	0	82	42	193
	4:30 PM	0	0	0	0	0	0	8	75	0	0	89	46	218
	4:45 PM	0	0	0	0	0	0	6	70	0	0	92	33	201
	5:00 PM	0	0	0	0	0	0	4	89	0	0	98	54	245
	5:15 PM	0	0	0	0	0	0	1	56	0	0	85	51	193
	5:30 PM	0	0	0	0	0	0	2	64	0	0	89	49	204
	5:45 PM	0	0	0	0	0	0	6	56	0	0	87	38	187
	VOLUMES	0	0	0	0	0	0	32	558	0	0	692	355	1,638
	APPROACH %	0%	0%	0%	0%	0%	0%	5%	94%	0%	0%	66%	34%	
	APP/DEPART	0	/	387	0	/	0	591	/	558	1,047	/	693	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	0	0	19	290	0	0	364	184	857
	APPROACH %	0%	0%	0%	0%	0%	0%	6%	94%	0%	0%	66%	34%	
	PEAK HR FACTOR		0.000			0.000			0.831			0.901		0.874
	APP/DEPART	0	/	203	0	/	0	309	/	290	548	/	364	0

		U-TURNS					RTOR			
		NB 0	SB 0	EB 0	WB 0	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0
	APPROACH %									
	APP/DEPART									
	BEGIN PEAK HR									
	VOLUMES	0	0	0	0		0	0	0	0
	APPROACH %									
	PEAK HR FACTOR									
	APP/DEPART									
PM	4:00 PM	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	1	0	1	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	1	0	1	0	0	0	0
	APPROACH %									
	APP/DEPART									
	BEGIN PEAK HR									
	VOLUMES	0	0	0	0		0	0	0	0
	APPROACH %									
	PEAK HR FACTOR									
	APP/DEPART									

I-10 WB On Ramp

NORTH LEG

Sandalwood Dr WEST LEG EAST LEG **Sandalwood Dr**

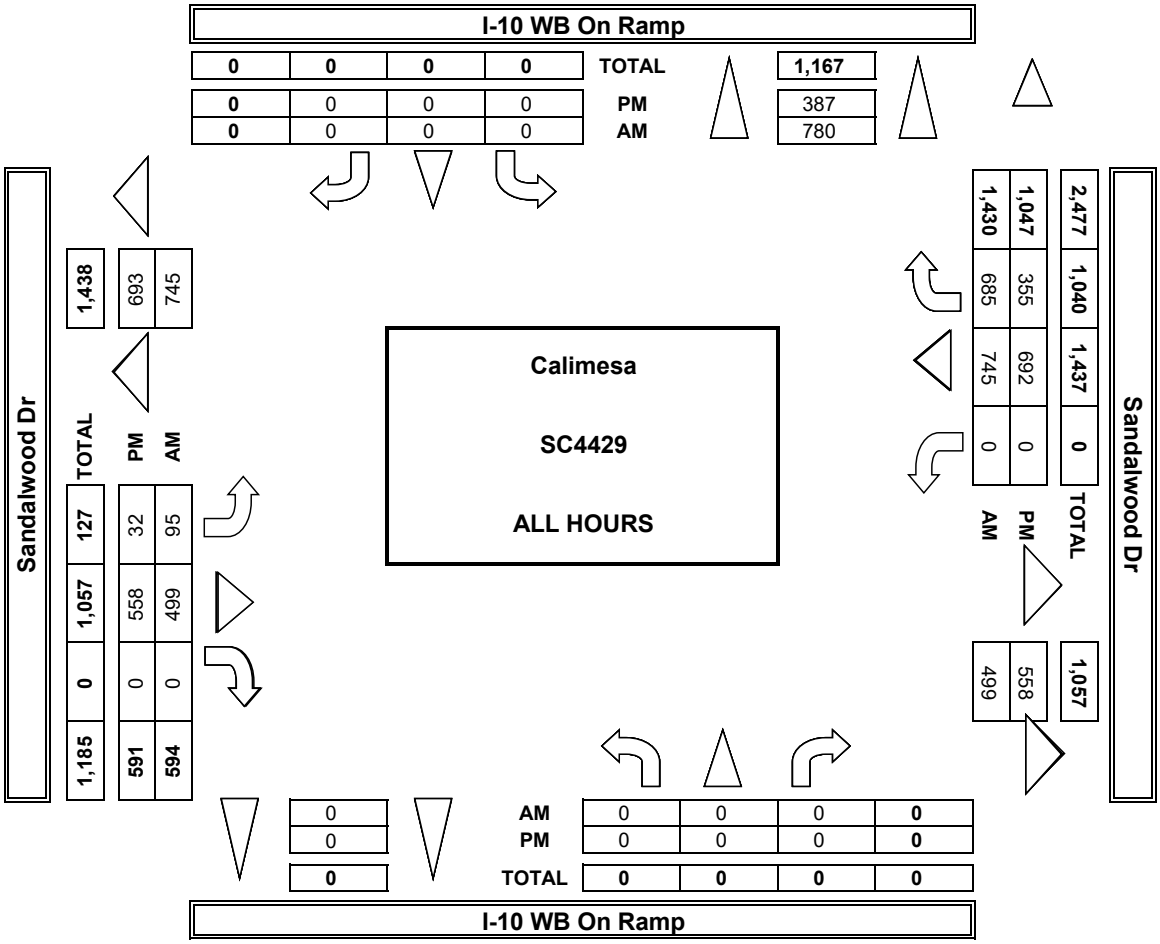
SOUTH LEG

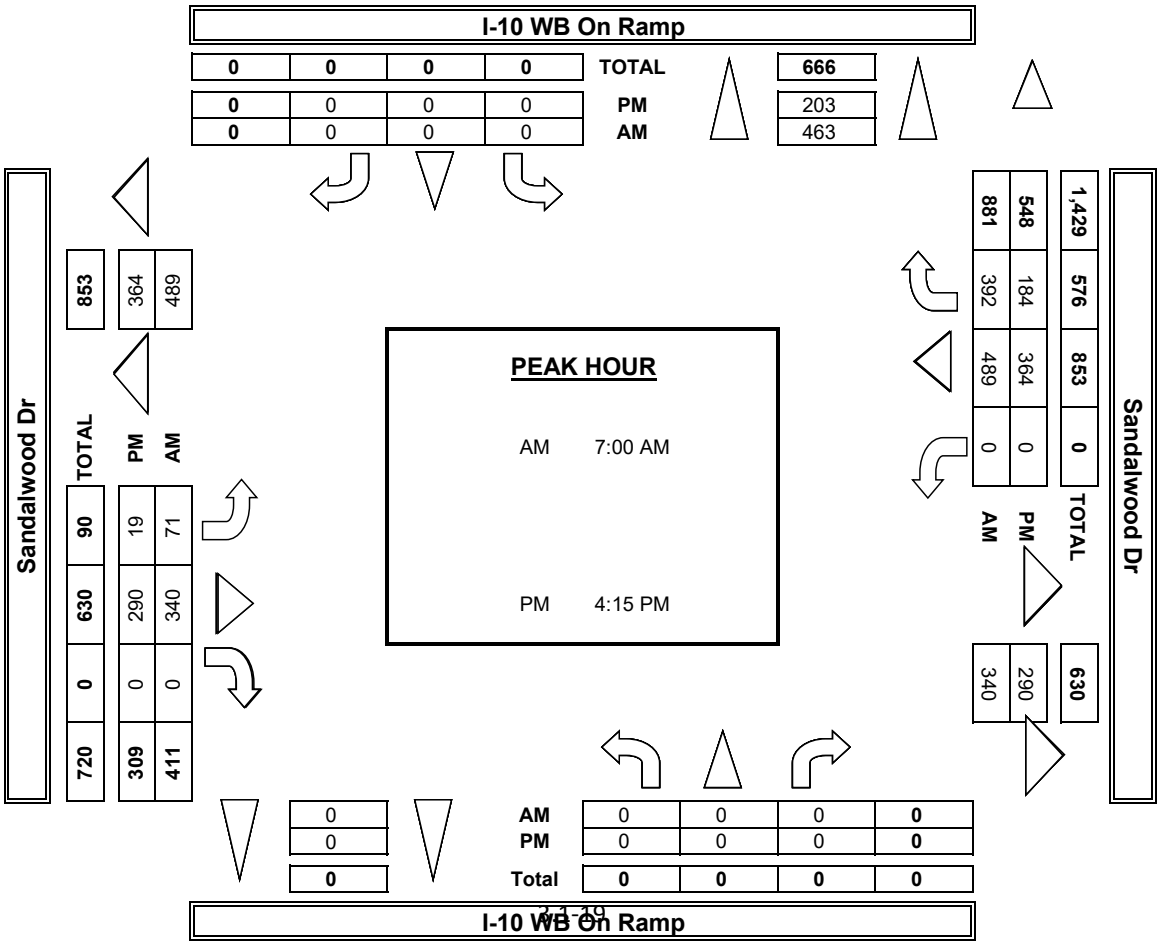
I-10 WB On Ramp

		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
	8:00 AM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	4	4	0	0	0	2	2	0	0	0	2	2
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	2	2	0	0	0	2	2	0	0	0	0	0
	TOTAL	0	0	0	3	3	0	0	0	3	3	0	0	0	0	0

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB On Ramp	LOCATION #:	3
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	NO CONTROL

CLASS 1: PASSENGER VEHICLES

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 WB On Ramp)			SOUTHBOUND (I-10 WB On Ramp)			EASTBOUND (Sandalwood Dr)			WESTBOUND (Sandalwood Dr)				U-TURNS					RTOR			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL 0	ET 1	ER X	WL X	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	12	37	0	0	83	117	249	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	12	74	0	0	114	99	299	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	20	103	0	0	141	85	349	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	24	110	0	0	129	73	336	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	16	50	0	0	62	86	214	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	3	30	0	0	49	56	138	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	2	37	0	0	64	75	178	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	1	31	0	0	54	59	145	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	90	472	0	0	696	650	1,908	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	16%	84%	0%	0%	52%	48%										
	APP/DEPART	0	/	740	0	/	0	562	/	472	1,346	/	696	0									
	BEGIN PEAK HR		7:00 AM																				
	VOLUMES	0	0	0	0	0	0	68	324	0	0	467	374	1,233	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	17%	83%	0%	0%	56%	44%										
	PEAK HR FACTOR		0.000			0.000			0.731			0.930		0.883									
	APP/DEPART	0	/	442	0	/	0	392	/	324	841	/	467	0									
PM	4:00 PM	0	0	0	0	0	0	2	74	0	0	66	39	181	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	2	64	0	0	76	41	183	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	8	72	0	0	88	43	211	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	6	68	0	0	90	31	195	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	4	86	0	0	95	51	236	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	1	54	0	0	82	50	187	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	2	61	0	0	84	48	195	0	0	1	0	1	0	0	0	0
	5:45 PM	0	0	0	0	0	0	6	54	0	0	86	37	183	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	31	533	0	0	667	340	1,572	0	0	1	0	1	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	5%	94%	0%	0%	66%	34%										
	APP/DEPART	0	/	371	0	/	0	565	/	533	1,007	/	668	0									
	BEGIN PEAK HR		4:15 PM																				
	VOLUMES	0	0	0	0	0	0	20	290	0	0	349	166	825	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	6%	94%	0%	0%	68%	32%										
	PEAK HR FACTOR		0.000			0.000			0.861			0.882		0.874									
	APP/DEPART	0	/	186	0	/	0	310	/	290	515	/	349	0									

I-10 WB On Ramp

NORTH SIDE

Sandalwood Dr WEST SIDE EAST SIDE **Sandalwood Dr**

SOUTH SIDE

I-10 WB On Ramp

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB On Ramp	LOCATION #:	3
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	NO CONTROL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB On Ramp			SOUTHBOUND I-10 WB On Ramp			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL 0	ET 1	ER X	WL X	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	2	2	4
	7:15 AM	0	0	0	0	0	0	1	1	0	0	6	7	15
	7:30 AM	0	0	0	0	0	0	2	5	0	0	4	3	14
	7:45 AM	0	0	0	0	0	0	0	6	0	0	3	2	11
	8:00 AM	0	0	0	0	0	0	1	4	0	0	15	6	26
	8:15 AM	0	0	0	0	0	0	0	2	0	0	1	1	4
	8:30 AM	0	0	0	0	0	0	1	2	0	0	2	2	7
	8:45 AM	0	0	0	0	0	0	0	1	0	0	3	3	7
	VOLUMES	0	0	0	0	0	0	5	21	0	0	36	26	88
	APPROACH %	0%	0%	0%	0%	0%	0%	19%	81%	0%	0%	58%	42%	
	APP/DEPART	0	/	31	0	/	0	26	/	21	62	/	36	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	0	0	0	3	12	0	0	15	14	44
	APPROACH %	0%	0%	0%	0%	0%	0%	20%	80%	0%	0%	52%	48%	
	PEAK HR FACTOR		0.000			0.000			0.536			0.558		0.733
	APP/DEPART	0	/	17	0	/	0	15	/	12	29	/	15	0
PM	4:00 PM	0	0	0	0	0	0	1	6	0	0	4	3	14
	4:15 PM	0	0	0	0	0	0	0	3	0	0	3	0	6
	4:30 PM	0	0	0	0	0	0	0	3	0	0	1	2	6
	4:45 PM	0	0	0	0	0	0	0	2	0	0	2	2	6
	5:00 PM	0	0	0	0	0	0	0	1	0	0	3	3	7
	5:15 PM	0	0	0	0	0	0	0	2	0	0	2	1	5
	5:30 PM	0	0	0	0	0	0	0	3	0	0	5	1	9
	5:45 PM	0	0	0	0	0	0	0	2	0	0	1	0	3
	VOLUMES	0	0	0	0	0	0	1	22	0	0	21	12	56
	APPROACH %	0%	0%	0%	0%	0%	0%	4%	96%	0%	0%	64%	36%	
	APP/DEPART	0	/	13	0	/	0	23	/	22	33	/	21	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	0	0	0	9	0	0	9	7	25
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	56%	44%	
	PEAK HR FACTOR		0.000			0.000			0.750			0.667		0.893
	APP/DEPART	0	/	7	0	/	0	9	/	9	16	/	9	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

I-10 WB On Ramp

NORTH SIDE

Sandalwood Dr WEST SIDE EAST SIDE **Sandalwood Dr**

SOUTH SIDE

I-10 WB On Ramp

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB On Ramp	LOCATION #:	3
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	NO CONTROL

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB On Ramp			SOUTHBOUND I-10 WB On Ramp			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL 0	ET 1	ER X	WL X	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
	7:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	2
	7:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	2
	7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
	8:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	2
	8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	8:45 AM	0	0	0	0	0	0	0	1	0	0	2	0	3
	VOLUMES	0	0	0	0	0	0	0	2	0	0	8	4	14
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	67%	33%	
	APP/DEPART	0	/	4	0	/	0	2	/	2	12	/	8	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	3	3	6
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	50%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.750		0.750
	APP/DEPART	0	/	3	0	/	0	0	/	0	6	/	3	0
PM	4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	2	0	0	1	0	3
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	0	/	0	2	/	2	1	/	1	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	0	0	0	1	0	0	1	0	2
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.250			0.250		0.500
	APP/DEPART	0	/	0	0	/	0	1	/	1	1	/	1	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB On Ramp	LOCATION #:	3
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	NO CONTROL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB On Ramp			SOUTHBOUND I-10 WB On Ramp			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL 0	ET 1	ER X	WL X	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	7:15 AM	0	0	0	0	0	0	0	3	0	0	0	0	3
	7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	2
	VOLUMES	0	0	0	0	0	0	0	3	0	0	3	5	11
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	38%	63%	
	APP/DEPART	0	/	5	0	/	0	3	/	3	8	/	3	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	0	0	0	0	3	0	0	2	1	6
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	67%	33%	
	PEAK HR FACTOR		0.000			0.000			0.250			0.750		0.500
	APP/DEPART	0	/	1	0	/	0	3	/	3	3	/	2	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	2	1	3
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
	VOLUMES	0	0	0	0	0	0	0	1	0	0	3	3	7
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	50%	50%	
	APP/DEPART	0	/	3	0	/	0	1	/	1	6	/	3	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	0	0	0	1	0	0	2	2	5
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	50%	50%	
	PEAK HR FACTOR		0.000			0.000			0.250			0.333		0.417
	APP/DEPART	0	/	2	0	/	0	1	/	1	4	/	2	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB On Ramp	LOCATION #:	3
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	NO CONTROL

CLASS 5: RV

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB On Ramp			SOUTHBOUND I-10 WB On Ramp			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL 0	ET 1	ER X	WL X	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB On Ramp	LOCATION #:	3
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	NO CONTROL

CLASS 6: BUSES

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB On Ramp			SOUTHBOUND I-10 WB On Ramp			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL 0	ET 1	ER X	WL X	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
	7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	1	0	0	2	0	3
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	0	/	0	1	/	1	2	/	2	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	0	0	0	0	1	0	0	2	0	3
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.250			0.250		0.375
	APP/DEPART	0	/	0	0	/	0	1	/	1	2	/	2	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

I-10 WB On Ramp

NORTH SIDE

Sandalwood Dr WEST SIDE EAST SIDE **Sandalwood Dr**

SOUTH SIDE

I-10 WB On Ramp

INTERSECTION TURNING MOVEMENT COUNTS

T101823

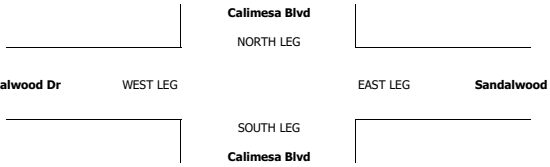
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Jan 30, 24	LOCATION:	Calimesa	PROJECT #: SC4429
	NORTH & SOUTH:	Calimesa Blvd	LOCATION #: 4
	EAST & WEST:	Sandalwood Dr	CONTROL: SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

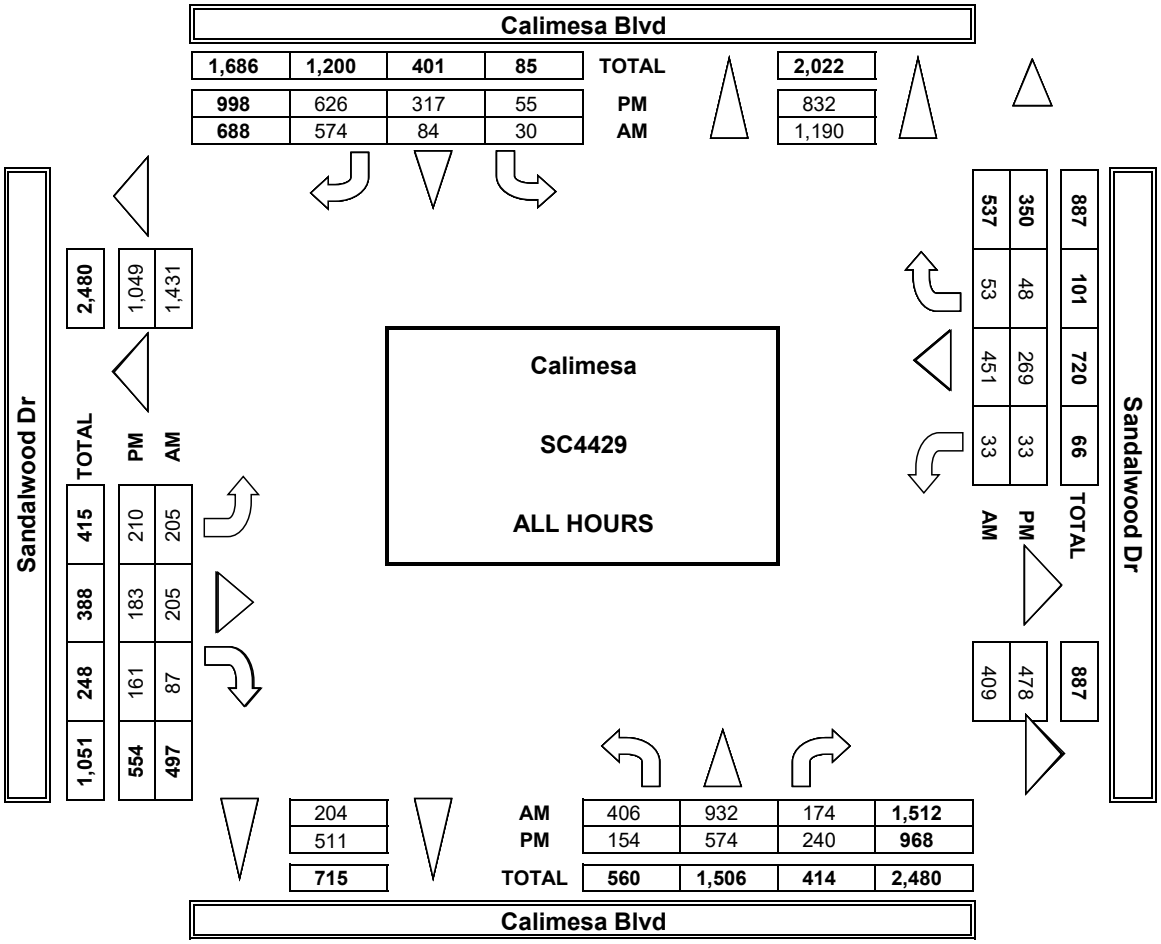
		NORTHBOUND Calimesa Blvd			SOUTHBOUND Calimesa Blvd			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr				U-TURNS					RTOR			
	LANES:	NL 1	NT 1.5	NR 0.5	SL 1	ST 1	SR 1	EL 1.5	ET 1	ER 0.5	WL 1	WT 1	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL	NRR 0	SRR 0	ERR 0	WRR 0
AM	7:00 AM	62	80	20	3	4	69	13	16	8	0	75	4	354	0	0	0	0	0	3	12	4	0
	7:15 AM	61	115	26	1	4	85	26	45	5	4	82	8	462	0	0	0	0	0	6	12	1	0
	7:30 AM	66	141	18	3	11	100	42	52	14	9	73	4	533	0	0	0	0	0	6	22	2	3
	7:45 AM	63	161	28	4	16	72	52	49	16	5	74	8	548	0	0	0	0	0	9	22	9	2
	8:00 AM	51	118	23	5	13	74	30	16	8	2	47	10	397	0	0	0	0	0	5	12	4	4
	8:15 AM	37	127	19	4	11	48	12	8	12	8	25	8	319	0	0	0	0	0	4	8	9	2
	8:30 AM	36	95	20	6	16	65	14	6	20	3	43	6	330	0	0	0	0	0	4	13	9	0
	8:45 AM	30	95	20	4	9	61	16	13	4	2	32	5	291	0	0	0	0	0	3	5	1	2
	VOLUMES	406	932	174	30	84	574	205	205	87	33	451	53	3,234	0	0	0	0	0	40	106	39	13
	APPROACH %	27%	62%	12%	4%	12%	83%	41%	41%	18%	6%	84%	10%										
	APP/DEPART	1,512	/	1,190	688	/	204	497	/	409	537	/	1,431	0									
	BEGIN PEAK HR		7:15 AM																				
	VOLUMES	241	535	95	13	44	331	150	162	43	20	276	30	1,940	0	0	0	0		26	68	16	9
	APPROACH %	28%	61%	11%	3%	11%	85%	42%	46%	12%	6%	85%	9%										
	PEAK HR FACTOR		0.864			0.851			0.759			0.867		0.885									
	APP/DEPART	871	/	715	388	/	107	355	/	270	326	/	848	0									
PM	4:00 PM	13	93	22	7	38	66	22	32	27	3	33	6	362	0	0	0	0	0	5	4	15	3
	4:15 PM	13	86	37	11	41	69	30	23	14	6	42	7	379	0	0	0	0	0	2	15	3	3
	4:30 PM	19	61	32	5	41	89	36	20	19	6	27	7	362	0	0	0	0	0	8	22	12	4
	4:45 PM	12	83	33	5	42	81	25	24	21	4	34	4	368	0	0	0	0	0	5	20	5	1
	5:00 PM	24	68	27	6	41	90	29	28	32	5	38	7	395	0	0	0	0	0	7	22	6	6
	5:15 PM	25	63	26	5	35	81	21	19	16	2	30	6	329	0	0	0	0	0	3	12	12	1
	5:30 PM	18	53	36	7	39	84	23	20	17	3	36	8	344	0	0	0	0	0	8	12	6	0
	5:45 PM	30	67	27	9	40	66	24	17	15	4	29	3	331	0	0	0	0	0	2	14	2	0
	VOLUMES	154	574	240	55	317	626	210	183	161	33	269	48	2,870	0	0	0	0	0	40	121	61	18
	APPROACH %	16%	59%	25%	6%	32%	63%	38%	33%	29%	9%	77%	14%										
	APP/DEPART	968	/	832	998	/	511	554	/	478	350	/	1,049	0									
	BEGIN PEAK HR		4:15 PM																				
	VOLUMES	68	298	129	27	165	329	120	95	86	21	141	25	1,504	0	0	0	0		22	79	26	14
	APPROACH %	14%	60%	26%	5%	32%	63%	40%	32%	29%	11%	75%	13%										
	PEAK HR FACTOR		0.910			0.951			0.846			0.850		0.952									
	APP/DEPART	495	/	443	521	/	272	301	/	251	187	/	538	0									

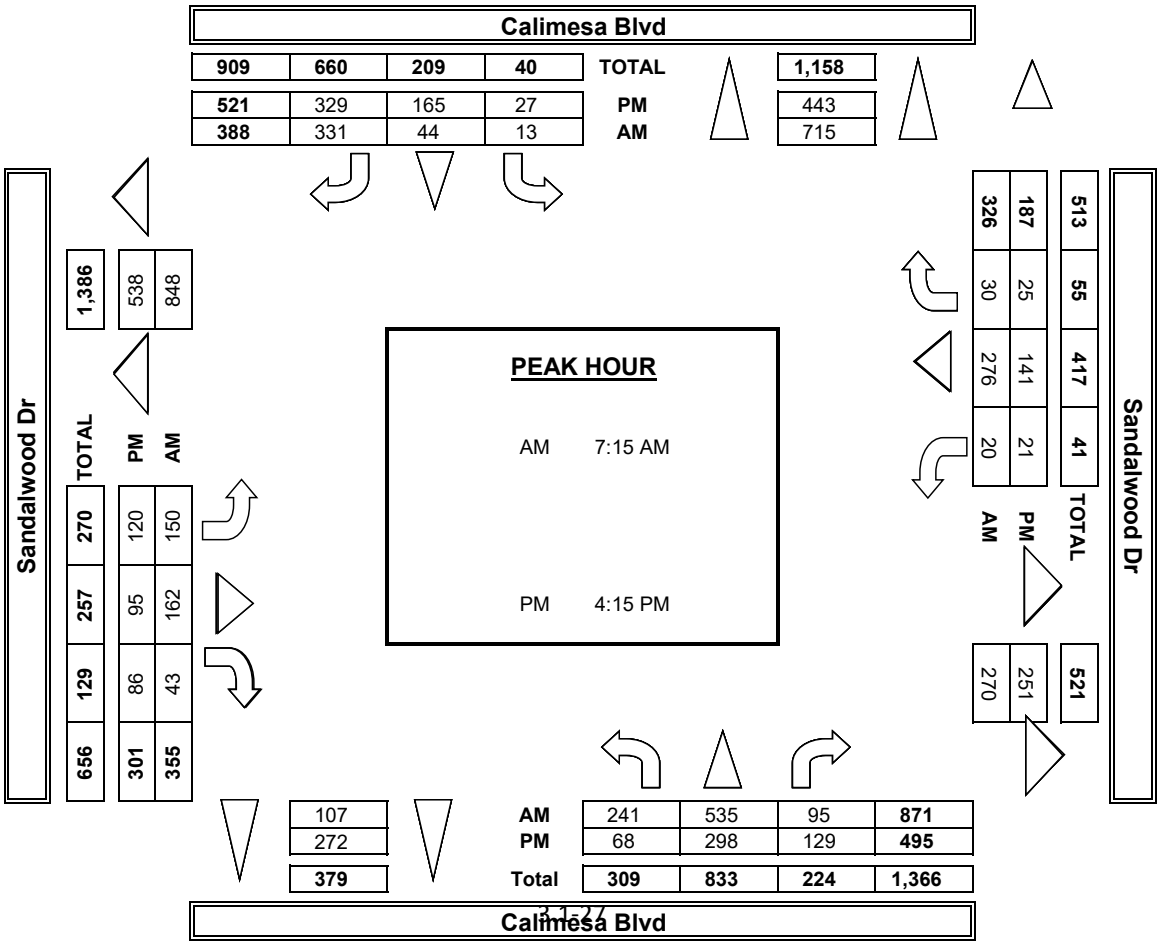


		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	2	1	1	1	5	2	1	1	1	5	0	0	0	0	0
	7:15 AM	0	0	0	2	2	0	0	0	1	1	0	0	0	1	1
	7:30 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	7:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
	8:00 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	4	1	1	5	11	4	1	1	3	9	0	0	0	2	2
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0
	4:30 PM	1	0	0	1	2	1	0	0	1	2	0	0	0	0	0
	4:45 PM	2	0	0	1	3	2	0	0	1	3	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	4	1	0	2	7	4	1	0	2	7	0	0	0	0	0

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TUR

PREPARED BY: AimTD LI

DATE:	LOCATION:	Calimesa
1/30/24	NORTH & SOUTH:	Calimesa Blvd
TUESDAY	EAST & WEST:	Sandalwood Dr

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

		NORTHBOUND Calimesa Blvd			SOUTHBOUNI Calimesa Blvd	
	LANES:	NL 1	NT 1.5	NR 0.5	SL 1	ST 1
AM	7:00 AM	63	82	22	5	4
	7:15 AM	61	115	27	1	6
	7:30 AM	68	145	18	4	11
	7:45 AM	66	164	32	4	16
	8:00 AM	53	121	23	5	13
	8:15 AM	37	128	22	5	11
	8:30 AM	39	98	20	6	17
	8:45 AM	33	98	23	5	11
	VOLUMES	418	949	186	33	88
	APPROACH %	27%	61%	12%	5%	12%
	APP/DEPART	1,553	/	1,215	724	/
	BEGIN PEAK HR		7:15 AM			
	VOLUMES	247	544	99	14	46
	APPROACH %	28%	61%	11%	3%	11%
	PEAK HR FACTOR		0.854			0.840
	APP/DEPART	890	/	731	408	/
PM	4:00 PM	14	96	22	7	38
	4:15 PM	15	90	39	11	43
	4:30 PM	21	62	33	6	42
	4:45 PM	12	86	34	6	42
	5:00 PM	26	70	29	6	42
	5:15 PM	25	63	27	5	35
	5:30 PM	19	58	38	7	40
	5:45 PM	32	67	27	9	41
	VOLUMES	163	591	248	57	322
	APPROACH %	16%	59%	25%	6%	32%
	APP/DEPART	1,001	/	854	1,017	/

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

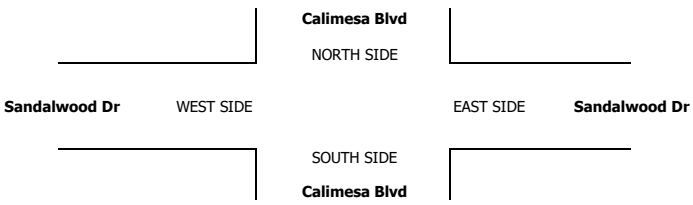
DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Calimesa Blvd	LOCATION #:	4
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	SIGNAL

CLASS 1: PASSENGER VEHICLES

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Calimesa Blvd			SOUTHBOUND Calimesa Blvd			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr				U-TURNS					RTOR			
	LANES:	NL 1	NT 1.5	NR 0.5	SL 1	ST 1	SR 1	EL 1.5	ET 1	ER 0.5	WL 1	WT 1	WR 1	TOTAL	NB	SB	EB	WB	TTL	NRR 0	SRR 0	ERR 0	WRR 0
AM	7:00 AM	60	79	17	1	4	66	13	16	8	0	74	3	341	0	0	0	0	0	3	11	4	0
	7:15 AM	61	115	25	1	2	79	25	42	5	4	73	7	439	0	0	0	0	0	6	11	1	0
	7:30 AM	64	137	18	2	11	91	40	49	14	9	72	4	511	0	0	0	0	0	6	17	2	3
	7:45 AM	61	156	25	4	16	69	50	45	15	5	72	7	525	0	0	0	0	0	8	20	8	2
	8:00 AM	49	114	23	5	13	62	28	14	8	2	37	10	365	0	0	0	0	0	5	10	4	4
	8:15 AM	37	126	16	3	11	46	10	8	12	8	22	8	307	0	0	0	0	0	4	7	9	2
	8:30 AM	34	91	20	6	15	64	14	4	19	3	41	6	317	0	0	0	0	0	4	13	8	0
	8:45 AM	27	93	18	3	8	56	16	11	4	2	30	5	273	0	0	0	0	0	3	4	1	2
	VOLUMES	393	911	162	25	80	533	196	189	85	33	421	50	3,078	0	0	0	0	0	39	93	37	13
	APPROACH %	27%	62%	11%	4%	13%	84%	42%	40%	18%	7%	84%	10%										
	APP/DEPART	1,466	/	1,157	638	/	198	470	/	376	504	/	1,347	0									
	BEGIN PEAK HR		7:15 AM																				
	VOLUMES	235	522	91	12	42	301	143	150	42	20	254	28	1,840	0	0	0	0		25	58	15	9
	APPROACH %	28%	62%	11%	3%	12%	85%	43%	45%	13%	7%	84%	9%										
	PEAK HR FACTOR		0.876			0.853			0.761			0.888		0.876									
	APP/DEPART	848	/	693	355	/	104	335	/	253	302	/	790	0									
PM	4:00 PM	12	87	22	7	38	65	20	27	27	3	28	6	342	0	0	0	0	0	5	4	15	3
	4:15 PM	12	82	36	11	38	65	29	22	13	4	40	7	359	0	0	0	0	0	2	15	3	3
	4:30 PM	18	60	30	4	40	86	35	19	18	5	27	7	349	0	0	0	0	0	8	20	12	4
	4:45 PM	12	81	32	4	42	78	24	23	21	4	33	4	358	0	0	0	0	0	5	20	5	1
	5:00 PM	21	65	25	6	39	89	29	28	29	5	36	6	378	0	0	0	0	0	7	22	4	5
	5:15 PM	25	63	25	5	35	78	21	17	16	2	29	6	322	0	0	0	0	0	3	11	12	1
	5:30 PM	17	50	35	7	38	82	23	17	17	3	33	8	330	0	0	0	0	0	8	12	6	0
	5:45 PM	29	67	27	9	38	65	23	16	15	4	29	2	324	0	0	0	0	0	2	14	2	0
	VOLUMES	146	555	232	53	308	608	204	169	156	30	255	46	2,762	0	0	0	0	0	40	118	59	17
	APPROACH %	16%	59%	25%	5%	32%	63%	39%	32%	29%	9%	77%	14%										
	APP/DEPART	933	/	805	969	/	494	529	/	454	331	/	1,009	0									
	BEGIN PEAK HR		4:15 PM																				
	VOLUMES	63	288	123	25	159	318	117	92	81	18	136	24	1,444	0	0	0	0		22	77	24	13
	APPROACH %	13%	61%	26%	5%	32%	63%	40%	32%	28%	10%	76%	13%										
	PEAK HR FACTOR		0.912			0.937			0.843			0.873		0.955									
	APP/DEPART	474	/	429	502	/	258	290	/	240	178	/	517	0									



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Calimesa Blvd	LOCATION #:	4
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM / PM / MD / OTHER / OTHER	▲ N / ◄ W / E ► / S ▼

		NORTHBOUND Calimesa Blvd			SOUTHBOUND Calimesa Blvd			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr			
	LANES:	NL 1	NT 1.5	NR 0.5	SL 1	ST 1	SR 1	EL 1.5	ET 1	ER 0.5	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	2	0	2	1	0	2	0	0	0	0	0	1	8
	7:15 AM	0	0	1	0	1	6	0	1	0	0	7	1	17
	7:30 AM	1	2	0	1	0	6	2	3	0	0	0	0	15
	7:45 AM	1	5	1	0	0	3	2	3	1	0	1	0	17
	8:00 AM	1	3	0	0	0	11	2	2	0	0	9	0	28
	8:15 AM	0	0	2	1	0	0	2	0	0	0	2	0	7
	8:30 AM	1	3	0	0	1	1	0	1	1	0	2	0	10
	8:45 AM	2	1	0	1	0	4	0	1	0	0	0	0	9
	VOLUMES	8	14	6	4	2	33	8	11	2	0	21	2	111
	APPROACH %	29%	50%	21%	10%	5%	85%	38%	52%	10%	0%	91%	9%	
	APP/DEPART	28	/	24	39	/	4	21	/	21	23	/	62	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	3	10	2	1	1	26	6	9	1	0	17	1	77
	APPROACH %	20%	67%	13%	4%	4%	93%	38%	56%	6%	0%	94%	6%	
	PEAK HR FACTOR		0.536			0.636			0.667			0.500		0.688
	APP/DEPART	15	/	17	28	/	2	16	/	12	18	/	46	0
PM	4:00 PM	1	6	0	0	0	1	1	5	0	0	5	0	19
	4:15 PM	0	2	0	0	2	2	1	1	1	2	1	0	12
	4:30 PM	0	0	2	0	1	3	1	1	1	0	0	0	9
	4:45 PM	0	1	1	1	0	3	1	1	0	0	1	0	9
	5:00 PM	3	3	1	0	2	1	0	0	1	0	2	0	13
	5:15 PM	0	0	1	0	0	2	0	2	0	0	1	0	6
	5:30 PM	1	1	0	0	1	2	0	3	0	0	3	0	11
	5:45 PM	0	0	0	0	2	1	1	1	0	0	0	1	6
	VOLUMES	5	13	5	1	8	15	5	14	3	2	13	1	85
	APPROACH %	22%	57%	22%	4%	33%	63%	23%	64%	14%	13%	81%	6%	
	APP/DEPART	23	/	19	24	/	13	22	/	20	16	/	33	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	3	6	4	1	5	9	3	3	3	2	4	0	43
	APPROACH %	23%	46%	31%	7%	33%	60%	33%	33%	33%	33%	67%	0%	
	PEAK HR FACTOR		0.464			0.938			0.750			0.500		0.827
	APP/DEPART	13	/	9	15	/	10	9	/	8	6	/	16	0

U-TURNS					RTOR			
NB	SB	EB	WB	TTL	NRR 0	SRR 0	ERR 0	WRR 0
0	0	0	0	0	0	1	0	0
0	0	0	0	0	0	1	0	0
0	0	0	0	0	0	4	0	0
0	0	0	0	0	0	2	1	0
0	0	0	0	0	0	1	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1	0
0	0	0	0	0	0	1	0	0
0	0	0	0	0	0	10	2	0
0	0	0	0		0	8	1	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	2	0	0
0	0	0	0		0	2	0	0

Calimesa Blvd

NORTH SIDE

Sandalwood Dr WEST SIDE EAST SIDE **Sandalwood Dr**

SOUTH SIDE

Calimesa Blvd

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Calimesa Blvd	LOCATION #:	4
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	SIGNAL

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Calimesa Blvd			SOUTHBOUND Calimesa Blvd			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr			
	LANES:	NL 1	NT 1.5	NR 0.5	SL 1	ST 1	SR 1	EL 1.5	ET 1	ER 0.5	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	0	0	1	1	0	0	0	0	0	0	1	0	3
	7:15 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
	7:30 AM	0	1	0	0	0	1	0	0	0	0	1	0	3
	7:45 AM	0	0	1	0	0	0	0	0	0	0	1	1	3
	8:00 AM	1	1	0	0	0	1	0	0	0	0	0	0	3
	8:15 AM	0	1	0	0	0	1	0	0	0	0	1	0	3
	8:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
	8:45 AM	0	0	1	0	0	0	0	1	0	0	2	0	4
	VOLUMES	1	4	3	1	1	3	0	2	0	0	8	1	24
	APPROACH %	13%	50%	38%	20%	20%	60%	0%	100%	0%	0%	89%	11%	
	APP/DEPART	8	/	5	5	/	1	2	/	6	9	/	12	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	1	2	1	0	1	2	0	0	0	0	4	1	12
	APPROACH %	25%	50%	25%	0%	33%	67%	0%	0%	0%	0%	80%	20%	
	PEAK HR FACTOR		0.500			0.750			0.000			0.625		1.000
	APP/DEPART	4	/	3	3	/	1	0	/	1	5	/	7	0
PM	4:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
	4:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	2
	4:30 PM	0	1	0	1	0	0	0	0	0	1	0	0	3
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	1	0	0	0	0	0	1	0	0	1	3
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	2	1	1	0	1	1	0	1	1	0	1	9
	APPROACH %	0%	67%	33%	50%	0%	50%	50%	0%	50%	50%	0%	50%	
	APP/DEPART	3	/	4	2	/	2	2	/	2	2	/	1	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	2	1	1	0	1	0	0	1	1	0	1	8
	APPROACH %	0%	67%	33%	50%	0%	50%	0%	0%	100%	50%	0%	50%	
	PEAK HR FACTOR		0.750			0.500			0.250			0.500		0.667
	APP/DEPART	3	/	3	2	/	2	1	/	2	2	/	1	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Calimesa Blvd	LOCATION #:	4
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Calimesa Blvd			SOUTHBOUND Calimesa Blvd			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr			
	LANES:	NL 1	NT 1.5	NR 0.5	SL 1	ST 1	SR 1	EL 1.5	ET 1	ER 0.5	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	2
	7:15 AM	0	0	0	0	0	0	1	2	0	0	0	0	3
	7:30 AM	0	1	0	0	0	1	0	0	0	0	0	0	2
	7:45 AM	1	0	1	0	0	0	0	0	0	0	0	0	2
	8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	8:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	2
	8:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
	8:45 AM	1	1	1	0	1	1	0	0	0	0	0	0	5
	VOLUMES	3	3	3	0	1	4	1	2	0	0	1	0	18
	APPROACH %	33%	33%	33%	0%	20%	80%	33%	67%	0%	0%	100%	0%	
	APP/DEPART	9	/	4	5	/	1	3	/	5	1	/	8	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	1	1	1	0	0	1	1	2	0	0	1	0	8
	APPROACH %	33%	33%	33%	0%	0%	100%	33%	67%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.375			0.250			0.250			0.250		0.667
	APP/DEPART	3	/	2	1	/	0	3	/	3	1	/	3	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	1	1	1	0	0	1	0	0	0	0	1	0	5
	4:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
	5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
	5:30 PM	0	2	1	0	0	0	0	0	0	0	0	0	3
	5:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
	VOLUMES	3	4	2	0	0	2	0	0	1	0	1	0	13
	APPROACH %	33%	44%	22%	0%	0%	100%	0%	0%	100%	0%	100%	0%	
	APP/DEPART	9	/	4	2	/	1	1	/	2	1	/	6	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	2	2	1	0	0	1	0	0	1	0	1	0	8
	APPROACH %	40%	40%	20%	0%	0%	100%	0%	0%	100%	0%	100%	0%	
	PEAK HR FACTOR		0.417			0.250			0.250			0.250		0.400
	APP/DEPART	5	/	2	1	/	1	1	/	1	1	/	4	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR 0	SRR 0	ERR 0	WRR 0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Calimesa Blvd

NORTH SIDE

Sandalwood Dr WEST SIDE EAST SIDE **Sandalwood Dr**

SOUTH SIDE

Calimesa Blvd

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Calimesa Blvd	LOCATION #:	4
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	SIGNAL

CLASS 5: RV

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Calimesa Blvd			SOUTHBOUND Calimesa Blvd			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr			
	LANES:	NL 1	NT 1.5	NR 0.5	SL 1	ST 1	SR 1	EL 1.5	ET 1	ER 0.5	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	1	0	0	0	0	0	0	0	1
	APPROACH %	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	1	/	1	0	/	0	0	/	0	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	1	0	0	0	0	0	0	0	1
	APPROACH %	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.250			0.000			0.000		0.250
	APP/DEPART	0	/	0	1	/	1	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Calimesa Blvd

NORTH SIDE

Sandalwood Dr WEST SIDE EAST SIDE **Sandalwood Dr**

SOUTH SIDE

Calimesa Blvd

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Calimesa Blvd	LOCATION #:	4
TUESDAY	EAST & WEST:	Sandalwood Dr	CONTROL:	SIGNAL

CLASS 6: BUSES

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Calimesa Blvd			SOUTHBOUND Calimesa Blvd			EASTBOUND Sandalwood Dr			WESTBOUND Sandalwood Dr				U-TURNS					RTOR			
	LANES:	NL 1	NT 1.5	NR 0.5	SL 1	ST 1	SR 1	EL 1.5	ET 1	ER 0.5	WL 1	WT 1	WR 1	TOTAL	NB	SB	EB	WB	TTL	NRR 0	SRR 0	ERR 0	WRR 0
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	1	0	0	0	0	1	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	APPROACH %	100%	0%	0%	0%	0%	100%	0%	100%	0%	0%	0%	0%										
	APP/DEPART	1	/	0	1	/	0	1	/	1	0	/	2	0									
	BEGIN PEAK HR		7:15 AM																				
	VOLUMES	1	0	0	0	0	1	0	1	0	0	0	0	3	0	0	0	0		0	0	0	0
	APPROACH %	100%	0%	0%	0%	0%	100%	0%	100%	0%	0%	0%	0%										
	PEAK HR FACTOR		0.250			0.250			0.250			0.000		0.375									
	APP/DEPART	1	/	0	1	/	0	1	/	1	0	/	2	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									
	BEGIN PEAK HR		4:15 PM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000									
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									

Calimesa Blvd

NORTH SIDE

Sandalwood Dr WEST SIDE EAST SIDE **Sandalwood Dr**

SOUTH SIDE

Calimesa Blvd

INTERSECTION TURNING MOVEMENT COUNTS

T101823

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Jan 30, 24	LOCATION:	Calimesa	PROJECT #: SC4429
	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #: 5
	EAST & WEST:	Calimesa Blvd	CONTROL: STOP ALL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 WB Off Ramp)			SOUTHBOUND (Calimesa Blvd)			EASTBOUND (Calimesa Blvd)			WESTBOUND (Calimesa Blvd)			
	LANES:	NL X	NT 1	NR 0	SL 1	ST X	SR X	EL X	ET X	ER X	WL X	WT X	WR 1	TOTAL
AM	7:00 AM	0	44	0	12	0	0	0	0	0	0	0	123	179
	7:15 AM	0	35	0	12	0	0	0	0	0	0	0	166	213
	7:30 AM	0	29	0	34	0	0	0	0	0	0	0	196	259
	7:45 AM	0	67	0	34	0	0	0	0	0	0	0	185	286
	8:00 AM	0	49	0	23	0	0	0	0	0	0	0	143	215
	8:15 AM	0	48	0	31	0	0	0	0	0	0	0	135	214
	8:30 AM	0	67	1	39	0	0	0	0	0	0	0	84	191
	8:45 AM	0	74	0	15	0	0	0	0	0	0	0	71	160
	VOLUMES	0	413	1	200	0	0	0	0	0	0	0	1,103	1,718
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	414	/	1,517	201	/	0	0	/	201	1,103	/	0	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	180	0	103	0	0	0	0	0	0	0	690	974
	APPROACH %	0%	100%	0%	99%	0%	0%	0%	0%	0%	0%	0%	100%	
	PEAK HR FACTOR		0.672			0.765			0.000			0.880		0.851
	APP/DEPART	180	/	871	104	/	0	0	/	103	690	/	0	0
PM	4:00 PM	0	85	1	67	0	0	0	0	0	0	0	42	195
	4:15 PM	0	93	0	61	0	0	0	0	0	0	0	43	197
	4:30 PM	0	74	0	66	0	0	0	0	0	0	0	38	178
	4:45 PM	0	85	0	67	0	0	0	0	0	0	0	43	195
	5:00 PM	0	81	0	72	0	0	0	0	0	0	0	41	194
	5:15 PM	0	79	0	53	0	0	0	0	0	0	0	35	167
	5:30 PM	0	64	0	59	0	0	0	0	0	0	0	43	166
	5:45 PM	0	88	0	59	0	0	0	0	0	0	0	36	183
	VOLUMES	0	649	1	504	0	0	0	0	0	0	0	321	1,476
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	650	/	971	505	/	0	0	/	505	321	/	0	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	337	1	261	0	0	0	0	0	0	0	166	766
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	
	PEAK HR FACTOR		0.909			0.963			0.000			0.965		0.972
	APP/DEPART	338	/	504	262	/	0	0	/	262	166	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	1	0	0	
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	1	0	0	

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Calimesa Blvd

NORTH LEG

Calimesa Blvd WEST LEG — EAST LEG **Calimesa Blvd**

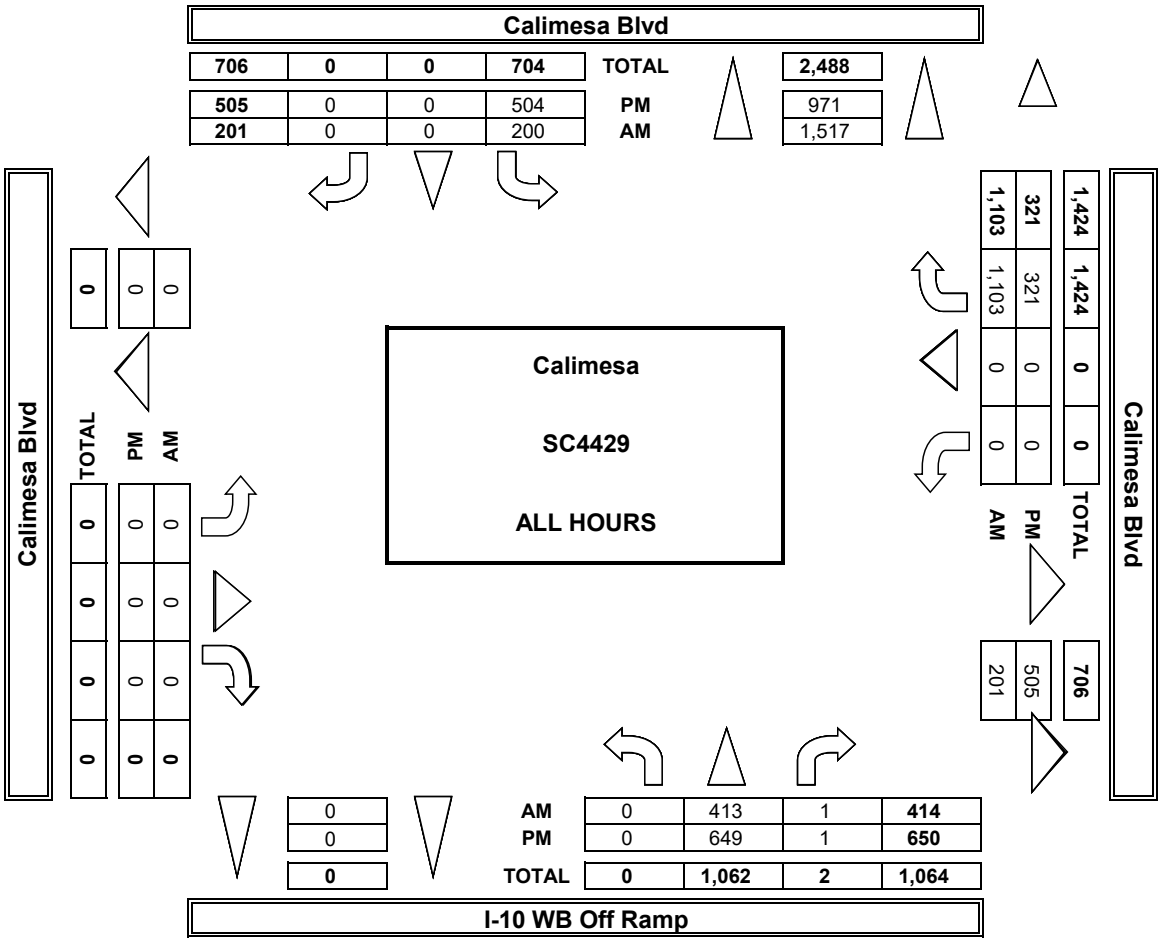
SOUTH LEG

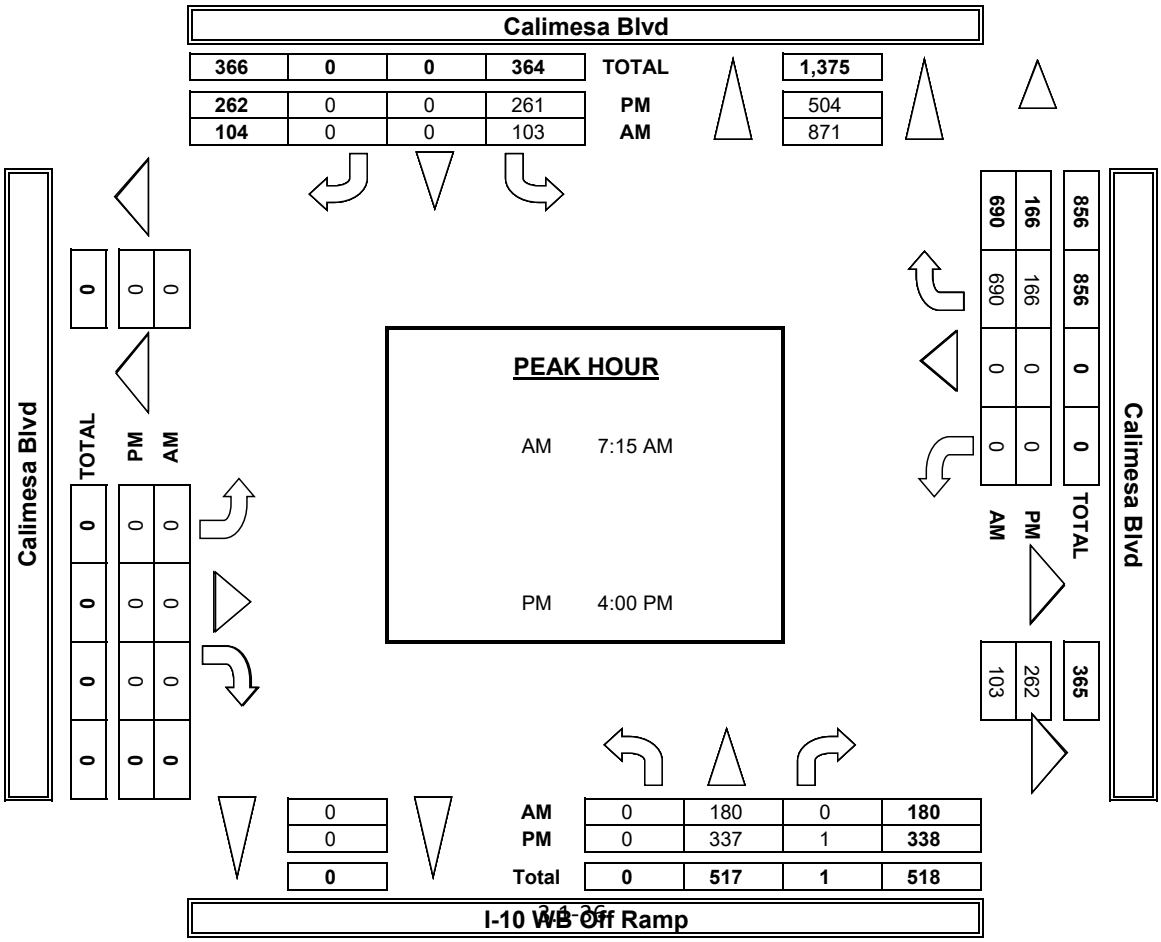
I-10 WB Off Ramp

		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TUR

PREPARED BY: AimTD LL

DATE:	LOCATION:	Calimesa
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp
TUESDAY	EAST & WEST:	Calimesa Blvd

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

		NORTHBOUND I-10 WB Off Ramp			SOUTHBOUNI Calimesa Blvd	
	LANES:	NL X	NT 1	NR 0	SL 1	ST X
AM	7:00 AM	0	48	0	12	0
	7:15 AM	0	35	0	14	0
	7:30 AM	0	30	0	34	0
	7:45 AM	0	71	0	35	0
	8:00 AM	0	51	0	23	0
	8:15 AM	0	49	0	31	0
	8:30 AM	0	70	1	40	0
	8:45 AM	0	82	0	17	0
	VOLUMES	0	435	1	205	0
	APPROACH %	0%	100%	0%	100%	0%
	APP/DEPART	436	/	1,557	205	/
	BEGIN PEAK HR		7:15 AM			
	VOLUMES	0	187	0	105	0
	APPROACH %	0%	100%	0%	100%	0%
	PEAK HR FACTOR		0.657			0.761
	APP/DEPART	187	/	889	105	/
PM	4:00 PM	0	88	1	67	0
	4:15 PM	0	98	0	65	0
	4:30 PM	0	78	0	68	0
	4:45 PM	0	88	0	67	0
	5:00 PM	0	84	0	77	0
	5:15 PM	0	80	0	53	0
	5:30 PM	0	71	0	60	0
	5:45 PM	0	90	0	60	0
	VOLUMES	0	675	1	516	0
	APPROACH %	0%	100%	0%	100%	0%
	APP/DEPART	676	/	1,003	516	/

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #:	5
TUESDAY	EAST & WEST:	Calimesa Blvd	CONTROL:	STOP ALL

CLASS 1: PASSENGER VEHICLES

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

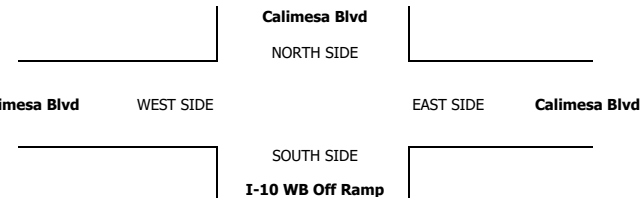
	NORTHBOUND (I-10 WB Off Ramp)			SOUTHBOUND (Calimesa Blvd)			EASTBOUND (Calimesa Blvd)			WESTBOUND (Calimesa Blvd)			
LANES:	NL X	NT 1	NR 0	SL 1	ST X	SR X	EL X	ET X	ER X	WL X	WT X	WR 1	TOTAL
7:00 AM	0	41	0	12	0	0	0	0	0	0	0	120	173
7:15 AM	0	35	0	10	0	0	0	0	0	0	0	165	210
7:30 AM	0	27	0	34	0	0	0	0	0	0	0	192	253
7:45 AM	0	63	0	33	0	0	0	0	0	0	0	179	275
8:00 AM	0	47	0	23	0	0	0	0	0	0	0	139	209
8:15 AM	0	47	0	31	0	0	0	0	0	0	0	132	210
8:30 AM	0	65	1	37	0	0	0	0	0	0	0	80	183
8:45 AM	0	68	0	14	0	0	0	0	0	0	0	70	152
AM VOLUMES	0	393	1	194	0	0	0	0	0	0	0	1,077	1,666
AM APPROACH %	0%	100%	0%	99%	0%	0%	0%	0%	0%	0%	0%	100%	
AM APP/DEPART	394	/	1,471	195	/	0	0	/	195	1,077	/	0	0
AM BEGIN PEAK HR	7:15 AM												
AM PEAK HR VOLUMES	0	172	0	100	0	0	0	0	0	0	0	675	948
AM PEAK HR APPROACH %	0%	100%	0%	99%	0%	0%	0%	0%	0%	0%	0%	100%	
AM PEAK HR FACTOR		0.683			0.743			0.000			0.879		0.862
AM PEAK HR APP/DEPART	172	/	848	101	/	0	0	/	100	675	/	0	0
4:00 PM	0	80	1	67	0	0	0	0	0	0	0	40	188
4:15 PM	0	89	0	55	0	0	0	0	0	0	0	41	185
4:30 PM	0	71	0	63	0	0	0	0	0	0	0	37	171
4:45 PM	0	83	0	67	0	0	0	0	0	0	0	42	192
5:00 PM	0	76	0	67	0	0	0	0	0	0	0	38	181
5:15 PM	0	78	0	53	0	0	0	0	0	0	0	35	166
5:30 PM	0	59	0	58	0	0	0	0	0	0	0	43	160
5:45 PM	0	87	0	57	0	0	0	0	0	0	0	36	180
PM VOLUMES	0	623	1	487	0	0	0	0	0	0	0	312	1,424
PM APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	
PM APP/DEPART	624	/	936	488	/	0	0	/	488	312	/	0	0
PM BEGIN PEAK HR	4:00 PM												
PM PEAK HR VOLUMES	0	323	1	252	0	0	0	0	0	0	0	160	737
PM PEAK HR APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	
PM PEAK HR FACTOR		0.910			0.930			0.000			0.952		0.960
PM PEAK HR APP/DEPART	324	/	484	253	/	0	0	/	253	160	/	0	0

U-TURNS

	NB	SB	EB	WB	TTL
7:00 AM	0	0	0	0	0
7:15 AM	0	1	0	0	1
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
AM VOLUMES	0	1	0	0	1
AM PEAK HR VOLUMES	0	1	0	0	
4:00 PM	0	1	0	0	1
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
PM VOLUMES	0	1	0	0	1
PM PEAK HR VOLUMES	0	1	0	0	

RTOR

	NRR X	SRR X	ERR X	WRR X
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
AM VOLUMES	0	0	0	0
AM PEAK HR VOLUMES	0	0	0	0
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
PM VOLUMES	0	0	0	0
PM PEAK HR VOLUMES	0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #:	5
TUESDAY	EAST & WEST:	Calimesa Blvd	CONTROL:	STOP ALL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB Off Ramp			SOUTHBOUND Calimesa Blvd			EASTBOUND Calimesa Blvd			WESTBOUND Calimesa Blvd			
	LANES:	NL X	NT 1	NR 0	SL 1	ST X	SR X	EL X	ET X	ER X	WL X	WT X	WR 1	TOTAL
AM	7:00 AM	0	1	0	0	0	0	0	0	0	0	0	3	4
	7:15 AM	0	0	0	1	0	0	0	0	0	0	0	1	2
	7:30 AM	0	2	0	0	0	0	0	0	0	0	0	1	3
	7:45 AM	0	2	0	1	0	0	0	0	0	0	0	5	8
	8:00 AM	0	1	0	0	0	0	0	0	0	0	0	3	4
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	2
	8:30 AM	0	1	0	2	0	0	0	0	0	0	0	3	6
	8:45 AM	0	2	0	0	0	0	0	0	0	0	0	1	3
	VOLUMES	0	9	0	4	0	0	0	0	0	0	0	19	32
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	9	/	28	4	/	0	0	/	4	19	/	0	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	5	0	2	0	0	0	0	0	0	0	10	17
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	
	PEAK HR FACTOR		0.625			0.500			0.000			0.500		0.531
	APP/DEPART	5	/	15	2	/	0	0	/	2	10	/	0	0
PM	4:00 PM	0	5	0	0	0	0	0	0	0	0	0	2	7
	4:15 PM	0	2	0	5	0	0	0	0	0	0	0	0	7
	4:30 PM	0	1	0	2	0	0	0	0	0	0	0	1	4
	4:45 PM	0	1	0	0	0	0	0	0	0	0	0	1	2
	5:00 PM	0	4	0	3	0	0	0	0	0	0	0	3	10
	5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	5:30 PM	0	2	0	1	0	0	0	0	0	0	0	0	3
	5:45 PM	0	0	0	2	0	0	0	0	0	0	0	0	2
	VOLUMES	0	16	0	13	0	0	0	0	0	0	0	7	36
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	16	/	23	13	/	0	0	/	13	7	/	0	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	9	0	7	0	0	0	0	0	0	0	4	20
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	
	PEAK HR FACTOR		0.450			0.350			0.000			0.500		0.714
	APP/DEPART	9	/	13	7	/	0	0	/	7	4	/	0	0

U-TURNS NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	0

RTOR NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Calimesa Blvd

NORTH SIDE

Calimesa Blvd WEST SIDE EAST SIDE **Calimesa Blvd**

SOUTH SIDE

I-10 WB Off Ramp

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

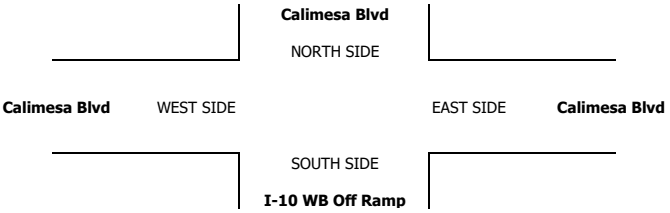
DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #:	5
TUESDAY	EAST & WEST:	Calimesa Blvd	CONTROL:	STOP ALL

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB Off Ramp			SOUTHBOUND Calimesa Blvd			EASTBOUND Calimesa Blvd			WESTBOUND Calimesa Blvd				U-TURNS					RTOR			
	LANES:	NL X	NT 1	NR 0	SL 1	ST X	SR X	EL X	ET X	ER X	WL X	WT X	WR 1	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	8:00 AM	0	1	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0
	8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	VOLUMES	0	5	0	1	0	0	0	0	0	0	0	3	9	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%										
	APP/DEPART	5	/	8	1	/	0	0	/	1	3	/	0	0									
	BEGIN PEAK HR		7:15 AM																				
	VOLUMES	0	2	0	1	0	0	0	0	0	0	0	2	5	0	0	0	0		0	0	0	0
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%										
	PEAK HR FACTOR		0.500			0.250			0.000			0.500		0.625									
	APP/DEPART	2	/	4	1	/	0	0	/	1	2	/	0	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	4:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	2	0	2	0	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%										
	APP/DEPART	2	/	3	2	/	0	0	/	2	1	/	0	0									
	BEGIN PEAK HR		4:00 PM																				
	VOLUMES	0	1	0	1	0	0	0	0	0	0	0	1	3	0	0	0	0		0	0	0	0
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%										
	PEAK HR FACTOR		0.250			0.250			0.000			0.250		0.375									
	APP/DEPART	1	/	2	1	/	0	0	/	1	1	/	0	0									



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #:	5
TUESDAY	EAST & WEST:	Calimesa Blvd	CONTROL:	STOP ALL

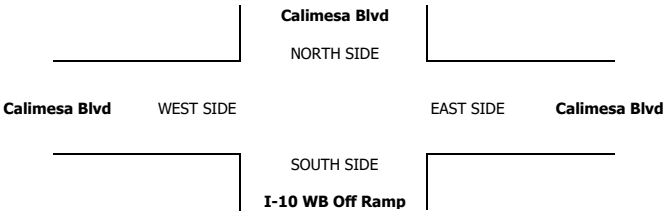
CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 WB Off Ramp)			SOUTHBOUND (Calimesa Blvd)			EASTBOUND (Calimesa Blvd)			WESTBOUND (Calimesa Blvd)			
	LANES:	NL X	NT 1	NR 0	SL 1	ST X	SR X	EL X	ET X	ER X	WL X	WT X	WR 1	TOTAL
AM	7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
	7:45 AM	0	1	0	0	0	0	0	0	0	0	0	1	2
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
	8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	8:45 AM	0	3	0	1	0	0	0	0	0	0	0	0	4
	VOLUMES	0	6	0	1	0	0	0	0	0	0	0	3	10
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	6	/	9	1	/	0	0	/	1	3	/	0	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	1	0	0	0	0	0	0	0	0	0	2	3
	APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	
	PEAK HR FACTOR		0.250			0.000			0.000			0.500		0.375
	APP/DEPART	1	/	3	0	/	0	0	/	0	2	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	2	0	0	0	0	0	0	0	0	0	1	3
	4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
	5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	VOLUMES	0	8	0	1	0	0	0	0	0	0	0	1	10
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	8	/	9	1	/	0	0	/	1	1	/	0	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	4	0	0	0	0	0	0	0	0	0	1	5
	APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	
	PEAK HR FACTOR		0.500			0.000			0.000			0.250		0.417
	APP/DEPART	4	/	5	0	/	0	0	/	0	1	/	0	0

U-TURNS					RTOR			
NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0		0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0		0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #:	5
TUESDAY	EAST & WEST:	Calimesa Blvd	CONTROL:	STOP ALL

CLASS 5: RV

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 WB Off Ramp)			SOUTHBOUND (Calimesa Blvd)			EASTBOUND (Calimesa Blvd)			WESTBOUND (Calimesa Blvd)			
	LANES:	NL X	NT 1	NR 0	SL 1	ST X	SR X	EL X	ET X	ER X	WL X	WT X	WR 1	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	1	0	0	0	0	0	0	0	0	1
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	1	/	0	0	/	1	0	/	0	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	0	0	1	0	0	0	0	0	0	0	0	1
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.250			0.000			0.000		0.250
	APP/DEPART	0	/	0	1	/	0	0	/	1	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Calimesa Blvd

NORTH SIDE

Calimesa Blvd WEST SIDE EAST SIDE **Calimesa Blvd**

SOUTH SIDE

I-10 WB Off Ramp

INTERSECTION TURNING MOVEMENT COUNTS

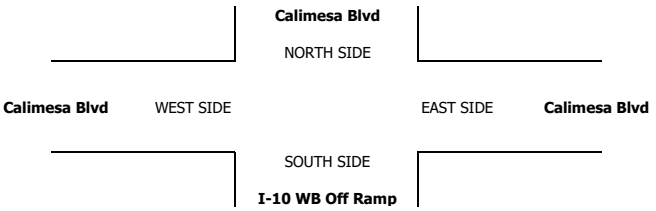
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #:	5
TUESDAY	EAST & WEST:	Calimesa Blvd	CONTROL:	STOP ALL

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB Off Ramp			SOUTHBOUND Calimesa Blvd			EASTBOUND Calimesa Blvd			WESTBOUND Calimesa Blvd				U-TURNS					RTOR			
	LANES:	NL X	NT 1	NR 0	SL 1	ST X	SR X	EL X	ET X	ER X	WL X	WT X	WR 1	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%										
	APP/DEPART	0	/	1	0	/	0	0	/	0	1	/	0	0									
	BEGIN PEAK HR		7:15 AM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.250		0.250									
	APP/DEPART	0	/	1	0	/	0	0	/	0	1	/	0	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									
	BEGIN PEAK HR		4:00 PM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000									
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									



INTERSECTION TURNING MOVEMENT COUNTS

T101823

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Jan 30, 24	LOCATION:	Calimesa	PROJECT #: SC4429
	NORTH & SOUTH:	Roberts Rd	LOCATION #: 6
	EAST & WEST:	Singleton Rd	CONTROL: STOP W

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

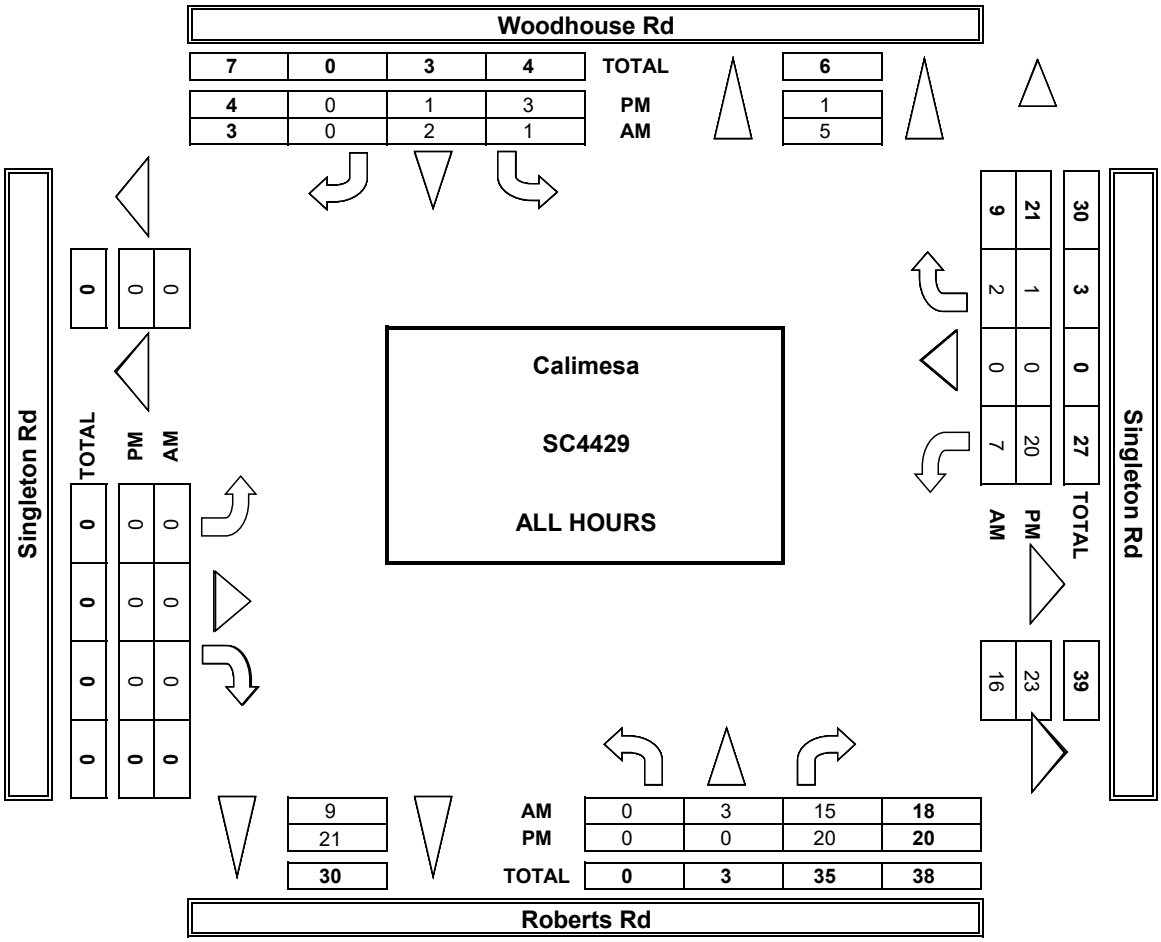
		NORTHBOUND (Roberts Rd)			SOUTHBOUND (Woodhouse Rd)			EASTBOUND (Singleton Rd)			WESTBOUND (Singleton Rd)			
	LANES:	NL X	NT 1	NR 0	SL 0	ST 1	SR X	EL X	ET X	ER X	WL 0	WT X	WR 0	TOTAL
AM	7:00 AM	0	0	2	0	0	0	0	0	0	3	0	0	5
	7:15 AM	0	0	3	0	0	0	0	0	0	1	0	0	4
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	2	0	0	0	0	0	0	0	0	1	3
	8:00 AM	0	0	6	0	0	0	0	0	0	0	0	0	6
	8:15 AM	0	2	0	0	1	0	0	0	0	3	0	1	7
	8:30 AM	0	1	2	0	1	0	0	0	0	0	0	0	4
	8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
	VOLUMES	0	3	15	1	2	0	0	0	0	7	0	2	30
	APPROACH %	0%	17%	83%	33%	67%	0%	0%	0%	0%	78%	0%	22%	
	APP/DEPART	18	/	5	3	/	9	0	/	16	9	/	0	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	0	3	10	0	2	0	0	0	0	3	0	2	20
	APPROACH %	0%	23%	77%	0%	100%	0%	0%	0%	0%	60%	0%	40%	
	PEAK HR FACTOR		0.542			0.500			0.000			0.313		0.714
	APP/DEPART	13	/	5	2	/	5	0	/	10	5	/	0	0
PM	4:00 PM	0	0	4	0	0	0	0	0	0	2	0	0	6
	4:15 PM	0	0	2	0	1	0	0	0	0	2	0	1	6
	4:30 PM	0	0	1	0	0	0	0	0	0	3	0	0	4
	4:45 PM	0	0	5	3	0	0	0	0	0	0	0	0	8
	5:00 PM	0	0	5	0	0	0	0	0	0	8	0	0	13
	5:15 PM	0	0	1	0	0	0	0	0	0	4	0	0	5
	5:30 PM	0	0	1	0	0	0	0	0	0	1	0	0	2
	5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	VOLUMES	0	0	20	3	1	0	0	0	0	20	0	1	45
	APPROACH %	0%	0%	100%	75%	25%	0%	0%	0%	0%	95%	0%	5%	
	APP/DEPART	20	/	1	4	/	21	0	/	23	21	/	0	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	13	3	1	0	0	0	0	13	0	1	31
	APPROACH %	0%	0%	100%	75%	25%	0%	0%	0%	0%	93%	0%	7%	
	PEAK HR FACTOR		0.650			0.333			0.000			0.438		0.596
	APP/DEPART	13	/	1	4	/	14	0	/	16	14	/	0	0

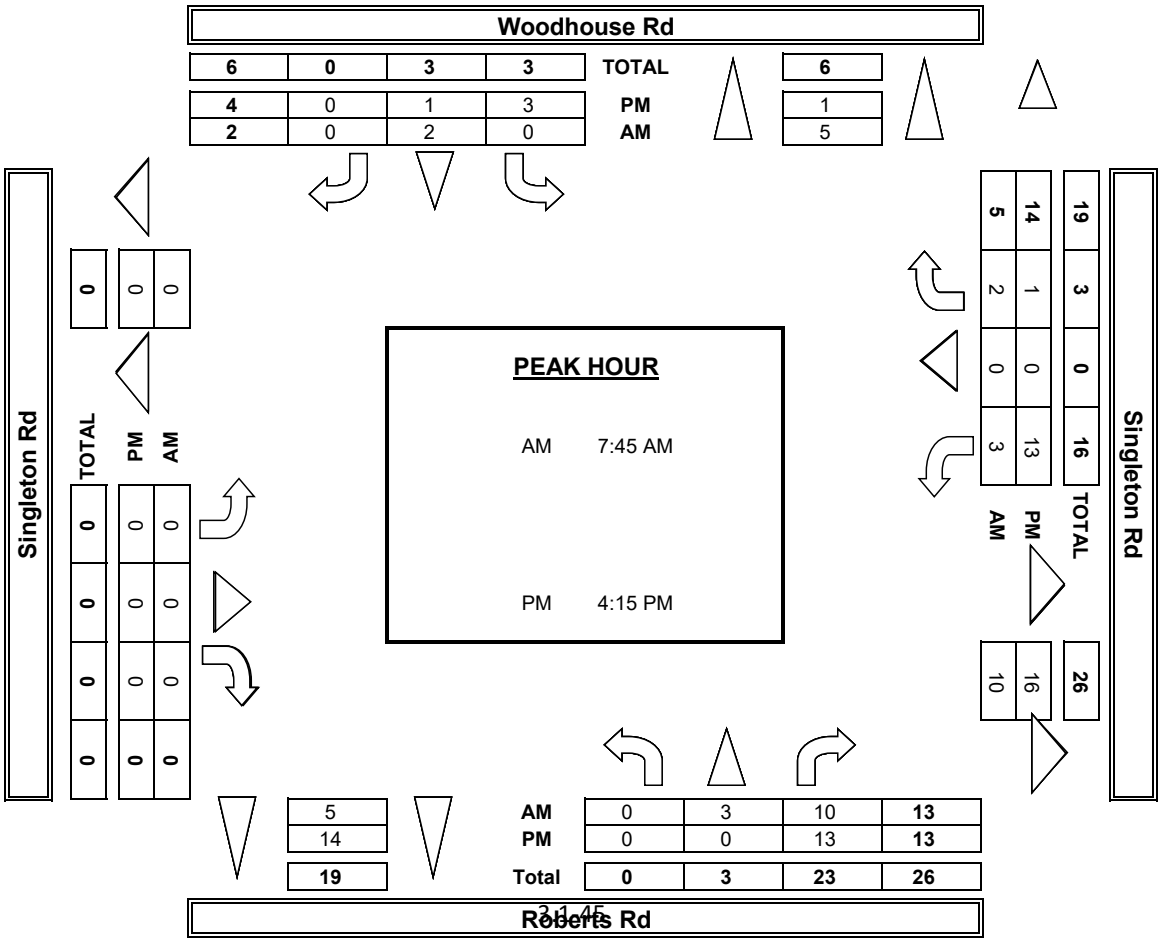
U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TUR

PREPARED BY: AimTD LL

DATE:	LOCATION:	Calimesa
1/30/24	NORTH & SOUTH:	Roberts Rd
TUESDAY	EAST & WEST:	Singleton Rd

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

		NORTHBOUND Roberts Rd			SOUTHBOUNI Woodhouse Rd	
		NL	NT	NR	SL	ST
	LANES:	X	1	0	0	1
AM	7:00 AM	0	0	2	0	0
	7:15 AM	0	0	5	0	0
	7:30 AM	0	0	0	0	0
	7:45 AM	0	0	3	0	0
	8:00 AM	0	0	6	0	0
	8:15 AM	0	2	0	0	1
	8:30 AM	0	1	2	0	1
	8:45 AM	0	0	0	1	0
	VOLUMES	0	3	18	1	2
	APPROACH %	0%	14%	86%	33%	67%
	APP/DEPART	21	/	6	3	/
	BEGIN PEAK HR		7:45 AM			
	VOLUMES	0	3	11	0	2
	APPROACH %	0%	21%	79%	0%	100%
	PEAK HR FACTOR		0.583			0.500
	APP/DEPART	14	/	6	2	/
PM	4:00 PM	0	0	5	0	0
	4:15 PM	0	0	2	0	1
	4:30 PM	0	0	1	0	0
	4:45 PM	0	0	6	3	0
	5:00 PM	0	0	6	0	0
	5:15 PM	0	0	1	0	0
	5:30 PM	0	0	1	0	0
	5:45 PM	0	0	1	0	0
	VOLUMES	0	0	22	3	1
	APPROACH %	0%	0%	100%	75%	25%
	APP/DEPART	22	/	1	4	/

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Roberts Rd	LOCATION #:	6
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP W

CLASS 1: PASSENGER VEHICLES

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

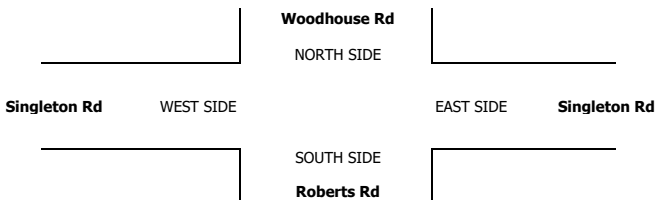
		NORTHBOUND (Roberts Rd)			SOUTHBOUND (Woodhouse Rd)			EASTBOUND (Singleton Rd)			WESTBOUND (Singleton Rd)			
	LANES:	NL X	NT 1	NR 0	SL 0	ST 1	SR X	EL X	ET X	ER X	WL 0	WT X	WR 0	TOTAL
AM	7:00 AM	0	0	2	0	0	0	0	0	0	3	0	0	5
	7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
	8:00 AM	0	0	6	0	0	0	0	0	0	0	0	0	6
	8:15 AM	0	2	0	0	1	0	0	0	0	1	0	1	5
	8:30 AM	0	1	2	0	1	0	0	0	0	0	0	0	4
	8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
	VOLUMES	0	3	12	1	2	0	0	0	0	4	0	1	23
	APPROACH %	0%	20%	80%	33%	67%	0%	0%	0%	0%	80%	0%	20%	
	APP/DEPART	15	/	4	3	/	6	0	/	13	5	/	0	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	0	3	9	0	2	0	0	0	0	1	0	1	16
	APPROACH %	0%	25%	75%	0%	100%	0%	0%	0%	0%	50%	0%	50%	
	PEAK HR FACTOR		0.500			0.500			0.000			0.250		0.667
	APP/DEPART	12	/	4	2	/	3	0	/	9	2	/	0	0
PM	4:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	3
	4:15 PM	0	0	2	0	1	0	0	0	0	1	0	1	5
	4:30 PM	0	0	1	0	0	0	0	0	0	2	0	0	3
	4:45 PM	0	0	4	3	0	0	0	0	0	0	0	0	7
	5:00 PM	0	0	4	0	0	0	0	0	0	6	0	0	10
	5:15 PM	0	0	1	0	0	0	0	0	0	3	0	0	4
	5:30 PM	0	0	1	0	0	0	0	0	0	1	0	0	2
	5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	VOLUMES	0	0	17	3	1	0	0	0	0	13	0	1	35
	APPROACH %	0%	0%	100%	75%	25%	0%	0%	0%	0%	93%	0%	7%	
	APP/DEPART	17	/	1	4	/	14	0	/	20	14	/	0	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	11	3	1	0	0	0	0	9	0	1	25
	APPROACH %	0%	0%	100%	75%	25%	0%	0%	0%	0%	90%	0%	10%	
	PEAK HR FACTOR		0.688			0.333			0.000			0.417		0.625
	APP/DEPART	11	/	1	4	/	10	0	/	14	10	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Roberts Rd	LOCATION #:	6
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP W

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Roberts Rd			SOUTHBOUND Woodhouse Rd			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd			
	LANES:	NL X	NT 1	NR 0	SL 0	ST 1	SR X	EL X	ET X	ER X	WL 0	WT X	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	2
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	3	0	1	4
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	75%	0%	25%	
	APP/DEPART	0	/	1	0	/	3	0	/	0	4	/	0	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	2	0	1	3
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	0%	33%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.375		0.375
	APP/DEPART	0	/	1	0	/	2	0	/	0	3	/	0	0
PM	4:00 PM	0	0	1	0	0	0	0	0	0	1	0	0	2
	4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
	4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	5:00 PM	0	0	1	0	0	0	0	0	0	2	0	0	3
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	3	0	0	0	0	0	0	5	0	0	8
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
	APP/DEPART	3	/	0	0	/	5	0	/	3	5	/	0	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	2	0	0	0	0	0	0	4	0	0	6
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR		0.500			0.000			0.000			0.500		0.500
	APP/DEPART	2	/	0	0	/	4	0	/	2	4	/	0	0

U-TURNS						RTOR			
NB	SB	EB	WB	TTL		NRR X	SRR X	ERR X	WRR X
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0			0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0	0		0	0	0	0
0	0	0	0			0	0	0	0
0	0	0	0	0		0	0	0	0

Woodhouse Rd

NORTH SIDE

Singleton Rd WEST SIDE EAST SIDE **Singleton Rd**

SOUTH SIDE

Roberts Rd

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Roberts Rd	LOCATION #:	6
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP W

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Roberts Rd			SOUTHBOUND Woodhouse Rd			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd			
	LANES:	NL X	NT 1	NR 0	SL 0	ST 1	SR X	EL X	ET X	ER X	WL 0	WT X	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	2
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	3	0	0	0	0	0	0	0	0	0	3
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	3	/	0	0	/	0	0	/	3	0	/	0	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	0	0	1	0	0	0	0	0	0	0	0	0	1
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.250			0.000			0.000			0.000		0.250
	APP/DEPART	1	/	0	0	/	0	0	/	1	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	1	0	0	1
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
	APP/DEPART	0	/	0	0	/	1	0	/	0	1	/	0	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS					
NB	SB	EB	WB	TTL	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0		
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0		

RTOR			
NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Woodhouse Rd

NORTH SIDE

Singleton Rd WEST SIDE EAST SIDE **Singleton Rd**

SOUTH SIDE

Roberts Rd

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

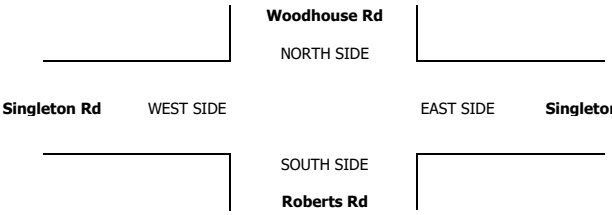
DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Roberts Rd	LOCATION #:	6
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP W

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Roberts Rd			SOUTHBOUND Woodhouse Rd			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd				U-TURNS					RTOR			
	LANES:	NL X	NT 1	NR 0	SL 0	ST 1	SR X	EL X	ET X	ER X	WL 0	WT X	WR 0	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									
	BEGIN PEAK HR		7:45 AM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000									
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%										
	APP/DEPART	0	/	0	0	/	1	0	/	0	1	/	0	0									
	BEGIN PEAK HR		4:15 PM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000									
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Roberts Rd	LOCATION #:	6
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP W

CLASS 5: RV

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Roberts Rd			SOUTHBOUND Woodhouse Rd			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd			
	LANES:	NL X	NT 1	NR 0	SL 0	ST 1	SR X	EL X	ET X	ER X	WL 0	WT X	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Woodhouse Rd

NORTH SIDE

Singleton Rd WEST SIDE EAST SIDE **Singleton Rd**

SOUTH SIDE

Roberts Rd

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Roberts Rd	LOCATION #:	6
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP W

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Roberts Rd			SOUTHBOUND Woodhouse Rd			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd			
	LANES:	NL X	NT 1	NR 0	SL 0	ST 1	SR X	EL X	ET X	ER X	WL 0	WT X	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
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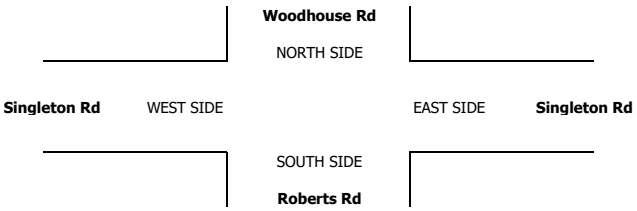
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

T101823

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Jan 30, 24	LOCATION:	Calimesa	PROJECT #: SC4429
	NORTH & SOUTH:	I-10 EB On Ramp	LOCATION #: 7
	EAST & WEST:	Singleton Rd	CONTROL: NO CONTROL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 EB On Ramp			SOUTHBOUND I-10 EB On Ramp			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	2	0	75	3	0	80
	7:15 AM	0	0	0	0	0	0	0	2	1	85	1	0	89
	7:30 AM	0	0	0	0	0	0	0	0	0	90	0	0	90
	7:45 AM	0	0	0	0	0	0	0	2	0	92	1	0	95
	8:00 AM	0	0	0	0	0	0	0	5	1	110	0	0	116
	8:15 AM	0	0	0	0	0	0	0	0	0	65	5	0	70
	8:30 AM	0	0	0	0	0	0	0	1	1	83	0	0	85
	8:45 AM	0	0	0	0	0	0	0	0	1	48	0	0	49
	VOLUMES	0	0	0	0	0	0	0	12	4	648	10	0	674
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	75%	25%	98%	2%	0%	
	APP/DEPART	0	/	0	0	/	652	16	/	12	658	/	10	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	0	0	0	0	9	2	377	2	0	390
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	82%	18%	99%	1%	0%	
	PEAK HR FACTOR		0.000			0.000			0.458			0.861		0.841
	APP/DEPART	0	/	0	0	/	379	11	/	9	379	/	2	0
PM	4:00 PM	0	0	0	0	0	0	0	4	0	60	2	0	66
	4:15 PM	0	0	0	0	0	0	0	0	2	51	3	0	56
	4:30 PM	0	0	0	0	0	0	0	0	0	52	3	0	55
	4:45 PM	0	0	0	0	0	0	0	8	0	58	0	0	66
	5:00 PM	0	0	0	0	0	0	0	5	0	52	9	0	66
	5:15 PM	0	0	0	0	0	0	0	1	0	64	4	0	69
	5:30 PM	0	0	0	0	0	0	0	0	1	46	1	0	48
	5:45 PM	0	0	0	0	0	0	0	0	1	40	0	0	41
	VOLUMES	0	0	0	0	0	0	0	18	4	423	22	0	467
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	82%	18%	95%	5%	0%	
	APP/DEPART	0	/	0	0	/	427	22	/	18	445	/	22	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	0	0	0	0	0	0	14	0	226	16	0	256
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	93%	7%	0%	
	PEAK HR FACTOR		0.000			0.000			0.438			0.890		0.928
	APP/DEPART	0	/	0	0	/	226	14	/	14	242	/	16	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
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0	0	0	0
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0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

I-10 EB On Ramp

NORTH LEG

Singleton Rd WEST LEG — EAST LEG **Singleton Rd**

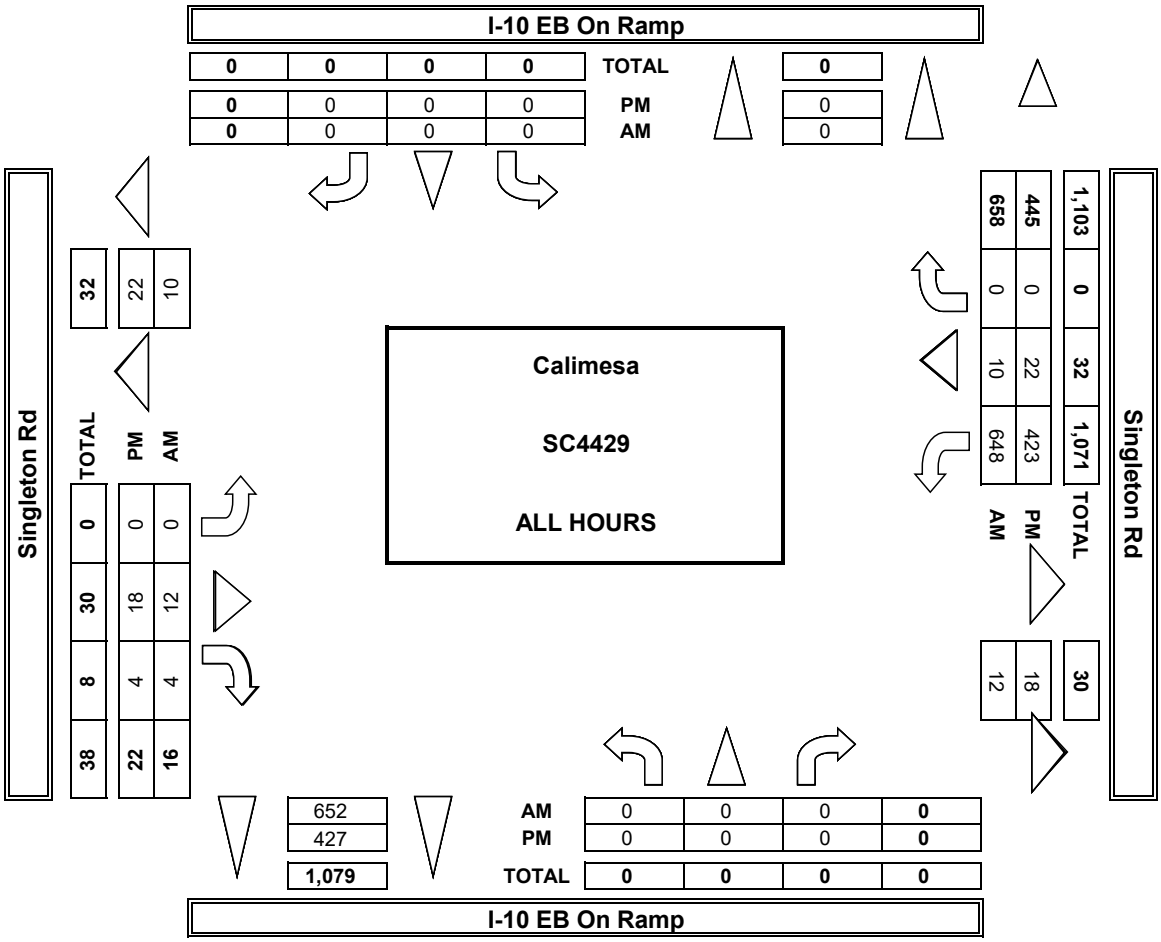
SOUTH LEG

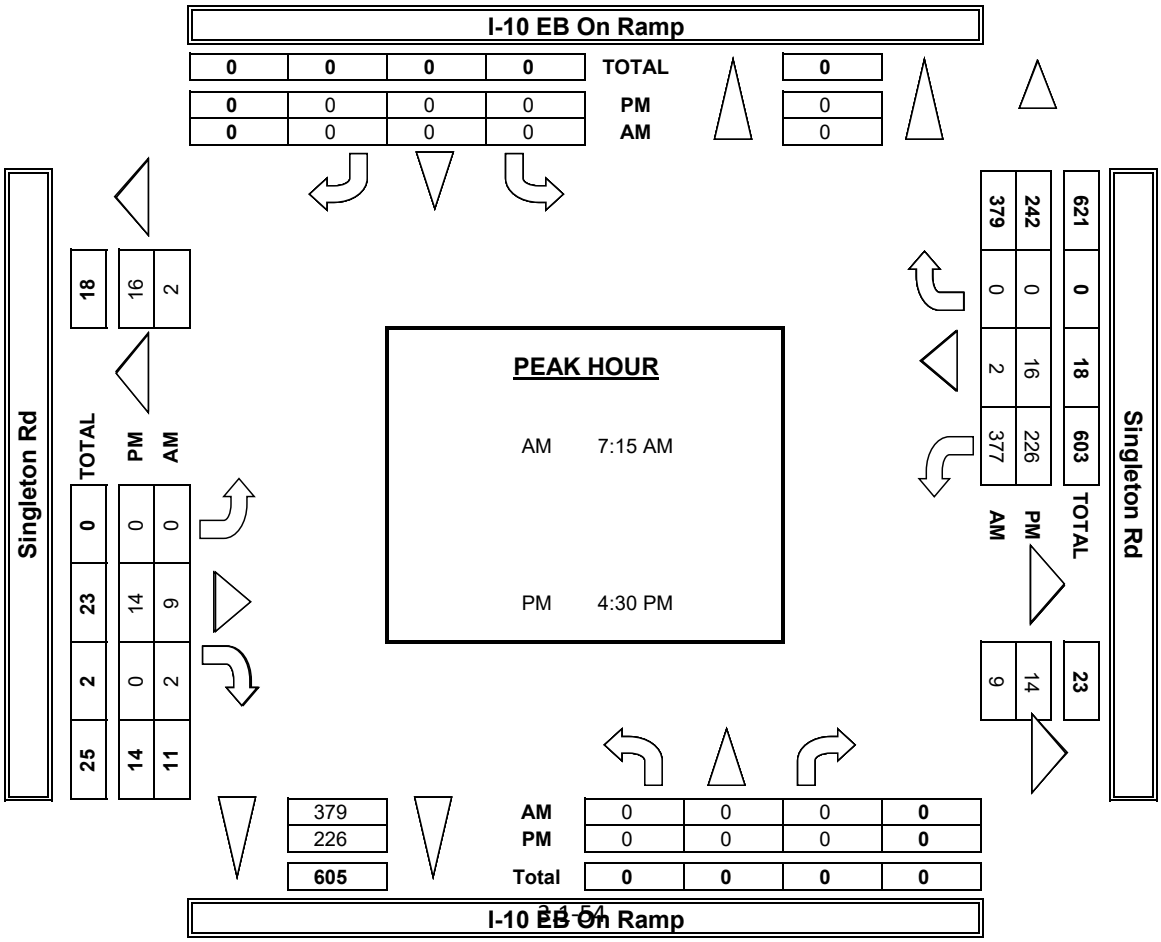
I-10 EB On Ramp

		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	1	1	2	0	0	0	0	0	0	0	1	1	2
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	1	1	2	0	0	0	0	0	0	0	1	1	2

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TUR

PREPARED BY: AimTD LL

DATE:	LOCATION:	Calimesa
1/30/24	NORTH & SOUTH:	I-10 EB On Ramp
TUESDAY	EAST & WEST:	Singleton Rd

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

		NORTHBOUND I-10 EB On Ramp			SOUTHBOUNI I-10 EB On Ram	
	LANES:	NL X	NT X	NR X	SL X	ST X
AM	7:00 AM	0	0	0	0	0
	7:15 AM	0	0	0	0	0
	7:30 AM	0	0	0	0	0
	7:45 AM	0	0	0	0	0
	8:00 AM	0	0	0	0	0
	8:15 AM	0	0	0	0	0
	8:30 AM	0	0	0	0	0
	8:45 AM	0	0	0	0	0
	VOLUMES	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%
	APP/DEPART	0	/	0	0	/
	BEGIN PEAK HR		7:15 AM			
	VOLUMES	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%
	PEAK HR FACTOR		0.000			0.000
	APP/DEPART	0	/	0	0	/
PM	4:00 PM	0	0	0	0	0
	4:15 PM	0	0	0	0	0
	4:30 PM	0	0	0	0	0
	4:45 PM	0	0	0	0	0
	5:00 PM	0	0	0	0	0
	5:15 PM	0	0	0	0	0
	5:30 PM	0	0	0	0	0
	5:45 PM	0	0	0	0	0
	VOLUMES	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%
	APP/DEPART	0	/	0	0	/

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB On Ramp	LOCATION #:	7
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	NO CONTROL

CLASS 1: PASSENGER VEHICLES

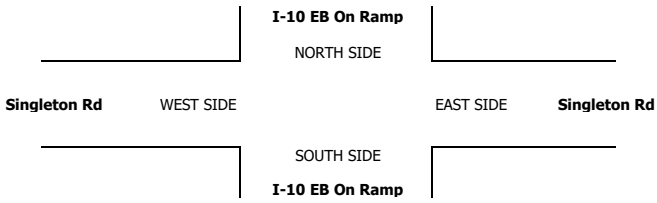
NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 EB On Ramp)			SOUTHBOUND (I-10 EB On Ramp)			EASTBOUND (Singleton Rd)			WESTBOUND (Singleton Rd)			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	2	0	73	3	0	78
	7:15 AM	0	0	0	0	0	0	0	0	1	78	0	0	79
	7:30 AM	0	0	0	0	0	0	0	0	0	89	0	0	89
	7:45 AM	0	0	0	0	0	0	0	1	0	89	0	0	90
	8:00 AM	0	0	0	0	0	0	0	5	1	105	0	0	111
	8:15 AM	0	0	0	0	0	0	0	0	0	60	3	0	63
	8:30 AM	0	0	0	0	0	0	0	1	1	75	0	0	77
	8:45 AM	0	0	0	0	0	0	0	0	1	48	0	0	49
	VOLUMES	0	0	0	0	0	0	0	9	4	617	6	0	636
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	69%	31%	99%	1%	0%	
	APP/DEPART	0	/	0	0	/	621	13	/	9	623	/	6	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	0	0	0	0	6	2	361	0	0	369
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	75%	25%	100%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.333			0.860		0.831
	APP/DEPART	0	/	0	0	/	363	8	/	6	361	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	3	0	54	0	0	57
	4:15 PM	0	0	0	0	0	0	0	0	2	49	2	0	53
	4:30 PM	0	0	0	0	0	0	0	0	0	48	2	0	50
	4:45 PM	0	0	0	0	0	0	0	7	0	57	0	0	64
	5:00 PM	0	0	0	0	0	0	0	4	0	47	7	0	58
	5:15 PM	0	0	0	0	0	0	0	1	0	62	3	0	66
	5:30 PM	0	0	0	0	0	0	0	0	1	44	1	0	46
	5:45 PM	0	0	0	0	0	0	0	0	1	38	0	0	39
	VOLUMES	0	0	0	0	0	0	0	15	4	399	15	0	433
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	79%	21%	96%	4%	0%	
	APP/DEPART	0	/	0	0	/	403	19	/	15	414	/	15	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	0	0	0	0	0	0	12	0	214	12	0	238
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	95%	5%	0%	
	PEAK HR FACTOR		0.000			0.000			0.429			0.869		0.902
	APP/DEPART	0	/	0	0	/	214	12	/	12	226	/	12	0

U-TURNS					
NB	SB	EB	WB	TTL	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	

RTOR			
NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

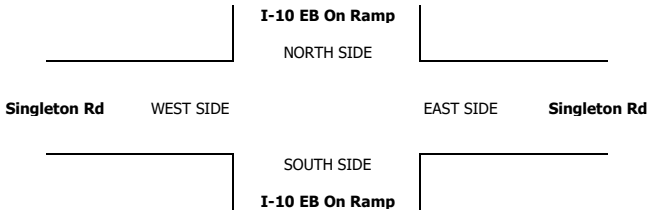
DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB On Ramp	LOCATION #:	7
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	NO CONTROL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 EB On Ramp			SOUTHBOUND I-10 EB On Ramp			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd				U-TURNS					RTOR			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	7	1	0	8	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	4	2	0	6	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	22	4	0	26	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	85%	15%	0%										
	APP/DEPART	0	/	0	0	/	22	0	/	0	26	/	4	0									
	BEGIN PEAK HR		7:15 AM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	12	2	0	14	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	86%	14%	0%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.438		0.438									
	APP/DEPART	0	/	0	0	/	12	0	/	0	14	/	2	0									
PM	4:00 PM	0	0	0	0	0	0	0	1	0	4	1	0	6	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	1	0	4	2	0	7	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	3	0	18	5	0	26	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	78%	22%	0%										
	APP/DEPART	0	/	0	0	/	18	3	/	3	23	/	5	0									
	BEGIN PEAK HR		4:30 PM																				
	VOLUMES	0	0	0	0	0	0	0	2	0	9	3	0	14	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	75%	25%	0%										
	PEAK HR FACTOR		0.000			0.000			0.500			0.500		0.500									
	APP/DEPART	0	/	0	0	/	9	2	/	2	12	/	3	0									



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB On Ramp	LOCATION #:	7
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	NO CONTROL

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 EB On Ramp			SOUTHBOUND I-10 EB On Ramp			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd				U-TURNS					RTOR			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	3	0	4	0	0	7	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%										
	APP/DEPART	0	/	0	0	/	4	3	/	3	4	/	0	0									
	BEGIN PEAK HR		7:15 AM																				
	VOLUMES	0	0	0	0	0	0	0	3	0	1	0	0	4	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%										
	PEAK HR FACTOR		0.000			0.000			0.375			0.250		0.500									
	APP/DEPART	0	/	0	0	/	1	3	/	3	1	/	0	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	80%	20%	0%										
	APP/DEPART	0	/	0	0	/	4	0	/	0	5	/	1	0									
	BEGIN PEAK HR		4:30 PM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	33%	0%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.375		0.375									
	APP/DEPART	0	/	0	0	/	2	0	/	0	3	/	1	0									

I-10 EB On Ramp

NORTH SIDE

Singleton Rd WEST SIDE EAST SIDE **Singleton Rd**

SOUTH SIDE

I-10 EB On Ramp

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

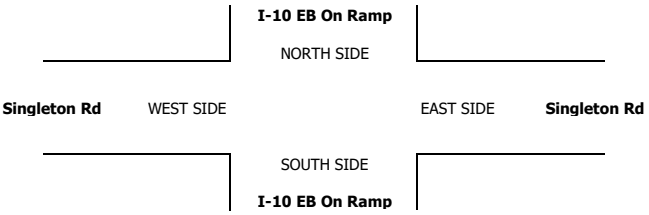
DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB On Ramp	LOCATION #:	7
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	NO CONTROL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 EB On Ramp			SOUTHBOUND I-10 EB On Ramp			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd				U-TURNS					RTOR			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%										
	APP/DEPART	0	/	0	0	/	3	0	/	0	3	/	0	0									
	BEGIN PEAK HR		7:15 AM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.250		0.250									
	APP/DEPART	0	/	0	0	/	3	0	/	0	3	/	0	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	33%	0%										
	APP/DEPART	0	/	0	0	/	2	0	/	0	3	/	1	0									
	BEGIN PEAK HR		4:30 PM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.250		0.250									
	APP/DEPART	0	/	0	0	/	1	0	/	0	1	/	0	0									



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB On Ramp	LOCATION #:	7
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	NO CONTROL

CLASS 5: RV

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 EB On Ramp			SOUTHBOUND I-10 EB On Ramp			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
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0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

I-10 EB On Ramp

NORTH SIDE

Singleton Rd WEST SIDE EAST SIDE **Singleton Rd**

SOUTH SIDE

I-10 EB On Ramp

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB On Ramp	LOCATION #:	7
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	NO CONTROL

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 EB On Ramp			SOUTHBOUND I-10 EB On Ramp			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd			
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	2
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	2	0	0	2
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
	APP/DEPART	0	/	0	0	/	2	0	/	0	2	/	0	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
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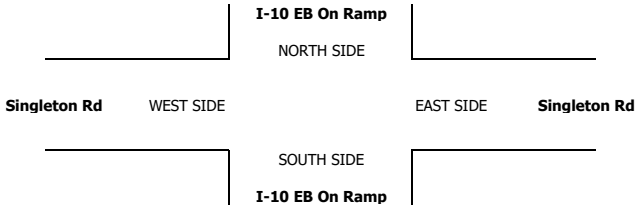

INTERSECTION TURNING MOVEMENT COUNTS

T101823

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Jan 30, 24	LOCATION:	Calimesa	PROJECT #: SC4429
	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #: 8
	EAST & WEST:	Singleton Rd	CONTROL: STOP N

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 WB Off Ramp)			SOUTHBOUND (I-10 WB Off Ramp)			EASTBOUND (Singleton Rd)			WESTBOUND (Singleton Rd)			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER X	WL X	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	35	0	0	0	0	2	0	0	78	0	115
	7:15 AM	0	0	44	0	0	0	0	2	0	0	86	0	132
	7:30 AM	0	0	38	0	0	0	0	0	0	0	90	0	128
	7:45 AM	2	0	56	0	0	0	0	2	0	0	91	0	151
	8:00 AM	1	0	49	0	0	0	0	5	0	0	109	0	164
	8:15 AM	2	0	58	0	0	0	0	0	0	0	68	0	128
	8:30 AM	2	0	63	0	0	0	0	1	0	0	84	0	150
	8:45 AM	2	0	57	0	0	0	0	0	0	0	46	0	105
	VOLUMES	9	0	400	0	0	0	0	12	0	0	652	0	1,073
	APPROACH %	2%	0%	98%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	409	/	0	0	/	0	12	/	412	652	/	661	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	7	0	226	0	0	0	0	8	0	0	352	0	593
	APPROACH %	3%	0%	97%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.896			0.000			0.400			0.807		0.904
	APP/DEPART	233	/	0	0	/	0	8	/	234	352	/	359	0
PM	4:00 PM	1	0	63	0	0	0	0	3	0	0	65	0	132
	4:15 PM	1	0	63	0	0	0	0	0	0	0	53	0	117
	4:30 PM	0	0	88	0	0	0	0	0	0	0	55	0	143
	4:45 PM	0	0	85	0	0	0	0	8	0	0	58	0	151
	5:00 PM	1	0	94	0	0	0	0	5	0	0	60	0	160
	5:15 PM	0	0	61	0	0	0	0	1	0	0	68	0	130
	5:30 PM	2	0	81	0	0	0	0	0	0	0	45	0	128
	5:45 PM	0	0	62	0	0	0	0	0	0	0	40	0	102
	VOLUMES	5	0	597	0	0	0	0	17	0	0	444	0	1,063
	APPROACH %	1%	0%	99%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	602	/	0	0	/	0	17	/	614	444	/	449	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	1	0	328	0	0	0	0	14	0	0	241	0	584
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.866			0.000			0.438			0.886		0.913
	APP/DEPART	329	/	0	0	/	0	14	/	342	241	/	242	0

U-TURNS

NB 0	SB 0	EB 0	WB 0	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
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0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

I-10 WB Off Ramp

NORTH LEG

Singleton Rd WEST LEG — EAST LEG **Singleton Rd**

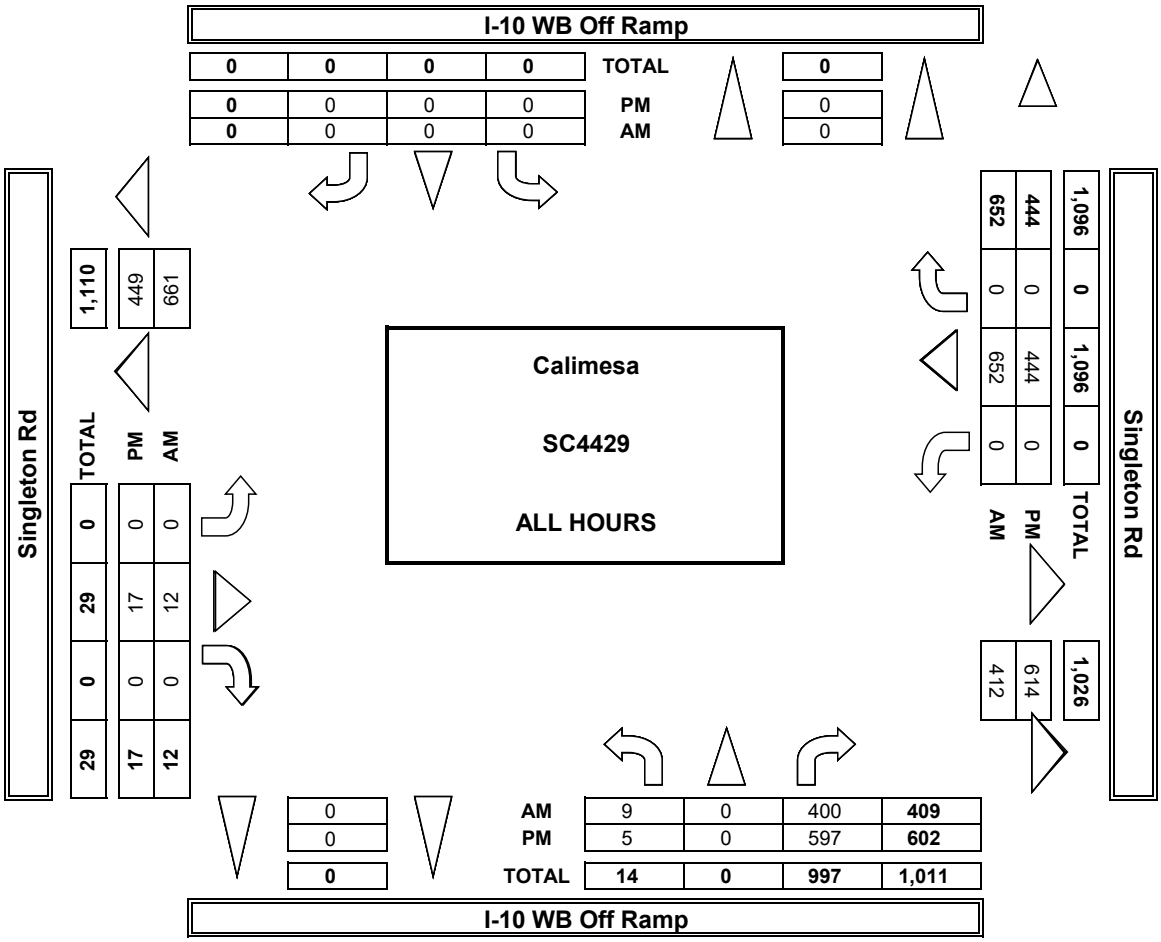
SOUTH LEG

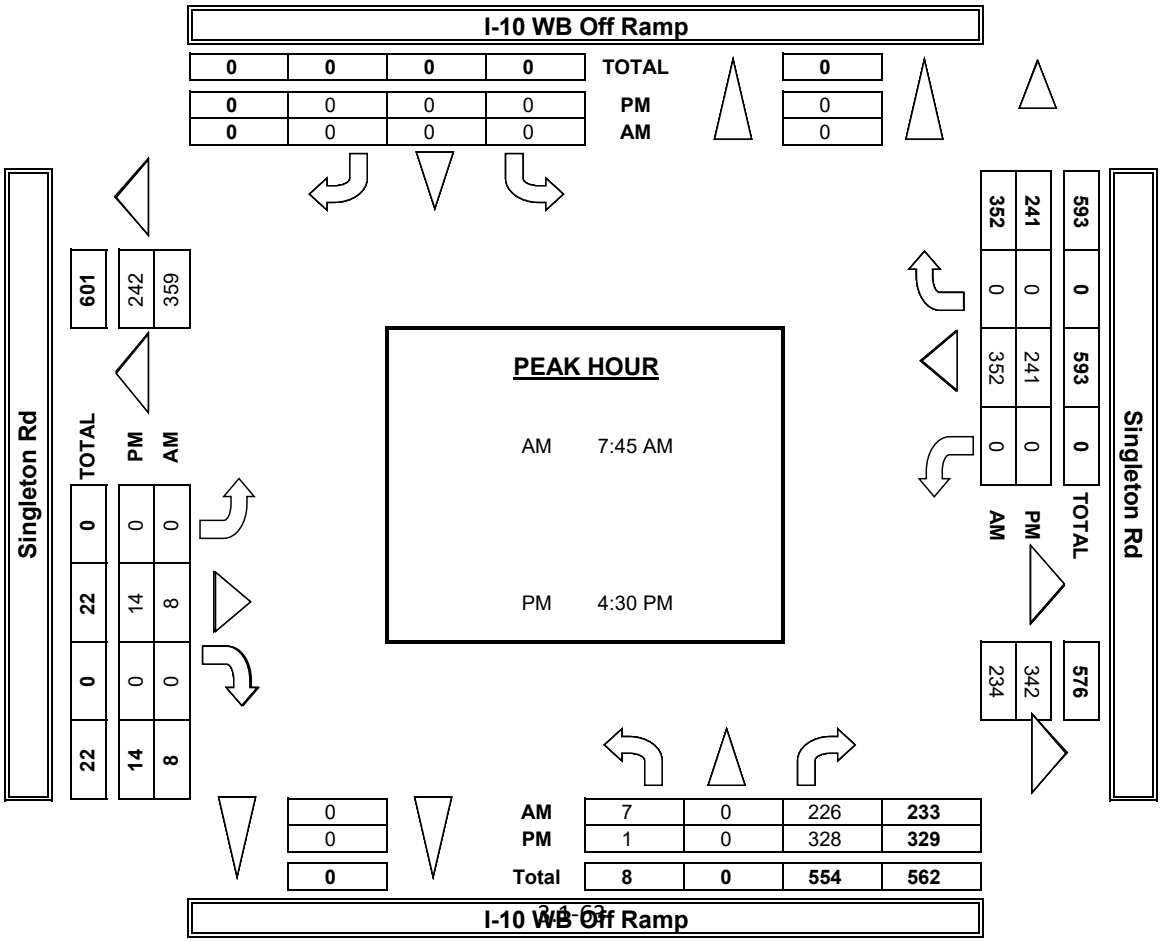
I-10 WB Off Ramp

		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TUR

PREPARED BY: AimTD LL

DATE:	LOCATION:	Calimesa
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp
TUESDAY	EAST & WEST:	Singleton Rd

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

		NORTHBOUND I-10 WB Off Ramp			SOUTHBOUNI I-10 WB Off Ram	
		NL	NT	NR	SL	ST
	LANES:	0	X	0	X	X
AM	7:00 AM	0	0	36	0	0
	7:15 AM	0	0	47	0	0
	7:30 AM	0	0	42	0	0
	7:45 AM	3	0	61	0	0
	8:00 AM	1	0	53	0	0
	8:15 AM	2	0	68	0	0
	8:30 AM	3	0	67	0	0
	8:45 AM	2	0	59	0	0
	VOLUMES	10	0	430	0	0
	APPROACH %	2%	0%	98%	0%	0%
	APP/DEPART	440	/	0	0	/
	BEGIN PEAK HR		7:45 AM			
	VOLUMES	8	0	248	0	0
	APPROACH %	3%	0%	97%	0%	0%
	PEAK HR FACTOR		0.921			0.000
	APP/DEPART	256	/	0	0	/
PM	4:00 PM	1	0	64	0	0
	4:15 PM	1	0	65	0	0
	4:30 PM	0	0	90	0	0
	4:45 PM	0	0	87	0	0
	5:00 PM	1	0	96	0	0
	5:15 PM	0	0	67	0	0
	5:30 PM	2	0	83	0	0
	5:45 PM	0	0	64	0	0
	VOLUMES	5	0	614	0	0
	APPROACH %	1%	0%	99%	0%	0%
	APP/DEPART	619	/	0	0	/

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #:	8
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP N

CLASS 1: PASSENGER VEHICLES

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 WB Off Ramp)			SOUTHBOUND (I-10 WB Off Ramp)			EASTBOUND (Singleton Rd)			WESTBOUND (Singleton Rd)			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER X	WL X	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	34	0	0	0	0	2	0	0	76	0	112
	7:15 AM	0	0	42	0	0	0	0	0	0	0	78	0	120
	7:30 AM	0	0	34	0	0	0	0	0	0	0	89	0	123
	7:45 AM	1	0	52	0	0	0	0	1	0	0	88	0	142
	8:00 AM	1	0	46	0	0	0	0	5	0	0	104	0	156
	8:15 AM	2	0	52	0	0	0	0	0	0	0	61	0	115
	8:30 AM	1	0	55	0	0	0	0	1	0	0	77	0	134
	8:45 AM	2	0	54	0	0	0	0	0	0	0	46	0	102
	VOLUMES	7	0	369	0	0	0	0	9	0	0	619	0	1,004
	APPROACH %	2%	0%	98%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	376	/	0	0	/	0	9	/	378	619	/	626	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	5	0	205	0	0	0	0	7	0	0	330	0	547
	APPROACH %	2%	0%	98%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.938			0.000			0.350			0.793		0.877
	APP/DEPART	210	/	0	0	/	0	7	/	212	330	/	335	0
PM	4:00 PM	1	0	62	0	0	0	0	2	0	0	57	0	122
	4:15 PM	1	0	62	0	0	0	0	0	0	0	50	0	113
	4:30 PM	0	0	86	0	0	0	0	0	0	0	50	0	136
	4:45 PM	0	0	81	0	0	0	0	7	0	0	57	0	145
	5:00 PM	1	0	90	0	0	0	0	4	0	0	53	0	148
	5:15 PM	0	0	55	0	0	0	0	1	0	0	65	0	121
	5:30 PM	2	0	78	0	0	0	0	0	0	0	43	0	123
	5:45 PM	0	0	60	0	0	0	0	0	0	0	38	0	98
	VOLUMES	5	0	574	0	0	0	0	14	0	0	413	0	1,006
	APPROACH %	1%	0%	99%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	579	/	0	0	/	0	14	/	588	413	/	418	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	1	0	312	0	0	0	0	12	0	0	225	0	550
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.860			0.000			0.429			0.865		0.929
	APP/DEPART	313	/	0	0	/	0	12	/	324	225	/	226	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
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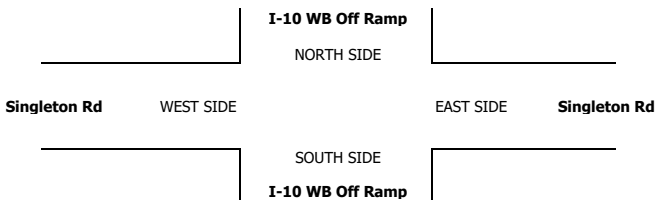


INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #:	8
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP N

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB Off Ramp			SOUTHBOUND I-10 WB Off Ramp			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER X	WL X	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	1	0	0	0	0	0	0	0	2	0	3
	7:15 AM	0	0	1	0	0	0	0	0	0	0	8	0	9
	7:30 AM	0	0	3	0	0	0	0	0	0	0	1	0	4
	7:45 AM	1	0	2	0	0	0	0	0	0	0	2	0	5
	8:00 AM	0	0	1	0	0	0	0	0	0	0	2	0	3
	8:15 AM	0	0	1	0	0	0	0	0	0	0	6	0	7
	8:30 AM	1	0	8	0	0	0	0	0	0	0	3	0	12
	8:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	3
	VOLUMES	2	0	20	0	0	0	0	0	0	0	24	0	46
	APPROACH %	9%	0%	91%	0%	0%	0%	0%	0%	0%	0%	100%	0%	
	APP/DEPART	22	/	0	0	/	0	0	/	20	24	/	26	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	2	0	12	0	0	0	0	0	0	0	13	0	27
	APPROACH %	14%	0%	86%	0%	0%	0%	0%	0%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.389			0.000			0.000			0.542		0.563
	APP/DEPART	14	/	0	0	/	0	0	/	12	13	/	15	0
PM	4:00 PM	0	0	1	0	0	0	0	1	0	0	5	0	7
	4:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	3
	4:30 PM	0	0	1	0	0	0	0	0	0	0	4	0	5
	4:45 PM	0	0	4	0	0	0	0	1	0	0	1	0	6
	5:00 PM	0	0	4	0	0	0	0	1	0	0	6	0	11
	5:15 PM	0	0	4	0	0	0	0	0	0	0	1	0	5
	5:30 PM	0	0	3	0	0	0	0	0	0	0	1	0	4
	5:45 PM	0	0	1	0	0	0	0	0	0	0	2	0	3
	VOLUMES	0	0	18	0	0	0	0	3	0	0	23	0	44
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	18	/	0	0	/	0	3	/	21	23	/	23	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	0	13	0	0	0	0	2	0	0	12	0	27
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.813			0.000			0.500			0.500		0.614
	APP/DEPART	13	/	0	0	/	0	2	/	15	12	/	12	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

I-10 WB Off Ramp

NORTH SIDE

Singleton Rd WEST SIDE EAST SIDE **Singleton Rd**

SOUTH SIDE

I-10 WB Off Ramp

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

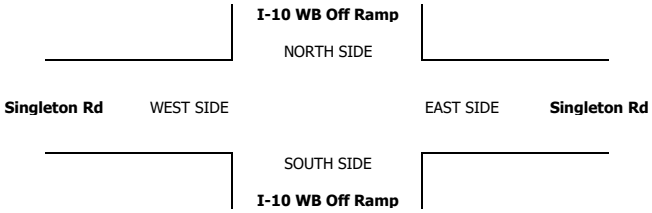
DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #:	8
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP N

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB Off Ramp			SOUTHBOUND I-10 WB Off Ramp			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd				U-TURNS					RTOR			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER X	WL X	WT 1	WR X	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	1	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	2	0	0	0	0	3	0	0	4	0	9	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	100%	0%										
	APP/DEPART	2	/	0	0	/	0	3	/	5	4	/	4	0									
	BEGIN PEAK HR		7:45 AM																				
	VOLUMES	0	0	2	0	0	0	0	1	0	0	4	0	7	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	100%	0%										
	PEAK HR FACTOR		0.500			0.000			0.250			0.500		0.875									
	APP/DEPART	2	/	0	0	/	0	1	/	3	4	/	4	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	2	0	0	0	0	0	0	0	5	0	7	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%										
	APP/DEPART	2	/	0	0	/	0	0	/	2	5	/	5	0									
	BEGIN PEAK HR		4:30 PM																				
	VOLUMES	0	0	1	0	0	0	0	0	0	0	3	0	4	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%										
	PEAK HR FACTOR		0.250			0.000			0.000			0.375		0.500									
	APP/DEPART	1	/	0	0	/	0	0	/	1	3	/	3	0									



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #:	8
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP N

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB Off Ramp			SOUTHBOUND I-10 WB Off Ramp			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd				U-TURNS					RTOR			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER X	WL X	WT 1	WR X	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	1	0	0	0	0	0	0	0	3	0	4	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	9	0	0	0	0	0	0	0	3	0	12	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%										
	APP/DEPART	9	/	0	0	/	0	0	/	9	3	/	3	0									
	BEGIN PEAK HR		7:45 AM																				
	VOLUMES	0	0	7	0	0	0	0	0	0	0	3	0	10	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%										
	PEAK HR FACTOR		0.438			0.000			0.000			0.250		0.625									
	APP/DEPART	7	/	0	0	/	0	0	/	7	3	/	3	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	3	0	0	0	0	0	0	0	3	0	6	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%										
	APP/DEPART	3	/	0	0	/	0	0	/	3	3	/	3	0									
	BEGIN PEAK HR		4:30 PM																				
	VOLUMES	0	0	2	0	0	0	0	0	0	0	1	0	3	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%										
	PEAK HR FACTOR		0.250			0.000			0.000			0.250		0.375									
	APP/DEPART	2	/	0	0	/	0	0	/	2	1	/	1	0									

I-10 WB Off Ramp

NORTH SIDE

Singleton Rd WEST SIDE EAST SIDE **Singleton Rd**

SOUTH SIDE

I-10 WB Off Ramp

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #:	8
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP N

CLASS 5: RV

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB Off Ramp			SOUTHBOUND I-10 WB Off Ramp			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER X	WL X	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

I-10 WB Off Ramp

NORTH SIDE

Singleton Rd WEST SIDE EAST SIDE **Singleton Rd**

SOUTH SIDE

I-10 WB Off Ramp

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Off Ramp	LOCATION #:	8
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP N

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB Off Ramp			SOUTHBOUND I-10 WB Off Ramp			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER X	WL X	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	2	0	2
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	2	/	2	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	2	0	2
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.250		0.250
	APP/DEPART	0	/	0	0	/	0	0	/	0	2	/	2	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
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0	0	0	0
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0	0	0	0
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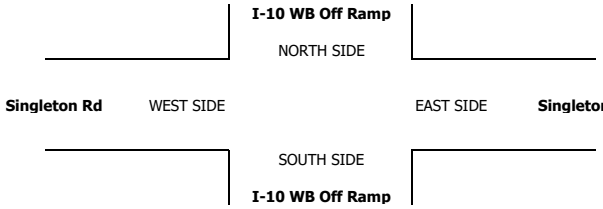
0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

T101823

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Jan 30, 24	LOCATION:	Calimesa	PROJECT #: SC4429
	NORTH & SOUTH:	Calimesa Blvd	LOCATION #: 9
	EAST & WEST:	Singleton Rd	CONTROL: STOP ALL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Calimesa Blvd			SOUTHBOUND Calimesa Blvd			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	0	56	28	7	6	7	6	29	2	8	71	49	269
	7:15 AM	1	124	56	9	3	4	9	37	0	5	81	37	366
	7:30 AM	1	135	64	14	10	12	10	27	0	3	77	52	405
	7:45 AM	0	115	50	23	15	8	12	46	0	5	83	41	398
	8:00 AM	0	97	30	15	5	7	17	36	1	13	103	24	348
	8:15 AM	0	81	33	20	8	3	21	37	0	9	65	31	308
	8:30 AM	0	26	15	22	11	4	21	43	0	5	80	35	262
	8:45 AM	1	15	10	8	7	3	17	40	0	8	42	24	175
	VOLUMES	3	649	286	118	65	48	113	295	3	56	602	293	2,532
	APPROACH %	0%	69%	30%	51%	28%	21%	27%	72%	1%	6%	63%	31%	
	APP/DEPART	938	/	1,056	232	/	124	411	/	699	951	/	653	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	2	471	200	61	33	31	48	146	1	26	344	154	1,518
	APPROACH %	0%	70%	30%	48%	26%	25%	25%	75%	1%	5%	66%	29%	
	PEAK HR FACTOR		0.841			0.685			0.841			0.936		0.935
	APP/DEPART	673	/	674	126	/	60	195	/	407	524	/	377	0
PM	4:00 PM	0	20	25	39	19	2	5	61	0	8	64	23	266
	4:15 PM	0	11	12	36	19	5	5	53	3	9	48	25	226
	4:30 PM	0	13	22	32	22	4	2	85	1	14	51	19	265
	4:45 PM	0	16	20	39	25	8	7	86	0	8	50	25	284
	5:00 PM	0	13	14	47	24	7	6	92	1	17	53	21	295
	5:15 PM	0	7	12	26	19	5	2	60	0	16	63	21	231
	5:30 PM	0	7	13	29	24	5	3	78	0	7	40	29	235
	5:45 PM	0	12	10	31	23	3	4	58	0	11	37	13	202
	VOLUMES	0	99	128	279	175	39	34	573	5	90	406	176	2,005
	APPROACH %	0%	44%	56%	57%	35%	8%	6%	94%	1%	13%	60%	26%	
	APP/DEPART	227	/	309	493	/	270	612	/	981	673	/	445	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	49	68	144	90	24	17	323	2	55	217	86	1,075
	APPROACH %	0%	42%	58%	56%	35%	9%	5%	94%	1%	15%	61%	24%	
	PEAK HR FACTOR		0.813			0.827			0.864			0.895		0.911
	APP/DEPART	117	/	152	258	/	147	342	/	535	358	/	241	0

U-TURNS

NB 0	SB 0	EB 0	WB 0	TTL
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	1	0	1	
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	
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0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Calimesa Blvd

NORTH LEG

Singleton Rd WEST LEG — EAST LEG **Singleton Rd**

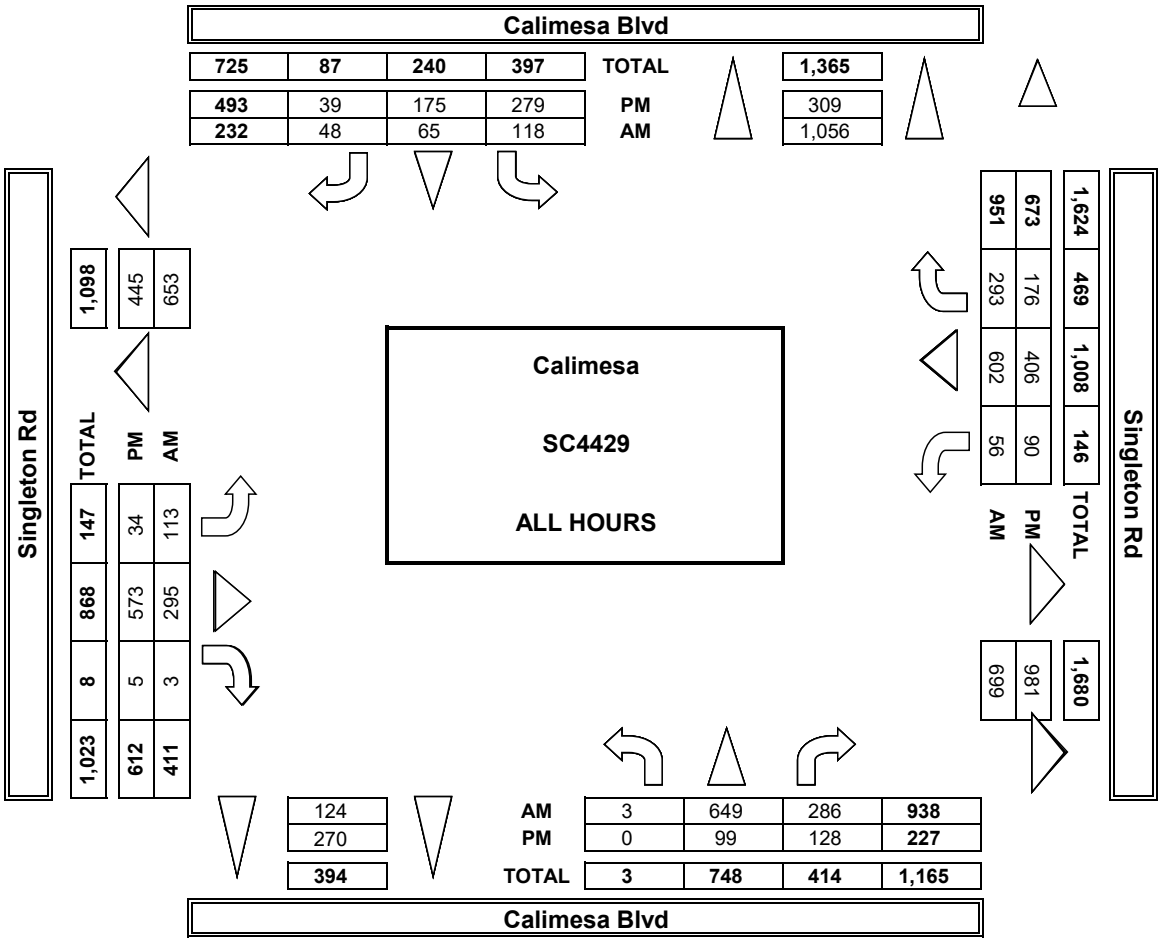
SOUTH LEG

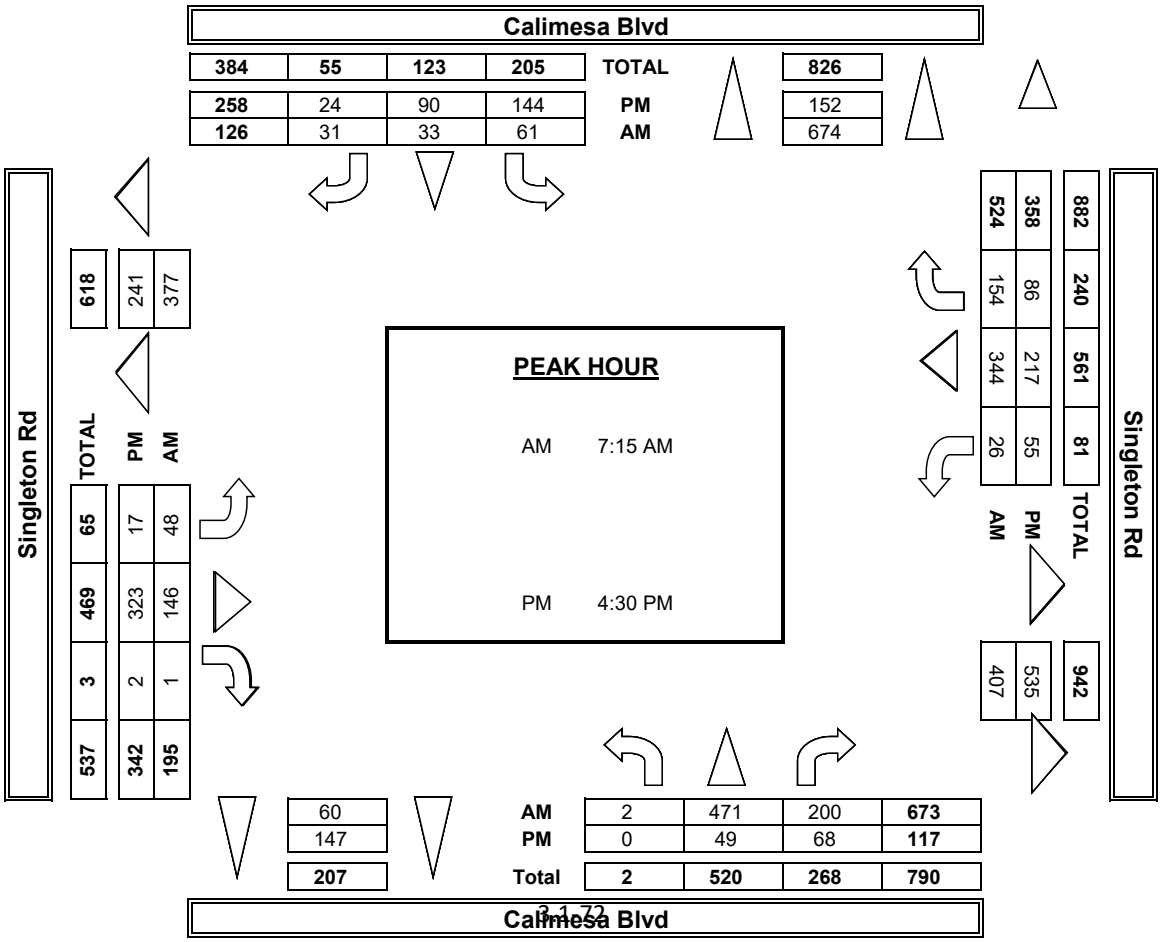
Calimesa Blvd

		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	1	0	0	1	2	1	0	0	1	2	0	0	0	0	0
	8:45 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	TOTAL	3	0	1	1	5	2	0	1	1	4	1	0	0	0	1
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	1	0	0	1	2	0	0	0	0	0	1	0	0	1	2

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TUR

PREPARED BY: AimTD LL

DATE:	LOCATION:	Calimesa
1/30/24	NORTH & SOUTH:	Calimesa Blvd
TUESDAY	EAST & WEST:	Singleton Rd

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND Calimesa Blvd			SOUTHBOUNI Calimesa Blvd	
	NL	NT	NR	SL	ST
LANES:	0	1	0	0	1
AM 7:00 AM	0	57	29	7	6
7:15 AM	1	124	58	9	5
7:30 AM	1	138	69	14	10
7:45 AM	0	118	53	24	15
8:00 AM	0	99	31	15	5
8:15 AM	0	82	36	20	8
8:30 AM	0	27	15	23	12
8:45 AM	1	15	11	8	11
VOLUMES	3	659	299	120	72
APPROACH %	0%	69%	31%	50%	30%
APP/DEPART	961	/	1,074	239	/
BEGIN PEAK HR		7:15 AM			
VOLUMES	2	479	210	62	35
APPROACH %	0%	69%	30%	49%	27%
PEAK HR FACTOR		0.831			0.678
APP/DEPART	690	/	684	128	/
PM 4:00 PM	0	20	26	39	19
4:15 PM	0	13	12	38	20
4:30 PM	0	13	23	33	24
4:45 PM	0	16	20	39	25
5:00 PM	0	14	14	53	24
5:15 PM	0	7	13	26	19
5:30 PM	0	7	13	29	24
5:45 PM	0	12	10	31	24
VOLUMES	0	102	131	288	178
APPROACH %	0%	44%	56%	57%	35%
APP/DEPART	232	/	315	506	/

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Calimesa Blvd	LOCATION #:	9
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP ALL

CLASS 1: PASSENGER VEHICLES

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (Calimesa Blvd)			SOUTHBOUND (Calimesa Blvd)			EASTBOUND (Singleton Rd)			WESTBOUND (Singleton Rd)			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	0	54	27	7	6	7	6	28	2	5	69	48	259
	7:15 AM	1	124	53	9	1	4	9	33	0	5	73	36	348
	7:30 AM	1	133	58	14	10	12	10	23	0	2	76	51	390
	7:45 AM	0	111	46	22	15	8	12	41	0	4	80	39	378
	8:00 AM	0	93	29	15	5	7	17	33	1	13	98	23	334
	8:15 AM	0	80	29	20	8	3	20	32	0	5	58	31	286
	8:30 AM	0	25	15	21	9	4	19	37	0	4	73	34	241
	8:45 AM	1	15	9	8	5	3	17	37	0	8	42	22	167
	VOLUMES	3	635	266	116	59	48	110	264	3	46	569	284	2,404
	APPROACH %	0%	70%	29%	52%	26%	21%	29%	70%	1%	5%	63%	32%	
	APP/DEPART	904	/	1,030	224	/	108	377	/	646	899	/	620	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	2	461	186	60	31	31	48	130	1	24	327	149	1,451
	APPROACH %	0%	71%	29%	49%	25%	25%	27%	73%	1%	5%	65%	30%	
	PEAK HR FACTOR		0.845			0.683			0.844			0.933		0.928
	APP/DEPART	649	/	659	123	/	56	179	/	376	500	/	360	0
PM	4:00 PM	0	20	24	39	19	2	4	60	0	8	56	23	255
	4:15 PM	0	10	12	34	18	5	5	53	2	9	45	23	216
	4:30 PM	0	13	21	30	20	4	2	83	1	14	46	19	253
	4:45 PM	0	16	20	39	25	8	7	81	0	7	49	24	276
	5:00 PM	0	12	14	44	24	7	6	87	1	16	46	20	277
	5:15 PM	0	7	10	26	19	4	2	54	0	15	61	21	219
	5:30 PM	0	7	13	29	24	5	3	75	0	7	38	29	230
	5:45 PM	0	12	10	31	21	2	4	56	0	11	36	12	195
	VOLUMES	0	97	124	272	170	37	33	549	4	87	377	171	1,922
	APPROACH %	0%	44%	56%	57%	35%	8%	6%	94%	1%	14%	59%	27%	
	APP/DEPART	221	/	301	479	/	261	586	/	946	636	/	414	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	48	65	139	88	23	17	305	2	52	202	84	1,025
	APPROACH %	0%	42%	58%	56%	35%	9%	5%	94%	1%	15%	60%	25%	
	PEAK HR FACTOR		0.785			0.833			0.862			0.871		0.925
	APP/DEPART	113	/	149	250	/	142	324	/	509	338	/	225	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
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0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
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0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Calimesa Blvd
NORTH SIDE

Singleton Rd WEST SIDE EAST SIDE **Singleton Rd**

SOUTH SIDE
Calimesa Blvd

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Calimesa Blvd	LOCATION #:	9
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP ALL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Calimesa Blvd			SOUTHBOUND Calimesa Blvd			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	0	2	1	0	0	0	0	1	0	2	2	1	9
	7:15 AM	0	0	2	0	1	0	0	1	0	0	8	1	13
	7:30 AM	0	0	3	0	0	0	0	3	0	1	1	0	8
	7:45 AM	0	3	3	0	0	0	0	2	0	0	2	2	12
	8:00 AM	0	4	1	0	0	0	0	1	0	0	2	1	9
	8:15 AM	0	1	3	0	0	0	0	1	0	4	6	0	15
	8:30 AM	0	1	0	1	2	0	2	6	0	1	3	0	16
	8:45 AM	0	0	1	0	0	0	0	3	0	0	0	2	6
	VOLUMES	0	11	14	1	3	0	2	18	0	8	24	7	88
	APPROACH %	0%	44%	56%	25%	75%	0%	10%	90%	0%	21%	62%	18%	
	APP/DEPART	25	/	20	4	/	11	20	/	33	39	/	24	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	7	9	0	1	0	0	7	0	1	13	4	42
	APPROACH %	0%	44%	56%	0%	100%	0%	0%	100%	0%	6%	72%	22%	
	PEAK HR FACTOR		0.667			0.250			0.583			0.500		0.808
	APP/DEPART	16	/	11	1	/	2	7	/	16	18	/	13	0
PM	4:00 PM	0	0	1	0	0	0	1	1	0	0	5	0	8
	4:15 PM	0	0	0	1	1	0	0	0	0	0	3	1	6
	4:30 PM	0	0	0	2	1	0	0	1	0	0	4	0	8
	4:45 PM	0	0	0	0	0	0	0	5	0	1	1	1	8
	5:00 PM	0	1	0	0	0	0	0	5	0	0	6	1	13
	5:15 PM	0	0	2	0	0	1	0	4	0	0	0	0	7
	5:30 PM	0	0	0	0	0	0	0	3	0	0	1	0	4
	5:45 PM	0	0	0	0	2	1	0	1	0	0	1	1	6
	VOLUMES	0	1	3	3	4	2	1	20	0	1	21	4	60
	APPROACH %	0%	25%	75%	33%	44%	22%	5%	95%	0%	4%	81%	15%	
	APP/DEPART	4	/	6	9	/	5	21	/	26	26	/	23	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	1	2	2	1	1	0	15	0	1	11	2	36
	APPROACH %	0%	33%	67%	50%	25%	25%	0%	100%	0%	7%	79%	14%	
	PEAK HR FACTOR		0.375			0.333			0.750			0.500		0.692
	APP/DEPART	3	/	3	4	/	2	15	/	19	14	/	12	0

U-TURNS					
	NB	SB	EB	WB	TTL
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	

RTOR			
NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Calimesa Blvd

NORTH SIDE

Singleton Rd WEST SIDE EAST SIDE **Singleton Rd**

SOUTH SIDE

Calimesa Blvd

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Calimesa Blvd	LOCATION #:	9
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP ALL

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Calimesa Blvd			SOUTHBOUND Calimesa Blvd			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd				U-TURNS					RTOR			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	1	0	1	0	0	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0
	7:30 AM	0	1	3	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
	7:45 AM	0	1	1	1	0	0	0	1	0	0	1	0	5	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	1	0	0	0	0	1	0	0	1	0	3	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	2	6	1	1	0	0	5	0	1	4	0	20	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	25%	75%	50%	50%	0%	0%	100%	0%	20%	80%	0%										
	APP/DEPART	8	/	2	2	/	2	5	/	12	5	/	4	0									
	BEGIN PEAK HR		7:15 AM																				
	VOLUMES	0	2	5	1	1	0	0	4	0	0	1	0	14	0	0	0	0		0	0	0	0
	APPROACH %	0%	29%	71%	50%	50%	0%	0%	100%	0%	0%	100%	0%										
	PEAK HR FACTOR		0.438			0.500			0.500			0.250		0.700									
	APP/DEPART	7	/	2	2	/	1	4	/	10	1	/	1	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	1	0	1	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	1	0	1	0	0	2	0	2	5	1	12	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	100%	0%	100%	0%	0%	100%	0%	25%	63%	13%										
	APP/DEPART	1	/	1	1	/	3	2	/	3	8	/	5	0									
	BEGIN PEAK HR		4:30 PM																				
	VOLUMES	0	0	1	0	1	0	0	1	0	2	3	0	8	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	100%	0%	100%	0%	0%	100%	0%	40%	60%	0%										
	PEAK HR FACTOR		0.250			0.250			0.250			0.417		0.667									
	APP/DEPART	1	/	0	1	/	3	1	/	2	5	/	3	0									

Calimesa Blvd

NORTH SIDE

Singleton Rd WEST SIDE EAST SIDE **Singleton Rd**

SOUTH SIDE

Calimesa Blvd

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Calimesa Blvd	LOCATION #:	9
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP ALL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Calimesa Blvd			SOUTHBOUND Calimesa Blvd			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd				U-TURNS					RTOR			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	7:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	2	0	1	0	0	3	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	1	0	0	3	0	4	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	1	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	VOLUMES	0	1	0	0	2	0	1	8	0	1	3	1	17	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	100%	0%	0%	100%	0%	11%	89%	0%	20%	60%	20%										
	APP/DEPART	1	/	3	2	/	3	9	/	8	5	/	3	0									
	BEGIN PEAK HR		7:15 AM																				
	VOLUMES	0	1	0	0	0	0	0	5	0	1	3	0	10	0	0	0	0		0	0	0	0
	APPROACH %	0%	100%	0%	0%	0%	0%	0%	100%	0%	25%	75%	0%										
	PEAK HR FACTOR		0.250			0.000			0.625			0.333		0.625									
	APP/DEPART	1	/	1	0	/	1	5	/	5	4	/	3	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
	4:15 PM	0	1	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	3	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	1	0	3	0	0	0	2	1	0	3	0	10	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	67%	33%	0%	100%	0%										
	APP/DEPART	1	/	1	3	/	1	3	/	5	3	/	3	0									
	BEGIN PEAK HR		4:30 PM																				
	VOLUMES	0	0	0	3	0	0	0	2	0	0	1	0	6	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	100%	0%										
	PEAK HR FACTOR		0.000			0.250			0.250			0.250		0.500									
	APP/DEPART	0	/	0	3	/	0	2	/	5	1	/	1	0									

Calimesa Blvd

NORTH SIDE

Singleton Rd WEST SIDE EAST SIDE **Singleton Rd**

SOUTH SIDE

Calimesa Blvd

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Calimesa Blvd	LOCATION #:	9
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP ALL

CLASS 5: RV

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Calimesa Blvd			SOUTHBOUND Calimesa Blvd			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	1	0	0	0	0	0	0	0	0	1
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	1	/	0	0	/	1	0	/	0	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Calimesa Blvd

NORTH SIDE

Singleton Rd WEST SIDE EAST SIDE **Singleton Rd**

SOUTH SIDE

Calimesa Blvd

INTERSECTION TURNING MOVEMENT COUNTS

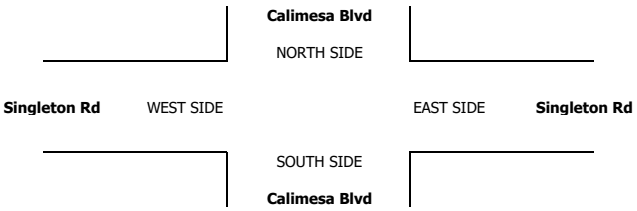
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	Calimesa Blvd	LOCATION #:	9
TUESDAY	EAST & WEST:	Singleton Rd	CONTROL:	STOP ALL

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Calimesa Blvd			SOUTHBOUND Calimesa Blvd			EASTBOUND Singleton Rd			WESTBOUND Singleton Rd				U-TURNS					RTOR			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	33%										
	APP/DEPART	0	/	1	0	/	0	0	/	0	3	/	2	0									
	BEGIN PEAK HR		7:15 AM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.250		0.250									
	APP/DEPART	0	/	1	0	/	0	0	/	0	1	/	0	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									
	BEGIN PEAK HR		4:30 PM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000									
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									



INTERSECTION TURNING MOVEMENT COUNTS

T101823

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
Tue, Jan 30, 24	NORTH & SOUTH:	I-10 EB Ramps	LOCATION #:	10
	EAST & WEST:	W County Line Rd	CONTROL:	STOP S

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 EB Ramps)			SOUTHBOUND (I-10 EB Ramps)			EASTBOUND (W County Line Rd)			WESTBOUND (W County Line Rd)			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 1	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	48	2	12	0	39	5	59	19	0	184
	7:15 AM	0	0	0	66	0	10	0	20	2	79	33	0	210
	7:30 AM	0	0	0	49	1	14	0	48	9	94	49	0	264
	7:45 AM	0	0	0	66	2	14	0	45	12	72	30	0	241
	8:00 AM	0	0	0	50	0	12	0	37	5	55	13	0	172
	8:15 AM	0	0	0	71	1	15	0	32	5	44	19	0	187
	8:30 AM	0	0	0	76	1	18	0	22	4	45	24	0	190
	8:45 AM	0	0	0	57	1	13	0	20	7	42	10	0	150
	VOLUMES	0	0	0	483	8	108	0	263	49	490	197	0	1,598
	APPROACH %	0%	0%	0%	81%	1%	18%	0%	84%	16%	71%	29%	0%	
	APP/DEPART	0	/	0	599	/	547	312	/	746	687	/	305	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	229	5	50	0	152	28	304	131	0	899
	APPROACH %	0%	0%	0%	81%	2%	18%	0%	84%	16%	70%	30%	0%	
	PEAK HR FACTOR		0.000			0.866			0.789			0.760		0.851
	APP/DEPART	0	/	0	284	/	337	180	/	381	435	/	181	0
PM	4:00 PM	0	0	0	120	0	7	0	22	8	53	15	0	225
	4:15 PM	0	0	0	99	1	20	0	24	4	55	31	0	234
	4:30 PM	0	0	0	78	1	10	0	30	13	71	17	0	220
	4:45 PM	0	0	0	82	1	13	0	25	9	53	18	0	201
	5:00 PM	0	0	0	69	0	12	0	29	6	63	19	0	198
	5:15 PM	0	0	0	74	0	10	0	9	6	75	10	0	184
	5:30 PM	0	0	0	89	0	9	0	19	11	68	19	0	215
	5:45 PM	0	0	0	90	2	11	0	22	7	58	17	0	207
	VOLUMES	0	0	0	701	5	92	0	180	64	496	146	0	1,684
	APPROACH %	0%	0%	0%	88%	1%	12%	0%	74%	26%	77%	23%	0%	
	APP/DEPART	0	/	0	798	/	565	244	/	881	642	/	238	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	0	0	379	3	50	0	101	34	232	81	0	880
	APPROACH %	0%	0%	0%	88%	1%	12%	0%	75%	25%	74%	26%	0%	
	PEAK HR FACTOR		0.000			0.850			0.785			0.889		0.940
	APP/DEPART	0	/	0	432	/	269	135	/	480	313	/	131	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	0

RTOR

NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

I-10 EB Ramps

NORTH LEG

W County Line Rd WEST LEG EAST LEG **W County Line Rd**

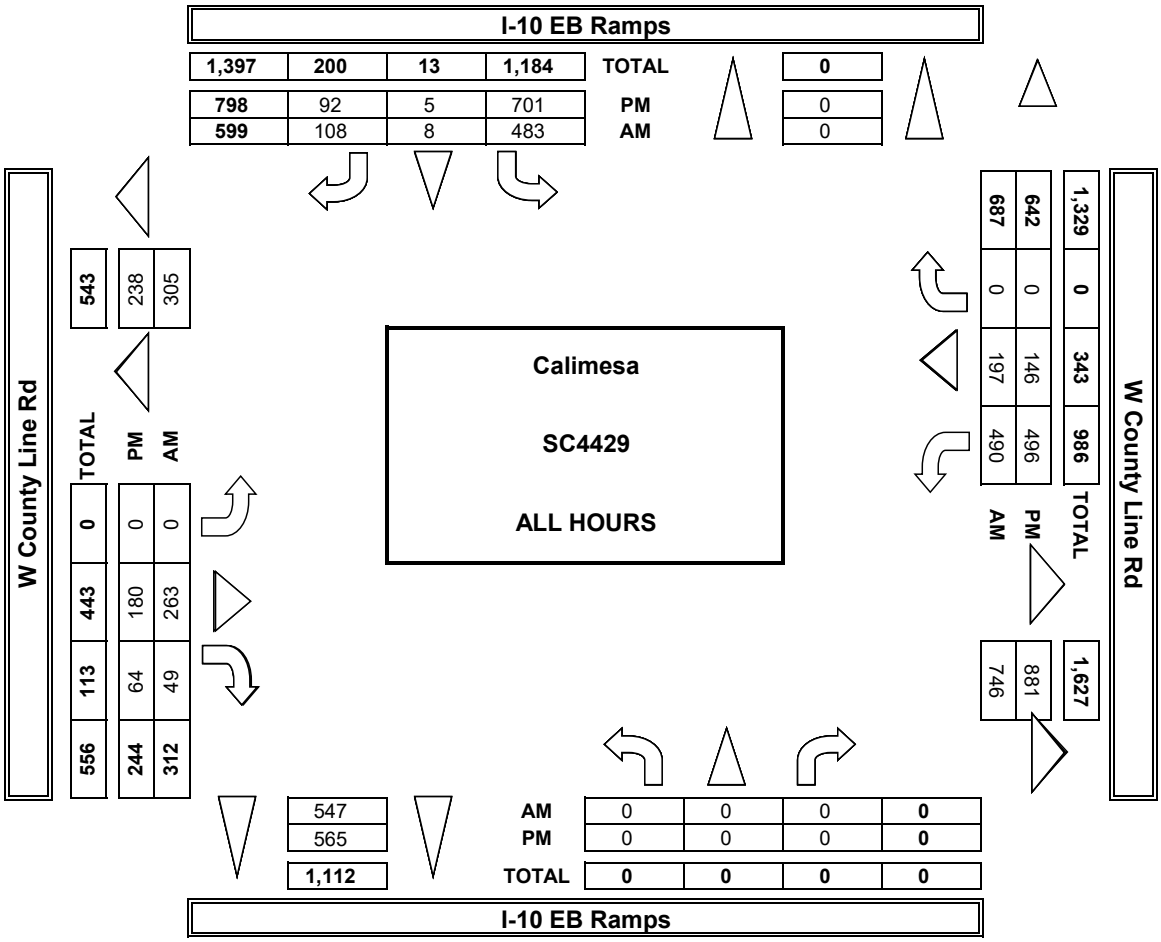
SOUTH LEG

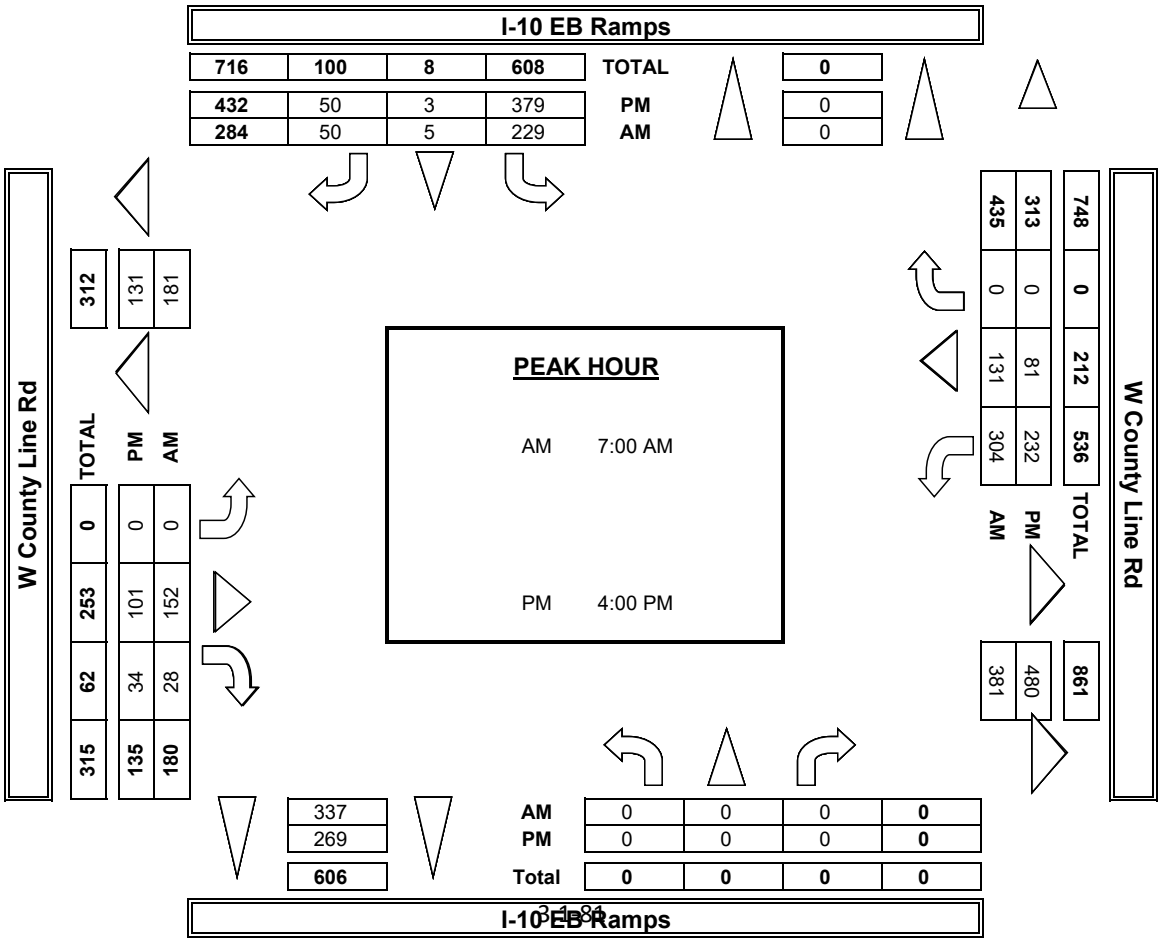
I-10 EB Ramps

		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	2	0	2	0	0	0	0	0	0	0	2	0	2
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	3	3	0	0	0	3	3	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	3	3	6	0	0	1	3	4	0	0	2	0	2
PM	4:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0
	5:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
	5:45 PM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
	TOTAL	0	0	1	3	4	0	0	1	1	2	0	0	0	2	2

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TUR

PREPARED BY: AimTD LL

DATE:	LOCATION:	Calimesa
1/30/24	NORTH & SOUTH:	I-10 EB Ramps
TUESDAY	EAST & WEST:	W County Line Rd

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

		NORTHBOUND I-10 EB Ramps			SOUTHBOUNI I-10 EB Ramps	
		NL	NT	NR	SL	ST
	LANES:	X	X	X	0	1
AM	7:00 AM	0	0	0	57	2
	7:15 AM	0	0	0	71	0
	7:30 AM	0	0	0	51	1
	7:45 AM	0	0	0	74	3
	8:00 AM	0	0	0	52	0
	8:15 AM	0	0	0	78	1
	8:30 AM	0	0	0	79	1
	8:45 AM	0	0	0	64	1
	VOLUMES	0	0	0	525	9
	APPROACH %	0%	0%	0%	76%	1%
	APP/DEPART	0	/	0	688	/
	BEGIN PEAK HR		7:00 AM			
	VOLUMES	0	0	0	252	6
	APPROACH %	0%	0%	0%	76%	2%
	PEAK HR FACTOR		0.000			0.878
	APP/DEPART	0	/	0	332	/
PM	4:00 PM	0	0	0	126	0
	4:15 PM	0	0	0	103	1
	4:30 PM	0	0	0	82	1
	4:45 PM	0	0	0	87	1
	5:00 PM	0	0	0	70	0
	5:15 PM	0	0	0	78	0
	5:30 PM	0	0	0	90	0
	5:45 PM	0	0	0	92	4
	VOLUMES	0	0	0	726	7
	APPROACH %	0%	0%	0%	87%	1%
	APP/DEPART	0	/	0	834	/

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB Ramps	LOCATION #:	10
TUESDAY	EAST & WEST:	W County Line Rd	CONTROL:	STOP S

CLASS 1: PASSENGER VEHICLES

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 EB Ramps)			SOUTHBOUND (I-10 EB Ramps)			EASTBOUND (W County Line Rd)			WESTBOUND (W County Line Rd)			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 1	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	39	2	6	0	36	4	56	15	0	158
	7:15 AM	0	0	0	58	0	4	0	17	2	75	32	0	188
	7:30 AM	0	0	0	46	1	8	0	44	8	92	46	0	245
	7:45 AM	0	0	0	58	1	9	0	37	10	69	27	0	211
	8:00 AM	0	0	0	47	0	7	0	29	3	52	9	0	147
	8:15 AM	0	0	0	64	1	10	0	25	3	42	19	0	164
	8:30 AM	0	0	0	70	1	11	0	18	1	43	21	0	165
	8:45 AM	0	0	0	46	1	6	0	18	6	37	8	0	122
	VOLUMES	0	0	0	428	7	61	0	224	37	466	177	0	1,400
	APPROACH %	0%	0%	0%	86%	1%	12%	0%	86%	14%	72%	28%	0%	
	APP/DEPART	0	/	0	496	/	510	261	/	652	643	/	238	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	201	4	27	0	134	24	292	120	0	802
	APPROACH %	0%	0%	0%	87%	2%	12%	0%	85%	15%	71%	29%	0%	
	PEAK HR FACTOR		0.000			0.853			0.760			0.746		0.818
	APP/DEPART	0	/	0	232	/	320	158	/	335	412	/	147	0
PM	4:00 PM	0	0	0	109	0	7	0	22	7	51	13	0	209
	4:15 PM	0	0	0	95	1	18	0	22	4	53	27	0	220
	4:30 PM	0	0	0	71	1	8	0	26	9	65	15	0	195
	4:45 PM	0	0	0	76	1	12	0	20	8	51	17	0	185
	5:00 PM	0	0	0	67	0	8	0	26	6	61	17	0	185
	5:15 PM	0	0	0	69	0	9	0	8	5	69	6	0	166
	5:30 PM	0	0	0	88	0	9	0	19	8	68	16	0	208
	5:45 PM	0	0	0	86	1	11	0	21	6	56	14	0	195
	VOLUMES	0	0	0	661	4	82	0	164	53	474	125	0	1,563
	APPROACH %	0%	0%	0%	88%	1%	11%	0%	76%	24%	79%	21%	0%	
	APP/DEPART	0	/	0	747	/	531	217	/	825	599	/	207	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	0	0	351	3	45	0	90	28	220	72	0	809
	APPROACH %	0%	0%	0%	88%	1%	11%	0%	76%	24%	75%	25%	0%	
	PEAK HR FACTOR		0.000			0.860			0.843			0.913		0.919
	APP/DEPART	0	/	0	399	/	251	118	/	441	292	/	117	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
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0	0	0	0
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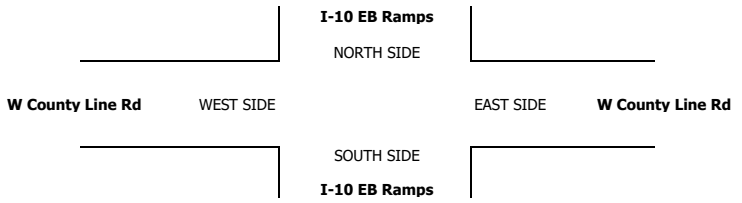
0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB Ramps	LOCATION #:	10
TUESDAY	EAST & WEST:	W County Line Rd	CONTROL:	STOP S

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 EB Ramps			SOUTHBOUND I-10 EB Ramps			EASTBOUND W County Line Rd			WESTBOUND W County Line Rd			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 1	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	5	0	1	0	2	1	3	3	0	15
	7:15 AM	0	0	0	7	0	1	0	0	0	3	1	0	12
	7:30 AM	0	0	0	2	0	1	0	1	0	2	2	0	8
	7:45 AM	0	0	0	4	1	2	0	1	1	3	0	0	12
	8:00 AM	0	0	0	2	0	2	0	0	1	2	2	0	9
	8:15 AM	0	0	0	4	0	3	0	1	2	1	0	0	11
	8:30 AM	0	0	0	6	0	2	0	0	1	0	1	0	10
	8:45 AM	0	0	0	8	0	1	0	1	0	2	2	0	14
	VOLUMES	0	0	0	38	1	13	0	6	6	16	11	0	91
	APPROACH %	0%	0%	0%	73%	2%	25%	0%	50%	50%	59%	41%	0%	
	APP/DEPART	0	/	0	52	/	23	12	/	44	27	/	24	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	18	1	5	0	4	2	11	6	0	47
	APPROACH %	0%	0%	0%	75%	4%	21%	0%	67%	33%	65%	35%	0%	
	PEAK HR FACTOR		0.000			0.750			0.500			0.708		0.783
	APP/DEPART	0	/	0	24	/	14	6	/	22	17	/	11	0
PM	4:00 PM	0	0	0	11	0	0	0	0	1	1	1	0	14
	4:15 PM	0	0	0	3	0	2	0	1	0	2	1	0	9
	4:30 PM	0	0	0	7	0	2	0	3	1	5	0	0	18
	4:45 PM	0	0	0	5	0	0	0	2	0	2	1	0	10
	5:00 PM	0	0	0	2	0	2	0	3	0	1	2	0	10
	5:15 PM	0	0	0	4	0	1	0	1	1	4	4	0	15
	5:30 PM	0	0	0	1	0	0	0	0	1	0	1	0	3
	5:45 PM	0	0	0	4	0	0	0	1	1	2	3	0	11
	VOLUMES	0	0	0	37	0	7	0	11	5	17	13	0	90
	APPROACH %	0%	0%	0%	84%	0%	16%	0%	69%	31%	57%	43%	0%	
	APP/DEPART	0	/	0	44	/	22	16	/	48	30	/	20	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	0	0	26	0	4	0	6	2	10	3	0	51
	APPROACH %	0%	0%	0%	87%	0%	13%	0%	75%	25%	77%	23%	0%	
	PEAK HR FACTOR		0.000			0.682			0.500			0.650		0.708
	APP/DEPART	0	/	0	30	/	12	8	/	32	13	/	7	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
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0	0	0	0
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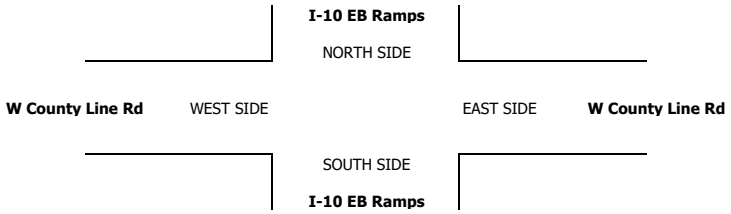


INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

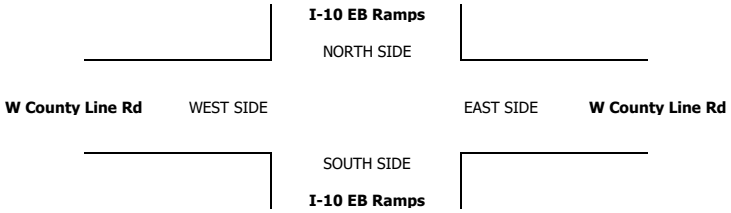
DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB Ramps	LOCATION #:	10
TUESDAY	EAST & WEST:	W County Line Rd	CONTROL:	STOP S

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 EB Ramps			SOUTHBOUND I-10 EB Ramps			EASTBOUND W County Line Rd			WESTBOUND W County Line Rd				U-TURNS					RTOR			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 1	WT 1	WR X	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	2	0	4	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	1	0	3	0	2	0	1	0	0	7	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	1	0	4	0	3	0	0	0	0	8	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	1	0	3	0	5	0	0	1	0	10	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	1	0	3	0	3	0	0	0	0	7	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	1	0	1	0	5	0	0	0	0	7	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	5	0	2	1	1	0	0	9	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	1	0	5	0	1	0	1	0	0	8	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	8	0	28	0	21	1	3	1	0	62	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	22%	0%	78%	0%	95%	5%	75%	25%	0%										
	APP/DEPART	0	/	0	36	/	4	22	/	29	4	/	29	0									
	BEGIN PEAK HR		7:00 AM																				
	VOLUMES	0	0	0	5	0	14	0	10	0	1	1	0	31	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	26%	0%	74%	0%	100%	0%	50%	50%	0%										
	PEAK HR FACTOR		0.000			0.792			0.500			0.500		0.775									
	APP/DEPART	0	/	0	19	/	1	10	/	15	2	/	15	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	2	0	3	0	0	5	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%										
	APP/DEPART	0	/	0	0	/	3	2	/	2	3	/	0	0									
	BEGIN PEAK HR		4:00 PM																				
	VOLUMES	0	0	0	0	0	0	0	2	0	1	0	0	3	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%										
	PEAK HR FACTOR		0.000			0.000			0.500			0.250		0.750									
	APP/DEPART	0	/	0	0	/	1	2	/	2	1	/	0	0									



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB Ramps	LOCATION #:	10
TUESDAY	EAST & WEST:	W County Line Rd	CONTROL:	STOP S

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (I-10 EB Ramps)			SOUTHBOUND (I-10 EB Ramps)			EASTBOUND (W County Line Rd)			WESTBOUND (W County Line Rd)			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 1	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	2	0	1	0	1	0	0	1	0	5
	7:15 AM	0	0	0	0	0	2	0	1	0	0	0	0	3
	7:30 AM	0	0	0	0	0	1	0	0	1	0	1	0	3
	7:45 AM	0	0	0	2	0	0	0	1	1	0	0	0	4
	8:00 AM	0	0	0	0	0	0	0	3	1	1	2	0	7
	8:15 AM	0	0	0	2	0	1	0	0	0	1	0	0	4
	8:30 AM	0	0	0	0	0	0	0	2	1	1	2	0	6
	8:45 AM	0	0	0	0	0	1	0	0	1	0	0	0	2
	VOLUMES	0	0	0	6	0	6	0	8	5	3	6	0	34
	APPROACH %	0%	0%	0%	50%	0%	50%	0%	62%	38%	33%	67%	0%	
	APP/DEPART	0	/	0	12	/	8	13	/	14	9	/	12	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	4	0	4	0	3	2	0	2	0	15
	APPROACH %	0%	0%	0%	50%	0%	50%	0%	60%	40%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.667			0.625			0.500		0.750
	APP/DEPART	0	/	0	8	/	2	5	/	7	2	/	6	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	4:15 PM	0	0	0	1	0	0	0	1	0	0	3	0	5
	4:30 PM	0	0	0	0	0	0	0	0	3	1	2	0	6
	4:45 PM	0	0	0	1	0	1	0	2	1	0	0	0	5
	5:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	2
	5:15 PM	0	0	0	1	0	0	0	0	0	1	0	0	2
	5:30 PM	0	0	0	0	0	0	0	0	2	0	2	0	4
	5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	VOLUMES	0	0	0	3	1	3	0	3	6	2	8	0	26
	APPROACH %	0%	0%	0%	43%	14%	43%	0%	33%	67%	20%	80%	0%	
	APP/DEPART	0	/	0	7	/	9	9	/	6	10	/	11	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	0	0	2	0	1	0	3	4	1	6	0	17
	APPROACH %	0%	0%	0%	67%	0%	33%	0%	43%	57%	14%	86%	0%	
	PEAK HR FACTOR		0.000			0.375			0.583			0.583		0.708
	APP/DEPART	0	/	0	3	/	5	7	/	5	7	/	7	0

	U-TURNS					RTOR			
	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	0	0
PEAK HR	0	0	0	0		0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	0	0
PEAK HR	0	0	0	0		0	0	0	0

I-10 EB Ramps

NORTH SIDE

W County Line Rd WEST SIDE EAST SIDE **W County Line Rd**

SOUTH SIDE

I-10 EB Ramps

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB Ramps	LOCATION #:	10
TUESDAY	EAST & WEST:	W County Line Rd	CONTROL:	STOP S

CLASS 5: RV

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 EB Ramps			SOUTHBOUND I-10 EB Ramps			EASTBOUND W County Line Rd			WESTBOUND W County Line Rd			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 1	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
	VOLUMES	0	0	0	1	0	0	0	0	0	0	0	0	1
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	1	/	0	0	/	1	0	/	0	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

I-10 EB Ramps

NORTH SIDE

W County Line Rd WEST SIDE EAST SIDE **W County Line Rd**

SOUTH SIDE

I-10 EB Ramps

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 EB Ramps	LOCATION #:	10
TUESDAY	EAST & WEST:	W County Line Rd	CONTROL:	STOP S

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 EB Ramps			SOUTHBOUND I-10 EB Ramps			EASTBOUND W County Line Rd			WESTBOUND W County Line Rd			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 1	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	1	0	0	0	1	0	0	2	0	4
	8:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
	8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	1	0	0	0	0	0	2	0	0	3
	VOLUMES	0	0	0	2	0	0	0	4	0	2	2	0	10
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	100%	0%	50%	50%	0%	
	APP/DEPART	0	/	0	2	/	2	4	/	6	4	/	2	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	1	0	0	0	1	0	0	2	0	4
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.250			0.250			0.250		0.250
	APP/DEPART	0	/	0	1	/	0	1	/	2	2	/	2	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS					RTOR			
NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
0	0	0	0	0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

T101823

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Jan 30, 24	LOCATION:	Calimesa	PROJECT #: SC4429
	NORTH & SOUTH:	I-10 WB Ramps	LOCATION #: 11
	EAST & WEST:	W County Line Rd	CONTROL: STOP N

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB Ramps			SOUTHBOUND I-10 WB Ramps			EASTBOUND W County Line Rd			WESTBOUND W County Line Rd			
	LANES:	NL 0	NT 1	NR 0	SL X	ST X	SR X	EL 1	ET 1	ER X	WL X	WT 1	WR 1	TOTAL
AM	7:00 AM	3	1	24	0	0	0	15	72	0	0	75	183	373
	7:15 AM	0	0	24	0	0	0	14	72	0	0	112	179	401
	7:30 AM	4	1	23	0	0	0	19	78	0	0	139	152	416
	7:45 AM	3	1	15	0	0	0	27	84	0	0	104	127	361
	8:00 AM	4	0	41	0	0	0	21	66	0	0	64	137	333
	8:15 AM	2	1	20	0	0	0	17	86	0	0	61	123	310
	8:30 AM	4	2	35	0	0	0	11	85	0	0	65	108	310
	8:45 AM	3	0	41	0	0	0	8	69	0	0	49	98	268
	VOLUMES	23	6	223	0	0	0	132	612	0	0	669	1,107	2,772
	APPROACH %	9%	2%	88%	0%	0%	0%	18%	82%	0%	0%	38%	62%	
	APP/DEPART	252	/	1,245	0	/	0	744	/	835	1,776	/	692	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	10	3	86	0	0	0	75	306	0	0	430	641	1,551
	APPROACH %	10%	3%	87%	0%	0%	0%	20%	80%	0%	0%	40%	60%	
	PEAK HR FACTOR		0.884			0.000			0.858			0.920		0.932
	APP/DEPART	99	/	719	0	/	0	381	/	392	1,071	/	440	0
PM	4:00 PM	4	0	56	0	0	0	12	130	0	0	64	80	346
	4:15 PM	4	1	49	0	0	0	11	112	0	0	82	69	328
	4:30 PM	2	0	51	0	0	0	13	95	0	0	86	88	335
	4:45 PM	2	0	52	0	0	0	13	94	0	0	69	64	294
	5:00 PM	3	0	39	0	0	0	14	84	0	0	80	94	314
	5:15 PM	3	0	53	0	0	0	3	77	0	0	82	73	291
	5:30 PM	5	1	43	0	0	0	12	96	0	0	82	64	303
	5:45 PM	3	0	51	0	0	0	11	101	0	0	72	47	285
	VOLUMES	26	2	394	0	0	0	89	789	0	0	617	579	2,496
	APPROACH %	6%	0%	93%	0%	0%	0%	10%	90%	0%	0%	52%	48%	
	APP/DEPART	422	/	670	0	/	0	878	/	1,183	1,196	/	643	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	12	1	208	0	0	0	49	431	0	0	301	301	1,303
	APPROACH %	5%	0%	94%	0%	0%	0%	10%	90%	0%	0%	50%	50%	
	PEAK HR FACTOR		0.921			0.000			0.845			0.865		0.941
	APP/DEPART	221	/	351	0	/	0	480	/	639	602	/	313	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

I-10 WB Ramps

NORTH LEG

W County Line Rd WEST LEG EAST LEG **W County Line Rd**

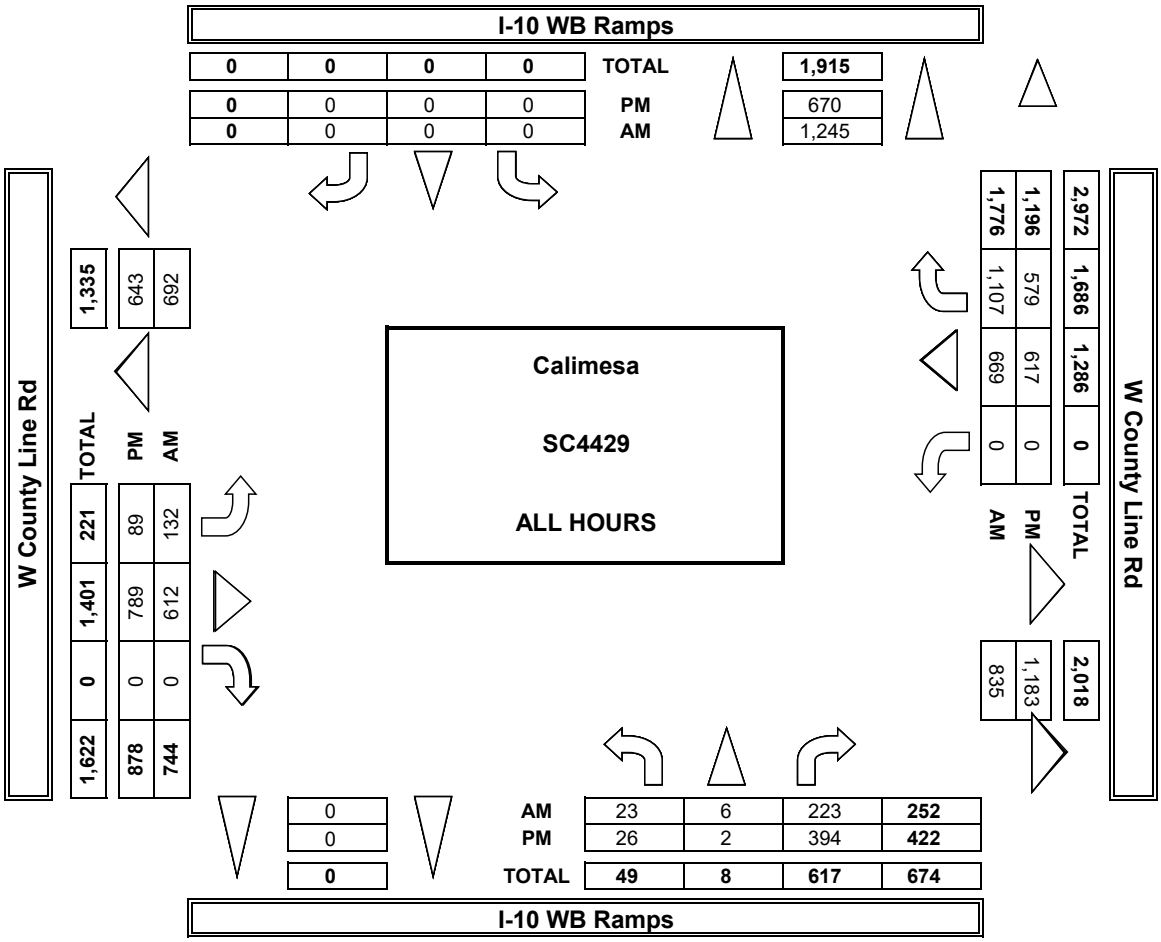
SOUTH LEG

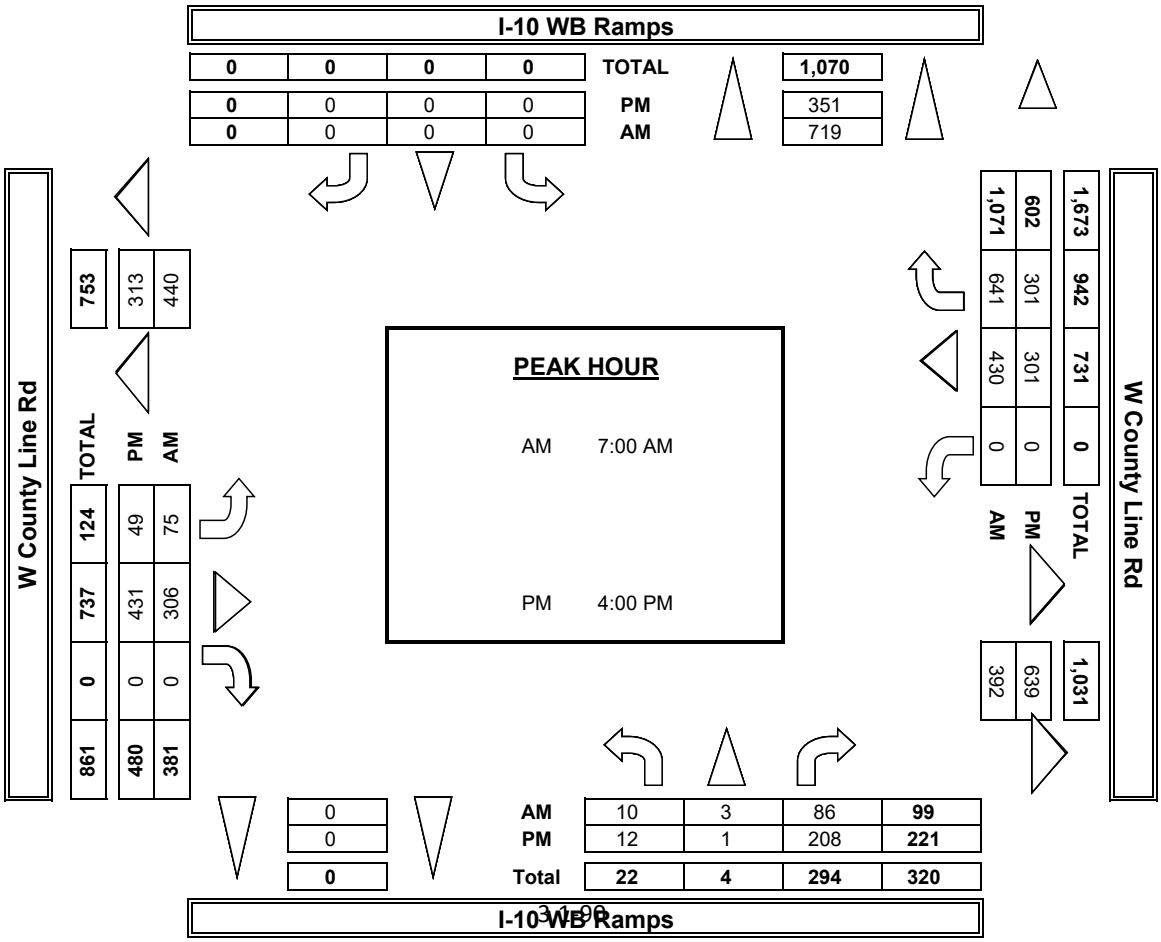
I-10 WB Ramps

		ALL PED + BIKE & SCOOTER					PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS				
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	2	0	2	0	0	2	0	2	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	2	0	2	0	0	0	0	0	0	0	2	0	2
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	5	5	0	0	0	5	5	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	4	5	9	0	0	2	5	7	0	0	2	0	2
PM	4:00 PM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0
	4:15 PM	0	3	0	0	3	0	3	0	0	3	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0
	5:30 PM	0	0	1	1	2	0	0	1	0	1	0	0	0	1	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	3	1	3	7	0	3	1	2	6	0	0	0	1	1

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TUR

PREPARED BY: AimTD LL

DATE:	LOCATION:	Calimesa
1/30/24	NORTH & SOUTH:	I-10 WB Ramps
TUESDAY	EAST & WEST:	W County Line Rd

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND I-10 WB Ramps			SOUTHBOUNI I-10 WB Ramps	
	NL	NT	NR	SL	ST
LANES:	0	1	0	X	X
AM 7:00 AM	6	1	28	0	0
7:15 AM	0	0	28	0	0
7:30 AM	5	2	25	0	0
7:45 AM	5	1	17	0	0
8:00 AM	6	0	43	0	0
8:15 AM	2	3	21	0	0
8:30 AM	6	4	38	0	0
8:45 AM	3	0	43	0	0
VOLUMES	32	11	242	0	0
APPROACH %	11%	4%	85%	0%	0%
APP/DEPART	285	/	1,327	0	/
BEGIN PEAK HR		7:00 AM			
VOLUMES	15	4	98	0	0
APPROACH %	13%	3%	84%	0%	0%
PEAK HR FACTOR		0.857			0.000
APP/DEPART	117	/	758	0	/
PM 4:00 PM	4	0	58	0	0
4:15 PM	5	1	51	0	0
4:30 PM	6	0	56	0	0
4:45 PM	2	0	53	0	0
5:00 PM	3	0	40	0	0
5:15 PM	3	0	53	0	0
5:30 PM	7	1	43	0	0
5:45 PM	3	0	59	0	0
VOLUMES	33	2	411	0	0
APPROACH %	7%	0%	92%	0%	0%
APP/DEPART	446	/	703	0	/

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Ramps	LOCATION #:	11
TUESDAY	EAST & WEST:	W County Line Rd	CONTROL:	STOP N

CLASS 1: PASSENGER VEHICLES

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

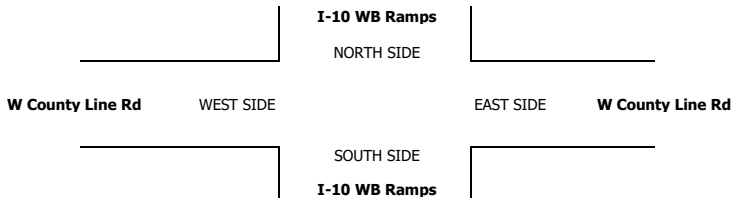
		NORTHBOUND (I-10 WB Ramps)			SOUTHBOUND (I-10 WB Ramps)			EASTBOUND (W County Line Rd)			WESTBOUND (W County Line Rd)			
	LANES:	NL 0	NT 1	NR 0	SL X	ST X	SR X	EL 1	ET 1	ER X	WL X	WT 1	WR 1	TOTAL
AM	7:00 AM	1	1	21	0	0	0	14	61	0	0	70	175	343
	7:15 AM	0	0	21	0	0	0	9	66	0	0	107	172	375
	7:30 AM	3	0	22	0	0	0	14	76	0	0	135	146	396
	7:45 AM	1	1	14	0	0	0	20	75	0	0	100	124	335
	8:00 AM	3	0	39	0	0	0	13	63	0	0	58	132	308
	8:15 AM	2	0	18	0	0	0	12	77	0	0	59	117	285
	8:30 AM	3	1	31	0	0	0	7	79	0	0	61	101	283
	8:45 AM	3	0	38	0	0	0	4	60	0	0	42	90	237
	VOLUMES	16	3	204	0	0	0	93	557	0	0	632	1,057	2,562
	APPROACH %	7%	1%	91%	0%	0%	0%	14%	86%	0%	0%	37%	63%	
	APP/DEPART	223	/	1,153	0	/	0	650	/	761	1,689	/	648	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	5	2	78	0	0	0	57	278	0	0	412	617	1,449
	APPROACH %	6%	2%	92%	0%	0%	0%	17%	83%	0%	0%	40%	60%	
	PEAK HR FACTOR		0.850			0.000			0.882			0.915		0.915
	APP/DEPART	85	/	676	0	/	0	335	/	356	1,029	/	417	0
PM	4:00 PM	4	0	53	0	0	0	11	120	0	0	60	69	317
	4:15 PM	2	1	46	0	0	0	11	106	0	0	78	65	309
	4:30 PM	0	0	44	0	0	0	12	85	0	0	80	84	305
	4:45 PM	2	0	50	0	0	0	8	88	0	0	66	63	277
	5:00 PM	3	0	37	0	0	0	12	81	0	0	76	89	298
	5:15 PM	3	0	53	0	0	0	3	71	0	0	72	69	271
	5:30 PM	4	1	43	0	0	0	12	95	0	0	80	62	297
	5:45 PM	3	0	46	0	0	0	10	97	0	0	67	44	267
	VOLUMES	21	2	372	0	0	0	79	743	0	0	579	545	2,341
	APPROACH %	5%	1%	94%	0%	0%	0%	10%	90%	0%	0%	52%	48%	
	APP/DEPART	395	/	626	0	/	0	822	/	1,115	1,124	/	600	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	8	1	193	0	0	0	42	399	0	0	284	281	1,208
	APPROACH %	4%	0%	96%	0%	0%	0%	10%	90%	0%	0%	50%	50%	
	PEAK HR FACTOR		0.886			0.000			0.842			0.861		0.953
	APP/DEPART	202	/	324	0	/	0	441	/	592	565	/	292	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Ramps	LOCATION #:	11
TUESDAY	EAST & WEST:	W County Line Rd	CONTROL:	STOP N

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB Ramps			SOUTHBOUND I-10 WB Ramps			EASTBOUND W County Line Rd			WESTBOUND W County Line Rd			
	LANES:	NL 0	NT 1	NR 0	SL X	ST X	SR X	EL 1	ET 1	ER X	WL X	WT 1	WR 1	TOTAL
AM	7:00 AM	1	0	1	0	0	0	1	6	0	0	5	5	19
	7:15 AM	0	0	0	0	0	0	2	5	0	0	4	7	18
	7:30 AM	1	0	0	0	0	0	2	1	0	0	3	4	11
	7:45 AM	0	0	0	0	0	0	0	5	0	0	3	2	10
	8:00 AM	0	0	1	0	0	0	0	2	0	0	4	4	11
	8:15 AM	0	0	2	0	0	0	0	5	0	0	1	3	11
	8:30 AM	0	0	3	0	0	0	1	5	0	0	1	7	17
	8:45 AM	0	0	2	0	0	0	3	6	0	0	4	8	23
	VOLUMES	2	0	9	0	0	0	9	35	0	0	25	40	120
	APPROACH %	18%	0%	82%	0%	0%	0%	20%	80%	0%	0%	38%	62%	
	APP/DEPART	11	/	49	0	/	0	44	/	44	65	/	27	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	2	0	1	0	0	0	5	17	0	0	15	18	58
	APPROACH %	67%	0%	33%	0%	0%	0%	23%	77%	0%	0%	45%	55%	
	PEAK HR FACTOR		0.375			0.000			0.786			0.750		0.763
	APP/DEPART	3	/	23	0	/	0	22	/	18	33	/	17	0
PM	4:00 PM	0	0	3	0	0	0	1	10	0	0	2	9	25
	4:15 PM	2	0	3	0	0	0	0	4	0	0	1	2	12
	4:30 PM	0	0	5	0	0	0	0	10	0	0	5	4	24
	4:45 PM	0	0	2	0	0	0	2	5	0	0	3	1	13
	5:00 PM	0	0	2	0	0	0	2	3	0	0	3	3	13
	5:15 PM	0	0	0	0	0	0	0	5	0	0	8	2	15
	5:30 PM	0	0	0	0	0	0	0	1	0	0	1	1	3
	5:45 PM	0	0	1	0	0	0	1	4	0	0	5	3	14
	VOLUMES	2	0	16	0	0	0	6	42	0	0	28	25	119
	APPROACH %	11%	0%	89%	0%	0%	0%	13%	88%	0%	0%	53%	47%	
	APP/DEPART	18	/	31	0	/	0	48	/	58	53	/	30	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	2	0	13	0	0	0	3	29	0	0	11	16	74
	APPROACH %	13%	0%	87%	0%	0%	0%	9%	91%	0%	0%	41%	59%	
	PEAK HR FACTOR		0.750			0.000			0.727			0.614		0.740
	APP/DEPART	15	/	19	0	/	0	32	/	42	27	/	13	0

U-TURNS					RTOR			
NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0		0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0		0	0	0	0

I-10 WB Ramps

NORTH SIDE

W County Line Rd WEST SIDE EAST SIDE **W County Line Rd**

SOUTH SIDE

I-10 WB Ramps

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Ramps	LOCATION #:	11
TUESDAY	EAST & WEST:	W County Line Rd	CONTROL:	STOP N

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB Ramps			SOUTHBOUND I-10 WB Ramps			EASTBOUND W County Line Rd			WESTBOUND W County Line Rd			
	LANES:	NL 0	NT 1	NR 0	SL X	ST X	SR X	EL 1	ET 1	ER X	WL X	WT 1	WR 1	TOTAL
AM	7:00 AM	0	0	1	0	0	0	0	2	0	0	0	2	5
	7:15 AM	0	0	1	0	0	0	2	1	0	0	1	0	5
	7:30 AM	0	1	0	0	0	0	3	1	0	0	0	1	6
	7:45 AM	1	0	0	0	0	0	4	2	0	0	0	0	7
	8:00 AM	0	0	0	0	0	0	4	0	0	0	0	0	4
	8:15 AM	0	0	0	0	0	0	5	1	0	0	0	1	7
	8:30 AM	0	0	1	0	0	0	2	0	0	0	1	0	4
	8:45 AM	0	0	1	0	0	0	1	1	0	0	1	0	4
	VOLUMES	1	1	4	0	0	0	21	8	0	0	3	4	42
	APPROACH %	17%	17%	67%	0%	0%	0%	72%	28%	0%	0%	43%	57%	
	APP/DEPART	6	/	26	0	/	0	29	/	12	7	/	4	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	1	1	2	0	0	0	9	6	0	0	1	3	23
	APPROACH %	25%	25%	50%	0%	0%	0%	60%	40%	0%	0%	25%	75%	
	PEAK HR FACTOR		1.000			0.000			0.625			0.500		0.821
	APP/DEPART	4	/	13	0	/	0	15	/	8	4	/	2	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	1	2	3
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
	4:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	2
	4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	1	2	3
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	VOLUMES	0	0	2	0	0	0	2	0	0	0	3	5	12
	APPROACH %	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	38%	63%	
	APP/DEPART	2	/	7	0	/	0	2	/	2	8	/	3	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	0	1	0	0	0	2	0	0	0	1	3	7
	APPROACH %	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	25%	75%	
	PEAK HR FACTOR		0.250			0.000			0.500			0.333		0.583
	APP/DEPART	1	/	5	0	/	0	2	/	1	4	/	1	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	
0	0	0	0	

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

I-10 WB Ramps

NORTH SIDE

W County Line Rd WEST SIDE EAST SIDE **W County Line Rd**

SOUTH SIDE

I-10 WB Ramps

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Ramps	LOCATION #:	11
TUESDAY	EAST & WEST:	W County Line Rd	CONTROL:	STOP N

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB Ramps			SOUTHBOUND I-10 WB Ramps			EASTBOUND W County Line Rd			WESTBOUND W County Line Rd				U-TURNS					RTOR			
	LANES:	NL 0	NT 1	NR 0	SL X	ST X	SR X	EL 1	ET 1	ER X	WL X	WT 1	WR 1	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	1	0	1	0	0	0	0	3	0	0	0	1	6	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	1	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	1	0	0	0	0	0	0	0	1	1	3	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	1	0	0	0	3	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0
	8:00 AM	1	0	0	0	0	0	2	1	0	0	2	1	7	0	0	0	0	0	0	0	0	0
	8:15 AM	0	1	0	0	0	0	0	2	0	0	1	1	5	0	0	0	0	0	0	0	0	0
	8:30 AM	1	1	0	0	0	0	1	1	0	0	2	0	6	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	3	2	4	0	0	0	7	7	0	0	6	5	34	0	0	0	0	0	0	0	0	0
	APPROACH %	33%	22%	44%	0%	0%	0%	50%	50%	0%	0%	55%	45%										
	APP/DEPART	9	/	14	0	/	0	14	/	11	11	/	9	0									
	BEGIN PEAK HR		7:00 AM																				
	VOLUMES	1	0	4	0	0	0	4	3	0	0	1	3	16	0	0	0	0		0	0	0	0
	APPROACH %	20%	0%	80%	0%	0%	0%	57%	43%	0%	0%	25%	75%										
	PEAK HR FACTOR		0.625			0.000			0.583			0.500		0.667									
	APP/DEPART	5	/	7	0	/	0	7	/	7	4	/	2	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	2	0	0	3	1	6	0	0	0	0	0	0	0	0	0
	4:30 PM	2	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	2	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0
	5:30 PM	1	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	VOLUMES	3	0	3	0	0	0	2	4	0	0	7	2	21	0	0	0	0	0	0	0	0	0
	APPROACH %	50%	0%	50%	0%	0%	0%	33%	67%	0%	0%	78%	22%										
	APP/DEPART	6	/	4	0	/	0	6	/	7	9	/	10	0									
	BEGIN PEAK HR		4:00 PM																				
	VOLUMES	2	0	0	0	0	0	2	3	0	0	5	1	13	0	0	0	0		0	0	0	0
	APPROACH %	100%	0%	0%	0%	0%	0%	40%	60%	0%	0%	83%	17%										
	PEAK HR FACTOR		0.250			0.000			0.417			0.375		0.542									
	APP/DEPART	2	/	3	0	/	0	5	/	3	6	/	7	0									

I-10 WB Ramps

NORTH SIDE

W County Line Rd WEST SIDE EAST SIDE **W County Line Rd**

SOUTH SIDE

I-10 WB Ramps

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

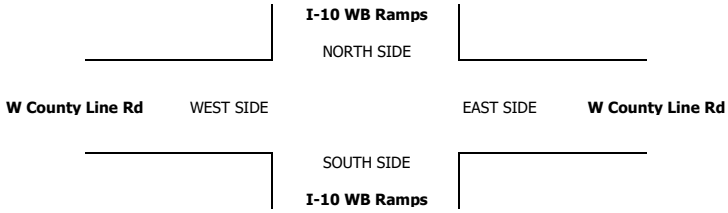
DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Ramps	LOCATION #:	11
TUESDAY	EAST & WEST:	W County Line Rd	CONTROL:	STOP N

CLASS 5: RV

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND I-10 WB Ramps			SOUTHBOUND I-10 WB Ramps			EASTBOUND W County Line Rd			WESTBOUND W County Line Rd				U-TURNS					RTOR			
	LANES:	NL 0	NT 1	NR 0	SL X	ST X	SR X	EL 1	ET 1	ER X	WL X	WT 1	WR 1	TOTAL	NB	SB	EB	WB	TTL	NRR X	SRR X	ERR X	WRR X
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%										
	APP/DEPART	0	/	1	0	/	0	1	/	1	1	/	0	0									
	BEGIN PEAK HR		7:00 AM																				
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000									
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	1	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%										
	APP/DEPART	1	/	2	0	/	0	0	/	1	2	/	0	0									
	BEGIN PEAK HR		4:00 PM																				
	VOLUMES	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0		0	0	0	0
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%										
	PEAK HR FACTOR		0.250			0.000			0.000			0.000		0.250									
	APP/DEPART	1	/	0	0	/	0	0	/	1	0	/	0	0									



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC4429
1/30/24	NORTH & SOUTH:	I-10 WB Ramps	LOCATION #:	11
TUESDAY	EAST & WEST:	W County Line Rd	CONTROL:	STOP N

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

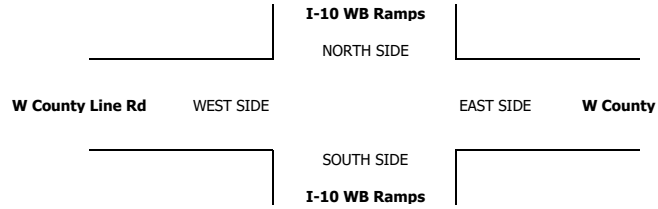
		NORTHBOUND I-10 WB Ramps			SOUTHBOUND I-10 WB Ramps			EASTBOUND W County Line Rd			WESTBOUND W County Line Rd			
	LANES:	NL 0	NT 1	NR 0	SL X	ST X	SR X	EL 1	ET 1	ER X	WL X	WT 1	WR 1	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	1	0	0	0	0	0	0	2	0	0	1	0	4
	8:00 AM	0	0	1	0	0	0	2	0	0	0	0	0	3
	8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	1	0	0	2	0	3
	VOLUMES	1	0	2	0	0	0	2	4	0	0	3	0	12
	APPROACH %	33%	0%	67%	0%	0%	0%	33%	67%	0%	0%	100%	0%	
	APP/DEPART	3	/	2	0	/	0	6	/	6	3	/	4	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	1	0	1	0	0	0	0	2	0	0	1	0	5
	APPROACH %	50%	0%	50%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.500			0.000			0.250			0.250		0.313
	APP/DEPART	2	/	0	0	/	0	2	/	3	1	/	2	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR X	SRR X	ERR X	WRR X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0



A102423

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 30, 2024 **CITY:** Calimesa

JOB #: SC4429 **LOCATION:** CLASS1 Sandalwood Dr west of I-10 EB Ramps

AM TIME	EB 1	2	3	4	5	6	TOTAL	PM Time	EB 1	2	3	4	5	6	TOTAL
0:00	0	0	0	0	0	0	0	12:00	37	0	0	0	0	9	46
0:15	2	0	0	0	0	0	2	12:15	29	2	0	0	0	0	31
0:30	4	0	0	0	0	0	4	12:30	14	1	0	0	0	0	15
0:45	1	0	0	0	0	0	1	12:45	13	0	0	1	0	1	15
1:00	2	0	0	0	0	0	2	13:00	13	3	1	1	0	0	18
1:15	0	0	0	0	0	0	0	13:15	13	1	0	0	0	0	14
1:30	0	0	0	0	0	0	0	13:30	16	2	0	0	0	0	18
1:45	1	0	0	1	0	0	2	13:45	16	0	0	0	0	0	16
2:00	0	0	0	0	0	0	0	14:00	12	1	0	0	0	0	13
2:15	3	0	0	0	0	0	3	14:15	37	0	0	0	0	3	40
2:30	0	0	0	0	0	0	0	14:30	114	3	0	0	0	0	117
2:45	0	0	0	0	0	0	0	14:45	113	0	1	0	0	0	114
3:00	0	1	0	0	0	0	1	15:00	34	2	0	0	0	1	37
3:15	0	0	0	0	0	0	0	15:15	39	0	0	0	0	0	39
3:30	1	0	0	0	0	0	1	15:30	50	0	0	0	0	0	50
3:45	2	0	0	0	0	0	2	15:45	23	0	0	0	0	0	23
4:00	3	0	0	0	0	0	3	16:00	22	1	0	0	0	0	23
4:15	3	0	0	0	0	0	3	16:15	20	0	0	0	0	0	20
4:30	1	0	0	0	0	0	1	16:30	44	1	0	0	0	0	45
4:45	2	0	0	0	0	0	2	16:45	40	0	0	0	0	0	40
5:00	2	0	0	0	0	0	2	17:00	20	0	0	0	0	0	20
5:15	2	0	0	1	0	0	3	17:15	13	0	0	0	0	0	13
5:30	3	0	0	0	0	0	3	17:30	13	0	1	0	0	0	14
5:45	7	0	0	1	0	0	8	17:45	23	0	0	1	0	0	24
6:00	7	1	0	0	0	0	8	18:00	12	1	0	0	0	0	13
6:15	8	1	0	0	0	0	9	18:15	11	0	0	1	0	0	12
6:30	17	2	0	0	0	0	19	18:30	22	0	0	0	0	0	22
6:45	62	0	1	1	0	0	64	18:45	10	0	0	1	0	0	11
7:00	40	1	0	0	0	0	41	19:00	10	0	0	0	0	0	10
7:15	63	3	0	0	0	0	66	19:15	5	1	0	0	0	0	6
7:30	125	2	0	0	0	0	127	19:30	40	0	1	0	0	0	41
7:45	119	4	0	0	0	1	124	19:45	12	0	0	0	0	0	12
8:00	43	4	0	0	0	0	47	20:00	29	1	1	0	0	0	31
8:15	9	3	0	0	0	0	12	20:15	4	0	0	0	0	0	4
8:30	9	2	0	0	0	0	11	20:30	3	0	0	0	0	0	3
8:45	12	1	1	0	0	0	14	20:45	3	0	0	0	0	0	3
9:00	17	1	0	1	0	1	20	21:00	8	0	0	0	0	0	8
9:15	17	2	1	1	0	1	22	21:15	4	0	0	0	0	0	4
9:30	6	1	0	0	0	0	7	21:30	1	0	0	0	0	0	1
9:45	16	0	0	1	0	0	17	21:45	3	0	0	0	0	0	3
10:00	14	3	0	1	0	0	18	22:00	7	0	0	0	0	0	7
10:15	14	2	0	0	0	0	16	22:15	4	0	0	0	0	0	4
10:30	14	1	0	0	0	0	15	22:30	3	0	0	0	0	0	3
10:45	11	0	0	0	0	0	11	22:45	1	0	0	0	0	0	1
11:00	15	0	0	0	0	0	15	23:00	3	0	0	0	0	0	3
11:15	21	2	0	0	0	0	23	23:15	2	0	0	0	0	0	2
11:30	26	1	0	1	0	0	28	23:30	1	0	0	0	0	0	1
11:45	53	4	1	0	0	0	58	23:45	1	0	0	0	0	0	1
TOTAL	777	42	4	9	0	3	835	TOTAL	967	20	5	5	0	14	1,011

AM PEAK HOUR	7:15 AM
AM PEAK VOLUME	364

AM PEAK HOUR	2:15 PM
AM PEAK VOLUME	308

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	Buses

	1	2	3	4	5	6	TOTAL
TOTAL: AM+PM	1,744	62	9	14	0	17	1,846
% OF TOTAL	94.5%	3.4%	0.5%	0.8%	0.0%	0.9%	100.0%
TOTAL: ALL	3,560	129	14	27	0	36	3,766
% OF TOTAL	94.5%	3.4%	0.4%	0.7%	0.0%	1.0%	100.0%

A102423

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 30, 2024
JOB #: SC4429
CITY: Calimesa
LOCATION: CLASS1 Sandalwood Dr west of I-10 EB Ramps

AM	WB						
TIME	1	2	3	4	5	6	TOTAL
0:00	0	0	0	0	0	0	0
0:15	1	0	0	0	0	0	1
0:30	4	0	0	0	0	0	4
0:45	1	0	0	0	0	0	1
1:00	2	0	0	0	0	0	2
1:15	0	0	0	0	0	0	0
1:30	0	0	0	1	0	0	1
1:45	0	0	0	0	0	0	0
2:00	2	0	0	0	0	0	2
2:15	1	0	0	0	0	0	1
2:30	0	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0
3:15	2	0	0	0	0	0	2
3:30	1	0	0	0	0	0	1
3:45	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0
4:15	0	0	0	0	0	0	0
4:30	0	0	0	0	0	0	0
4:45	2	0	0	0	0	0	2
5:00	1	0	0	0	0	0	1
5:15	2	0	0	0	0	0	2
5:30	3	0	0	0	0	0	3
5:45	8	0	0	0	0	0	8
6:00	5	1	0	0	0	0	6
6:15	14	1	0	0	0	0	15
6:30	37	1	0	1	0	0	39
6:45	72	2	0	0	0	0	74
7:00	57	1	0	0	0	0	58
7:15	133	4	0	0	0	0	137
7:30	153	3	0	0	0	3	159
7:45	130	3	0	0	0	0	133
8:00	30	7	1	0	0	0	38
8:15	22	0	0	0	0	1	23
8:30	10	1	0	1	0	7	19
8:45	13	4	0	0	0	2	19
9:00	19	2	0	0	0	0	21
9:15	9	1	0	2	0	0	12
9:30	21	1	0	0	0	0	22
9:45	9	0	0	1	0	0	10
10:00	17	3	0	0	0	0	20
10:15	9	0	0	0	0	1	10
10:30	10	0	0	0	0	1	11
10:45	9	1	0	0	0	0	10
11:00	17	2	0	0	0	0	19
11:15	21	0	0	0	0	0	21
11:30	18	1	0	0	0	0	19
11:45	16	3	1	0	0	0	20
TOTAL	881	42	2	6	0	15	946

AM PEAK HOUR	7:00 AM
AM PEAK VOLUME	487

PM	WB						
Time	1	2	3	4	5	6	TOTAL
12:00	20	1	0	0	0	0	21
12:15	15	0	0	0	0	0	15
12:30	11	1	0	0	0	0	12
12:45	7	2	1	3	0	0	13
13:00	8	2	0	0	0	0	10
13:15	13	2	0	0	0	0	15
13:30	17	1	0	0	0	0	18
13:45	39	1	0	0	0	1	41
14:00	84	0	0	0	0	2	86
14:15	119	1	0	0	0	0	120
14:30	40	1	0	0	0	0	41
14:45	55	1	0	0	0	0	56
15:00	52	0	0	0	0	1	53
15:15	36	1	0	1	0	0	38
15:30	40	2	0	0	0	0	42
15:45	27	1	0	0	0	0	28
16:00	12	1	0	0	0	0	13
16:15	17	0	1	1	0	0	19
16:30	18	0	0	0	0	0	18
16:45	17	0	0	0	0	0	17
17:00	17	0	0	0	0	0	17
17:15	22	1	0	1	0	0	24
17:30	34	1	1	1	0	0	37
17:45	34	0	0	0	0	0	34
18:00	22	0	0	0	0	0	22
18:15	15	0	0	0	0	0	15
18:30	17	1	0	0	0	0	18
18:45	13	1	0	0	0	0	14
19:00	11	1	0	0	0	0	12
19:15	12	0	0	0	0	0	12
19:30	14	0	0	0	0	0	14
19:45	7	1	0	0	0	0	8
20:00	9	0	0	0	0	0	9
20:15	3	0	0	0	0	0	3
20:30	6	0	0	0	0	0	6
20:45	7	0	0	0	0	0	7
21:00	6	0	0	0	0	0	6
21:15	6	0	0	0	0	0	6
21:30	3	0	0	0	0	0	3
21:45	6	0	0	0	0	0	6
22:00	3	0	0	0	0	0	3
22:15	5	0	0	0	0	0	5
22:30	4	0	0	0	0	0	4
22:45	2	0	0	0	0	0	2
23:00	8	0	0	0	0	0	8
23:15	1	1	0	0	0	0	2
23:30	1	0	0	0	0	0	1
23:45	0	0	0	0	0	0	0
TOTAL	935	25	3	7	0	4	974

AM PEAK HOUR	2:00 PM
AM PEAK VOLUME	303

TOTAL: AM+PM	1,816	67	5	13	0	19	1,920
% OF TOTAL	94.6%	3.5%	0.3%	0.7%	0.0%	1.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	BUS

A102423

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 30, 2024 **CITY:** Calimesa

JOB #: SC4429 **LOCATION:** CLASS1 Sandalwood Dr west of I-10 EB Ramps

AM TIME	COMBINED 1	2	3	4	5	6	TOTAL	PM Time	COMBINED 1	2	3	4	5	6	TOTAL
0:00	0	0	0	0	0	0	0	12:00	57	1	0	0	0	9	67
0:15	3	0	0	0	0	0	3	12:15	44	2	0	0	0	0	46
0:30	8	0	0	0	0	0	8	12:30	25	2	0	0	0	0	27
0:45	2	0	0	0	0	0	2	12:45	20	2	1	4	0	1	28
1:00	4	0	0	0	0	0	4	13:00	21	5	1	1	0	0	28
1:15	0	0	0	0	0	0	0	13:15	26	3	0	0	0	0	29
1:30	0	0	0	1	0	0	1	13:30	33	3	0	0	0	0	36
1:45	1	0	0	1	0	0	2	13:45	55	1	0	0	0	1	57
2:00	2	0	0	0	0	0	2	14:00	96	1	0	0	0	2	99
2:15	4	0	0	0	0	0	4	14:15	156	1	0	0	0	3	160
2:30	0	0	0	0	0	0	0	14:30	154	4	0	0	0	0	158
2:45	0	0	0	0	0	0	0	14:45	168	1	1	0	0	0	170
3:00	0	1	0	0	0	0	1	15:00	86	2	0	0	0	2	90
3:15	2	0	0	0	0	0	2	15:15	75	1	0	1	0	0	77
3:30	2	0	0	0	0	0	2	15:30	90	2	0	0	0	0	92
3:45	2	0	0	0	0	0	2	15:45	50	1	0	0	0	0	51
4:00	3	0	0	0	0	0	3	16:00	34	2	0	0	0	0	36
4:15	3	0	0	0	0	0	3	16:15	37	0	1	1	0	0	39
4:30	1	0	0	0	0	0	1	16:30	62	1	0	0	0	0	63
4:45	4	0	0	0	0	0	4	16:45	57	0	0	0	0	0	57
5:00	3	0	0	0	0	0	3	17:00	37	0	0	0	0	0	37
5:15	4	0	0	1	0	0	5	17:15	35	1	0	1	0	0	37
5:30	6	0	0	0	0	0	6	17:30	47	1	2	1	0	0	51
5:45	15	0	0	1	0	0	16	17:45	57	0	0	1	0	0	58
6:00	12	2	0	0	0	0	14	18:00	34	1	0	0	0	0	35
6:15	22	2	0	0	0	0	24	18:15	26	0	0	1	0	0	27
6:30	54	3	0	1	0	0	58	18:30	39	1	0	0	0	0	40
6:45	134	2	1	1	0	0	138	18:45	23	1	0	1	0	0	25
7:00	97	2	0	0	0	0	99	19:00	21	1	0	0	0	0	22
7:15	196	7	0	0	0	0	203	19:15	17	1	0	0	0	0	18
7:30	278	5	0	0	0	3	286	19:30	54	0	1	0	0	0	55
7:45	249	7	0	0	0	1	257	19:45	19	1	0	0	0	0	20
8:00	73	11	1	0	0	0	85	20:00	38	1	1	0	0	0	40
8:15	31	3	0	0	0	1	35	20:15	7	0	0	0	0	0	7
8:30	19	3	0	1	0	7	30	20:30	9	0	0	0	0	0	9
8:45	25	5	1	0	0	2	33	20:45	10	0	0	0	0	0	10
9:00	36	3	0	1	0	1	41	21:00	14	0	0	0	0	0	14
9:15	26	3	1	3	0	1	34	21:15	10	0	0	0	0	0	10
9:30	27	2	0	0	0	0	29	21:30	4	0	0	0	0	0	4
9:45	25	0	0	2	0	0	27	21:45	9	0	0	0	0	0	9
10:00	31	6	0	1	0	0	38	22:00	10	0	0	0	0	0	10
10:15	23	2	0	0	0	1	26	22:15	9	0	0	0	0	0	9
10:30	24	1	0	0	0	1	26	22:30	7	0	0	0	0	0	7
10:45	20	1	0	0	0	0	21	22:45	3	0	0	0	0	0	3
11:00	32	2	0	0	0	0	34	23:00	11	0	0	0	0	0	11
11:15	42	2	0	0	0	0	44	23:15	3	1	0	0	0	0	4
11:30	44	2	0	1	0	0	47	23:30	2	0	0	0	0	0	2
11:45	69	7	2	0	0	0	78	23:45	1	0	0	0	0	0	1
TOTAL	1,658	84	6	15	0	18	1,781	TOTAL	1,902	45	8	12	0	18	1,985
				AM PEAK HOUR			7:00 AM					AM PEAK HOUR			2:00 PM
				AM PEAK VOLUME			845					AM PEAK VOLUME			587

TOTAL: AM+PM	3,560	129	14	27	0	36	3,766
% OF TOTAL	94.5%	3.4%	0.4%	0.7%	0.0%	1.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	Buses

A102423

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 30, 2024 **CITY:** Calimesa

JOB #: SC4429 **LOCATION:** CLASS2 Singleton Rd east of Calimesa Blvd

AM TIME	EB 1	2	3	4	5	6	TOTAL
0:00	10	1	0	0	0	0	11
0:15	11	0	0	0	0	0	11
0:30	6	0	0	0	0	0	6
0:45	6	0	0	0	0	0	6
1:00	5	0	0	0	0	0	5
1:15	5	1	0	0	0	0	6
1:30	4	0	0	0	0	0	4
1:45	1	0	0	0	0	0	1
2:00	3	0	0	0	0	0	3
2:15	1	0	0	0	0	0	1
2:30	3	0	0	0	0	0	3
2:45	2	0	0	0	0	0	2
3:00	4	0	0	0	0	0	4
3:15	3	0	0	0	0	0	3
3:30	3	0	1	0	0	0	4
3:45	2	0	0	0	0	0	2
4:00	4	0	0	0	0	0	4
4:15	4	0	0	0	0	0	4
4:30	2	0	0	0	0	0	2
4:45	13	0	0	0	0	0	13
5:00	9	2	0	0	0	0	11
5:15	11	0	0	0	0	0	11
5:30	13	2	0	0	0	0	15
5:45	17	2	0	0	0	0	19
6:00	23	0	0	0	0	0	23
6:15	25	0	1	0	0	0	26
6:30	35	2	0	1	0	0	38
6:45	56	2	0	1	0	0	59
7:00	62	2	0	0	0	0	64
7:15	95	3	3	1	0	0	102
7:30	95	6	3	1	0	0	105
7:45	109	5	3	2	0	0	119
8:00	77	2	1	1	0	0	81
8:15	81	4	2	3	0	0	90
8:30	73	7	0	0	0	0	80
8:45	54	4	0	0	0	0	58
9:00	46	3	3	2	0	0	54
9:15	42	4	1	2	0	0	49
9:30	41	3	2	1	0	0	47
9:45	36	3	0	0	0	0	39
10:00	34	2	0	1	0	1	38
10:15	56	4	0	0	0	0	60
10:30	56	2	1	2	1	0	62
10:45	55	6	0	1	0	0	62
11:00	32	1	1	2	0	0	36
11:15	58	3	0	1	0	0	62
11:30	51	2	1	0	0	0	54
11:45	59	3	1	0	0	0	63
TOTAL	1,493	81	24	22	1	1	1,622

AM PEAK HOUR	7:15 AM
AM PEAK VOLUME	407

PM Time	EB 1	2	3	4	5	6	TOTAL
12:00	48	0	4	0	0	0	52
12:15	60	2	1	0	0	0	63
12:30	47	6	1	0	0	0	54
12:45	78	2	1	1	0	0	82
13:00	61	4	1	0	0	0	66
13:15	68	4	1	2	0	0	75
13:30	63	5	1	1	0	0	70
13:45	69	5	1	2	1	0	78
14:00	65	2	1	3	0	0	71
14:15	79	5	0	4	0	0	88
14:30	105	4	0	0	0	0	109
14:45	130	0	2	0	0	2	134
15:00	104	4	1	1	0	0	110
15:15	93	5	1	1	0	1	101
15:30	114	5	0	0	0	0	119
15:45	112	3	1	1	0	1	118
16:00	124	2	0	0	0	0	126
16:15	99	1	0	0	1	0	101
16:30	134	3	2	0	0	0	139
16:45	140	5	0	0	0	0	145
17:00	145	5	0	3	0	0	153
17:15	90	6	0	2	0	0	98
17:30	117	3	0	0	0	0	120
17:45	97	1	1	0	0	0	99
18:00	89	2	0	0	0	0	91
18:15	81	3	0	0	0	0	84
18:30	72	3	0	0	0	0	75
18:45	67	1	0	1	0	0	69
19:00	72	3	0	0	0	0	75
19:15	53	1	0	0	0	0	54
19:30	54	0	0	0	0	0	54
19:45	51	0	0	0	0	0	51
20:00	48	0	1	0	0	0	49
20:15	43	0	0	0	0	0	43
20:30	33	1	0	0	0	0	34
20:45	34	0	1	0	0	0	35
21:00	29	1	0	0	0	0	30
21:15	36	0	0	0	0	0	36
21:30	36	0	0	0	0	0	36
21:45	29	0	0	0	0	0	29
22:00	21	0	1	0	0	0	22
22:15	19	0	0	0	0	0	19
22:30	24	0	0	0	0	0	24
22:45	16	0	0	0	0	0	16
23:00	19	0	0	0	0	0	19
23:15	15	0	0	0	0	0	15
23:30	15	4	0	0	0	0	19
23:45	12	0	0	0	0	0	12
TOTAL	3,210	101	23	22	2	4	3,362

AM PEAK HOUR	4:15 PM
AM PEAK VOLUME	538

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	Buses

	1	2	3	4	5	6	TOTAL
TOTAL: AM+PM	4,703	182	47	44	3	5	4,984
% OF TOTAL	94.4%	3.7%	0.9%	0.9%	0.1%	0.1%	100.0%
TOTAL: ALL	9,541	357	84	80	4	9	10,075
% OF TOTAL	94.7%	3.5%	0.8%	0.8%	0.0%	0.1%	100.0%

A102423

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 30, 2024
JOB #: SC4429
CITY: Calimesa
LOCATION: CLASS2 Singleton Rd east of Calimesa Blvd

AM	WB						
TIME	1	2	3	4	5	6	TOTAL
0:00	4	0	0	0	0	0	4
0:15	6	0	0	0	0	0	6
0:30	2	0	0	0	0	0	2
0:45	2	0	0	0	0	0	2
1:00	0	0	0	0	0	0	0
1:15	2	0	0	0	0	0	2
1:30	6	0	0	0	0	0	6
1:45	4	0	0	0	0	0	4
2:00	2	0	0	0	0	0	2
2:15	3	0	0	0	0	0	3
2:30	2	0	0	0	0	0	2
2:45	4	1	0	0	0	0	5
3:00	5	1	0	0	0	0	6
3:15	6	1	0	0	0	0	7
3:30	8	1	0	1	0	0	10
3:45	12	0	0	0	0	0	12
4:00	6	0	0	0	0	0	6
4:15	29	0	0	0	0	0	29
4:30	22	1	0	0	0	0	23
4:45	33	1	0	0	0	0	34
5:00	40	2	0	0	0	0	42
5:15	48	1	0	0	0	0	49
5:30	49	2	0	0	0	0	51
5:45	70	2	0	0	0	0	72
6:00	78	2	3	0	0	0	83
6:15	74	1	0	1	0	0	76
6:30	110	4	0	1	0	0	115
6:45	109	1	0	0	0	0	110
7:00	122	5	1	0	0	0	128
7:15	114	9	0	0	0	0	123
7:30	129	2	0	0	0	1	132
7:45	123	4	1	1	0	0	129
8:00	134	3	0	3	0	0	140
8:15	94	10	1	0	0	0	105
8:30	111	4	2	1	0	2	120
8:45	72	2	0	0	0	0	74
9:00	53	5	1	0	0	0	59
9:15	75	1	1	2	0	0	79
9:30	68	5	0	2	0	0	75
9:45	59	7	0	0	0	0	66
10:00	59	4	0	2	0	0	65
10:15	59	0	2	1	0	0	62
10:30	59	4	0	0	0	0	63
10:45	60	2	1	1	0	0	64
11:00	75	3	3	3	0	0	84
11:15	72	3	1	1	0	0	77
11:30	66	3	1	2	0	0	72
11:45	66	2	0	0	0	0	68
TOTAL	2,406	99	18	22	0	3	2,548

AM PEAK HOUR	7:15 AM
AM PEAK VOLUME	524

PM	WB						
Time	1	2	3	4	5	6	TOTAL
12:00	63	0	0	3	0	0	66
12:15	40	1	0	0	0	0	41
12:30	59	2	2	0	0	0	63
12:45	47	1	1	1	1	0	51
13:00	60	0	0	0	0	0	60
13:15	65	2	0	1	0	0	68
13:30	70	2	0	0	0	0	72
13:45	70	0	1	1	0	0	72
14:00	82	8	3	1	0	0	94
14:15	77	3	0	0	0	0	80
14:30	77	3	0	0	0	0	80
14:45	85	5	0	0	0	0	90
15:00	96	2	0	1	0	0	99
15:15	107	8	1	0	0	0	116
15:30	91	4	0	1	0	0	96
15:45	73	3	1	0	0	0	77
16:00	88	5	1	2	0	0	96
16:15	77	4	1	0	0	0	82
16:30	79	4	0	1	0	0	84
16:45	80	3	0	0	0	0	83
17:00	82	7	2	0	0	0	91
17:15	97	0	3	0	0	0	100
17:30	74	1	1	0	0	0	76
17:45	59	2	0	0	0	0	61
18:00	65	2	1	0	0	0	68
18:15	66	1	0	0	0	1	68
18:30	47	0	0	0	0	0	47
18:45	59	1	0	1	0	0	61
19:00	48	0	0	0	0	0	48
19:15	38	1	0	0	0	0	39
19:30	54	0	0	0	0	0	54
19:45	22	1	0	0	0	0	23
20:00	25	0	0	0	0	0	25
20:15	24	0	0	0	0	0	24
20:30	26	0	0	0	0	0	26
20:45	26	0	0	0	0	0	26
21:00	20	0	0	0	0	0	20
21:15	21	0	1	0	0	0	22
21:30	17	0	0	0	0	0	17
21:45	12	0	0	0	0	0	12
22:00	10	0	0	0	0	0	10
22:15	15	0	0	0	0	0	15
22:30	6	0	0	0	0	0	6
22:45	8	0	0	0	0	0	8
23:00	6	0	0	0	0	0	6
23:15	7	0	0	0	0	0	7
23:30	7	0	0	1	0	0	8
23:45	5	0	0	0	0	0	5
TOTAL	2,432	76	19	14	1	1	2,543

AM PEAK HOUR	2:45 PM
AM PEAK VOLUME	401

TOTAL: AM+PM	4,838	175	37	36	1	4	5,091
% OF TOTAL	95.0%	3.4%	0.7%	0.7%	0.0%	0.1%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	BUS

A102423

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 30, 2024 **CITY:** Calimesa

JOB #: SC4429 **LOCATION:** CLASS2 Singleton Rd east of Calimesa Blvd

AM TIME	COMBINED 1	2	3	4	5	6	TOTAL	PM Time	COMBINED 1	2	3	4	5	6	TOTAL
0:00	14	1	0	0	0	0	15	12:00	111	0	4	3	0	0	118
0:15	17	0	0	0	0	0	17	12:15	100	3	1	0	0	0	104
0:30	8	0	0	0	0	0	8	12:30	106	8	3	0	0	0	117
0:45	8	0	0	0	0	0	8	12:45	125	3	2	2	1	0	133
1:00	5	0	0	0	0	0	5	13:00	121	4	1	0	0	0	126
1:15	7	1	0	0	0	0	8	13:15	133	6	1	3	0	0	143
1:30	10	0	0	0	0	0	10	13:30	133	7	1	1	0	0	142
1:45	5	0	0	0	0	0	5	13:45	139	5	2	3	1	0	150
2:00	5	0	0	0	0	0	5	14:00	147	10	4	4	0	0	165
2:15	4	0	0	0	0	0	4	14:15	156	8	0	4	0	0	168
2:30	5	0	0	0	0	0	5	14:30	182	7	0	0	0	0	189
2:45	6	1	0	0	0	0	7	14:45	215	5	2	0	0	2	224
3:00	9	1	0	0	0	0	10	15:00	200	6	1	2	0	0	209
3:15	9	1	0	0	0	0	10	15:15	200	13	2	1	0	1	217
3:30	11	1	1	1	0	0	14	15:30	205	9	0	1	0	0	215
3:45	14	0	0	0	0	0	14	15:45	185	6	2	1	0	1	195
4:00	10	0	0	0	0	0	10	16:00	212	7	1	2	0	0	222
4:15	33	0	0	0	0	0	33	16:15	176	5	1	0	1	0	183
4:30	24	1	0	0	0	0	25	16:30	213	7	2	1	0	0	223
4:45	46	1	0	0	0	0	47	16:45	220	8	0	0	0	0	228
5:00	49	4	0	0	0	0	53	17:00	227	12	2	3	0	0	244
5:15	59	1	0	0	0	0	60	17:15	187	6	3	2	0	0	198
5:30	62	4	0	0	0	0	66	17:30	191	4	1	0	0	0	196
5:45	87	4	0	0	0	0	91	17:45	156	3	1	0	0	0	160
6:00	101	2	3	0	0	0	106	18:00	154	4	1	0	0	0	159
6:15	99	1	1	1	0	0	102	18:15	147	4	0	0	0	1	152
6:30	145	6	0	2	0	0	153	18:30	119	3	0	0	0	0	122
6:45	165	3	0	1	0	0	169	18:45	126	2	0	2	0	0	130
7:00	184	7	1	0	0	0	192	19:00	120	3	0	0	0	0	123
7:15	209	12	3	1	0	0	225	19:15	91	2	0	0	0	0	93
7:30	224	8	3	1	0	1	237	19:30	108	0	0	0	0	0	108
7:45	232	9	4	3	0	0	248	19:45	73	1	0	0	0	0	74
8:00	211	5	1	4	0	0	221	20:00	73	0	1	0	0	0	74
8:15	175	14	3	3	0	0	195	20:15	67	0	0	0	0	0	67
8:30	184	11	2	1	0	2	200	20:30	59	1	0	0	0	0	60
8:45	126	6	0	0	0	0	132	20:45	60	0	1	0	0	0	61
9:00	99	8	4	2	0	0	113	21:00	49	1	0	0	0	0	50
9:15	117	5	2	4	0	0	128	21:15	57	0	1	0	0	0	58
9:30	109	8	2	3	0	0	122	21:30	53	0	0	0	0	0	53
9:45	95	10	0	0	0	0	105	21:45	41	0	0	0	0	0	41
10:00	93	6	0	3	0	1	103	22:00	31	0	1	0	0	0	32
10:15	115	4	2	1	0	0	122	22:15	34	0	0	0	0	0	34
10:30	115	6	1	2	1	0	125	22:30	30	0	0	0	0	0	30
10:45	115	8	1	2	0	0	126	22:45	24	0	0	0	0	0	24
11:00	107	4	4	5	0	0	120	23:00	25	0	0	0	0	0	25
11:15	130	6	1	2	0	0	139	23:15	22	0	0	0	0	0	22
11:30	117	5	2	2	0	0	126	23:30	22	4	0	1	0	0	27
11:45	125	5	1	0	0	0	131	23:45	17	0	0	0	0	0	17
TOTAL	3,899	180	42	44	1	4	4,170	TOTAL	5,642	177	42	36	3	5	5,905

AM PEAK HOUR	7:15 AM
AM PEAK VOLUME	931

PM PEAK HOUR	4:30 PM
PM PEAK VOLUME	893

TOTAL: AM+PM	9,541	357	84	80	4	9	10,075
% OF TOTAL	94.7%	3.5%	0.8%	0.8%	0.0%	0.1%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	Buses

A102423

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 30, 2024 **CITY:** Calimesa

JOB #: SC4429 **LOCATION:** CLASS3 Sandalwood Dr east of Calimesa Blvd

AM TIME	EB 1	2	3	4	5	6	TOTAL	PM Time	EB 1	2	3	4	5	6	TOTAL
0:00	3	0	0	0	0	0	3	12:00	57	1	0	0	0	1	59
0:15	6	0	0	1	0	0	7	12:15	49	2	1	0	0	0	52
0:30	5	0	0	0	0	0	5	12:30	52	3	0	0	0	0	55
0:45	5	0	0	0	0	0	5	12:45	42	2	0	0	0	0	44
1:00	3	0	0	0	0	0	3	13:00	43	3	0	0	0	0	46
1:15	2	0	0	0	0	0	2	13:15	39	3	1	1	0	0	44
1:30	5	0	0	0	0	0	5	13:30	49	6	0	2	0	0	57
1:45	0	0	0	1	0	0	1	13:45	52	3	0	1	0	0	56
2:00	4	0	0	0	0	0	4	14:00	41	2	0	0	0	0	43
2:15	4	0	0	0	0	0	4	14:15	44	1	0	0	0	1	46
2:30	2	0	0	0	0	0	2	14:30	90	3	0	0	0	0	93
2:45	5	0	0	0	0	0	5	14:45	97	1	0	0	0	0	98
3:00	1	0	0	0	0	0	1	15:00	58	5	0	0	0	0	63
3:15	4	0	0	0	0	0	4	15:15	53	6	1	0	0	0	60
3:30	2	0	0	1	0	0	3	15:30	72	7	0	1	0	0	80
3:45	6	1	0	0	0	0	7	15:45	79	2	0	1	0	0	82
4:00	3	2	0	0	0	0	5	16:00	56	5	0	0	0	0	61
4:15	9	1	0	0	0	0	10	16:15	69	1	0	1	0	0	71
4:30	6	0	0	0	0	0	6	16:30	53	3	1	0	0	0	57
4:45	6	0	0	0	0	0	6	16:45	59	3	0	0	0	0	62
5:00	1	2	0	1	0	0	4	17:00	59	1	1	0	0	0	61
5:15	5	2	0	1	0	0	8	17:15	47	3	0	0	0	0	50
5:30	7	1	0	2	0	0	10	17:30	59	3	0	1	0	0	63
5:45	10	4	0	0	0	0	14	17:45	52	1	0	0	0	0	53
6:00	15	1	0	2	0	0	18	18:00	44	3	0	0	0	0	47
6:15	23	2	0	1	0	0	26	18:15	47	2	0	2	0	0	51
6:30	16	2	0	0	0	0	18	18:30	47	0	0	0	0	0	47
6:45	51	1	0	0	0	0	52	18:45	52	2	0	1	0	0	55
7:00	34	3	2	0	0	0	39	19:00	39	0	0	0	0	0	39
7:15	68	2	0	2	0	0	72	19:15	29	2	0	0	0	0	31
7:30	69	4	0	0	0	0	73	19:30	41	1	0	0	0	0	42
7:45	74	4	1	1	0	1	81	19:45	42	0	0	0	0	0	42
8:00	42	2	0	0	0	0	44	20:00	24	0	0	0	0	0	24
8:15	27	3	0	1	0	0	31	20:15	29	0	0	0	0	0	29
8:30	30	1	1	0	0	0	32	20:30	29	0	0	0	0	0	29
8:45	32	2	2	1	0	0	37	20:45	22	0	0	0	0	0	22
9:00	34	4	0	0	0	0	38	21:00	26	0	0	1	0	0	27
9:15	42	2	1	0	0	0	45	21:15	24	2	0	0	0	0	26
9:30	35	2	0	0	0	0	37	21:30	15	1	0	0	0	0	16
9:45	36	6	0	0	0	0	42	21:45	19	0	0	0	0	0	19
10:00	34	0	0	1	0	0	35	22:00	16	1	0	0	0	0	17
10:15	32	4	1	0	0	0	37	22:15	17	0	0	0	0	0	17
10:30	25	2	1	1	0	0	29	22:30	11	0	0	0	0	0	11
10:45	40	2	0	0	0	0	42	22:45	6	0	0	0	0	0	6
11:00	31	0	0	0	0	0	31	23:00	13	0	0	0	0	0	13
11:15	50	2	0	1	0	0	53	23:15	6	0	0	0	0	0	6
11:30	39	1	1	2	0	0	43	23:30	8	0	0	0	0	0	8
11:45	37	7	1	1	0	0	46	23:45	5	0	0	0	0	0	5
TOTAL	1,020	72	11	21	0	1	1,125	**TOTAL**	1,982	84	5	12	0	2	2,085

AM PEAK HOUR	7:15 AM
AM PEAK VOLUME	270

AM PEAK HOUR	2:30 PM
AM PEAK VOLUME	314

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	Buses

	1	2	3	4	5	6	TOTAL
TOTAL: AM+PM	3,002	156	16	33	0	3	3,210
% OF TOTAL	93.5%	4.9%	0.5%	1.0%	0.0%	0.1%	100.0%
TOTAL: ALL	5,794	307	43	53	1	4	6,202
% OF TOTAL	93.4%	5.0%	0.7%	0.9%	0.0%	0.1%	100.0%

A102423

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 30, 2024
JOB #: SC4429
CITY: Calimesa
LOCATION: CLASS3 Sandalwood Dr east of Calimesa Blvd

AM TIME	WB 1	2	3	4	5	6	TOTAL	PM Time	WB 1	2	3	4	5	6	TOTAL
0:00	3	1	0	0	0	0	4	12:00	44	3	1	0	0	0	48
0:15	4	0	0	0	0	0	4	12:15	47	1	0	0	0	0	48
0:30	3	0	0	1	0	0	4	12:30	32	2	0	1	0	0	35
0:45	2	0	0	0	0	0	2	12:45	44	3	0	1	0	0	48
1:00	2	0	0	0	0	0	2	13:00	39	1	1	1	0	0	42
1:15	3	0	0	0	0	0	3	13:15	34	0	2	0	0	0	36
1:30	3	0	0	0	0	0	3	13:30	42	3	1	0	0	0	46
1:45	3	0	1	0	0	0	4	13:45	38	1	1	0	0	1	41
2:00	1	0	0	1	0	0	2	14:00	78	6	0	0	0	0	84
2:15	3	0	0	0	0	0	3	14:15	67	3	0	0	0	0	70
2:30	4	0	0	0	0	0	4	14:30	45	5	0	0	0	0	50
2:45	4	2	0	0	0	0	6	14:45	45	3	0	0	0	0	48
3:00	4	2	0	0	0	0	6	15:00	49	1	0	0	0	0	50
3:15	4	0	0	0	0	0	4	15:15	37	1	0	1	1	0	40
3:30	5	0	0	0	0	0	5	15:30	30	5	0	0	0	0	35
3:45	16	3	0	0	0	0	19	15:45	40	5	0	0	0	0	45
4:00	6	1	0	0	0	0	7	16:00	37	5	0	0	0	0	42
4:15	11	2	1	0	0	0	14	16:15	51	3	0	1	0	0	55
4:30	16	3	0	0	0	0	19	16:30	39	0	1	0	0	0	40
4:45	19	3	0	0	0	0	22	16:45	41	1	0	0	0	0	42
5:00	10	1	0	0	0	0	11	17:00	47	2	1	0	0	0	50
5:15	12	2	0	1	0	0	15	17:15	37	1	0	0	0	0	38
5:30	24	2	0	1	0	0	27	17:30	44	3	0	0	0	0	47
5:45	22	4	0	0	0	0	26	17:45	35	1	0	0	0	0	36
6:00	41	4	0	0	0	0	45	18:00	50	0	1	0	0	0	51
6:15	35	5	0	0	0	0	40	18:15	33	0	0	0	0	0	33
6:30	54	3	1	1	0	0	59	18:30	44	1	0	1	0	0	46
6:45	68	1	0	0	0	0	69	18:45	25	0	0	0	0	0	25
7:00	77	1	1	0	0	0	79	19:00	36	0	0	0	0	0	36
7:15	84	8	2	0	0	0	94	19:15	24	1	0	0	0	0	25
7:30	85	0	1	0	0	0	86	19:30	18	1	0	0	0	0	19
7:45	84	1	2	0	0	0	87	19:45	24	0	0	0	0	0	24
8:00	49	9	0	1	0	0	59	20:00	21	0	0	0	0	0	21
8:15	38	2	1	0	0	0	41	20:15	18	1	0	0	0	0	19
8:30	50	2	0	0	0	0	52	20:30	14	0	0	0	0	0	14
8:45	37	0	2	0	0	0	39	20:45	13	0	0	0	0	0	13
9:00	31	2	0	1	0	0	34	21:00	26	0	0	0	0	0	26
9:15	33	1	1	2	0	0	37	21:15	14	0	0	1	0	0	15
9:30	38	2	0	0	0	0	40	21:30	6	0	0	0	0	0	6
9:45	36	2	1	0	0	0	39	21:45	8	0	0	0	0	0	8
10:00	43	2	0	0	0	0	45	22:00	12	0	0	0	0	0	12
10:15	35	2	1	0	0	0	38	22:15	9	0	0	0	0	0	9
10:30	31	5	0	2	0	0	38	22:30	3	1	0	0	0	0	4
10:45	34	1	1	0	0	0	36	22:45	9	0	0	0	0	0	9
11:00	34	0	0	1	0	0	35	23:00	7	0	0	0	0	0	7
11:15	30	2	1	0	0	0	33	23:15	8	1	0	0	0	0	9
11:30	43	1	0	0	0	0	44	23:30	4	1	0	0	0	0	5
11:45	41	3	1	1	0	0	46	23:45	9	0	0	0	0	0	9
TOTAL	1,315	85	18	13	0	0	1,431	**TOTAL**	1,477	66	9	7	1	1	1,561
				AM PEAK HOUR			7:00 AM						**AM PEAK HOUR**		2:00 PM
				AM PEAK VOLUME			346						**AM PEAK VOLUME**		252

TOTAL: AM+PM	2,792	151	27	20	1	1	2,992
% OF TOTAL	93.3%	5.0%	0.9%	0.7%	0.0%	0.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	BUS

A102423

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 30, 2024 **CITY:** Calimesa

JOB #: SC4429 **LOCATION:** CLASS3 Sandalwood Dr east of Calimesa Blvd

AM TIME	COMBINED 1	2	3	4	5	6	TOTAL	PM Time	COMBINED 1	2	3	4	5	6	TOTAL
0:00	6	1	0	0	0	0	7	12:00	101	4	1	0	0	1	107
0:15	10	0	0	1	0	0	11	12:15	96	3	1	0	0	0	100
0:30	8	0	0	1	0	0	9	12:30	84	5	0	1	0	0	90
0:45	7	0	0	0	0	0	7	12:45	86	5	0	1	0	0	92
1:00	5	0	0	0	0	0	5	13:00	82	4	1	1	0	0	88
1:15	5	0	0	0	0	0	5	13:15	73	3	3	1	0	0	80
1:30	8	0	0	0	0	0	8	13:30	91	9	1	2	0	0	103
1:45	3	0	1	1	0	0	5	13:45	90	4	1	1	0	1	97
2:00	5	0	0	1	0	0	6	14:00	119	8	0	0	0	0	127
2:15	7	0	0	0	0	0	7	14:15	111	4	0	0	0	1	116
2:30	6	0	0	0	0	0	6	14:30	135	8	0	0	0	0	143
2:45	9	2	0	0	0	0	11	14:45	142	4	0	0	0	0	146
3:00	5	2	0	0	0	0	7	15:00	107	6	0	0	0	0	113
3:15	8	0	0	0	0	0	8	15:15	90	7	1	1	1	0	100
3:30	7	0	0	1	0	0	8	15:30	102	12	0	1	0	0	115
3:45	22	4	0	0	0	0	26	15:45	119	7	0	1	0	0	127
4:00	9	3	0	0	0	0	12	16:00	93	10	0	0	0	0	103
4:15	20	3	1	0	0	0	24	16:15	120	4	0	2	0	0	126
4:30	22	3	0	0	0	0	25	16:30	92	3	2	0	0	0	97
4:45	25	3	0	0	0	0	28	16:45	100	4	0	0	0	0	104
5:00	11	3	0	1	0	0	15	17:00	106	3	2	0	0	0	111
5:15	17	4	0	2	0	0	23	17:15	84	4	0	0	0	0	88
5:30	31	3	0	3	0	0	37	17:30	103	6	0	1	0	0	110
5:45	32	8	0	0	0	0	40	17:45	87	2	0	0	0	0	89
6:00	56	5	0	2	0	0	63	18:00	94	3	1	0	0	0	98
6:15	58	7	0	1	0	0	66	18:15	80	2	0	2	0	0	84
6:30	70	5	1	1	0	0	77	18:30	91	1	0	1	0	0	93
6:45	119	2	0	0	0	0	121	18:45	77	2	0	1	0	0	80
7:00	111	4	3	0	0	0	118	19:00	75	0	0	0	0	0	75
7:15	152	10	2	2	0	0	166	19:15	53	3	0	0	0	0	56
7:30	154	4	1	0	0	0	159	19:30	59	2	0	0	0	0	61
7:45	158	5	3	1	0	1	168	19:45	66	0	0	0	0	0	66
8:00	91	11	0	1	0	0	103	20:00	45	0	0	0	0	0	45
8:15	65	5	1	1	0	0	72	20:15	47	1	0	0	0	0	48
8:30	80	3	1	0	0	0	84	20:30	43	0	0	0	0	0	43
8:45	69	2	4	1	0	0	76	20:45	35	0	0	0	0	0	35
9:00	65	6	0	1	0	0	72	21:00	52	0	0	1	0	0	53
9:15	75	3	2	2	0	0	82	21:15	38	2	0	1	0	0	41
9:30	73	4	0	0	0	0	77	21:30	21	1	0	0	0	0	22
9:45	72	8	1	0	0	0	81	21:45	27	0	0	0	0	0	27
10:00	77	2	0	1	0	0	80	22:00	28	1	0	0	0	0	29
10:15	67	6	2	0	0	0	75	22:15	26	0	0	0	0	0	26
10:30	56	7	1	3	0	0	67	22:30	14	1	0	0	0	0	15
10:45	74	3	1	0	0	0	78	22:45	15	0	0	0	0	0	15
11:00	65	0	0	1	0	0	66	23:00	20	0	0	0	0	0	20
11:15	80	4	1	1	0	0	86	23:15	14	1	0	0	0	0	15
11:30	82	2	1	2	0	0	87	23:30	12	1	0	0	0	0	13
11:45	78	10	2	2	0	0	92	23:45	14	0	0	0	0	0	14
TOTAL	2,335	157	29	34	0	1	2,556	TOTAL	3,459	150	14	19	1	3	3,646

AM PEAK HOUR	7:00 AM	PM PEAK HOUR	2:00 PM
AM PEAK VOLUME	611	AM PEAK VOLUME	532

TOTAL: AM+PM	5,794	307	43	53	1	4	6,202
% OF TOTAL	93.4%	5.0%	0.7%	0.9%	0.0%	0.1%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	Buses

A102423

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 30, 2024 **CITY:** Calimesa

JOB #: SC4429 **LOCATION:** CLASS4 W County Line Rd east of I-10 WB Ramps

AM TIME	EB 1	2	3	4	5	6	TOTAL	PM Time	EB 1	2	3	4	5	6	TOTAL
0:00	8	0	0	0	0	0	8	12:00	116	6	4	1	0	0	127
0:15	9	0	0	2	0	0	11	12:15	118	6	0	1	0	0	125
0:30	15	0	0	0	0	0	15	12:30	131	4	2	0	0	0	137
0:45	10	1	0	0	0	0	11	12:45	101	7	1	3	0	0	112
1:00	7	0	0	0	0	0	7	13:00	116	5	2	1	0	0	124
1:15	12	0	0	0	0	0	12	13:15	106	8	0	0	0	0	114
1:30	6	0	0	0	0	0	6	13:30	100	3	0	1	1	0	105
1:45	10	0	0	0	0	0	10	13:45	145	7	1	2	0	0	155
2:00	9	0	0	0	0	0	9	14:00	103	8	1	3	0	2	117
2:15	3	1	0	0	0	0	4	14:15	146	10	1	0	0	0	157
2:30	12	1	1	1	0	0	15	14:30	176	14	2	0	0	0	192
2:45	4	0	0	0	0	0	4	14:45	188	10	2	3	0	0	203
3:00	7	0	0	2	0	0	9	15:00	123	13	2	2	0	0	140
3:15	13	0	0	0	0	0	13	15:15	126	15	3	0	0	1	145
3:30	7	1	0	0	0	0	8	15:30	160	8	3	2	0	0	173
3:45	10	0	0	1	0	0	11	15:45	164	6	0	1	0	0	171
4:00	6	1	0	0	0	0	7	16:00	173	13	0	0	0	0	186
4:15	8	0	0	1	0	0	9	16:15	152	7	0	2	0	0	161
4:30	19	1	0	1	0	0	21	16:30	129	15	1	0	1	0	146
4:45	15	1	0	0	0	0	16	16:45	138	7	0	1	0	0	146
5:00	13	2	0	0	0	0	15	17:00	118	5	0	0	0	0	123
5:15	25	0	0	1	1	0	27	17:15	124	5	0	1	0	0	130
5:30	28	0	0	1	0	0	29	17:30	138	1	0	0	0	0	139
5:45	40	2	1	1	0	0	44	17:45	143	5	1	3	0	0	152
6:00	33	2	0	1	0	0	36	18:00	111	3	1	1	0	0	116
6:15	49	5	3	0	0	0	57	18:15	126	2	1	1	0	0	130
6:30	61	7	1	0	0	0	69	18:30	102	1	0	0	0	0	103
6:45	99	12	2	1	0	1	115	18:45	125	1	0	0	0	0	126
7:00	82	7	3	4	0	0	96	19:00	91	5	1	1	0	0	98
7:15	87	5	2	1	0	1	96	19:15	90	7	0	0	0	0	97
7:30	98	1	1	1	0	0	101	19:30	89	3	0	0	1	0	93
7:45	89	5	2	1	0	2	99	19:45	89	2	0	0	0	0	91
8:00	102	3	0	1	0	1	107	20:00	72	2	0	0	0	0	74
8:15	95	7	1	2	0	1	106	20:15	69	2	0	0	0	0	71
8:30	110	8	1	1	0	0	120	20:30	60	0	1	1	0	0	62
8:45	98	8	2	0	1	1	110	20:45	81	0	0	0	0	0	81
9:00	77	6	1	4	0	0	88	21:00	55	0	0	0	0	0	55
9:15	86	9	0	0	0	0	95	21:15	69	2	0	0	0	0	71
9:30	88	8	0	0	0	0	96	21:30	45	1	0	1	0	0	47
9:45	98	5	2	0	0	0	105	21:45	52	2	0	0	0	0	54
10:00	90	9	3	1	0	0	103	22:00	53	0	0	0	0	0	53
10:15	93	6	3	1	0	0	103	22:15	33	0	0	0	0	0	33
10:30	107	6	2	2	0	0	117	22:30	38	0	0	0	0	0	38
10:45	113	11	0	7	1	0	132	22:45	27	0	0	2	0	0	29
11:00	105	10	1	2	0	0	118	23:00	28	0	0	0	0	0	28
11:15	111	7	1	3	0	0	122	23:15	30	0	1	0	0	0	31
11:30	136	5	0	3	0	0	144	23:30	14	0	0	0	0	0	14
11:45	112	7	4	2	0	0	125	23:45	0	0	0	0	0	0	0
TOTAL	2,515	170	37	49	3	7	2,781	TOTAL	4,783	221	31	34	3	3	5,075
				AM PEAK HOUR			10:45 AM					AM PEAK HOUR			2:15 PM
				AM PEAK VOLUME			516					AM PEAK VOLUME			692

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	7,298	391	68	83	6	10	7,856
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	92.9%	5.0%	0.9%	1.1%	0.1%	0.1%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV	TOTAL: ALL	16,435	831	140	169	11	21	17,607
CLASS 6	Buses	% OF TOTAL	93.3%	4.7%	0.8%	1.0%	0.1%	0.1%	100.0%

A102423

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 30, 2024
JOB #: SC4429
CITY: Calimesa
LOCATION: CLASS4 W County Line Rd east of I-10 WB Ramps

AM TIME	WB 1	2	3	4	5	6	TOTAL	PM Time	WB 1	2	3	4	5	6	TOTAL
0:00	11	0	0	0	0	0	11	12:00	115	8	1	1	0	0	125
0:15	7	1	0	0	0	0	8	12:15	125	2	0	1	0	0	128
0:30	9	1	0	0	0	0	10	12:30	137	1	3	1	0	0	142
0:45	7	1	0	0	0	0	8	12:45	109	8	1	1	0	0	119
1:00	9	0	0	0	0	0	9	13:00	111	2	1	0	0	0	114
1:15	6	0	0	1	0	0	7	13:15	124	12	1	1	0	0	138
1:30	10	1	0	1	0	0	12	13:30	120	3	1	1	0	0	125
1:45	1	0	0	0	0	0	1	13:45	117	11	0	2	0	1	131
2:00	10	0	0	0	0	0	10	14:00	187	10	2	1	1	0	201
2:15	11	0	0	0	0	0	11	14:15	181	5	0	1	0	0	187
2:30	8	0	3	1	0	0	12	14:30	157	8	2	2	0	0	169
2:45	6	0	0	0	0	0	6	14:45	141	8	0	0	0	0	149
3:00	11	2	0	0	0	0	13	15:00	171	6	0	0	0	3	180
3:15	24	0	0	0	0	0	24	15:15	181	3	1	1	0	0	186
3:30	38	0	0	1	0	0	39	15:30	147	12	1	3	0	0	163
3:45	31	1	0	1	0	0	33	15:45	122	8	1	2	0	0	133
4:00	19	2	0	2	0	0	23	16:00	129	11	3	1	0	0	144
4:15	43	3	0	1	0	0	47	16:15	143	3	1	4	0	0	151
4:30	49	4	0	0	0	0	53	16:30	164	9	0	1	0	0	174
4:45	61	6	1	2	0	0	70	16:45	129	4	0	0	0	0	133
5:00	84	6	1	1	0	0	92	17:00	165	6	1	1	1	0	174
5:15	64	9	0	2	0	0	75	17:15	141	10	3	1	0	0	155
5:30	119	7	2	0	0	0	128	17:30	142	2	0	1	1	0	146
5:45	95	6	3	1	0	0	105	17:45	111	8	0	0	0	0	119
6:00	114	5	3	0	0	0	122	18:00	143	9	0	0	0	0	152
6:15	143	19	0	3	0	0	165	18:15	108	3	0	1	0	0	112
6:30	192	11	2	1	0	0	206	18:30	105	2	0	0	0	0	107
6:45	220	10	1	0	0	1	232	18:45	96	5	0	0	0	0	101
7:00	245	10	2	1	0	0	258	19:00	65	3	0	0	0	0	68
7:15	279	11	1	0	0	0	291	19:15	69	0	0	0	0	0	69
7:30	281	7	1	2	0	0	291	19:30	65	3	0	1	0	0	69
7:45	224	5	0	1	0	1	231	19:45	61	4	0	1	0	0	66
8:00	190	8	0	3	0	0	201	20:00	52	1	1	0	0	0	54
8:15	176	4	1	2	1	0	184	20:15	73	0	0	1	0	0	74
8:30	162	8	1	2	0	0	173	20:30	41	0	0	0	0	0	41
8:45	132	12	1	0	0	2	147	20:45	49	1	0	0	0	0	50
9:00	122	5	0	2	0	1	130	21:00	49	1	0	0	0	0	50
9:15	126	9	2	4	1	0	142	21:15	33	0	0	0	0	0	33
9:30	110	6	1	1	0	0	118	21:30	31	0	0	0	0	0	31
9:45	153	11	2	0	0	0	166	21:45	33	3	0	0	0	0	36
10:00	95	7	1	2	0	1	106	22:00	30	0	0	0	0	0	30
10:15	130	4	3	2	0	0	139	22:15	18	0	0	0	0	0	18
10:30	117	8	4	0	0	0	129	22:30	14	0	0	0	0	0	14
10:45	119	3	3	0	0	1	126	22:45	27	0	0	0	0	0	27
11:00	125	12	3	4	0	0	144	23:00	21	0	0	0	0	0	21
11:15	123	9	2	4	0	0	138	23:15	21	0	0	0	0	0	21
11:30	103	7	2	4	0	0	116	23:30	16	0	0	0	0	0	16
11:45	134	4	2	3	0	0	143	23:45	0	0	0	0	0	0	0
TOTAL	4,548	245	48	55	2	7	4,905	TOTAL	4,589	195	24	31	3	4	4,846
				AM PEAK HOUR			6:45 AM						AM PEAK HOUR		2:00 PM
				AM PEAK VOLUME			1,072						AM PEAK VOLUME		706

TOTAL: AM+PM	9,137	440	72	86	5	11	9,751
% OF TOTAL	93.7%	4.5%	0.7%	0.9%	0.1%	0.1%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	BUS

A102423

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 30, 2024 **CITY:** Calimesa

JOB #: SC4429 **LOCATION:** CLASS4 W County Line Rd east of I-10 WB Ramps

AM TIME	COMBINED 1	2	3	4	5	6	TOTAL	PM Time	COMBINED 1	2	3	4	5	6	TOTAL
0:00	19	0	0	0	0	0	19	12:00	231	14	5	2	0	0	252
0:15	16	1	0	2	0	0	19	12:15	243	8	0	2	0	0	253
0:30	24	1	0	0	0	0	25	12:30	268	5	5	1	0	0	279
0:45	17	2	0	0	0	0	19	12:45	210	15	2	4	0	0	231
1:00	16	0	0	0	0	0	16	13:00	227	7	3	1	0	0	238
1:15	18	0	0	1	0	0	19	13:15	230	20	1	1	0	0	252
1:30	16	1	0	1	0	0	18	13:30	220	6	1	2	1	0	230
1:45	11	0	0	0	0	0	11	13:45	262	18	1	4	0	1	286
2:00	19	0	0	0	0	0	19	14:00	290	18	3	4	1	2	318
2:15	14	1	0	0	0	0	15	14:15	327	15	1	1	0	0	344
2:30	20	1	4	2	0	0	27	14:30	333	22	4	2	0	0	361
2:45	10	0	0	0	0	0	10	14:45	329	18	2	3	0	0	352
3:00	18	2	0	2	0	0	22	15:00	294	19	2	2	0	3	320
3:15	37	0	0	0	0	0	37	15:15	307	18	4	1	0	1	331
3:30	45	1	0	1	0	0	47	15:30	307	20	4	5	0	0	336
3:45	41	1	0	2	0	0	44	15:45	286	14	1	3	0	0	304
4:00	25	3	0	2	0	0	30	16:00	302	24	3	1	0	0	330
4:15	51	3	0	2	0	0	56	16:15	295	10	1	6	0	0	312
4:30	68	5	0	1	0	0	74	16:30	293	24	1	1	1	0	320
4:45	76	7	1	2	0	0	86	16:45	267	11	0	1	0	0	279
5:00	97	8	1	1	0	0	107	17:00	283	11	1	1	1	0	297
5:15	89	9	0	3	1	0	102	17:15	265	15	3	2	0	0	285
5:30	147	7	2	1	0	0	157	17:30	280	3	0	1	1	0	285
5:45	135	8	4	2	0	0	149	17:45	254	13	1	3	0	0	271
6:00	147	7	3	1	0	0	158	18:00	254	12	1	1	0	0	268
6:15	192	24	3	3	0	0	222	18:15	234	5	1	2	0	0	242
6:30	253	18	3	1	0	0	275	18:30	207	3	0	0	0	0	210
6:45	319	22	3	1	0	2	347	18:45	221	6	0	0	0	0	227
7:00	327	17	5	5	0	0	354	19:00	156	8	1	1	0	0	166
7:15	366	16	3	1	0	1	387	19:15	159	7	0	0	0	0	166
7:30	379	8	2	3	0	0	392	19:30	154	6	0	1	1	0	162
7:45	313	10	2	2	0	3	330	19:45	150	6	0	1	0	0	157
8:00	292	11	0	4	0	1	308	20:00	124	3	1	0	0	0	128
8:15	271	11	2	4	1	1	290	20:15	142	2	0	1	0	0	145
8:30	272	16	2	3	0	0	293	20:30	101	0	1	1	0	0	103
8:45	230	20	3	0	1	3	257	20:45	130	1	0	0	0	0	131
9:00	199	11	1	6	0	1	218	21:00	104	1	0	0	0	0	105
9:15	212	18	2	4	1	0	237	21:15	102	2	0	0	0	0	104
9:30	198	14	1	1	0	0	214	21:30	76	1	0	1	0	0	78
9:45	251	16	4	0	0	0	271	21:45	85	5	0	0	0	0	90
10:00	185	16	4	3	0	1	209	22:00	83	0	0	0	0	0	83
10:15	223	10	6	3	0	0	242	22:15	51	0	0	0	0	0	51
10:30	224	14	6	2	0	0	246	22:30	52	0	0	0	0	0	52
10:45	232	14	3	7	1	1	258	22:45	54	0	0	2	0	0	56
11:00	230	22	4	6	0	0	262	23:00	49	0	0	0	0	0	49
11:15	234	16	3	7	0	0	260	23:15	51	0	1	0	0	0	52
11:30	239	12	2	7	0	0	260	23:30	30	0	0	0	0	0	30
11:45	246	11	6	5	0	0	268	23:45	0	0	0	0	0	0	0
TOTAL	7,063	415	85	104	5	14	7,686	TOTAL	9,372	416	55	65	6	7	9,921

AM PEAK HOUR	6:45 AM
AM PEAK VOLUME	1,480

AM PEAK HOUR	2:15 PM
AM PEAK VOLUME	1,377

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	Buses

	1	2	3	4	5	6	TOTAL
TOTAL: AM+PM	16,435	831	140	169	11	21	17,607
% OF TOTAL	93.3%	4.7%	0.8%	1.0%	0.1%	0.1%	100.0%

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APPENDIX 3.2: EXISTING (2024) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	40	31	8	18	0
Future Vol, veh/h	0	40	31	8	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	55	42	11	25	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	53	0	-	0	103	48
Stage 1	-	-	-	-	48	-
Stage 2	-	-	-	-	55	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1565	-	-	-	900	1027
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	973	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1565	-	-	-	900	1027
Mov Cap-2 Maneuver	-	-	-	-	900	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	973	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	9.11
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1565	-	-	-	900
HCM Lane V/C Ratio	-	-	-	-	0.027
HCM Control Delay (s/veh)	0	-	-	-	9.1
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	5.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	80	2	114	105	8	135
Future Vol, veh/h	80	2	114	105	8	135
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	92	2	131	121	9	155

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	96	0	478	95
Stage 1	-	-	-	-	95	-
Stage 2	-	-	-	-	383	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1510	-	550	967
Stage 1	-	-	-	-	934	-
Stage 2	-	-	-	-	694	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1507	-	498	965
Mov Cap-2 Maneuver	-	-	-	-	498	-
Stage 1	-	-	-	-	932	-
Stage 2	-	-	-	-	629	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	3.96	9.78
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	917	-	-	937	-
HCM Lane V/C Ratio	0.179	-	-	0.087	-
HCM Control Delay (s/veh)	9.8	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0.3	-

Intersection	
Int Delay, s/veh	82.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	178	37	314	142	0	0	0	0	251	6	77
Future Vol, veh/h	0	178	37	314	142	0	0	0	0	251	6	77
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	209	44	369	167	0	0	0	0	295	7	91

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	254	0	0			1115	1160	167
Stage 1	-	-	-	-	-	-			906	906	-
Stage 2	-	-	-	-	-	-			209	254	-
Critical Hdwy	-	-	-	4.1	-	-			6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-			5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-			3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1323	-	0			~ 232	197	882
Stage 1	0	-	-	-	-	0			398	358	-
Stage 2	0	-	-	-	-	0			830	701	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	1323	-	-			~ 167	0	882
Mov Cap-2 Maneuver	-	-	-	-	-	-			~ 197	0	-
Stage 1	-	-	-	-	-	-			398	0	-
Stage 2	-	-	-	-	-	-			599	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	6.04	238.93
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	1323	-	197	882
HCM Lane V/C Ratio	-	-	0.279	-	1.534	0.103
HCM Control Delay (s/veh)	-	-	8.8	-	$ 307.7	9.5
HCM Lane LOS	-	-	A	-	F	A
HCM 95th %tile Q(veh)	-	-	1.2	-	19.1	0.3

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

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	333	0	0	441	659	14	4	97	0	0	0
Future Vol, veh/h	96	333	0	0	441	659	14	4	97	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	103	358	0	0	474	709	15	4	104	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1183	0	-	-	-	0	1039	1747	358
Stage 1	-	-	-	-	-	-	565	565	-
Stage 2	-	-	-	-	-	-	474	1183	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	598	-	0	0	-	-	258	87	691
Stage 1	-	-	0	0	-	-	573	511	-
Stage 2	-	-	0	0	-	-	630	265	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	598	-	-	-	-	-	213	0	691
Mov Cap-2 Maneuver	-	-	-	-	-	-	325	0	-
Stage 1	-	-	-	-	-	-	474	0	-
Stage 2	-	-	-	-	-	-	630	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	2.75	0	12.02
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	325	691	598	-	-	-
HCM Lane V/C Ratio	0.06	0.151	0.173	-	-	-
HCM Control Delay (s/veh)	16.8	11.1	12.3	-	-	-
HCM Lane LOS	C	B	B	-	-	-
HCM 95th %tile Q(veh)	0.2	0.5	0.6	-	-	-

Intersection	
Intersection Delay, s/veh	85.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	37	70	450	44	0	72	0	334	0	0	0
Future Vol, veh/h	0	37	70	450	44	0	72	0	334	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, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	51	96	616	60	0	99	0	458	0	0	0
Number of Lanes	1	1	0	1	1	1	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	2
HCM Control Delay, s/veh	14.2	146	30	0
HCM LOS	B	F	D	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	35%	0%	100%	100%	100%
Vol Right, %	0%	100%	0%	65%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	72	334	0	107	450	44	0	0
LT Vol	72	0	0	0	450	0	0	0
Through Vol	0	0	0	37	0	44	0	0
RT Vol	0	334	0	70	0	0	0	0
Lane Flow Rate	99	458	0	147	616	60	0	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.209	0.816	0	0.305	1.268	0.115	0	0
Departure Headway (Hd)	8.2	6.975	8.518	8.043	7.403	6.895	6.895	9.367
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	441	522	0	450	493	520	0	0
Service Time	5.9	4.675	6.218	5.743	5.15	4.641	4.641	7.067
HCM Lane V/C Ratio	0.224	0.877	0	0.327	1.249	0.115	0	0
HCM Control Delay, s/veh	13.1	33.7	11.2	14.2	159.3	10.5	9.6	12.1
HCM Lane LOS	B	D	N	B	F	B	N	N
HCM 95th-tile Q	0.8	8	0	1.3	25.3	0.4	0	0

Intersection	
Intersection Delay, s/veh	50.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	327	44	185	329	0	0	0	0	122	16	165
Future Vol, veh/h	0	327	44	185	329	0	0	0	0	122	16	165
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	404	54	228	406	0	0	0	0	151	20	204
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, s/veh	28.2	82.3	22.2
HCM LOS	D	F	C

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	36%	40%
Vol Thru, %	88%	64%	5%
Vol Right, %	12%	0%	54%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	371	514	303
LT Vol	0	185	122
Through Vol	327	329	16
RT Vol	44	0	165
Lane Flow Rate	458	635	374
Geometry Grp	1	1	1
Degree of Util (X)	0.779	1.072	0.67
Departure Headway (Hd)	6.347	6.081	6.691
Convergence, Y/N	Yes	Yes	Yes
Cap	573	596	542
Service Time	4.347	4.166	4.691
HCM Lane V/C Ratio	0.799	1.065	0.69
HCM Control Delay, s/veh	28.2	82.3	22.2
HCM Lane LOS	D	F	C
HCM 95th-tile Q	7.2	18.2	5

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	77	373	513	406	0	0
Future Vol, veh/h	77	373	513	406	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	88	424	583	461	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1044	0	-	0	-	814
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	674	-	-	-	0	381
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	674	-	-	-	-	381
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

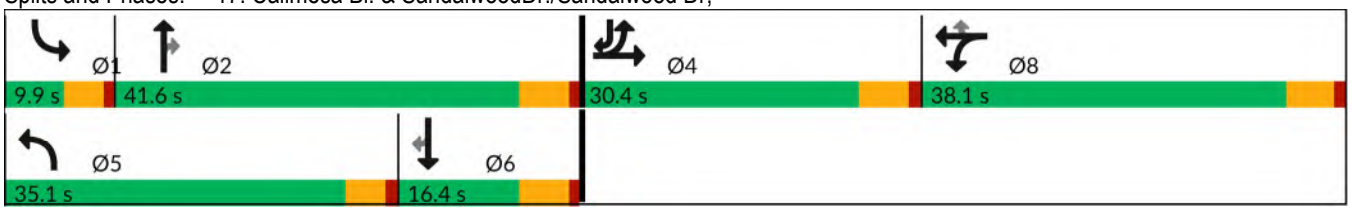
Approach	EB	WB	SB
HCM Control Delay, s/v	1.91	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	308	-	-	-	-
HCM Lane V/C Ratio	0.13	-	-	-	-
HCM Control Delay (s/veh)	11.1	0	-	-	0
HCM Lane LOS	B	A	-	-	A
HCM 95th %tile Q(veh)	0.4	-	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	156	173	20	303	32	255	544	99	14	46	362
Future Volume (vph)	156	173	20	303	32	255	544	99	14	46	362
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4	30.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	15.7	15.7	21.5	21.5	21.5	19.1	31.3	31.3	5.4	10.6	32.0
Actuated g/C Ratio	0.18	0.18	0.24	0.24	0.24	0.22	0.35	0.35	0.06	0.12	0.36
v/c Ratio	0.48	0.46	0.05	0.74	0.07	0.74	0.48	0.17	0.14	0.22	0.56
Control Delay (s/veh)	41.8	35.1	29.3	43.5	0.2	46.9	26.8	6.6	52.0	45.5	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	41.8	35.1	29.3	43.5	0.2	46.9	26.8	6.6	52.0	45.5	14.8
LOS	D	D	C	D	A	D	C	A	D	D	B
Approach Delay (s/veh)		37.4		38.9			30.3			19.4	
Approach LOS		D		D			C			B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 88.8	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay (s/veh): 30.8	Intersection LOS: C
Intersection Capacity Utilization 65.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	173	44	20	303	32	255	544	99	14	46	362
Future Volume (veh/h)	156	173	44	20	303	32	255	544	99	14	46	362
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	135	255	32	23	344	26	290	618	82	16	52	334
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	254	465	58	409	429	359	339	1166	519	34	293	474
Arrive On Green	0.14	0.14	0.14	0.23	0.23	0.23	0.19	0.32	0.32	0.02	0.15	0.15
Sat Flow, veh/h	1810	3315	411	1810	1900	1588	1810	3610	1607	1810	1900	1610
Grp Volume(v), veh/h	135	145	142	23	344	26	290	618	82	16	52	334
Grp Sat Flow(s),veh/h/ln	1810	1900	1826	1810	1900	1588	1810	1805	1607	1810	1900	1610
Q Serve(g_s), s	4.9	5.1	5.2	0.7	12.2	0.9	11.0	10.0	2.6	0.6	1.7	11.0
Cycle Q Clear(g_c), s	4.9	5.1	5.2	0.7	12.2	0.9	11.0	10.0	2.6	0.6	1.7	11.0
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	267	256	409	429	359	339	1166	519	34	293	474
V/C Ratio(X)	0.53	0.54	0.55	0.06	0.80	0.07	0.85	0.53	0.16	0.46	0.18	0.70
Avail Cap(c_a), veh/h	635	667	641	830	872	729	775	1834	817	135	293	474
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	28.5	28.6	21.6	26.1	21.7	28.0	19.7	17.2	34.6	26.2	21.6
Incr Delay (d2), s/veh	1.7	1.7	1.9	0.1	3.5	0.1	2.4	0.4	0.1	3.6	0.3	4.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	2.3	2.2	0.3	5.4	0.3	4.6	3.8	0.9	0.3	0.7	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.2	30.2	30.4	21.7	29.6	21.8	30.4	20.1	17.4	38.2	26.5	26.3
LnGrp LOS	C	C	C	C	C	C	C	C	B	D	C	C
Approach Vol, veh/h		422			393			990			402	
Approach Delay, s/veh		30.3			28.6			22.9			26.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	28.4		15.4	18.0	16.4		21.5				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7				
Max Q Clear Time (g_c+I1), s	2.6	12.0		7.2	13.0	13.0		14.2				
Green Ext Time (p_c), s	0.0	4.3		1.7	0.4	0.0		1.9				

Intersection Summary		
HCM 7th Control Delay, s/veh	26.0	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	71.8
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	109	0	0	709	189	0
Future Vol, veh/h	109	0	0	709	189	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	128	0	0	834	222	0
Number of Lanes	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	10.4	96.1	15.9
HCM LOS	B	F	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	100%
Vol Right, %	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	189	0	109	709
LT Vol	189	0	0	0
Through Vol	0	0	109	709
RT Vol	0	0	0	0
Lane Flow Rate	222	0	128	834
Geometry Grp	5	5	2	2
Degree of Util (X)	0.439	0	0.201	1.132
Departure Headway (Hd)	7.471	6.96	5.92	4.885
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	485	0	610	734
Service Time	5.171	4.66	3.92	2.971
HCM Lane V/C Ratio	0.458	0	0.21	1.136
HCM Control Delay, s/veh	15.9	9.7	10.4	96.1
HCM Lane LOS	C	N	B	F
HCM 95th-tile Q	2.2	0	0.7	24.5

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	3	3	14	0	2
Future Vol, veh/h	4	3	3	14	0	2
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	4	4	20	0	3
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	6.8	6.5	7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	57%	0%
Vol Thru, %	18%	0%	100%
Vol Right, %	82%	43%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	17	7	2
LT Vol	0	4	0
Through Vol	3	0	2
RT Vol	14	3	0
Lane Flow Rate	24	10	3
Geometry Grp	1	1	1
Degree of Util (X)	0.023	0.01	0.003
Departure Headway (Hd)	3.426	3.804	3.935
Convergence, Y/N	Yes	Yes	Yes
Cap	1051	945	914
Service Time	1.428	1.808	1.939
HCM Lane V/C Ratio	0.023	0.011	0.003
HCM Control Delay, s/veh	6.5	6.8	7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0	0

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	2	395	7	0	0	0	0	0	0	0
Future Vol, veh/h	0	12	2	395	7	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	14	2	470	8	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	17	0	0	963	965	8
Stage 1	-	-	-	-	-	-	949	949	-
Stage 2	-	-	-	-	-	-	14	17	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1614	-	0	286	257	1079
Stage 1	0	-	-	-	-	0	379	342	-
Stage 2	0	-	-	-	-	0	1014	886	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1614	-	-	202	0	1079
Mov Cap-2 Maneuver	-	-	-	-	-	-	202	0	-
Stage 1	-	-	-	-	-	-	379	0	-
Stage 2	-	-	-	-	-	-	717	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	8	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1606	-	-
HCM Lane V/C Ratio	-	-	0.291	-	-
HCM Control Delay (s/veh)	-	-	8.1	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1.2	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	0	0	394	0	8	0	248	0	0	0
Future Vol, veh/h	0	12	0	0	394	0	8	0	248	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	13	0	0	438	0	9	0	276	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	438	0	-	-	-	0	451	451	13
Stage 1	-	-	-	-	-	-	13	13	-
Stage 2	-	-	-	-	-	-	438	438	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1133	-	0	0	-	-	570	507	1073
Stage 1	-	-	0	0	-	-	1015	888	-
Stage 2	-	-	0	0	-	-	655	582	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1133	-	-	-	-	-	570	0	1073
Mov Cap-2 Maneuver	-	-	-	-	-	-	570	0	-
Stage 1	-	-	-	-	-	-	1015	0	-
Stage 2	-	-	-	-	-	-	655	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	9.74
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1044	1133	-	-	-
HCM Lane V/C Ratio	0.272	-	-	-	-
HCM Control Delay (s/veh)	9.7	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	1.1	0	-	-	-

Intersection	
Intersection Delay, s/veh	133.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	206	2	29	361	156	2	479	210	62	35	31
Future Vol, veh/h	52	206	2	29	361	156	2	479	210	62	35	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	219	2	31	384	166	2	510	223	66	37	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	25.2	106.1	217.3	17.4
HCM LOS	D	F	F	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	20%	5%	48%
Vol Thru, %	69%	79%	66%	27%
Vol Right, %	30%	1%	29%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	691	260	546	128
LT Vol	2	52	29	62
Through Vol	479	206	361	35
RT Vol	210	2	156	31
Lane Flow Rate	735	277	581	136
Geometry Grp	1	1	1	1
Degree of Util (X)	1.41	0.6	1.117	0.319
Departure Headway (Hd)	7.324	9.27	8.022	9.886
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	500	393	459	366
Service Time	5.324	7.27	6.022	7.886
HCM Lane V/C Ratio	1.47	0.705	1.266	0.372
HCM Control Delay, s/veh	217.3	25.2	106.1	17.4
HCM Lane LOS	F	D	F	C
HCM 95th-tile Q	33.1	3.8	17.4	1.3

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	29	18	1	4	0
Future Vol, veh/h	0	29	18	1	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	52	32	2	7	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	34	0	-	0	85	33
Stage 1	-	-	-	-	33	-
Stage 2	-	-	-	-	52	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1591	-	-	-	922	1046
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	976	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1591	-	-	-	922	1046
Mov Cap-2 Maneuver	-	-	-	-	922	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	976	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	8.94
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1591	-	-	-	922
HCM Lane V/C Ratio	-	-	-	-	0.008
HCM Control Delay (s/veh)	0	-	-	-	8.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	94	3	90	61	5	63
Future Vol, veh/h	94	3	90	61	5	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	108	3	103	70	6	72

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	111	0	387	110
Stage 1	-	-	-	-	110	-
Stage 2	-	-	-	-	277	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1491	-	620	949
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	774	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1491	-	576	949
Mov Cap-2 Maneuver	-	-	-	-	576	-
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	718	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	4.53	9.35
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	906	-	-	1073	-
HCM Lane V/C Ratio	0.086	-	-	0.069	-
HCM Control Delay (s/veh)	9.3	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-

Intersection	
Int Delay, s/veh	50.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	114	43	240	96	0	0	0	0	396	3	55
Future Vol, veh/h	0	114	43	240	96	0	0	0	0	396	3	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	121	46	255	102	0	0	0	0	421	3	59

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	167	0	0	734	780	102
Stage 1	-	-	-	-	-	-	613	613	-
Stage 2	-	-	-	-	-	-	121	167	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1423	-	0	~ 390	329	958
Stage 1	0	-	-	-	-	0	545	487	-
Stage 2	0	-	-	-	-	0	909	764	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1423	-	-	~ 320	0	958
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 381	0	-
Stage 1	-	-	-	-	-	-	545	0	-
Stage 2	-	-	-	-	-	-	746	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	5.77	101.22
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	1423	-	381	958
HCM Lane V/C Ratio	-	-	0.179	-	1.115	0.061
HCM Control Delay (s/veh)	-	-	8.1	-	113.9	9
HCM Lane LOS	-	-	A	-	F	A
HCM 95th %tile Q(veh)	-	-	0.7	-	15.6	0.2

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

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	59	452	0	0	319	314	17	1	216	0	0	0
Future Vol, veh/h	59	452	0	0	319	314	17	1	216	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	63	481	0	0	339	334	18	1	230	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	673	0	-	-	-	0	946	1280	481
Stage 1	-	-	-	-	-	-	606	606	-
Stage 2	-	-	-	-	-	-	339	673	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	927	-	0	0	-	-	293	167	589
Stage 1	-	-	0	0	-	-	548	490	-
Stage 2	-	-	0	0	-	-	726	457	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	927	-	-	-	-	-	273	0	589
Mov Cap-2 Maneuver	-	-	-	-	-	-	384	0	-
Stage 1	-	-	-	-	-	-	511	0	-
Stage 2	-	-	-	-	-	-	726	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	1.06	0	14.95
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	384	589	927	-	-	-
HCM Lane V/C Ratio	0.05	0.39	0.068	-	-	-
HCM Control Delay (s/veh)	14.9	15	9.2	-	-	-
HCM Lane LOS	B	B	A	-	-	-
HCM 95th %tile Q(veh)	0.2	1.8	0.2	-	-	-

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	46	10	30	45	0	6	0	82	0	0	0
Future Vol, veh/h	0	46	10	30	45	0	6	0	82	0	0	0
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	61	13	39	59	0	8	0	108	0	0	0
Number of Lanes	1	1	0	1	1	1	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	2
HCM Control Delay, s/veh	8.1	8.3	7.6	0
HCM LOS	A	A	A	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	82%	0%	100%	100%	100%
Vol Right, %	0%	100%	0%	18%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	82	0	56	30	45	0	0
LT Vol	6	0	0	0	30	0	0	0
Through Vol	0	0	0	46	0	45	0	0
RT Vol	0	82	0	10	0	0	0	0
Lane Flow Rate	8	108	0	74	39	59	0	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.012	0.128	0	0.1	0.06	0.081	0	0
Departure Headway (Hd)	5.487	4.284	4.997	4.872	5.44	4.939	4.939	5.198
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	655	839	0	738	660	728	0	0
Service Time	3.201	1.998	2.714	2.588	3.155	2.654	2.654	2.92
HCM Lane V/C Ratio	0.012	0.129	0	0.1	0.059	0.081	0	0
HCM Control Delay, s/veh	8.3	7.6	7.7	8.1	8.5	8.1	7.7	7.9
HCM Lane LOS	A	A	N	A	A	A	N	N
HCM 95th-tile Q	0	0.4	0	0.3	0.2	0.3	0	0

Intersection	
Intersection Delay, s/veh	12.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	0	92	36	316	58	0	0	0	0	243	7	17
Future Vol, veh/h	0	92	36	316	58	0	0	0	0	243	7	17
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	97	38	333	61	0	0	0	0	256	7	18
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, s/veh	9.3	14	12.2
HCM LOS	A	B	B

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	84%	91%
Vol Thru, %	72%	16%	3%
Vol Right, %	28%	0%	6%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	128	374	267
LT Vol	0	316	243
Through Vol	92	58	7
RT Vol	36	0	17
Lane Flow Rate	135	394	281
Geometry Grp	1	1	1
Degree of Util (X)	0.191	0.547	0.415
Departure Headway (Hd)	5.1	4.999	5.316
Convergence, Y/N	Yes	Yes	Yes
Cap	707	713	669
Service Time	3.1	3.082	3.415
HCM Lane V/C Ratio	0.191	0.553	0.42
HCM Control Delay, s/veh	9.3	14	12.2
HCM Lane LOS	A	B	B
HCM 95th-tile Q	0.7	3.3	2

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	315	374	192	0	0
Future Vol, veh/h	20	315	374	192	0	0
Conflicting Peds, #/hr	0	0	0	3	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	23	362	430	221	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	654	0	-	0	-	543
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	943	-	-	-	0	543
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	940	-	-	-	-	542
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

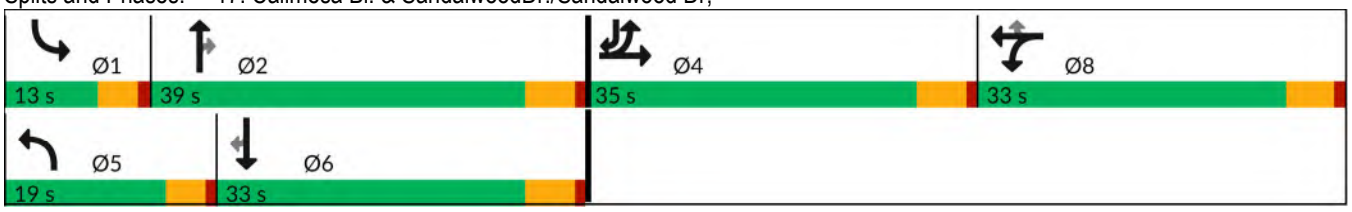
Approach	EB	WB	SB
HCM Control Delay, s/v	0.53	0	0
HCM LOS			A

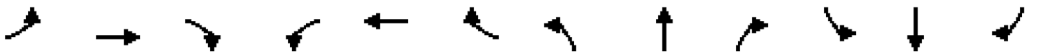
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	107	-	-	-	-
HCM Lane V/C Ratio	0.024	-	-	-	-
HCM Control Delay (s/veh)	8.9	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	124	99	22	149	26	75	312	136	29	168	342
Future Volume (vph)	124	99	22	149	26	75	312	136	29	168	342
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0	35.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%	29.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	12.7	12.7	12.3	12.3	12.3	7.7	18.7	18.7	6.1	12.7	25.4
Actuated g/C Ratio	0.20	0.20	0.19	0.19	0.19	0.12	0.29	0.29	0.09	0.20	0.39
v/c Ratio	0.35	0.31	0.06	0.43	0.06	0.36	0.31	0.25	0.18	0.47	0.42
Control Delay (s/veh)	28.8	15.6	26.0	30.2	0.2	34.7	20.9	6.3	34.5	30.2	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.8	15.6	26.0	30.2	0.2	34.7	20.9	6.3	34.5	30.2	3.1
LOS	C	B	C	C	A	C	C	A	C	C	A
Approach Delay (s/veh)		20.1		25.9			19.1			13.3	
Approach LOS		C		C			B			B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 64.5	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay (s/veh): 18.2	Intersection LOS: B
Intersection Capacity Utilization 48.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	99	93	22	149	26	75	312	136	29	168	342
Future Volume (veh/h)	124	99	93	22	149	26	75	312	136	29	168	342
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	102	145	71	23	157	12	79	328	120	31	177	277
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	328	445	207	320	336	284	116	821	365	62	376	610
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.06	0.23	0.23	0.03	0.20	0.20
Sat Flow, veh/h	1810	2454	1141	1810	1900	1605	1810	3610	1604	1810	1900	1606
Grp Volume(v), veh/h	102	111	105	23	157	12	79	328	120	31	177	277
Grp Sat Flow(s),veh/h/ln	1810	1900	1695	1810	1900	1605	1810	1805	1604	1810	1900	1606
Q Serve(g_s), s	2.7	2.8	3.0	0.6	4.1	0.3	2.3	4.2	3.4	0.9	4.5	7.1
Cycle Q Clear(g_c), s	2.7	2.8	3.0	0.6	4.1	0.3	2.3	4.2	3.4	0.9	4.5	7.1
Prop In Lane	1.00		0.67	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	328	344	307	320	336	284	116	821	365	62	376	610
V/C Ratio(X)	0.31	0.32	0.34	0.07	0.47	0.04	0.68	0.40	0.33	0.50	0.47	0.45
Avail Cap(c_a), veh/h	979	1028	917	913	958	809	476	2216	985	278	958	1102
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	19.5	19.6	18.8	20.2	18.7	25.1	18.0	17.7	26.0	19.4	12.7
Incr Delay (d2), s/veh	0.5	0.5	0.7	0.1	1.0	0.1	2.6	0.3	0.5	2.3	0.9	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.1	1.1	0.2	1.7	0.1	1.0	1.5	1.1	0.4	1.8	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.0	20.0	20.2	18.9	21.2	18.7	27.7	18.3	18.2	28.3	20.3	13.3
LnGrp LOS	B	C	C	B	C	B	C	B	B	C	C	B
Approach Vol, veh/h		318			192			527			485	
Approach Delay, s/veh		20.1			20.8			19.7			16.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.5	17.8		15.3	8.1	16.2		15.1				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6				
Max Q Clear Time (g_c+I1), s	2.9	6.2		5.0	4.3	9.1		6.1				
Green Ext Time (p_c), s	0.0	2.4		1.4	0.0	1.7		0.8				

Intersection Summary		
HCM 7th Control Delay, s/veh		19.0
HCM 7th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	15.1
Intersection LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	282	0	0	171	352	1
Future Vol, veh/h	282	0	0	171	352	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	291	0	0	176	363	1
Number of Lanes	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	12.6	10.7	19.3
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	100%
Vol Right, %	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	352	1	282	171
LT Vol	352	0	0	0
Through Vol	0	0	282	171
RT Vol	0	1	0	0
Lane Flow Rate	363	1	291	176
Geometry Grp	5	5	2	2
Degree of Util (X)	0.634	0.001	0.436	0.273
Departure Headway (Hd)	6.291	5.078	5.404	5.583
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	577	706	666	643
Service Time	4.016	2.802	3.441	3.624
HCM Lane V/C Ratio	0.629	0.001	0.437	0.274
HCM Control Delay, s/veh	19.3	7.8	12.6	10.7
HCM Lane LOS	C	A	B	B
HCM 95th-tile Q	4.4	0	2.2	1.1

Intersection	
Intersection Delay, s/veh	7
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	1	0	14	3	1
Future Vol, veh/h	18	1	0	14	3	1
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	30	2	0	23	5	2
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.3	6.5	7.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	95%	75%
Vol Thru, %	0%	0%	25%
Vol Right, %	100%	5%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	14	19	4
LT Vol	0	18	3
Through Vol	0	0	1
RT Vol	14	1	0
Lane Flow Rate	23	32	7
Geometry Grp	1	1	1
Degree of Util (X)	0.022	0.036	0.008
Departure Headway (Hd)	3.36	4.111	4.123
Convergence, Y/N	Yes	Yes	Yes
Cap	1066	875	870
Service Time	1.377	2.116	2.14
HCM Lane V/C Ratio	0.022	0.037	0.008
HCM Control Delay, s/veh	6.5	7.3	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.1	0

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	17	0	235	19	0	0	0	0	0	0	0
Future Vol, veh/h	0	17	0	235	19	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	18	0	253	20	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	18	0	0	544	544	20
Stage 1	-	-	-	-	-	-	526	526	-
Stage 2	-	-	-	-	-	-	18	18	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1612	-	0	503	449	1063
Stage 1	0	-	-	-	-	0	597	532	-
Stage 2	0	-	-	-	-	0	1010	884	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1612	-	-	424	0	1063
Mov Cap-2 Maneuver	-	-	-	-	-	-	424	0	-
Stage 1	-	-	-	-	-	-	597	0	-
Stage 2	-	-	-	-	-	-	850	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	7.08	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1593	-	-
HCM Lane V/C Ratio	-	-	0.157	-	-
HCM Control Delay (s/veh)	-	-	7.6	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.6	-	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	17	0	0	253	0	1	0	340	0	0	0
Future Vol, veh/h	0	17	0	0	253	0	1	0	340	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	19	0	0	278	0	1	0	374	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	278	0	-	-	-	0	297	297	19
Stage 1	-	-	-	-	-	-	19	19	-
Stage 2	-	-	-	-	-	-	278	278	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1296	-	0	0	-	-	699	618	1065
Stage 1	-	-	0	0	-	-	1009	884	-
Stage 2	-	-	0	0	-	-	774	684	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1296	-	-	-	-	-	699	0	1065
Mov Cap-2 Maneuver	-	-	-	-	-	-	699	0	-
Stage 1	-	-	-	-	-	-	1009	0	-
Stage 2	-	-	-	-	-	-	774	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	10.21
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1064	1296	-	-	-
HCM Lane V/C Ratio	0.352	-	-	-	-
HCM Control Delay (s/veh)	10.2	0	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	1.6	0	-	-	-

Intersection	
Intersection Delay, s/veh	19.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	338	2	58	228	87	0	50	70	151	92	25
Future Vol, veh/h	17	338	2	58	228	87	0	50	70	151	92	25
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	371	2	64	251	96	0	55	77	166	101	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	21.5	21.9	12.2	17.8
HCM LOS	C	C	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	5%	16%	56%
Vol Thru, %	42%	95%	61%	34%
Vol Right, %	58%	1%	23%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	357	373	268
LT Vol	0	17	58	151
Through Vol	50	338	228	92
RT Vol	70	2	87	25
Lane Flow Rate	132	392	410	295
Geometry Grp	1	1	1	1
Degree of Util (X)	0.251	0.678	0.693	0.55
Departure Headway (Hd)	6.844	6.223	6.087	6.72
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	521	577	590	533
Service Time	4.936	4.292	4.155	4.793
HCM Lane V/C Ratio	0.253	0.679	0.695	0.553
HCM Control Delay, s/veh	12.2	21.5	21.9	17.8
HCM Lane LOS	B	C	C	C
HCM 95th-tile Q	1	5.2	5.4	3.3

APPENDIX 3.3: EXISTING (2024) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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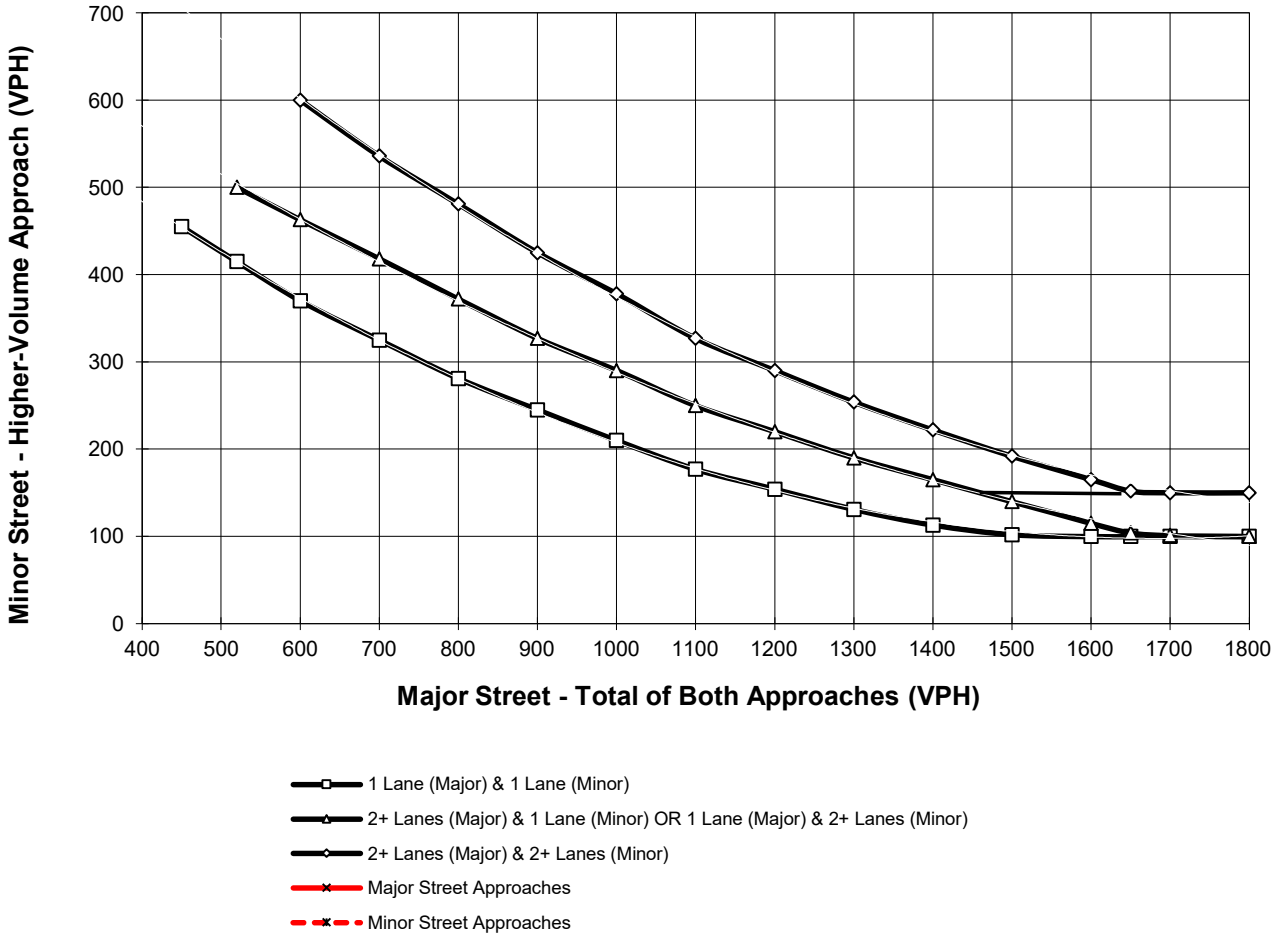
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2024) Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Ln.**
Total of Both Approaches (VPH) = **79**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **County Line Rd.**
High Volume Approach (VPH) = **18**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

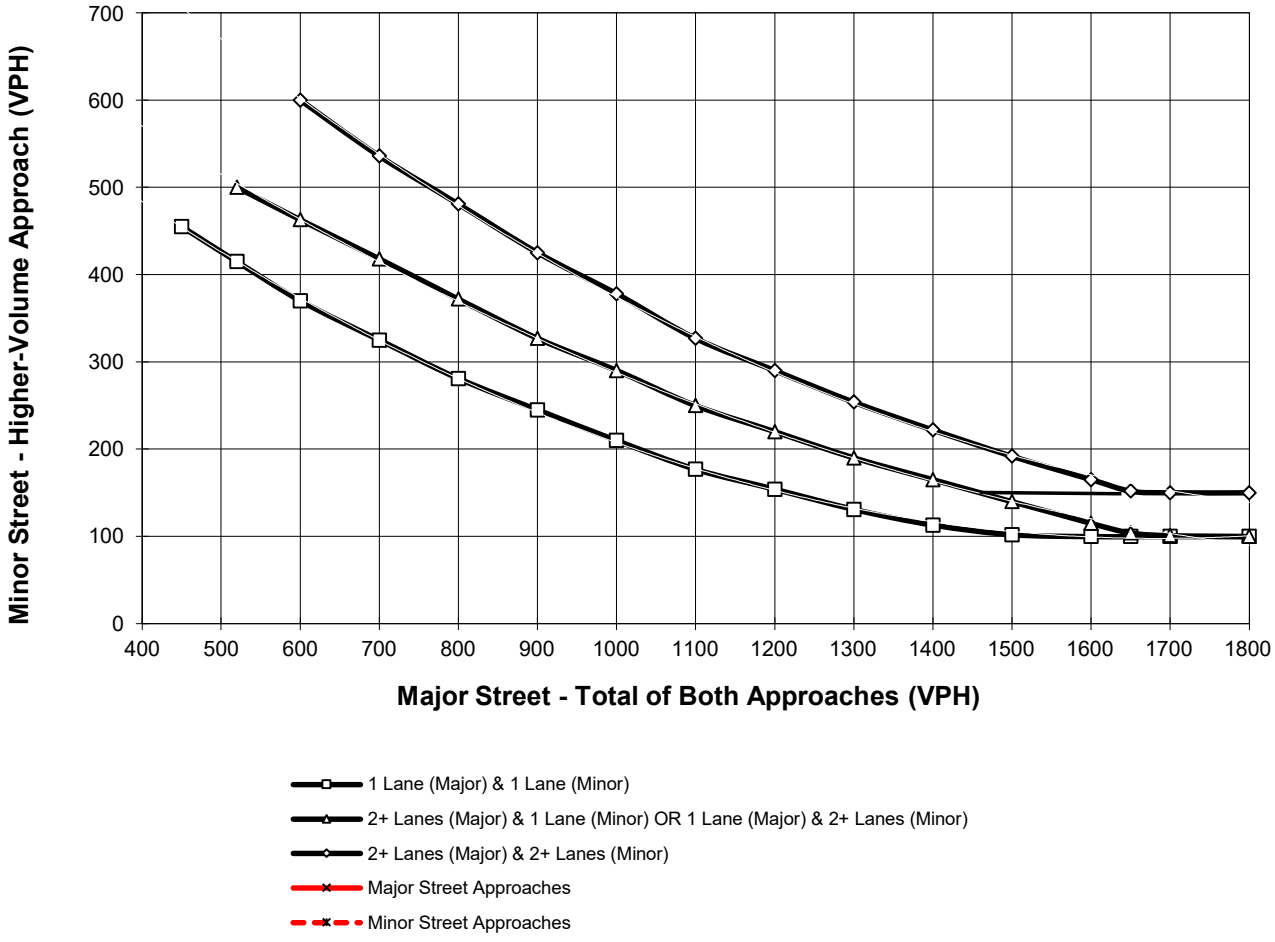
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2024) Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Rd.**
Total of Both Approaches (VPH) = **300**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **7th Pl.**
High Volume Approach (VPH) = **142**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

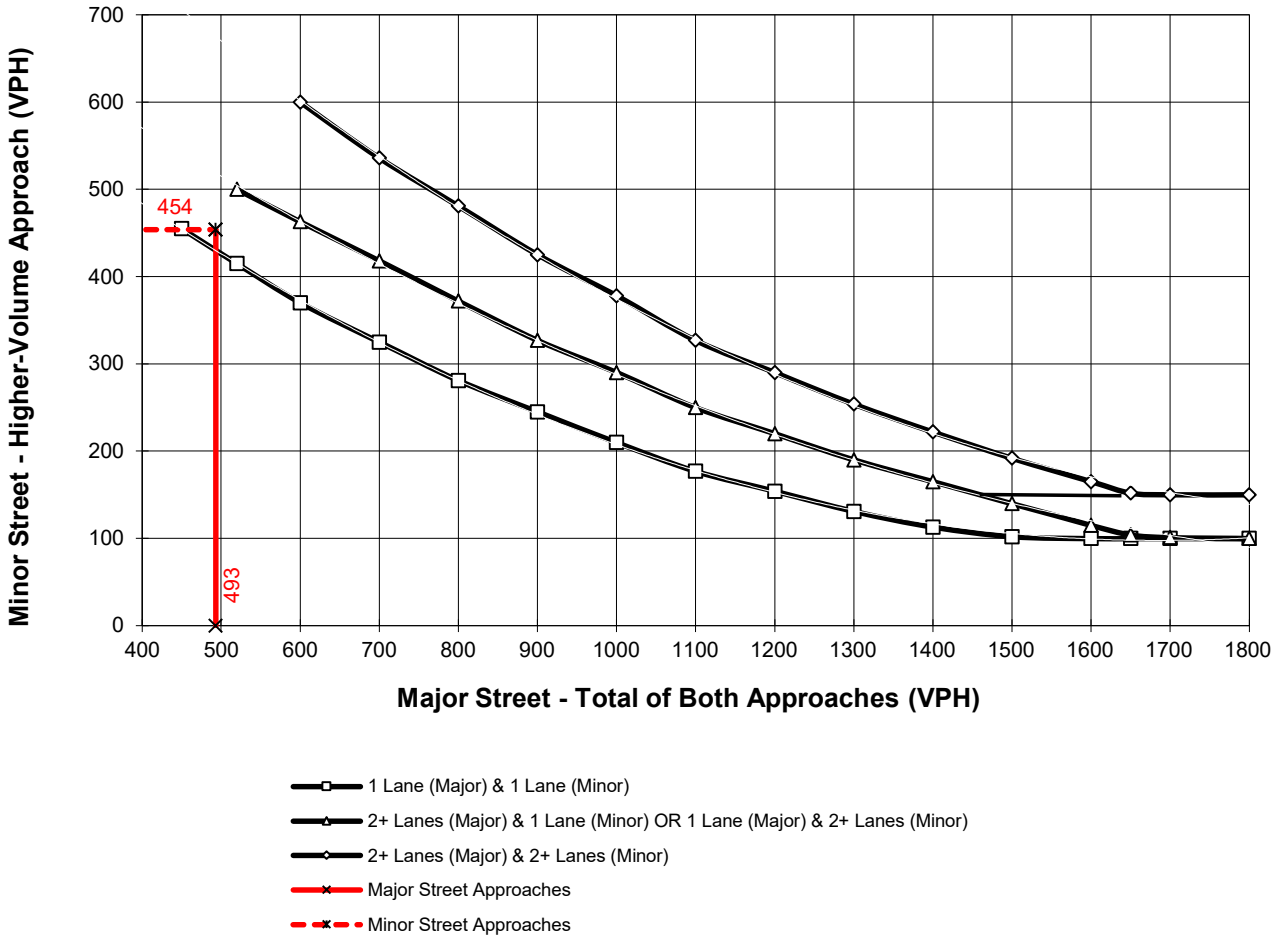
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **County Line Rd.**
Total of Both Approaches (VPH) = **493**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **County Line Rd. I-10 Southbound Ramps**
High Volume Approach (VPH) = **454**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

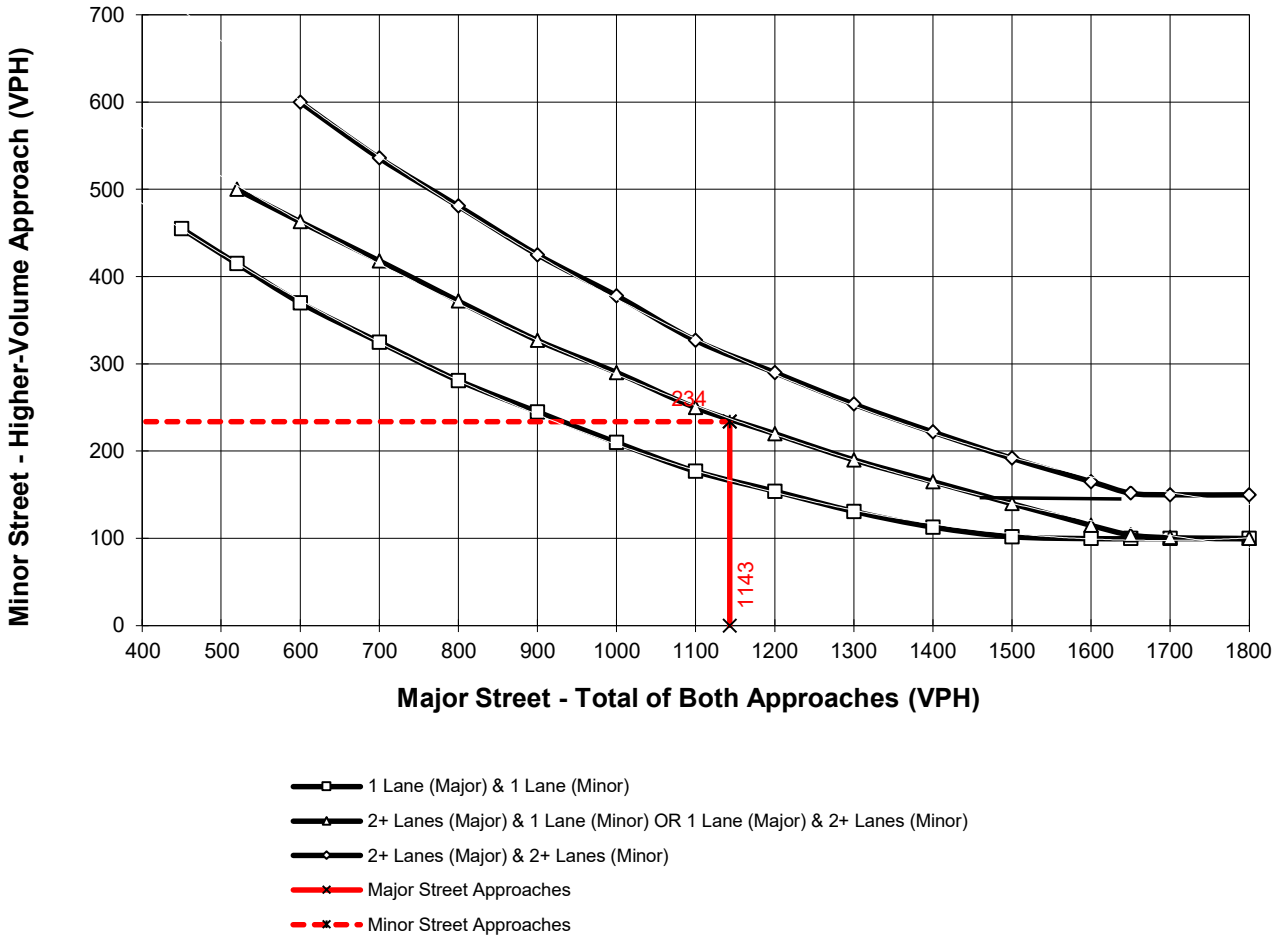
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **County Line Rd.** Total of Both Approaches (VPH) = **1143**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **I-10 Northbound Ramps** High Volume Approach (VPH) = **234**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

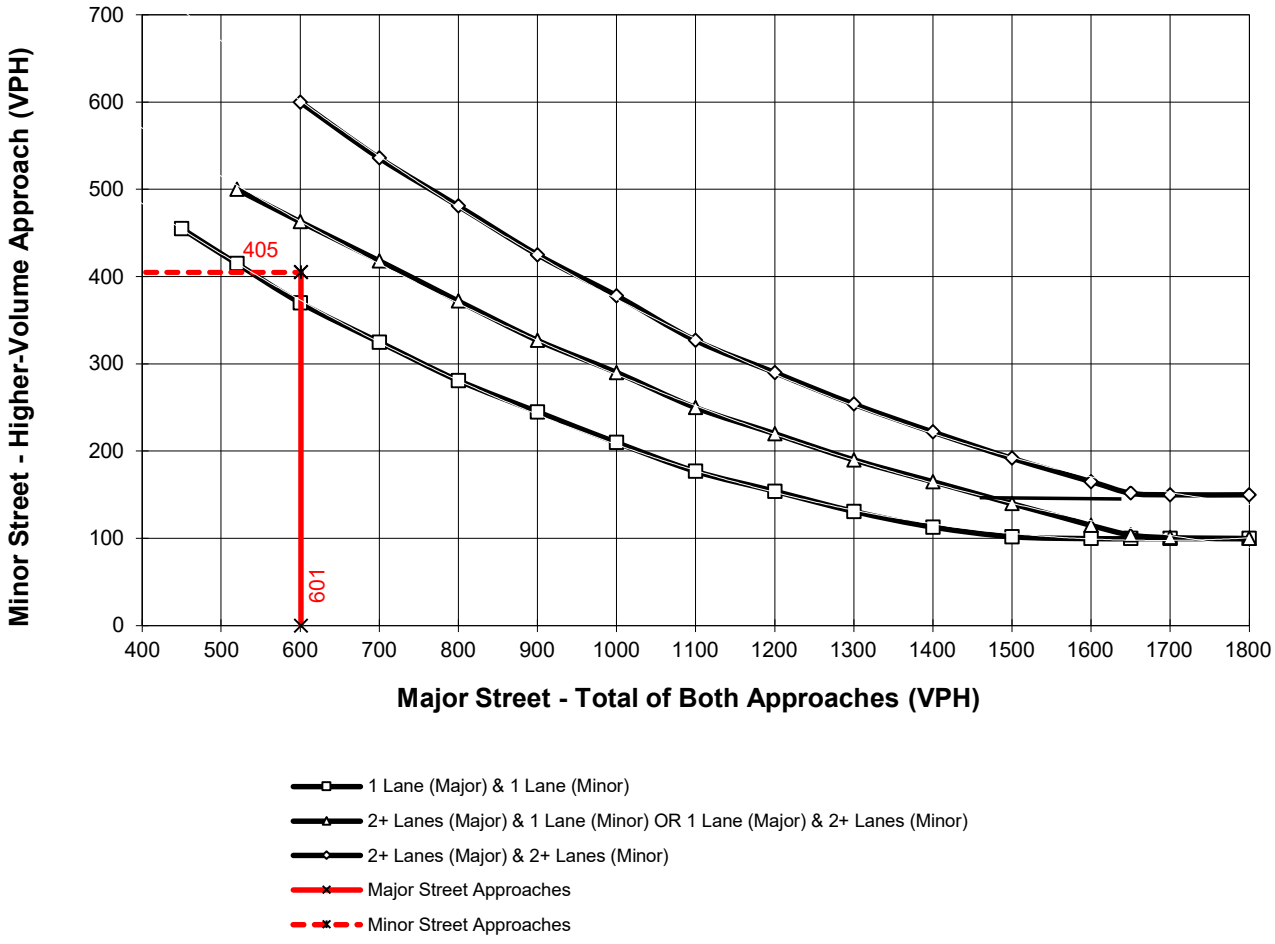
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2024) Conditions - Weekday AM Peak Hour**

Major Street Name = **Sandalwood Dr.**
Total of Both Approaches (VPH) = **601**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **7th St.**
High Volume Approach (VPH) = **405**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

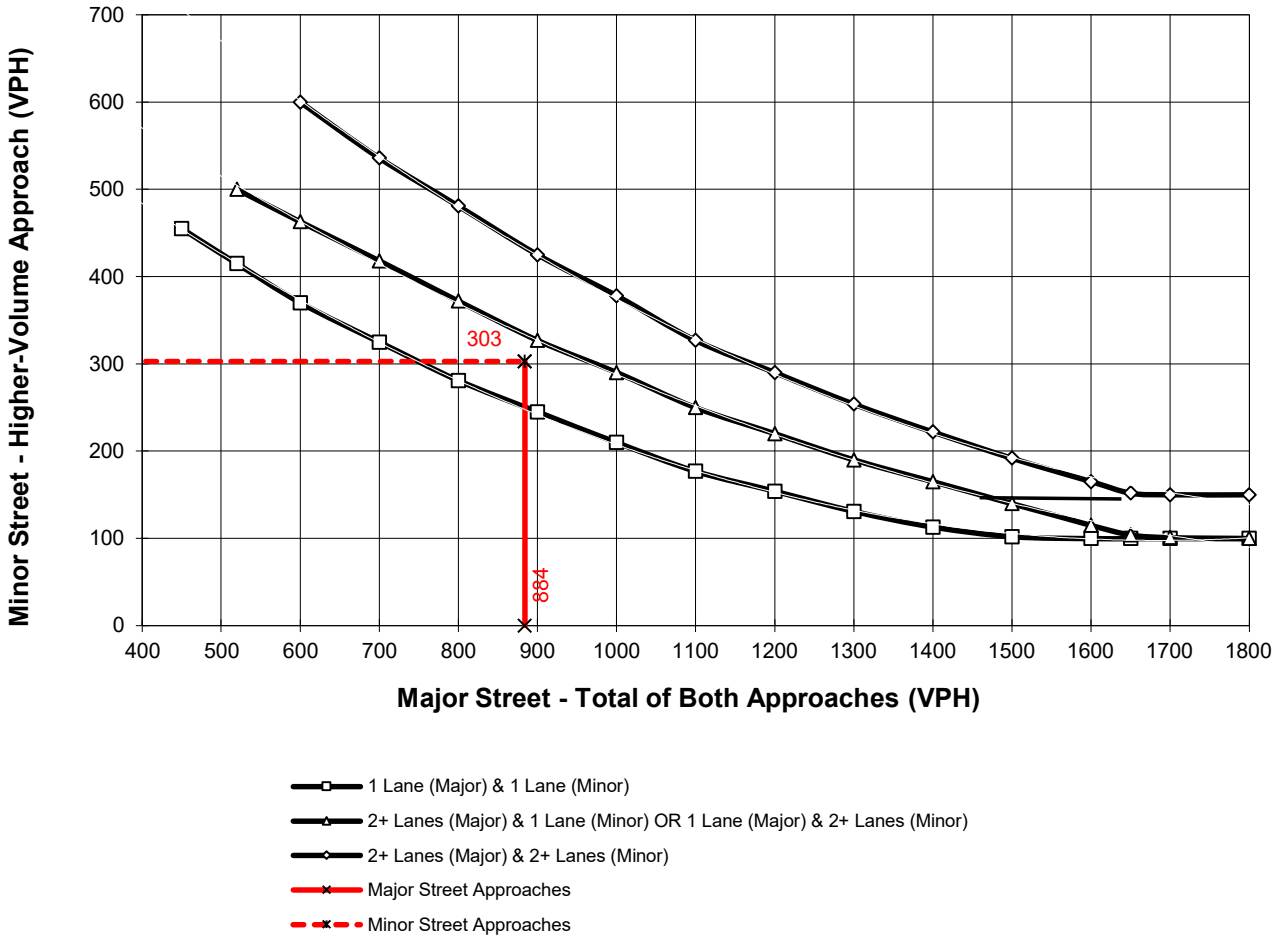
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2024) Conditions - Weekday AM Peak Hour**

Major Street Name = **Sandalwood Dr.** Total of Both Approaches (VPH) = **884**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **I-10 Southbound Ramps** High Volume Approach (VPH) = **303**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

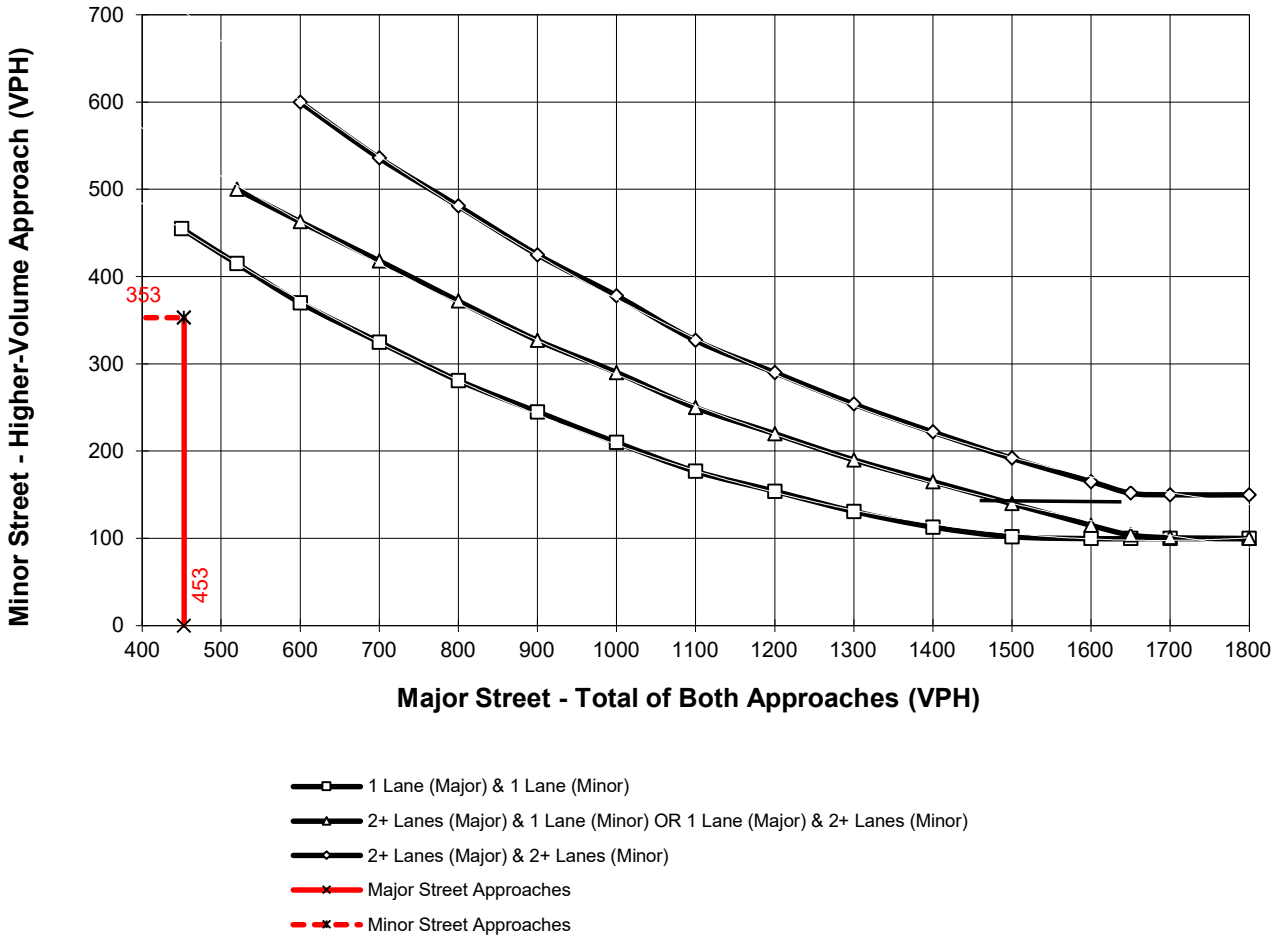
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **Calimesa Bl.** Total of Both Approaches (VPH) = **453**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **I-10 Northbound Off-Ramp** High Volume Approach (VPH) = **353**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

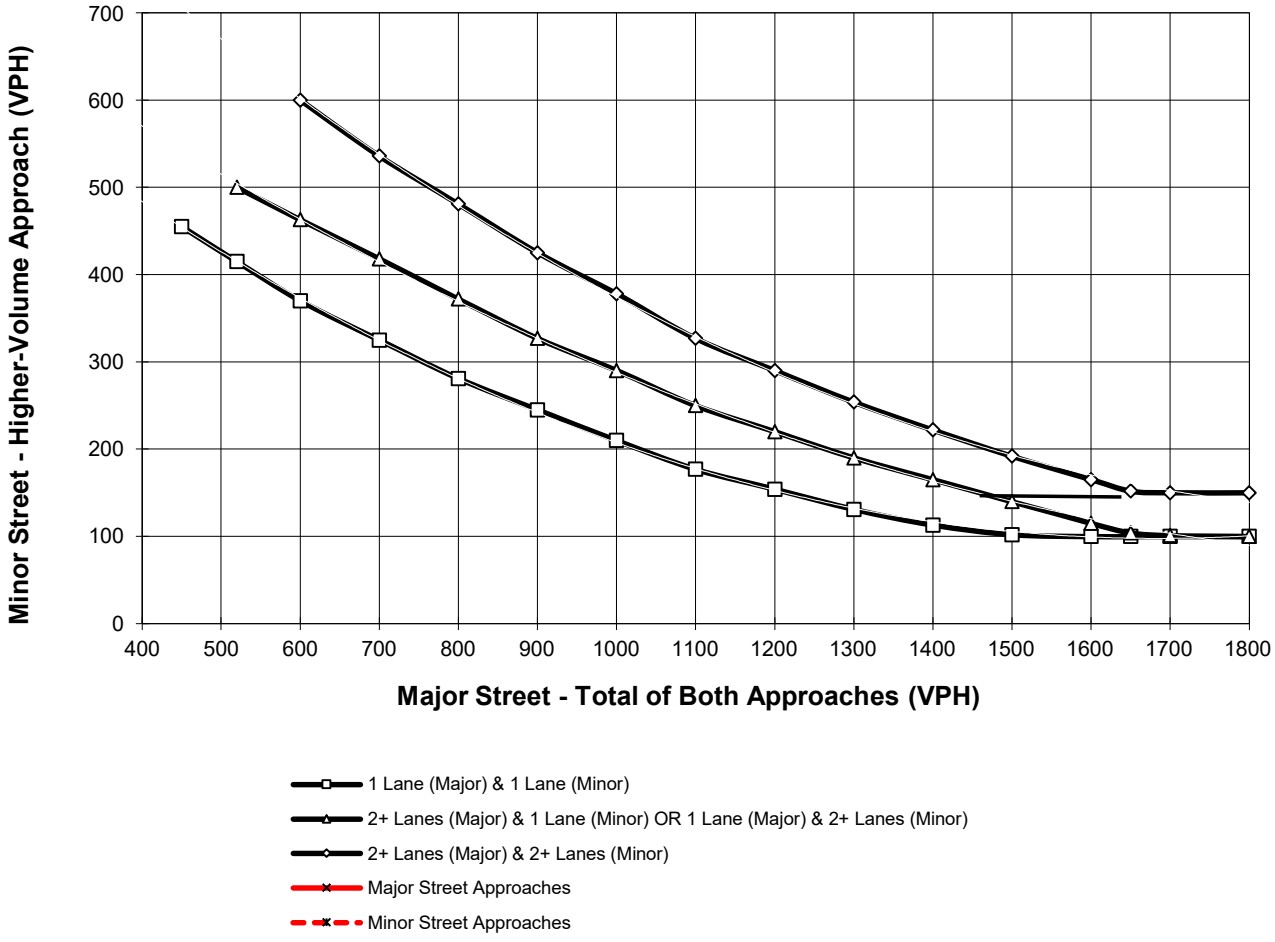
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **Singleton Rd.**
Total of Both Approaches (VPH) = **19**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Roberts Rd.**
High Volume Approach (VPH) = **14**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

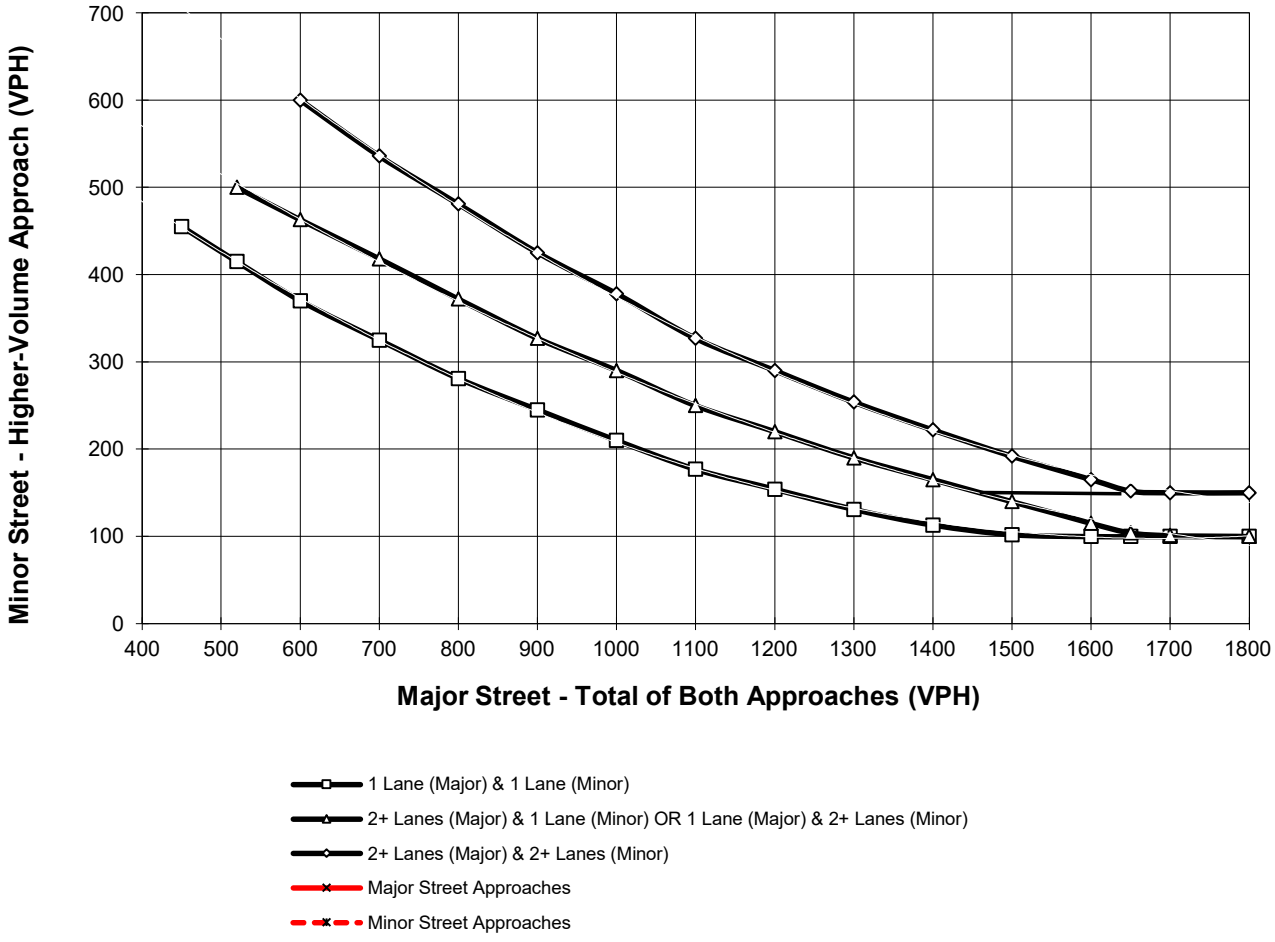
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **I-10 Northbound Ramps** Total of Both Approaches (VPH) = **341**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Singleton Rd.** High Volume Approach (VPH) = **253**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

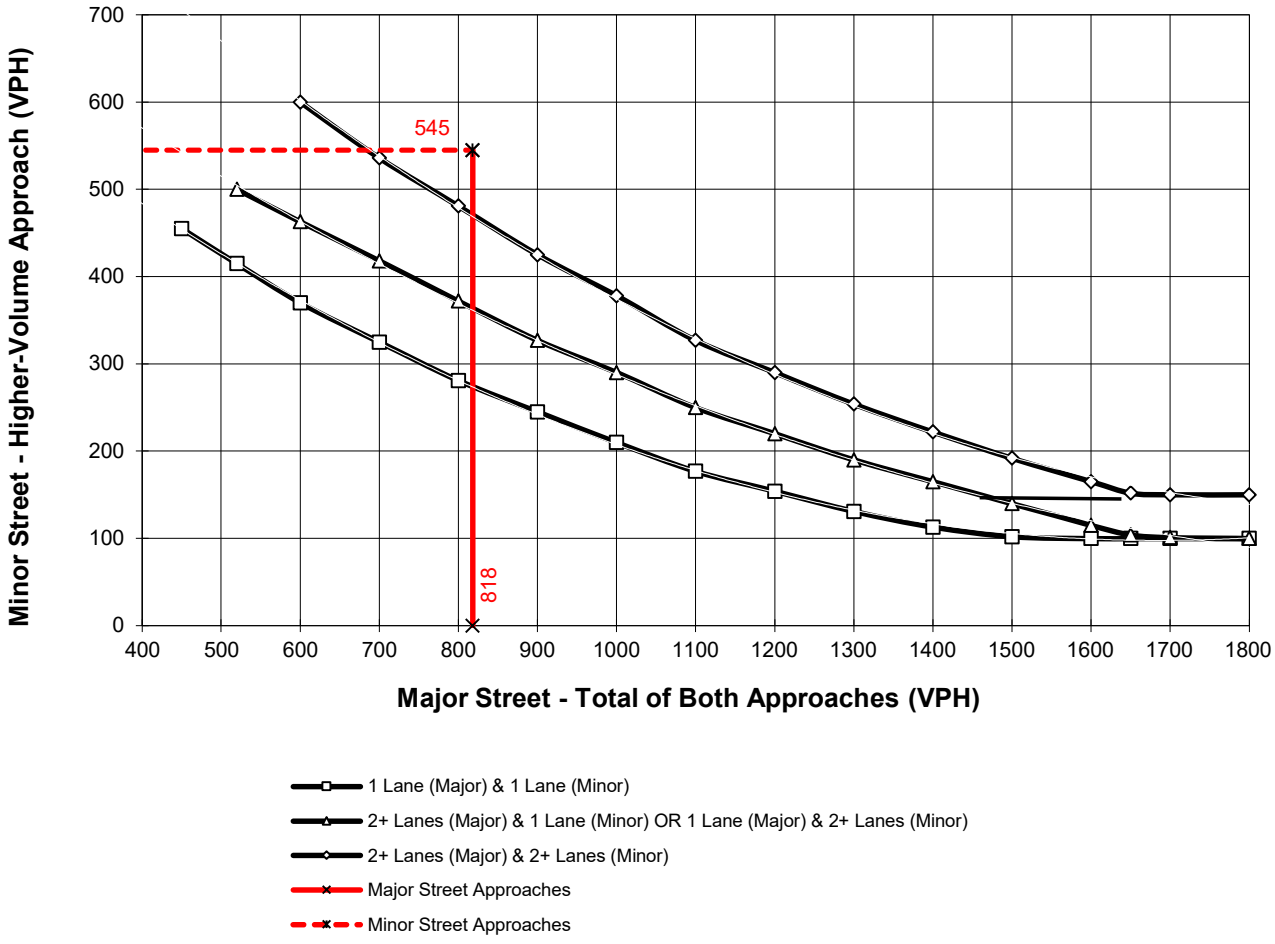
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2024) Conditions - Weekday AM Peak Hour**

Major Street Name = **Singleton Rd.**
Total of Both Approaches (VPH) = **818**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Calimesa Bl.**
High Volume Approach (VPH) = **545**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 3.4: EXISTING (2024) CONDITIONS QUEUING ANALYSIS WORKSHEETS

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Intersection: 6: County Line Rd. & County Line Ln.

Movement	SB
Directions Served	LR
Maximum Queue (ft)	40
Average Queue (ft)	13
95th Queue (ft)	39
Link Distance (ft)	282
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: 7th Pl. & County Line Rd.

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	49	60
Average Queue (ft)	10	36
95th Queue (ft)	37	56
Link Distance (ft)	119	701
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	SB	SB
Directions Served	TR	L	LT	R
Maximum Queue (ft)	5	82	206	99
Average Queue (ft)	0	37	82	39
95th Queue (ft)	3	67	151	89
Link Distance (ft)	119		740	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		160		50
Storage Blk Time (%)			31	0
Queuing Penalty (veh)			24	0

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	WB	NB	NB
Directions Served	L	R	LT	R
Maximum Queue (ft)	101	32	48	64
Average Queue (ft)	44	3	13	29
95th Queue (ft)	83	16	38	47
Link Distance (ft)		560	764	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	160			50
Storage Blk Time (%)			2	0
Queuing Penalty (veh)			2	0

Intersection: 14: Mustang Wy. & 7th St./Sandalwood Dr.

Movement	EB	WB	WB	NB	NB
Directions Served	TR	L	T	L	TR
Maximum Queue (ft)	54	117	36	53	87
Average Queue (ft)	32	51	21	30	50
95th Queue (ft)	51	89	41	47	74
Link Distance (ft)	943		247		970
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		110		200	
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 15: I-10 EB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	WB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	151	229	133
Average Queue (ft)	52	101	54
95th Queue (ft)	104	174	94
Link Distance (ft)	247	448	735
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: SandalwoodDr. & I-10 WB Ramp

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	378	28
Average Queue (ft)	121	5
95th Queue (ft)	288	21
Link Distance (ft)	448	115
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	2	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	TR	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	111	117	118	99	268	35	159	255	200	43	32	91
Average Queue (ft)	52	64	62	18	141	10	123	114	109	20	7	24
95th Queue (ft)	92	108	113	67	230	28	174	214	164	36	25	63
Link Distance (ft)	115	115	115		602	602		531	531			653
Upstream Blk Time (%)	0	1	2									
Queuing Penalty (veh)	1	2	3									
Storage Bay Dist (ft)				50			125			200	70	
Storage Blk Time (%)				1	45		12	1	0			1
Queuing Penalty (veh)				4	9		32	3	0			0

Intersection: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,

Movement	SB
Directions Served	R
Maximum Queue (ft)	244
Average Queue (ft)	94
95th Queue (ft)	176
Link Distance (ft)	653
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: I-10 WB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	T	TR	T
Maximum Queue (ft)	56	277	69
Average Queue (ft)	22	120	39
95th Queue (ft)	42	210	61
Link Distance (ft)	225	791	527
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			2
Queuing Penalty (veh)			0

Intersection: 19: Woodhouse Rd. & Singleton Rd.

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	30	31	31
Average Queue (ft)	13	11	5
95th Queue (ft)	36	35	23
Link Distance (ft)	530	934	467
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	WB
Directions Served	LT
Maximum Queue (ft)	13
Average Queue (ft)	1
95th Queue (ft)	10
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	NB
Directions Served	LTR
Maximum Queue (ft)	95
Average Queue (ft)	52
95th Queue (ft)	78
Link Distance (ft)	712
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 22: Calimesa Bl. & Singleton Rd.

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	127	148	72	116
Average Queue (ft)	59	68	39	60
95th Queue (ft)	101	115	62	99
Link Distance (ft)	136	1009	841	649
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 83

Intersection: 6: County Line Rd. & County Line Ln.

Movement	SB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	4
95th Queue (ft)	20
Link Distance (ft)	282
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: 7th Pl. & County Line Rd.

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	31	48
Average Queue (ft)	7	27
95th Queue (ft)	28	46
Link Distance (ft)	119	701
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	WB	SB	SB
Directions Served	L	LT	R
Maximum Queue (ft)	58	276	100
Average Queue (ft)	23	121	50
95th Queue (ft)	52	222	111
Link Distance (ft)		740	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	160		50
Storage Blk Time (%)		44	0
Queuing Penalty (veh)		24	1

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	WB	NB	NB
Directions Served	L	R	LT	R
Maximum Queue (ft)	45	11	90	93
Average Queue (ft)	21	1	16	45
95th Queue (ft)	46	5	51	74
Link Distance (ft)		560	764	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	160			50
Storage Blk Time (%)			0	6
Queuing Penalty (veh)			0	1

Intersection: 14: Mustang Wy. & 7th St./Sandalwood Dr.

Movement	EB	WB	WB	NB	NB
Directions Served	TR	L	T	L	TR
Maximum Queue (ft)	49	25	37	30	49
Average Queue (ft)	25	15	22	5	27
95th Queue (ft)	46	34	41	24	41
Link Distance (ft)	943		247		970
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		110		200	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 15: I-10 EB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	WB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	52	119	101
Average Queue (ft)	29	60	51
95th Queue (ft)	46	97	84
Link Distance (ft)	247	448	735
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: SandalwoodDr. & I-10 WB Ramp

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	98	8
Average Queue (ft)	13	0
95th Queue (ft)	54	5
Link Distance (ft)	448	115
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	TR	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	72	74	102	68	144	22	95	93	110	48	70	148
Average Queue (ft)	38	42	42	13	63	10	42	48	54	22	21	64
95th Queue (ft)	64	71	77	43	114	25	80	81	94	39	53	119
Link Distance (ft)	115	115	115		602	602		531	531			653
Upstream Blk Time (%)			0									
Queuing Penalty (veh)			0									
Storage Bay Dist (ft)				50			125			200	70	
Storage Blk Time (%)				1	22		0	0			1	8
Queuing Penalty (veh)				2	5		0	0			1	2

Intersection: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,

Movement	SB
Directions Served	R
Maximum Queue (ft)	108
Average Queue (ft)	46
95th Queue (ft)	87
Link Distance (ft)	653
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: I-10 WB Ramp & Calimesa Bl.

Movement	EB	WB	NB	NB
Directions Served	T	TR	T	R
Maximum Queue (ft)	102	53	118	24
Average Queue (ft)	47	32	64	1
95th Queue (ft)	82	49	102	12
Link Distance (ft)	225	791	527	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				50
Storage Blk Time (%)			11	
Queuing Penalty (veh)			0	

Intersection: 19: Woodhouse Rd. & Singleton Rd.

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	30	31	25
Average Queue (ft)	14	12	3
95th Queue (ft)	38	36	18
Link Distance (ft)	530	934	467
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	WB
Directions Served	LT
Maximum Queue (ft)	22
Average Queue (ft)	3
95th Queue (ft)	14
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	NB
Directions Served	LTR
Maximum Queue (ft)	108
Average Queue (ft)	52
95th Queue (ft)	82
Link Distance (ft)	712
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 22: Calimesa Bl. & Singleton Rd.

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	121	163	70	125
Average Queue (ft)	55	66	40	59
95th Queue (ft)	95	114	63	100
Link Distance (ft)	136	1009	841	649
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	1			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 37

APPENDIX 4.1: TRIP GENERATION TABLES

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Table 4.1-1: Project (Phase 1) Trip Generation Summary

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 1 (2030):									
General Light Industrial	1,400.000	TSF							
Passenger Cars:			903	119	1,022	120	776	896	6,468
2-axle Trucks:			1	1	2	1	1	2	58
3-axle Trucks:			1	1	2	1	1	2	72
4+-axle Trucks:			6	3	9	4	5	9	220
Total Truck Trips (Actual Vehicles):			8	5	13	6	7	13	350
General Light Industrial Total Trips (Actual Vehicles)			911	124	1,035	126	783	909	6,818
Phase 1 Internal Trip Capture Reduction - Industrial to Residential			-8	-3	-11	-6	-10	-15	-26
Parks	12.7	AC	13	13	26	25	25	50	636
Phase 1 Internal Trip Capture Reduction - Parks to Residential			-6	-6	-12	-13	-13	-26	-324
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	11	2	8	10	56
Single Family Residential	709	DU	129	367	496	420	247	667	6,686
Multifamily (Low-Rise) Residential	185	DU	18	56	74	59	35	94	1,248
Phase 1 Internal Trip Capture Reduction - Residential to Industrial			-3	-8	-11	-10	-6	-15	-26
Phase 1 Internal Trip Capture Reduction - Residential to Parks			-6	-6	-12	-13	-13	-26	-324
Phase 1 Total Passenger Cars			1,076	558	1,635	628	1,095	1,723	15,152
Internal Trip Capture Reduction[2]			-23	-23	-47	-41	-41	-82	-700
Phase 1 Total Trucks (Actual Vehicles)			8	5	13	6	7	13	350
Phase 1 Total External Trips (Actual Vehicles)			**1,061**	**539**	**1,601**	**593**	**1,061**	**1,654**	**14,802**
Passenger Car Equivalent:									
General Light Industrial	1,400.000	TSF							
Passenger Cars:			903	119	1,022	120	776	896	6,468
2-axle Trucks:			2	1	3	2	1	3	88
3-axle Trucks:			3	3	6	3	3	6	146
4+-axle Trucks:			17	9	26	13	14	27	658
Total Truck Trips (PCE):			22	13	35	18	18	36	892
General Light Industrial Total Trips (PCE)			925	132	1,057	138	794	932	7,360
Phase 1 Internal Trip Capture Reduction - Industrial to Residential			-8	-3	-11	-6	-10	-15	-26
Parks	12.7	AC	13	13	26	25	25	50	636
Phase 1 Internal Trip Capture Reduction - Parks to Residential			-6	-6	-12	-13	-13	-26	-324
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	11	2	8	10	56
Single Family Residential	709	DU	129	367	496	420	247	667	6,686
Multifamily (Low-Rise) Residential	185	DU	18	56	74	59	35	94	1,248
Phase 1 Internal Trip Capture Reduction - Residential to Industrial			-3	-8	-11	-10	-6	-15	-26
Phase 1 Internal Trip Capture Reduction - Residential to Parks			-6	-6	-12	-13	-13	-26	-324
Phase 1 Total Passenger Cars			1,076	558	1,635	628	1,095	1,723	15,152
Internal Trip Capture Reduction[2]			-23	-23	-47	-41	-41	-82	-700
Phase 1 Total Trucks (PCE)			22	13	35	18	18	36	892
Phase 1 Total External Trips (PCE)			**1,075**	**547**	**1,623**	**605**	**1,072**	**1,677**	**15,344**

[1] TSF = thousand square feet; AC = acres

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

Table 4.1-2: Project (Phase 2) Trip Generation Summary

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 2 (2035):									
General Light Industrial	2,100.000	TSF							
Passenger Cars:			1,355	178	1,533	181	1,163	1,344	9,702
2-axle Trucks:			2	1	3	2	1	3	88
3-axle Trucks:			2	2	4	2	2	4	110
4+-axle Trucks:			8	5	13	6	7	13	330
Total Truck Trips (Actual Vehicles):			12	8	20	10	10	20	528
General Light Industrial Total Trips (Actual Vehicles)			1,367	186	1,553	191	1,173	1,364	10,230
High-Cube Fulfillment Center (Sort)	700.000	TSF							
Passenger Cars:			487	109	596	321	505	826	4,376
2-axle Trucks:			1	1	2	1	1	2	22
3-axle Trucks:			1	1	2	1	1	2	28
4+-axle Trucks:			4	5	9	4	5	9	84
Total Truck Trips (Actual Vehicles):			6	7	13	6	7	13	134
High-Cube Fulfillment Center (Sort) Total Trips (Actual Vehicles)			493	116	609	327	512	839	4,510
Phase 2 Internal Trip Capture Reduction - Industrial to Residential			-14	-5	-19	-9	-16	-25	-36
Phase 2 Internal Trip Capture Reduction - Industrial to Retail			-3	-4	-7	-10	-10	-20	-164
Parks	28.9	AC	29	29	58	58	58	115	1,446
Phase 2 Internal Trip Capture Reduction - Parks to Residential			-15	-15	-30	-29	-29	-58	-738
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	11	2	8	10	56
Single Family Residential	1,177	DU	214	610	824	697	409	1,106	11,100
Multifamily (Low-Rise) Residential	266	DU	26	81	107	85	50	135	1,794
Phase 2 Internal Trip Capture Reduction - Residential to Industrial[3]			-5	-14	-19	-16	-9	-25	-36
Phase 2 Internal Trip Capture Reduction - Residential to Retail			-2	-3	-5	-7	-7	-13	-110
Phase 2 Internal Trip Capture Reduction - Residential to Parks			-15	-15	-30	-29	-29	-58	-738
Mixed Use (Commercial)	50.000	TSF	71	47	118	165	165	330	2,724
Phase 2 Internal Trip Capture Reduction - Retail to Industrial[3]			-4	-3	-7	-10	-10	-20	-164
Phase 2 Internal Trip Capture Reduction - Retail to Residential[3]			-3	-2	-5	-7	-7	-13	-110
Phase 2 Total Passenger Cars			2,195	1,057	3,253	1,510	2,361	3,872	31,256
Internal Trip Capture Reduction[2]			-60	-60	-121	-116	-116	-232	-2,096
Phase 2 Total Trucks (Actual Vehicles)			18	15	33	16	17	33	662
Phase 2 Total External Trips (Actual Vehicles)			**2,152**	**1,012**	**3,165**	**1,410**	**2,263**	**3,673**	**29,822**

Passenger Car Equivalent:								
General Light Industrial	2,100.000	TSF						
Passenger Cars:			1,355	178	1,533	181	1,163	1,344	9,702
2-axle Trucks:			3	2	5	3	2	5	132
3-axle Trucks:			4	4	8	4	4	8	218
4+-axle Trucks:			25	14	39	19	21	40	986
Total Truck Trips (PCE):			32	20	52	26	27	53	1,336
General Light Industrial Total Trips (PCE)			1,387	198	1,585	207	1,190	1,397	11,038
High-Cube Fulfillment Center (Sort)	700.000	TSF						
Passenger Cars:			487	109	596	321	505	826	4,376
2-axle Trucks:			2	1	3	2	1	3	34
3-axle Trucks:			3	3	6	3	3	6	56
4+-axle Trucks:			13	14	27	13	14	27	250
Total Truck Trips (PCE):			18	18	36	18	18	36	340
High-Cube Fulfillment Center (Sort) Total Trips (PCE)			505	127	632	339	523	862	4,716
Phase 2 Internal Trip Capture Reduction - Industrial to Residential			-14	-5	-19	-9	-16	-25	-36
Phase 2 Internal Trip Capture Reduction - Industrial to Retail			-3	-4	-7	-10	-10	-20	-164
Parks	29	AC	29	29	58	58	58	115	1,446
Phase 2 Internal Trip Capture Reduction - Parks to Residential			-15	-15	-30	-29	-29	-58	-738
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	11	2	8	10	56
Single Family Residential	1,177	DU	214	610	824	697	409	1,106	11,100
Multifamily (Low-Rise) Residential	266	DU	26	81	107	85	50	135	1,794
Phase 2 Internal Trip Capture Reduction - Residential to Industrial[3]			-5	-14	-19	-16	-9	-25	-36
Phase 2 Internal Trip Capture Reduction - Residential to Retail			-2	-3	-5	-7	-7	-13	-110
Phase 2 Internal Trip Capture Reduction - Residential to Parks			-15	-15	-30	-29	-29	-58	-738
Mixed Use (Commercial)	50.000	TSF	71	47	118	165	165	330	2,724
Phase 2 Internal Trip Capture Reduction - Retail to Industrial[3]			-4	-3	-7	-10	-10	-20	-164
Phase 2 Internal Trip Capture Reduction - Retail to Residential[3]			-3	-2	-5	-7	-7	-13	-110
Phases 1 & 2 Passenger Cars			2,195	1,057	3,253	1,510	2,361	3,872	31,256
Internal Trip Capture Reduction[2]			-60	-60	-121	-116	-116	-232	-2,096
Phase 1 & 2 Total Trucks (PCE)			50	38	88	44	45	89	1,676
Phase 2 Total External Trips (PCE)			**2,184**	**1,035**	**3,220**	**1,438**	**2,291**	**3,729**	**30,836**

[1] TSF = thousand square feet; AC = acres

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

Table 4.1-3: Project (Phase 3) Trip Generation Summary (Actual Vehicles)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 3 (2038):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			3	2	5	3	2	5	44
3-axle Trucks:			3	3	6	3	3	6	56
4+-axle Trucks:			8	9	17	8	9	17	168
Total Truck Trips (Actual Vehicles):			14	14	28	14	14	28	268
High-Cube Fulfillment Center (Sort) Total Trips (Actual Vehicles)			987	231	1,218	655	1,025	1,680	9,018
General Light Industrial	2,800.000	TSF							
Passenger Cars:			1,807	237	2,044	241	1,551	1,792	12,936
2-axle Trucks:			3	2	5	3	2	5	118
3-axle Trucks:			3	3	6	3	3	6	146
4+-axle Trucks:			11	6	17	8	9	17	438
Total Truck Trips (Actual Vehicles):			17	11	28	14	14	28	702
General Light Industrial Total Trips (Actual Vehicles)			1,824	248	2,072	255	1,565	1,820	13,638
Phase 3 Internal Trip Capture Reduction - Industrial to Residential			-19	-7	-26	-13	-21	-34	-354
Phase 3 Internal Trip Capture Reduction - Industrial to Retail			-8	-12	-20	-40	-37	-77	-808
Parks	37.8	AC	38	38	76	76	76	151	1,890
Phase 3 Internal Trip Capture Reduction - Parks to Residential			-19	-19	-38	-39	-39	-78	-964
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	1,624	DU	296	841	1,137	962	565	1,527	15,314
Multifamily (Low-Rise) Residential	347	DU	33	105	138	111	65	176	2,340
Phase 3 Internal Trip Capture Reduction - Residential to Industrial[3]			-7	-19	-26	-21	-13	-34	-354
Phase 3 Internal Trip Capture Reduction - Residential to Retail			-46	-16	-63	-31	-52	-83	-898
Phase 3 Internal Trip Capture Reduction - Residential to Parks			-19	-19	-38	-39	-39	-78	-964
Mixed Use (Commercial)	300.000	TSF	207	126	333	618	669	1,287	13,452
Phase 3 Internal Trip Capture Reduction - Retail to Industrial[3]			-12	-8	-20	-37	-40	-77	-808
Phase 3 Internal Trip Capture Reduction - Retail to Residential[3]			-16	-46	-63	-52	-31	-83	-898
Phases 1, 2 & 3 Passenger Cars			3,367	1,567	4,934	2,652	3,949	6,601	54,796
Internal Trip Capture Reduction[2]			-146	-146	-292	-272	-272	-544	-6,048
Phases 1, 2 & 3 Trucks (Actual Vehicles)			31	25	56	28	28	56	970
Phases 1, 2 & 3 Total External Trips (Actual Vehicles)			**3,252**	**1,446**	**4,698**	**2,408**	**3,705**	**6,112**	**49,718**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

Table 4.1-4: Project (Phase 3) Trip Generation Summary (PCE)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 3 (2038):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			4	3	7	4	3	7	68
3-axle Trucks:			6	6	12	6	6	12	110
4+-axle Trucks:			25	27	52	25	27	52	500
Total Truck Trips (Actual Vehicles):			35	36	71	35	36	71	678
High-Cube Fulfillment Center (Sort) Total Trips (PCE)			1,008	253	1,261	676	1,047	1,723	9,428
General Light Industrial	2,800.000	TSF							
Passenger Cars:			1,807	237	2,044	241	1,551	1,792	12,936
2-axle Trucks:			4	3	7	4	3	7	176
3-axle Trucks:			6	6	12	6	6	12	290
4+-axle Trucks:			34	19	53	25	27	52	1,316
Total Truck Trips (Actual Vehicles):			44	28	72	35	36	71	1,782
General Light Industrial Total Trips (PCE)			1,851	265	2,116	276	1,587	1,863	14,718
Phase 3 Internal Trip Capture Reduction - Industrial to Residential			-19	-7	-26	-13	-21	-34	-354
Phase 3 Internal Trip Capture Reduction - Industrial to Retail			-8	-12	-20	-40	-37	-77	-808
Parks	37.8	AC	38	38	76	76	76	151	1,890
Phase 3 Internal Trip Capture Reduction - Parks to Residential			-19	-19	-38	-39	-39	-78	-964
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	1,624	DU	296	841	1,137	962	565	1,527	15,314
Multifamily (Low-Rise) Residential	347	DU	33	105	138	111	65	176	2,340
Phase 3 Internal Trip Capture Reduction - Residential to Industrial[3]			-7	-19	-26	-21	-13	-34	-354
Phase 3 Internal Trip Capture Reduction - Residential to Retail			-46	-16	-63	-31	-52	-83	-898
Phase 3 Internal Trip Capture Reduction - Residential to Parks			-19	-19	-38	-39	-39	-78	-964
Mixed Use (Commercial)	300.000	TSF	207	126	333	618	669	1,287	13,452
Phase 3 Internal Trip Capture Reduction - Retail to Industrial[3]			-12	-8	-20	-37	-40	-77	-808
Phase 3 Internal Trip Capture Reduction - Retail to Residential[3]			-16	-46	-63	-52	-31	-83	-898
Phases 1, 2 & 3 Passenger Cars			3,367	1,567	4,934	2,652	3,949	6,601	54,796
Internal Trip Capture Reduction[2]			-146	-146	-292	-272	-272	-544	-6,048
Phases 1, 2 & 3 Trucks (PCE)			79	64	143	70	72	142	2,460
Phases 1, 2 & 3 Total External Trips (PCE)			**3,300**	**1,485**	**4,785**	**2,450**	**3,749**	**6,198**	**51,208**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

Table 4.1-5: Project (Phase 4) Trip Generation Summary (Actual Vehicles)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 4 (2040):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			3	2	5	3	2	5	44
3-axle Trucks:			3	3	6	3	3	6	56
4+-axle Trucks:			8	9	17	8	9	17	168
Total Truck Trips (Actual Vehicles):			14	14	28	14	14	28	268
High-Cube Fulfillment Center (Sort) Total Trips (Actual Vehicles)			987	231	1,218	655	1,025	1,680	9,018
General Light Industrial	2,800.000	TSF							
Passenger Cars:			1,807	237	2,044	241	1,551	1,792	12,936
2-axle Trucks:			3	2	5	3	2	5	118
3-axle Trucks:			3	3	6	3	3	6	146
4+-axle Trucks:			11	6	17	8	9	17	438
Total Truck Trips (Actual Vehicles):			17	11	28	14	14	28	702
General Light Industrial Total Trips (Actual Vehicles)			1,824	248	2,072	255	1,565	1,820	13,638
Phase 4 Internal Trip Capture Reduction - Industrial to Residential			-27	-9	-37	-18	-31	-49	-512
Phase 4 Internal Trip Capture Reduction - Industrial to Retail			-3	-4	-7	-13	-12	-26	-270
Parks	54.3	AC	54	54	109	109	109	217	2,716
Phase 4 Internal Trip Capture Reduction - Parks to Residential			-30	-30	-60	-61	-61	-122	-1,522
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	2,313	DU	421	1,198	1,619	1,370	804	2,174	21,812
Multifamily (Low-Rise) Residential	541	DU	52	164	216	174	102	276	3,646
Phase 4 Internal Trip Capture Reduction - Residential to Industrial[3]			-9	-27	-37	-31	-18	-49	-512
Phase 4 Internal Trip Capture Reduction - Residential to Retail			-135	-47	-183	-90	-152	-241	-2,630
Phase 4 Internal Trip Capture Reduction - Residential to Parks			-30	-30	-60	-61	-61	-122	-1,522
Phase 4 Internal Trip Capture Reduction - Residential to School			-165	-194	-359	-42	-36	-78	-1,104
Phase 4 Internal Trip Capture Reduction - Residential to Office[3]			-1	-6	-7	-6	-1	-7	-52
Elementary School	600	STU	240	204	444	44	52	96	1,362
Phase 4 Internal Trip Capture Reduction - School to Residential[3,4]			-194	-165	-359	-36	-42	-78	-1,104
Mixed Use (Commercial)	300.000	TSF	207	126	333	618	669	1,287	13,452
Phase 4 Internal Trip Capture Reduction - Retail to Industrial[3]			-4	-3	-7	-12	-13	-26	-270
Phase 4 Internal Trip Capture Reduction - Retail to Residential[3]			-47	-135	-183	-152	-90	-241	-2,630
Phase 4 Internal Trip Capture Reduction - Retail to Office[3]			-1	-6	-7	-6	-1	-7	-52
General Office	240.000	TSF	321	44	365	59	287	346	2,602
Phase 4 Internal Trip Capture Reduction - Office to Residential			-6	-1	-7	-1	-6	-7	-52
Phase 4 Internal Trip Capture Reduction - Office to Retail			-6	-1	-7	-1	-6	-7	-52
Phases 1, 2, 3 & 4 Passenger Cars			4,089	2,247	6,336	3,259	4,597	7,856	67,390
Internal Trip Capture Reduction[2]			-660	-660	-1,319	-530	-530	-1,060	-12,284
Phases 1, 2, 3 & 4 Trucks (Actual Vehicles)			31	25	56	28	28	56	970
Phases 1, 2, 3 & 4 Total External Trips (Actual Vehicles)			**3,460**	**1,613**	**5,073**	**2,757**	**4,095**	**6,852**	**56,076**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = students

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

[4] Includes internal capture between residential and elementary school based on the guidance from the American Planning Association (PAS) Report 210 School Enrollment by Housing Type. The internal capture reduction assumes 81% service area from within the project site and 19% from outside of the Project.

Table 4.1-6: Project (Phase 4) Trip Generation Summary (PCE)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 4 (2040):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			4	3	7	4	3	7	68
3-axle Trucks:			6	6	12	6	6	12	110
4+-axle Trucks:			25	27	52	25	27	52	500
Total Truck Trips (PCE):			35	36	71	35	36	71	678
High-Cube Fulfillment Center (Sort) Total Trips (PCE)			1,008	253	1,261	676	1,047	1,723	9,428
General Light Industrial	2,800.000	TSF							
Passenger Cars:			1,807	237	2,044	241	1,551	1,792	12,936
2-axle Trucks:			4	3	7	4	3	7	176
3-axle Trucks:			6	6	12	6	6	12	290
4+-axle Trucks:			34	19	53	25	27	52	1,316
Total Truck Trips (PCE):			44	28	72	35	36	71	1,782
General Light Industrial Total Trips (PCE)			1,851	265	2,116	276	1,587	1,863	14,718
Phase 4 Internal Trip Capture Reduction - Industrial to Residential			-27	-9	-37	-18	-31	-49	-512
Phase 4 Internal Trip Capture Reduction - Industrial to Retail			-3	-4	-7	-13	-12	-26	-270
Parks	54.3	AC	54	54	109	109	109	217	2,716
Phase 4 Internal Trip Capture Reduction - Parks to Residential			-30	-30	-60	-61	-61	-122	-1,522
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	2,313	DU	421	1,198	1,619	1,370	804	2,174	21,812
Multifamily (Low-Rise) Residential	541	DU	52	164	216	174	102	276	3,646
Phase 4 Internal Trip Capture Reduction - Residential to Industrial[3]			-9	-27	-37	-31	-18	-49	-512
Phase 4 Internal Trip Capture Reduction - Residential to Retail			-135	-47	-183	-90	-152	-241	-2,630
Phase 4 Internal Trip Capture Reduction - Residential to Parks			-30	-30	-60	-61	-61	-122	-1,522
Phase 4 Internal Trip Capture Reduction - Residential to School			-165	-194	-359	-42	-36	-78	-1,104
Phase 4 Internal Trip Capture Reduction - Residential to Office[3]			-1	-6	-7	-6	-1	-7	-52
Elementary School	600	STU	240	204	444	44	52	96	1,362
Phase 4 Internal Trip Capture Reduction - School to Residential[3,4]			-194	-165	-359	-36	-42	-78	-1,104
Mixed Use (Commercial)	300.000	TSF	207	126	333	618	669	1,287	13,452
Phase 4 Internal Trip Capture Reduction - Retail to Industrial[3]			-4	-3	-7	-12	-13	-26	-270
Phase 4 Internal Trip Capture Reduction - Retail to Residential[3]			-47	-135	-183	-152	-90	-241	-2,630
Phase 4 Internal Trip Capture Reduction - Retail to Office[3]			-1	-6	-7	-6	-1	-7	-52
General Office	240.000	TSF	321	44	365	59	287	346	2,602
Phase 4 Internal Trip Capture Reduction - Office to Residential			-6	-1	-7	-1	-6	-7	-52
Phase 4 Internal Trip Capture Reduction - Office to Retail			-6	-1	-7	-1	-6	-7	-52
Phases 1, 2, 3 & 4 Passenger Cars			4,089	2,247	6,336	3,259	4,597	7,856	67,390
Internal Trip Capture Reduction[2]			-660	-660	-1,319	-530	-530	-1,060	-12,284
Phases 1, 2, 3 & 4 Trucks (PCE)			79	64	143	70	72	142	2,460
Phases 1, 2, 3 & 4 Total External Trips (PCE)			**3,508**	**1,652**	**5,160**	**2,799**	**4,139**	**6,938**	**57,566**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = students

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

[4] Includes internal capture between residential and elementary school based on the guidance from the American Planning Association (PAS) Report 210 School Enrollment by Housing Type. The internal capture reduction assumes 81% service area from within the project site and 19% from outside of the Project.

Table 4.1-7: Project (Buildout) Trip Generation Summary (Actual Vehicles)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 5 (2045):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			3	2	5	3	2	5	44
3-axle Trucks:			3	3	6	3	3	6	56
4+-axle Trucks:			8	9	17	8	9	17	168
Total Truck Trips (Actual Vehicles):			14	14	28	14	14	28	268
High-Cube Fulfillment Center (Sort) Total Trips (Actual Vehicles)			987	231	1,218	655	1,025	1,680	9,018
General Light Industrial	2,800.000	TSF							
Passenger Cars:			1,807	237	2,044	241	1,551	1,792	12,936
2-axle Trucks:			3	2	5	3	2	5	118
3-axle Trucks:			3	3	6	3	3	6	146
4+-axle Trucks:			11	6	17	8	9	17	438
Total Truck Trips (Actual Vehicles):			17	11	28	14	14	28	702
General Light Industrial Total Trips (Actual Vehicles)			1,824	248	2,072	255	1,565	1,820	13,638
Phase 5 Internal Trip Capture Reduction - Industrial to Residential			-34	-12	-46	-23	-39	-62	-650
Phase 5 Internal Trip Capture Reduction - Industrial to Retail			-3	-4	-7	-13	-12	-26	-270
Parks	66.5	AC	67	67	133	133	133	266	3,326
Phase 5 Internal Trip Capture Reduction - Parks to Residential			-37	-37	-74	-74	-74	-148	-1,864
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	2,860	DU	521	1,481	2,002	1,694	995	2,689	26,970
Multifamily (Low-Rise) Residential	790	DU	76	240	316	254	149	403	5,326
Phase 5 Internal Trip Capture Reduction - Residential to Industrial[3]			-12	-34	-46	-39	-23	-62	-650
Phase 5 Internal Trip Capture Reduction - Residential to Retail			-176	-61	-237	-116	-197	-313	-3,446
Phase 5 Internal Trip Capture Reduction - Residential to Parks			-37	-37	-74	-74	-74	-148	-1,864
Phase 5 Internal Trip Capture Reduction - Residential to School			-330	-389	-719	-84	-71	-155	-2,206
Phase 5 Internal Trip Capture Reduction - Residential to Office[3]			-1	-6	-7	-6	-1	-7	-52
Elementary School	1,200	STU	480	408	888	88	104	192	2,724
Phase 5 Internal Trip Capture Reduction - School to Residential[3,4]			-389	-330	-719	-71	-84	-155	-2,206
Mixed Use (Commercial)	300.000	TSF	207	126	333	618	669	1,287	13,452
Phase 5 Internal Trip Capture Reduction - Retail to Industrial[3]			-4	-3	-7	-12	-13	-26	-270
Phase 5 Internal Trip Capture Reduction - Retail to Residential[3]			-61	-176	-237	-197	-116	-313	-3,446
Phase 5 Internal Trip Capture Reduction - Retail to Office[3]			-1	-6	-7	-6	-1	-7	-52
General Office	240.000	TSF	321	44	365	59	287	346	2,602
Phase 5 Internal Trip Capture Reduction - Office to Residential			-6	-1	-7	-1	-6	-7	-52
Phase 5 Internal Trip Capture Reduction - Office to Retail			-6	-1	-7	-1	-6	-7	-52
Project Buildout Passenger Cars			4,465	2,823	7,287	3,731	4,911	8,642	76,200
Internal Trip Capture Reduction[2]			-1,098	-1,098	-2,196	-717	-717	-1,435	-17,080
Project Buildout Trucks (Actual Vehicles)			31	25	56	28	28	56	970
Project Buildout Total External Trips (Actual Vehicles)			**3,398**	**1,750**	**5,147**	**3,042**	**4,222**	**7,263**	**60,090**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = students

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

[4] Includes internal capture between residential and elementary school based on the guidance from the American Planning Association (PAS) Report 210 School Enrollment by Housing Type. The internal capture reduction assumes 81% service area from within the project site and 19% from outside of the Project.

Table 4.1-8: Project (Buildout) Trip Generation Summary (PCE)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Phase 5 (2045):									
High-Cube Fulfillment Center (Sort)	1,400.000	TSF							
Passenger Cars:			973	217	1,190	641	1,011	1,652	8,750
2-axle Trucks:			4	3	7	4	3	7	68
3-axle Trucks:			6	6	12	6	6	12	110
4+-axle Trucks:			25	27	52	25	27	52	500
Total Truck Trips (PCE):			35	36	71	35	36	71	678
High-Cube Fulfillment Center (Sort) Total Trips (PCE)			1,008	253	1,261	676	1,047	1,723	9,428
General Light Industrial	2,800.000	TSF							
Passenger Cars:			1,807	237	2,044	241	1,551	1,792	12,936
2-axle Trucks:			4	3	7	4	3	7	176
3-axle Trucks:			6	6	12	6	6	12	290
4+-axle Trucks:			34	19	53	25	27	52	1,316
Total Truck Trips (Actual Vehicles):			44	28	72	35	36	71	1,782
General Light Industrial Total Trips (PCE)			1,851	265	2,116	276	1,587	1,863	14,718
Phase 5 Internal Trip Capture Reduction - Industrial to Residential			-34	-12	-46	-23	-39	-62	-650
Phase 5 Internal Trip Capture Reduction - Industrial to Retail			-3	-4	-7	-13	-12	-26	-270
Parks	66.5	AC	67	67	133	133	133	266	3,326
Phase 5 Internal Trip Capture Reduction - Parks to Residential			-37	-37	-74	-74	-74	-148	-1,864
Fire Station	12.000	TSF	4	2	6	2	4	6	58
Public Works Facility	4.500	TSF	9	1	10	2	8	10	56
Single Family Residential	2,860	DU	521	1,481	2,002	1,694	995	2,689	26,970
Multifamily (Low-Rise) Residential	790	DU	76	240	316	254	149	403	5,326
Phase 5 Internal Trip Capture Reduction - Residential to Industrial[3]			-12	-34	-46	-39	-23	-62	-650
Phase 5 Internal Trip Capture Reduction - Residential to Retail			-176	-61	-237	-116	-197	-313	-3,446
Phase 5 Internal Trip Capture Reduction - Residential to Parks			-37	-37	-74	-74	-74	-148	-1,864
Phase 5 Internal Trip Capture Reduction - Residential to School			-330	-389	-719	-84	-71	-155	-2,206
Phase 5 Internal Trip Capture Reduction - Residential to Office[3]			-1	-6	-7	-6	-1	-7	-52
Elementary School	1,200	STU	480	408	888	88	104	192	2,724
Phase 5 Internal Trip Capture Reduction - School to Residential[3,4]			-389	-330	-719	-71	-84	-155	-2,206
Mixed Use (Commercial)	300.000	TSF	207	126	333	618	669	1,287	13,452
Phase 5 Internal Trip Capture Reduction - Retail to Industrial[3]			-4	-3	-7	-12	-13	-26	-270
Phase 5 Internal Trip Capture Reduction - Retail to Residential[3]			-61	-176	-237	-197	-116	-313	-3,446
Phase 5 Internal Trip Capture Reduction - Retail to Office[3]			-1	-6	-7	-6	-1	-7	-52
General Office	240.000	TSF	321	44	365	59	287	346	2,602
Phase 5 Internal Trip Capture Reduction - Office to Residential			-6	-1	-7	-1	-6	-7	-52
Phase 5 Internal Trip Capture Reduction - Office to Retail			-6	-1	-7	-1	-6	-7	-52
Project Buildout Passenger Cars			4,465	2,823	7,287	3,731	4,911	8,642	76,200
Internal Trip Capture Reduction[2]			-1,098	-1,098	-2,196	-717	-717	-1,435	-17,080
Project Buildout Trucks (PCE)			79	64	143	70	72	142	2,460
Project Buildout Total External Trips (PCE)			**3,446**	**1,789**	**5,234**	**3,084**	**4,266**	**7,349**	**61,580**

[1] TSF = thousand square feet; DU = dwelling units; AC = acres; STU = students

[2] Includes internal capture between proposed Project land uses per the RIVCOM select zone model runs.

[3] Trips to be added back per the distribution.

[4] Includes internal capture between residential and elementary school based on the guidance from the American Planning Association (PAS) Report 210 School Enrollment by Housing Type. The internal capture reduction assumes 81% service area from within the project site and 19% from outside of the Project.

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APPENDIX 4.2: TRIP DISTRIBUTION EXHIBITS

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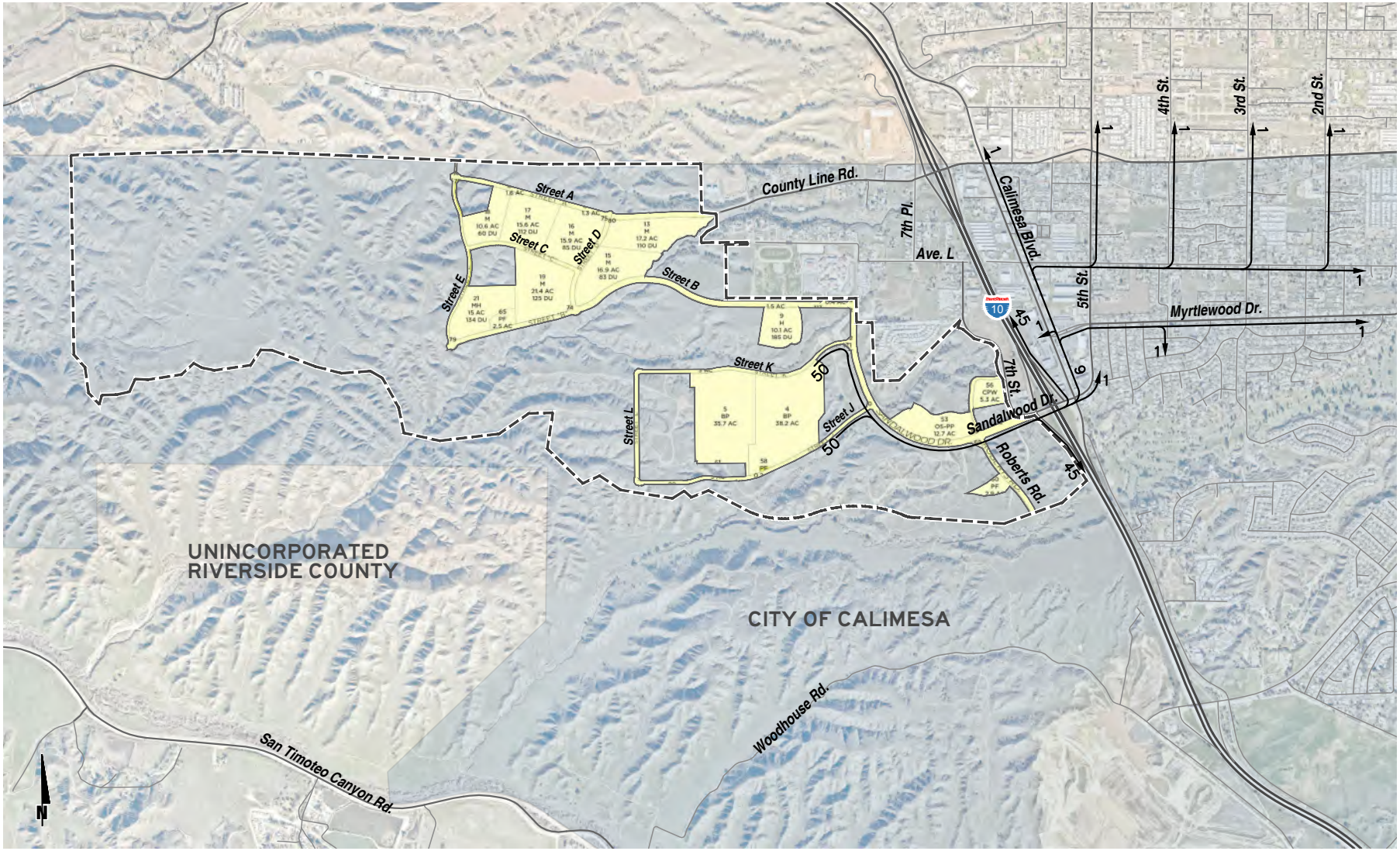
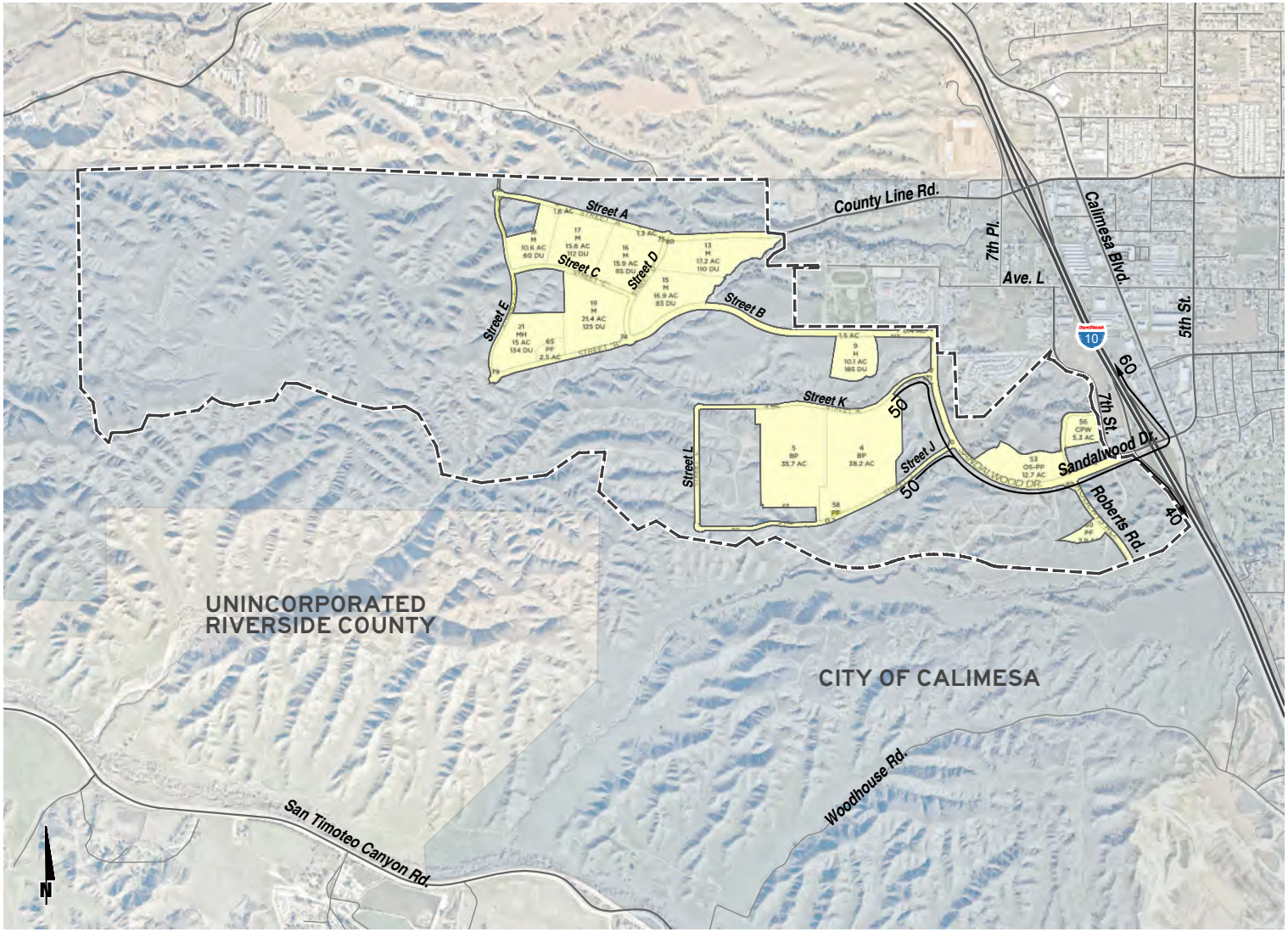
EXHIBIT 4.2-1 : PHASE 1 INDUSTRIAL (PASSENGER CARS) TRIP DISTRIBUTION



LEGEND:

10 = *Percent To/From Project* = *Phase 1*
= *Trip Distribution*

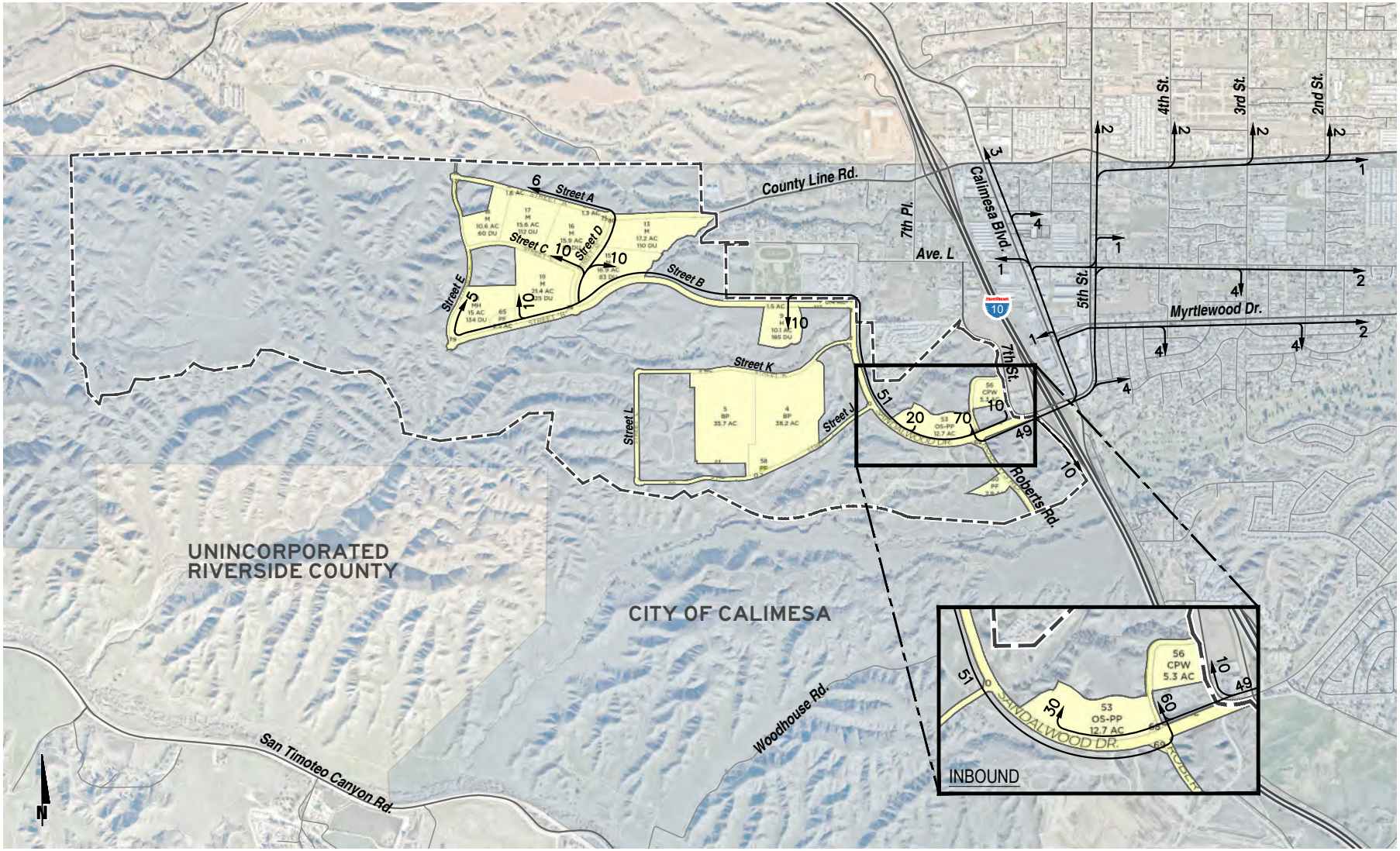
EXHIBIT 4.2-2 : PHASE 1 INDUSTRIAL (TRUCKS) TRIP DISTRIBUTION



LEGEND:

10 = Percent To/From Project
= Phase 1
= Trip Distribution

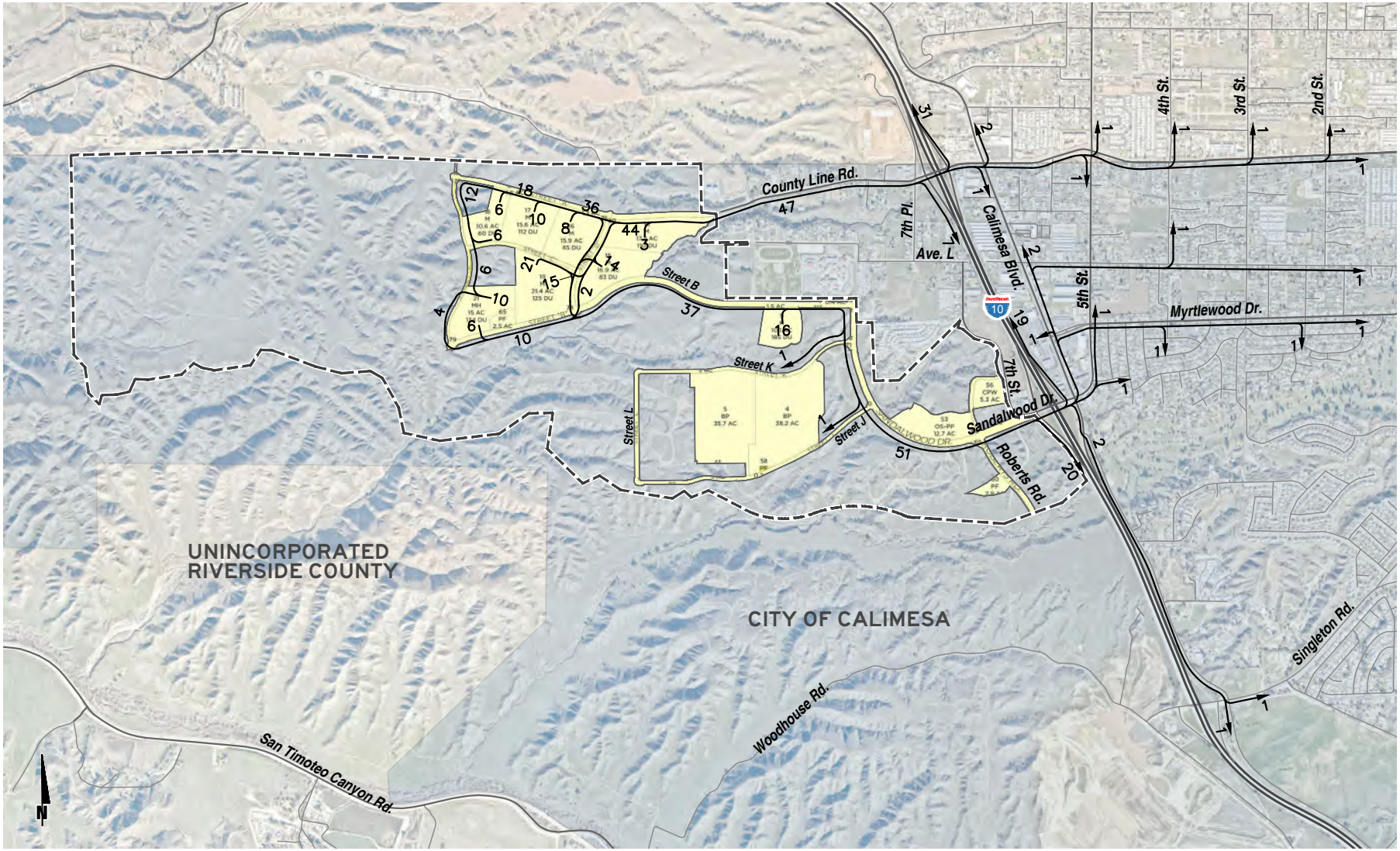
EXHIBIT 4.2-3 : PHASE 1 PARK TRIP DISTRIBUTION



LEGEND:

10 = *Percent To/From Project* = *Phase 1*
→ = *Trip Distribution*

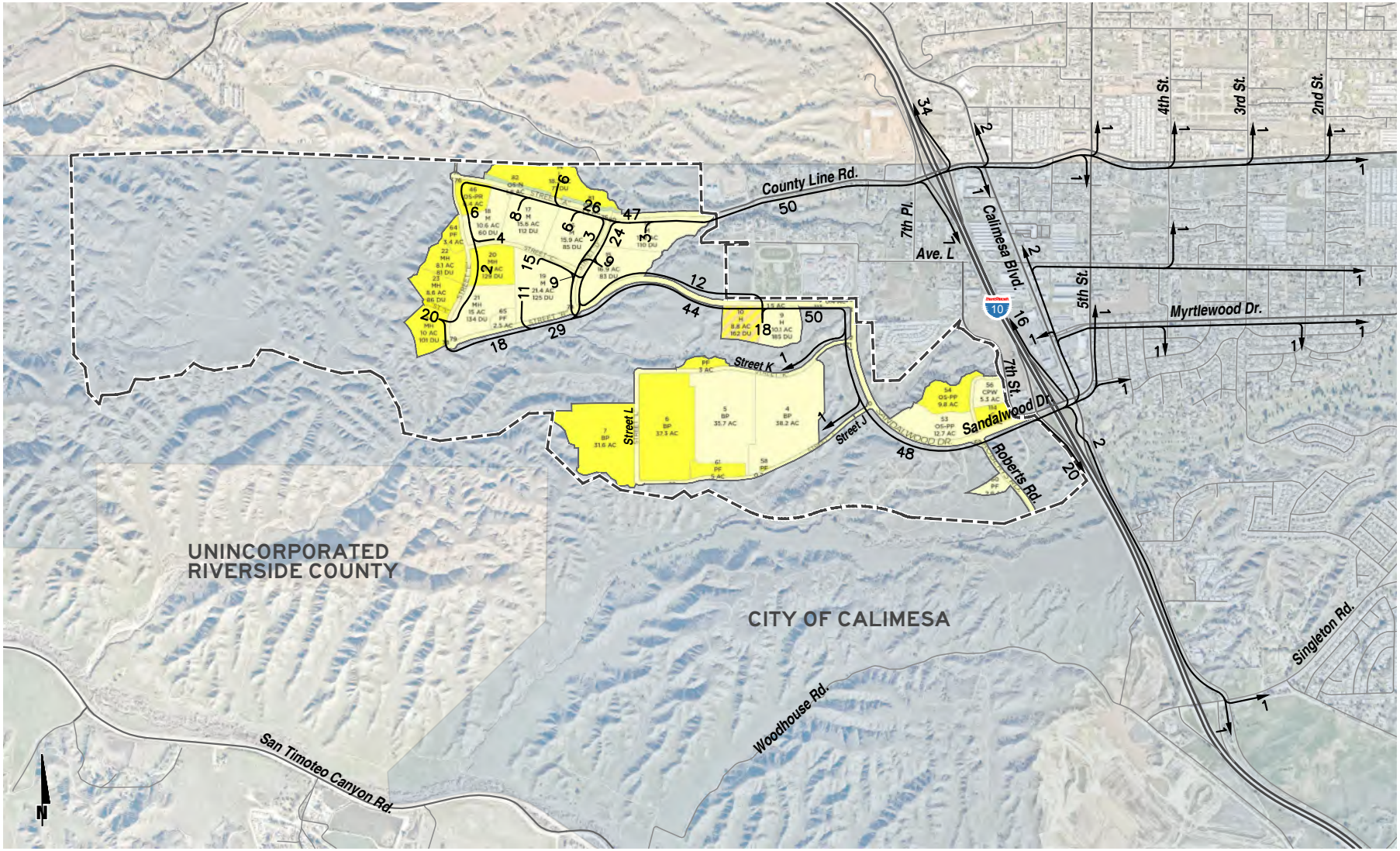
EXHIBIT 4.2-4 : PHASE 1 RESIDENTIAL TRIP DISTRIBUTION



LEGEND:

10 = *Percent To/From Project* = *Phase 1*
= *Trip Distribution*

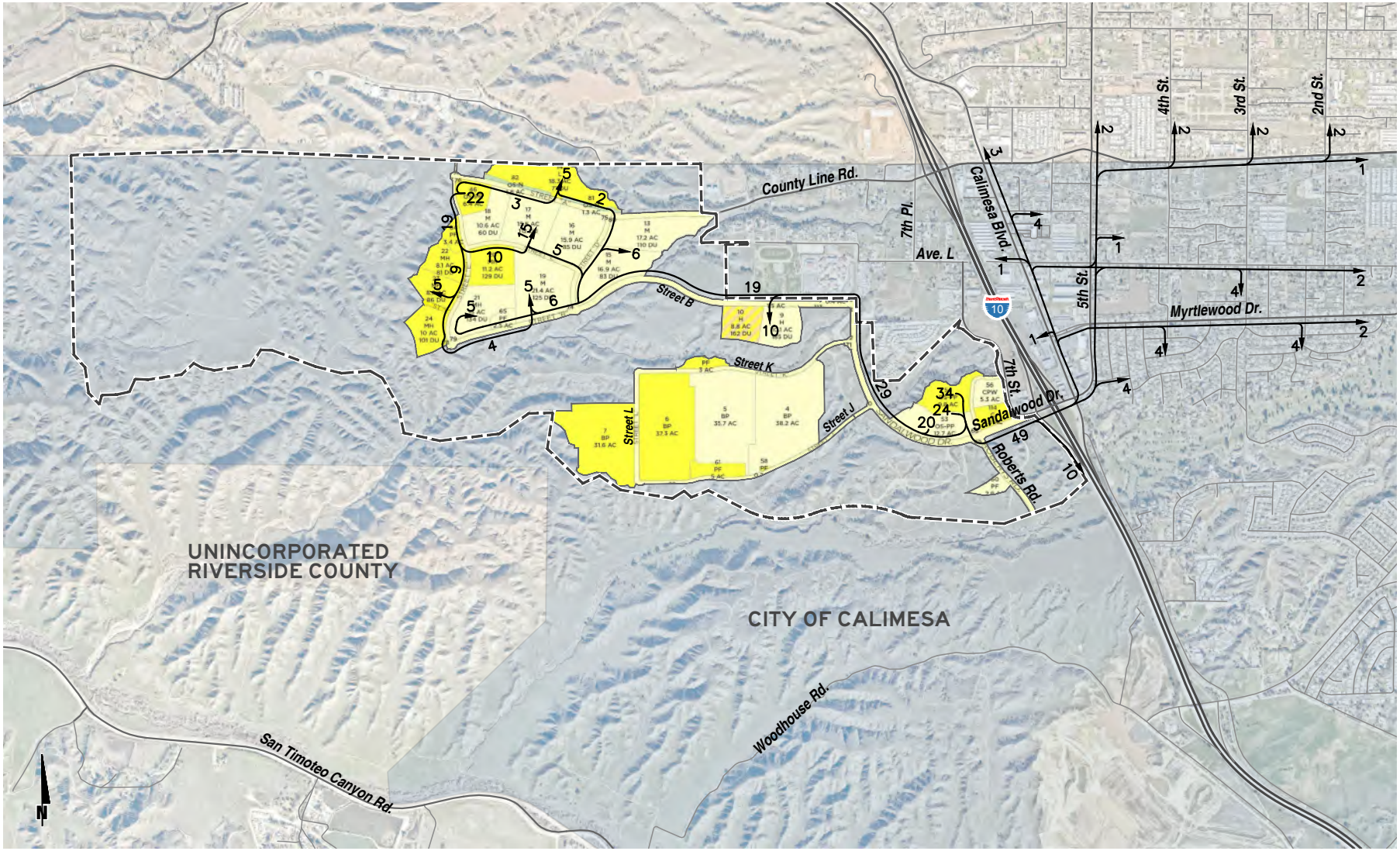
EXHIBIT 4.2-5 : PHASE 2 RESIDENTIAL TRIP DISTRIBUTION



LEGEND:

10 = Percent To/From Project
= Trip Distribution
= Phase 1
= Phase 2

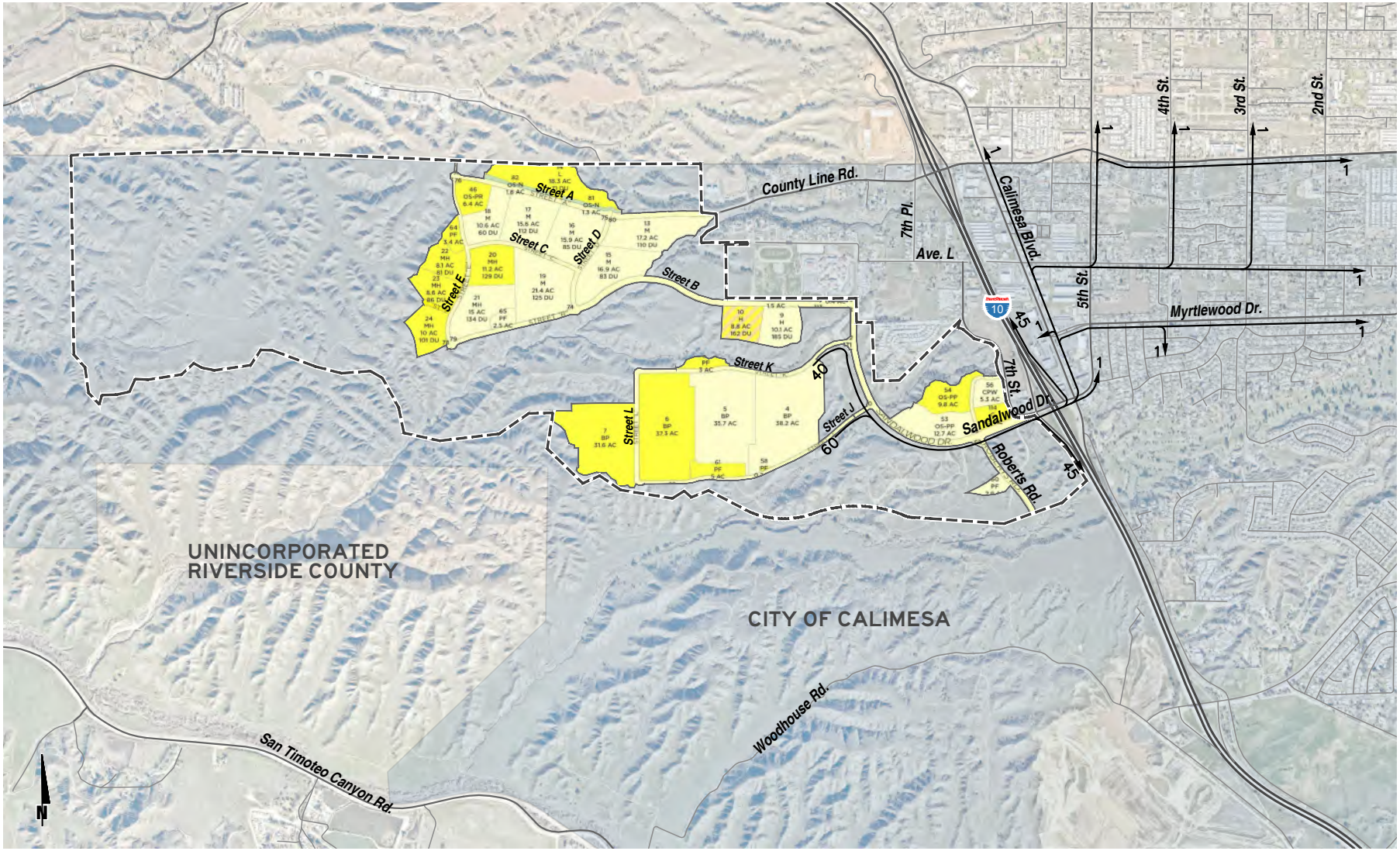
EXHIBIT 4.2-6 : PHASE 2 PARK TRIP DISTRIBUTION



LEGEND:

10 = Percent To/From Project
= Trip Distribution
= Phase 1
= Phase 2

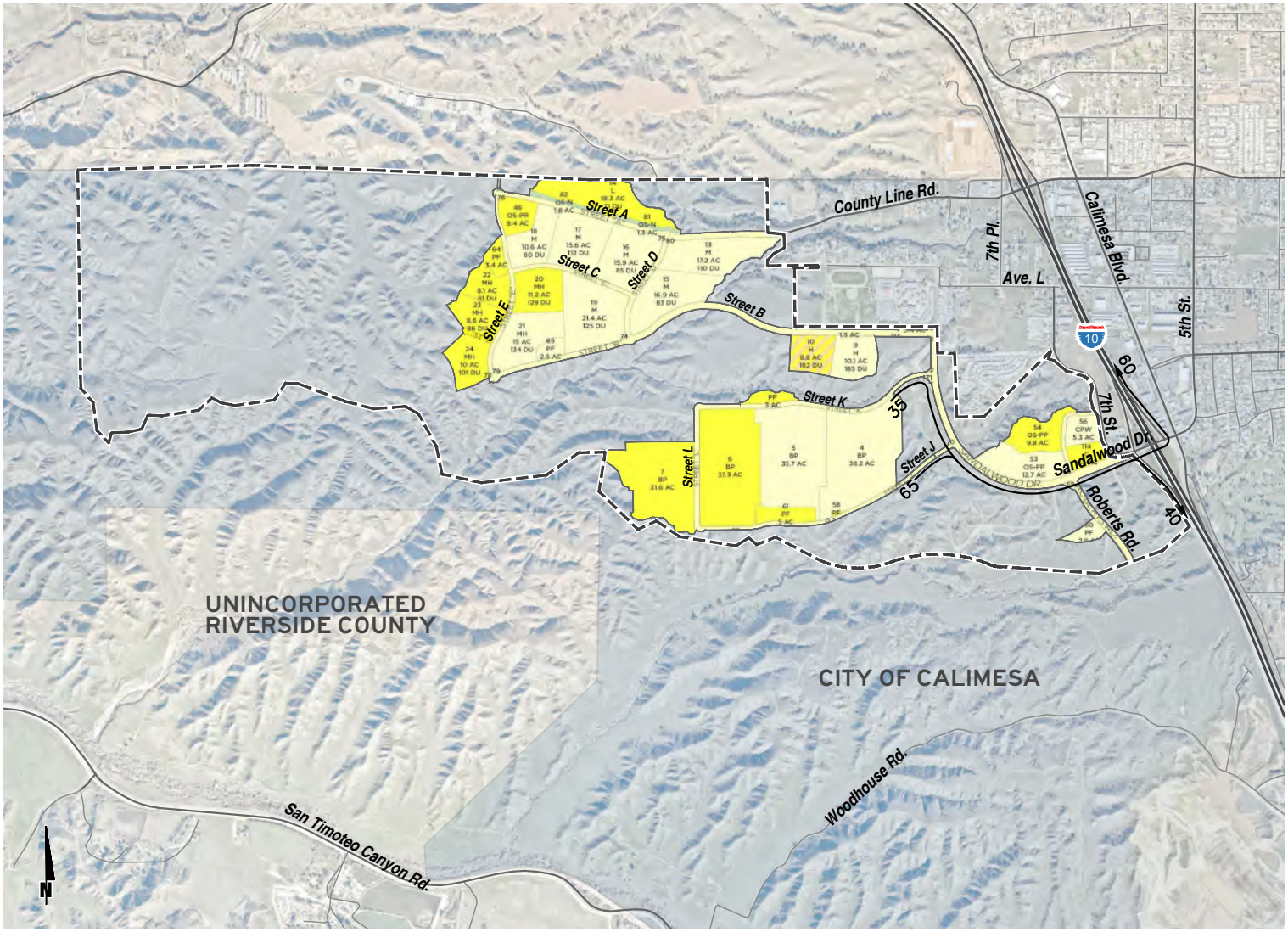
EXHIBIT 4.2-7 : PHASE 2 INDUSTRIAL (PASSENGER CARS) TRIP DISTRIBUTION



LEGEND:

10 = Percent To/From Project
= Trip Distribution
= Phase 1
= Phase 2

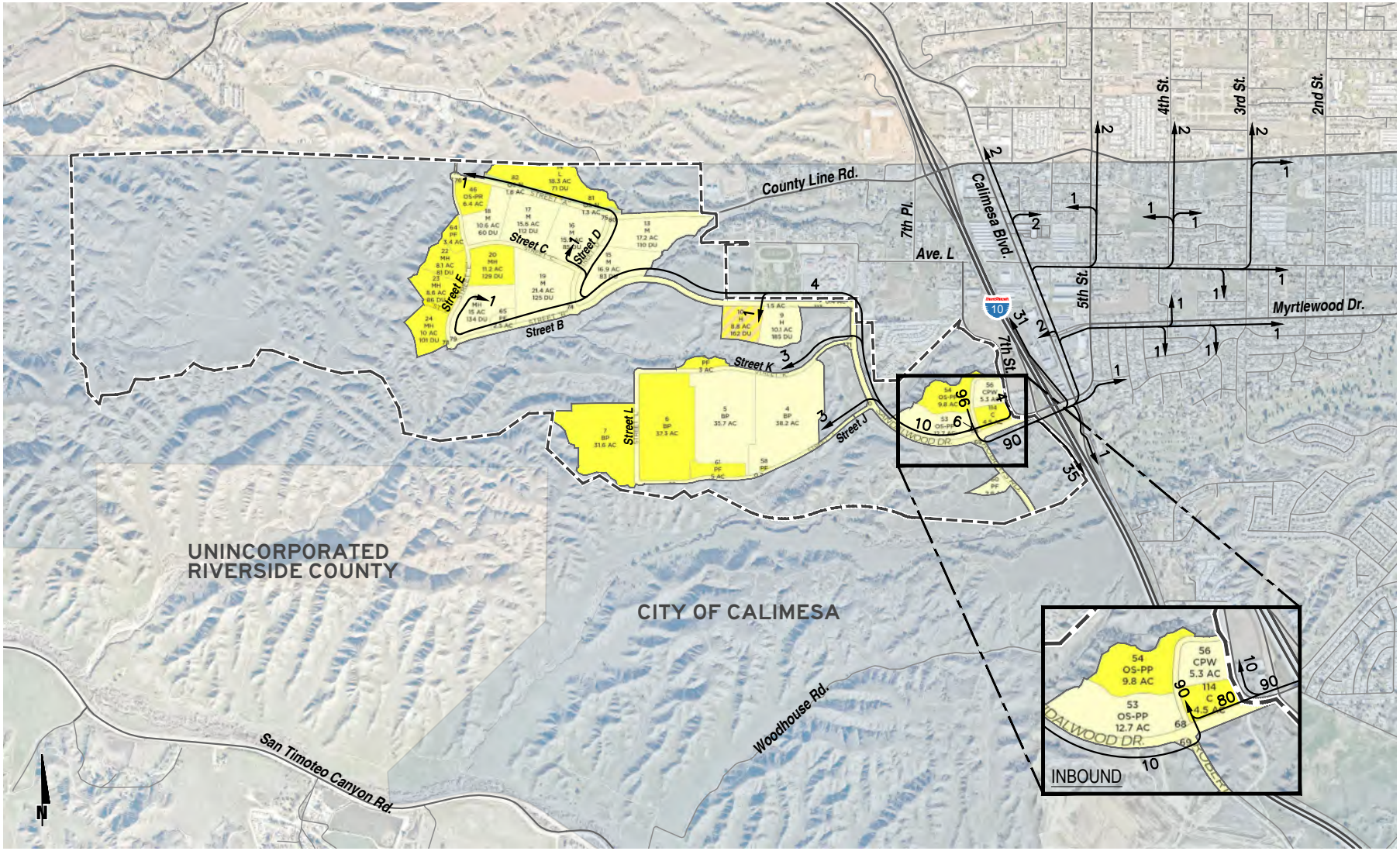
EXHIBIT 4.2-8 : PHASE 2 INDUSTRIAL (TRUCKS) TRIP DISTRIBUTION



LEGEND:

10 = Percent To/From Project
= Trip Distribution
= Phase 1
= Phase 2

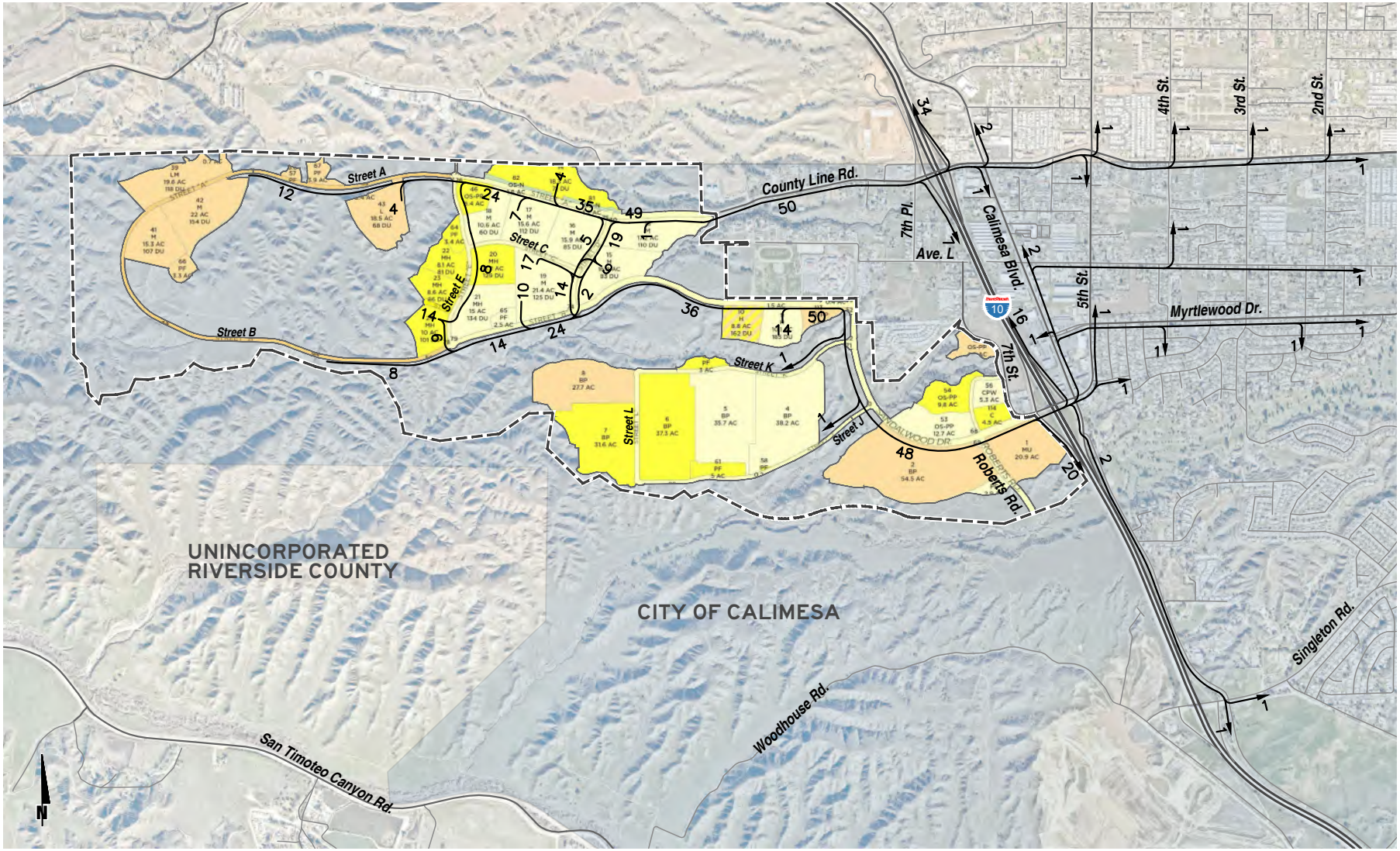
EXHIBIT 4.2-9 : PHASE 2 RETAIL TRIP DISTRIBUTION



LEGEND:

10 = Percent To/From Project
→ = Trip Distribution
= Phase 1
= Phase 2

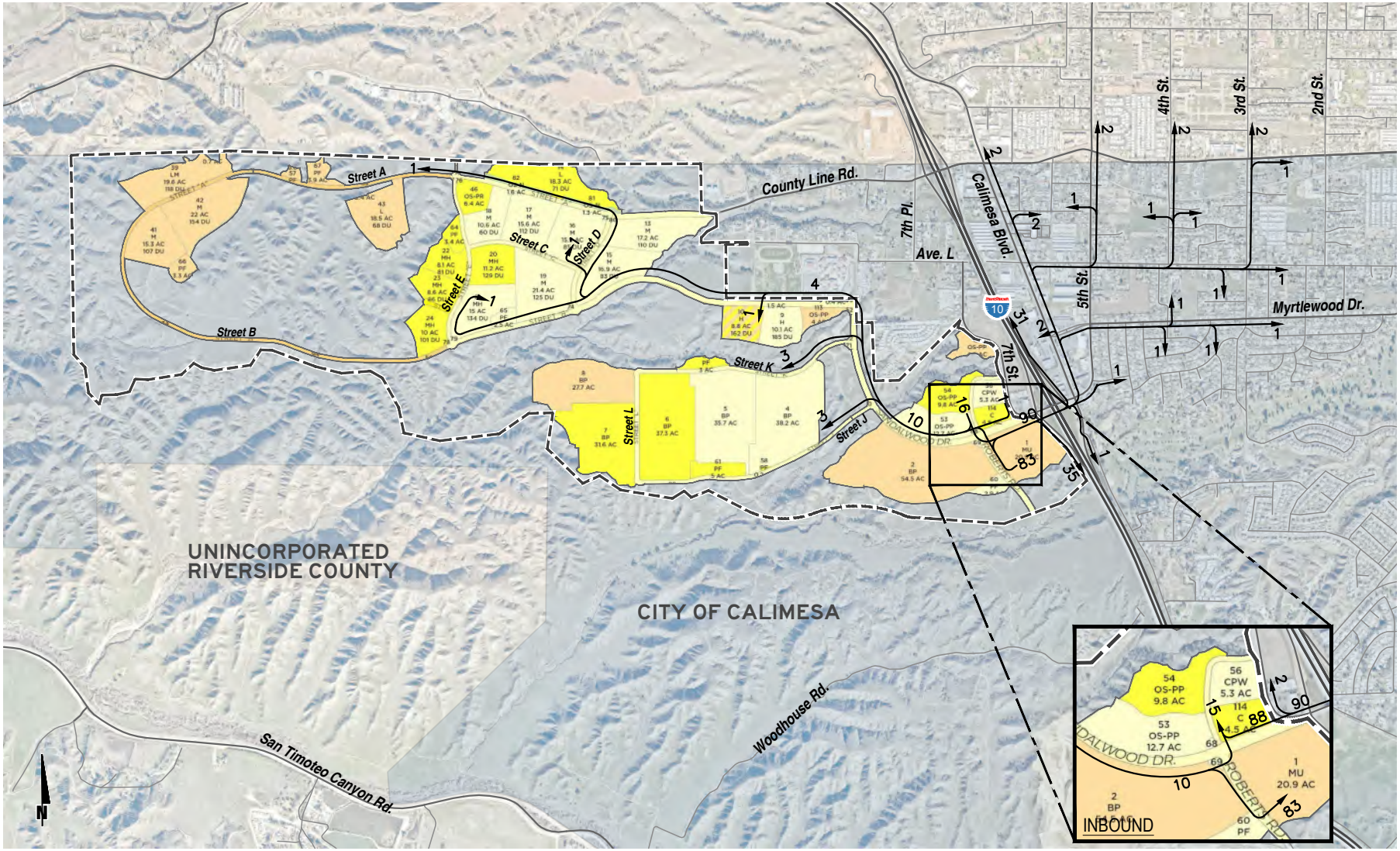
EXHIBIT 4.2-10 : PHASE 3 RESIDENTIAL TRIP DISTRIBUTION



LEGEND:

10 = Percent To/From Project
→ = Trip Distribution
= Phase 1
= Phase 2
= Phase 3

EXHIBIT 4.2-11 : PHASE 3 RETAIL TRIP DISTRIBUTION

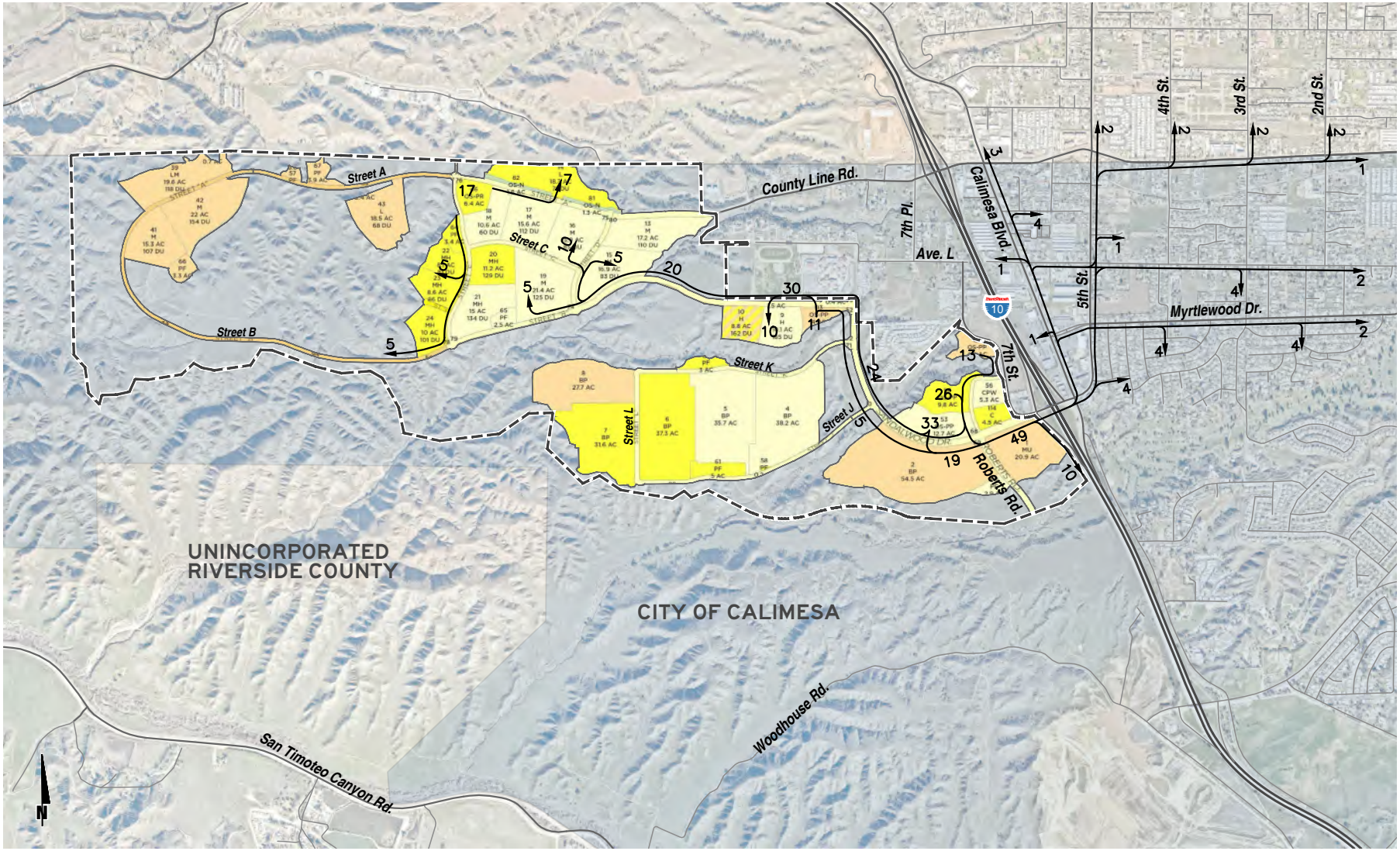


LEGEND:

10 = Percent To/From Project
→ = Trip Distribution

= Phase 1
= Phase 2
= Phase 3

EXHIBIT 4.2-12 : PHASE 3 PARK TRIP DISTRIBUTION

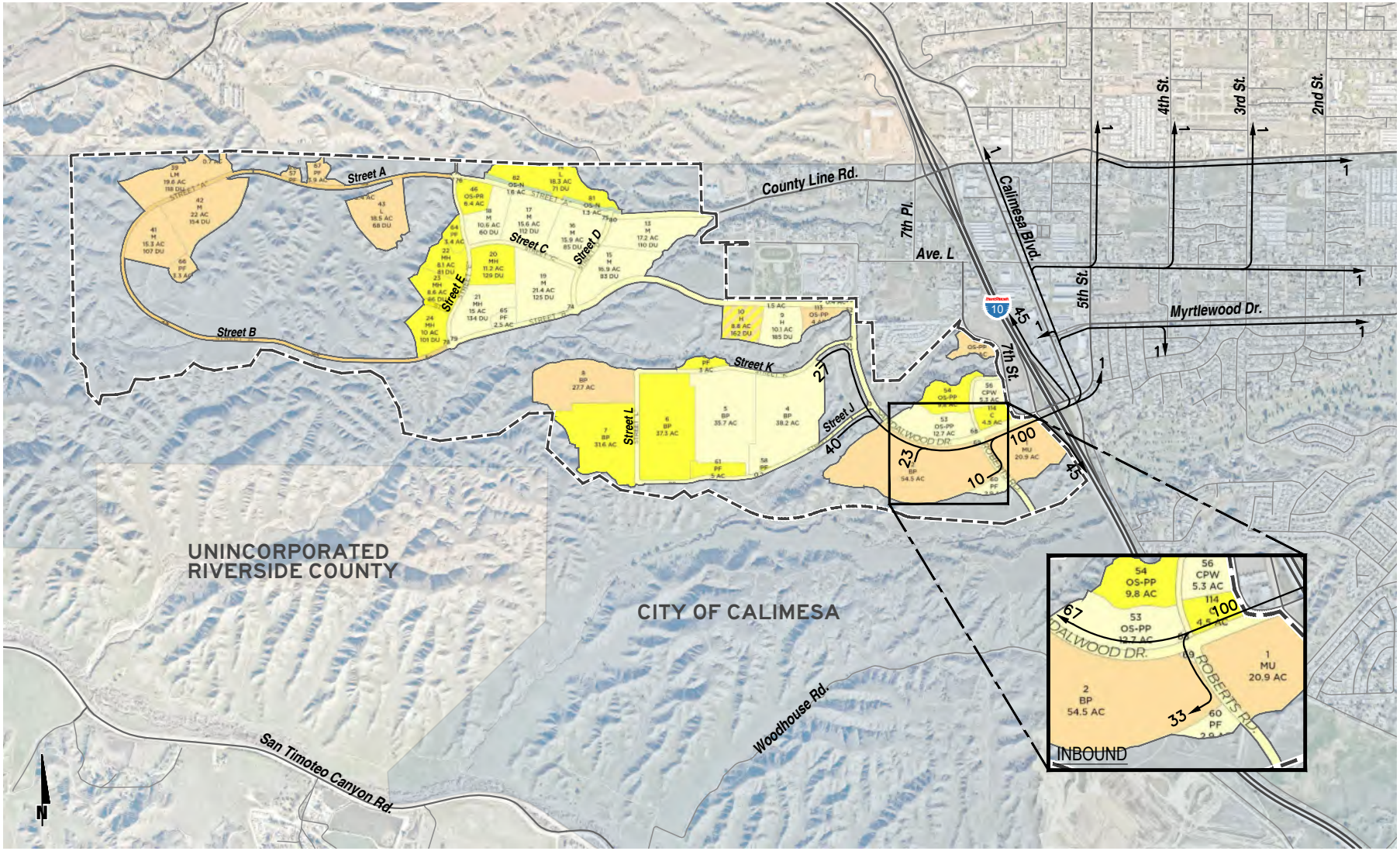


LEGEND:

10 = Percent To/From Project
→ = Trip Distribution

= Phase 1
= Phase 2
= Phase 3

EXHIBIT 4.2-13 : PHASE 3 INDUSTRIAL (PASSENGER CAR) TRIP DISTRIBUTION

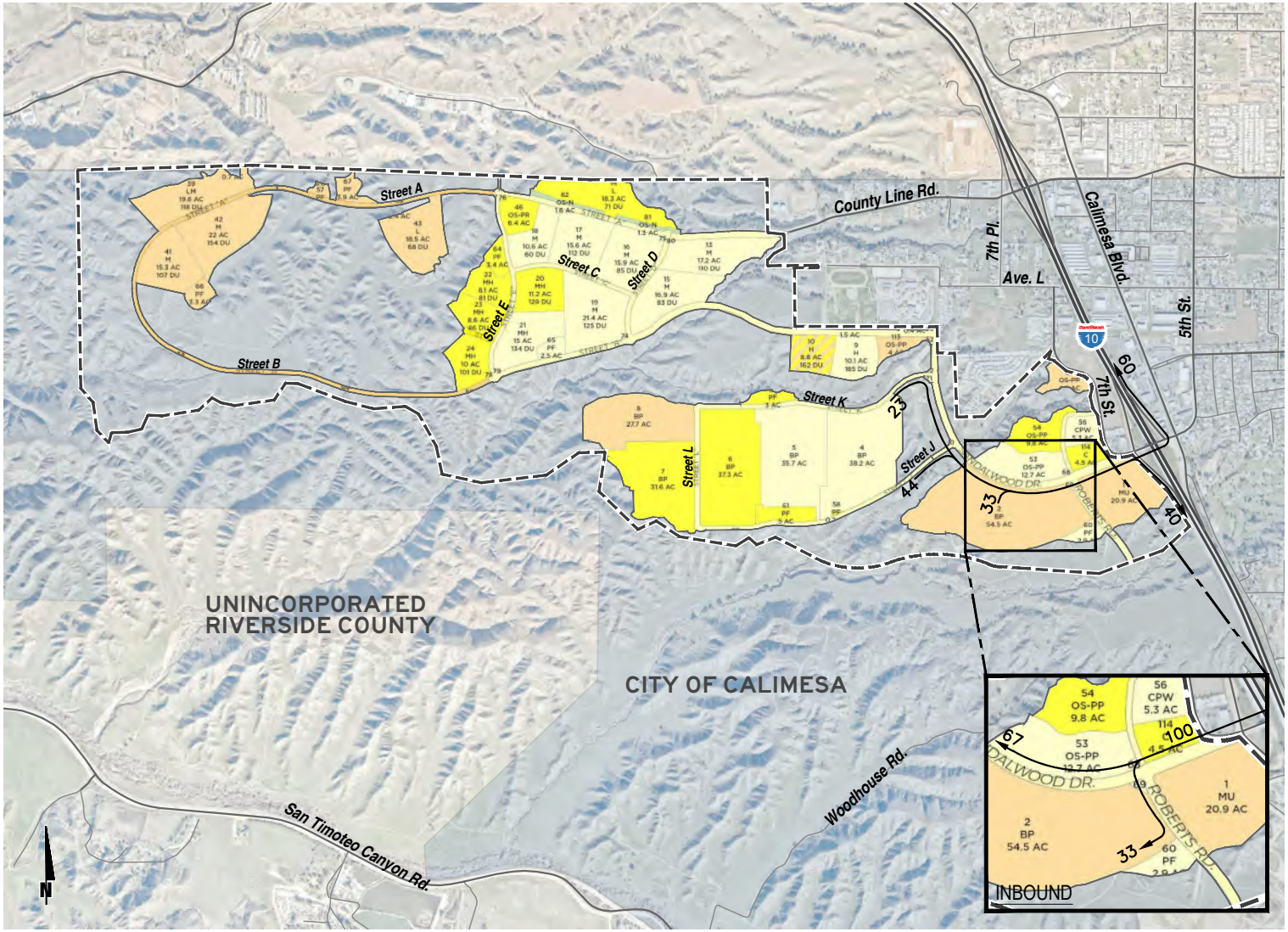


LEGEND:

10 = Percent To/From Project
→ = Trip Distribution

= Phase 1
= Phase 2
= Phase 3

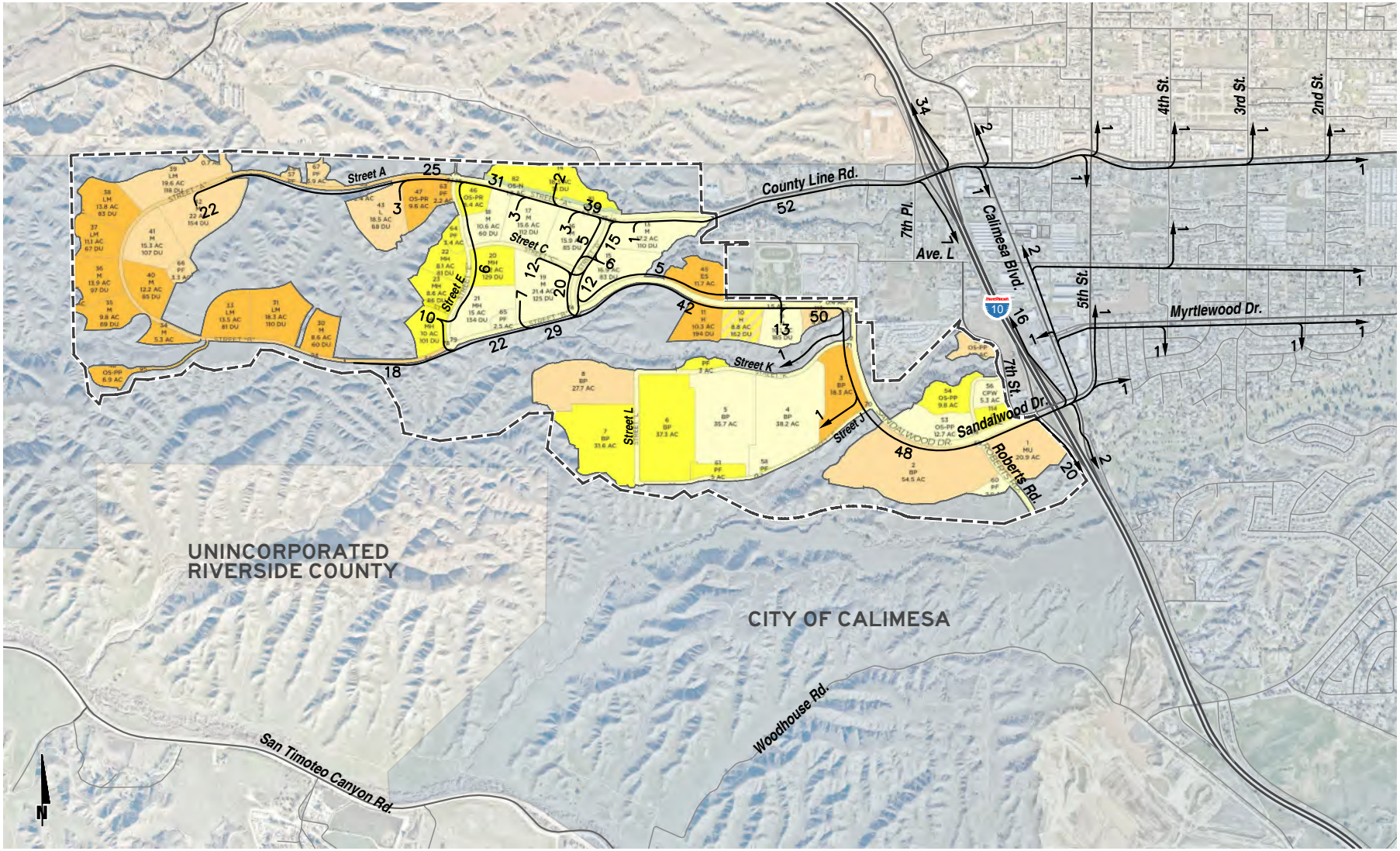
EXHIBIT 4.2-14 : PHASE 3 INDUSTRIAL (TRUCK) TRIP DISTRIBUTION



LEGEND:

10 = Percent To/From Project
→ = Trip Distribution
= Phase 1
= Phase 2
= Phase 3

EXHIBIT 4.2-15 : PHASE 4 RESIDENTIAL TRIP DISTRIBUTION

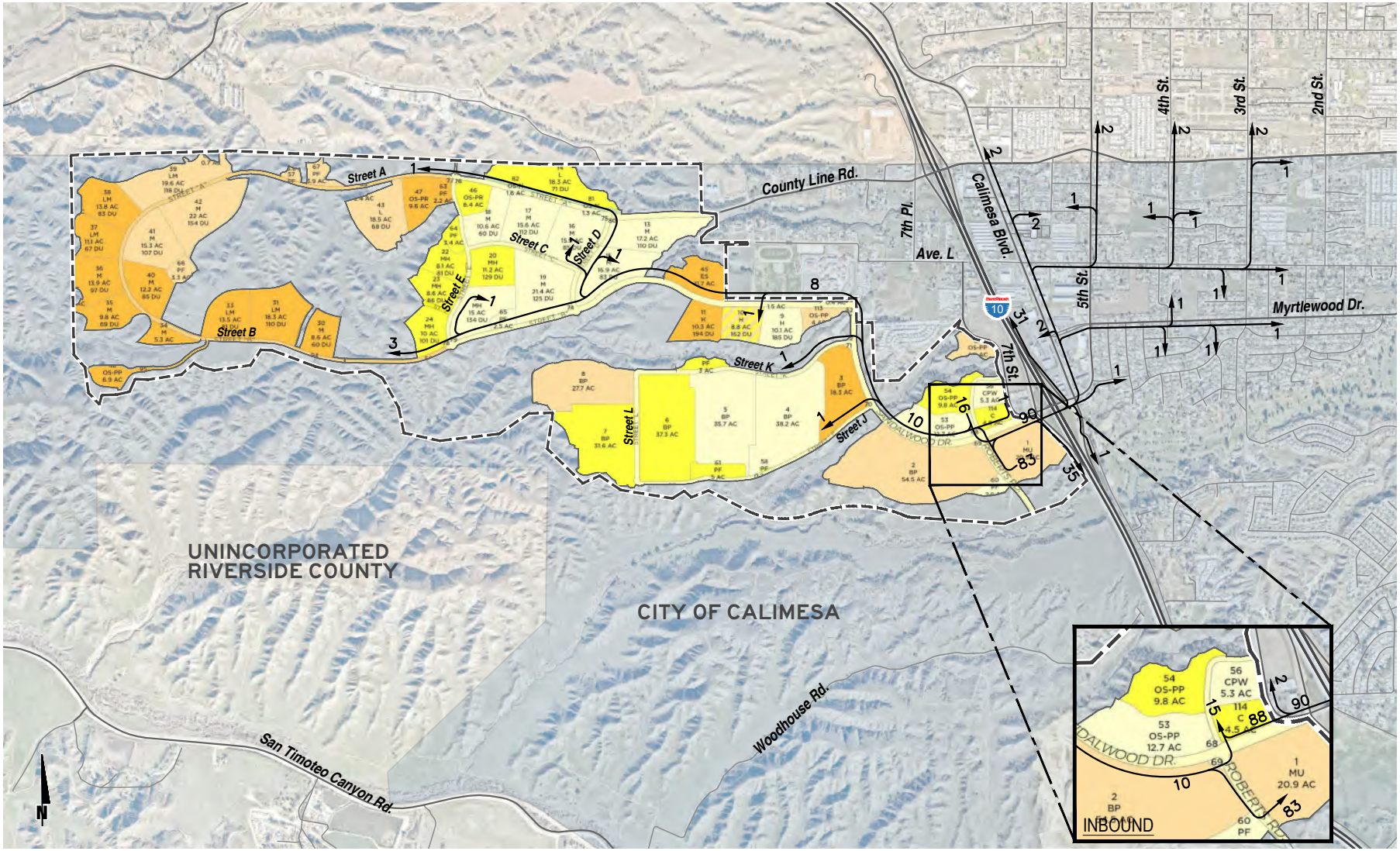


LEGEND:

10 = *Percent To/From Project*
→ = *Trip Distribution*

= *Phase 1*
= *Phase 2*
= *Phase 3*
= *Phase 4*

EXHIBIT 4.2-16 : PHASE 4 RETAIL TRIP DISTRIBUTION

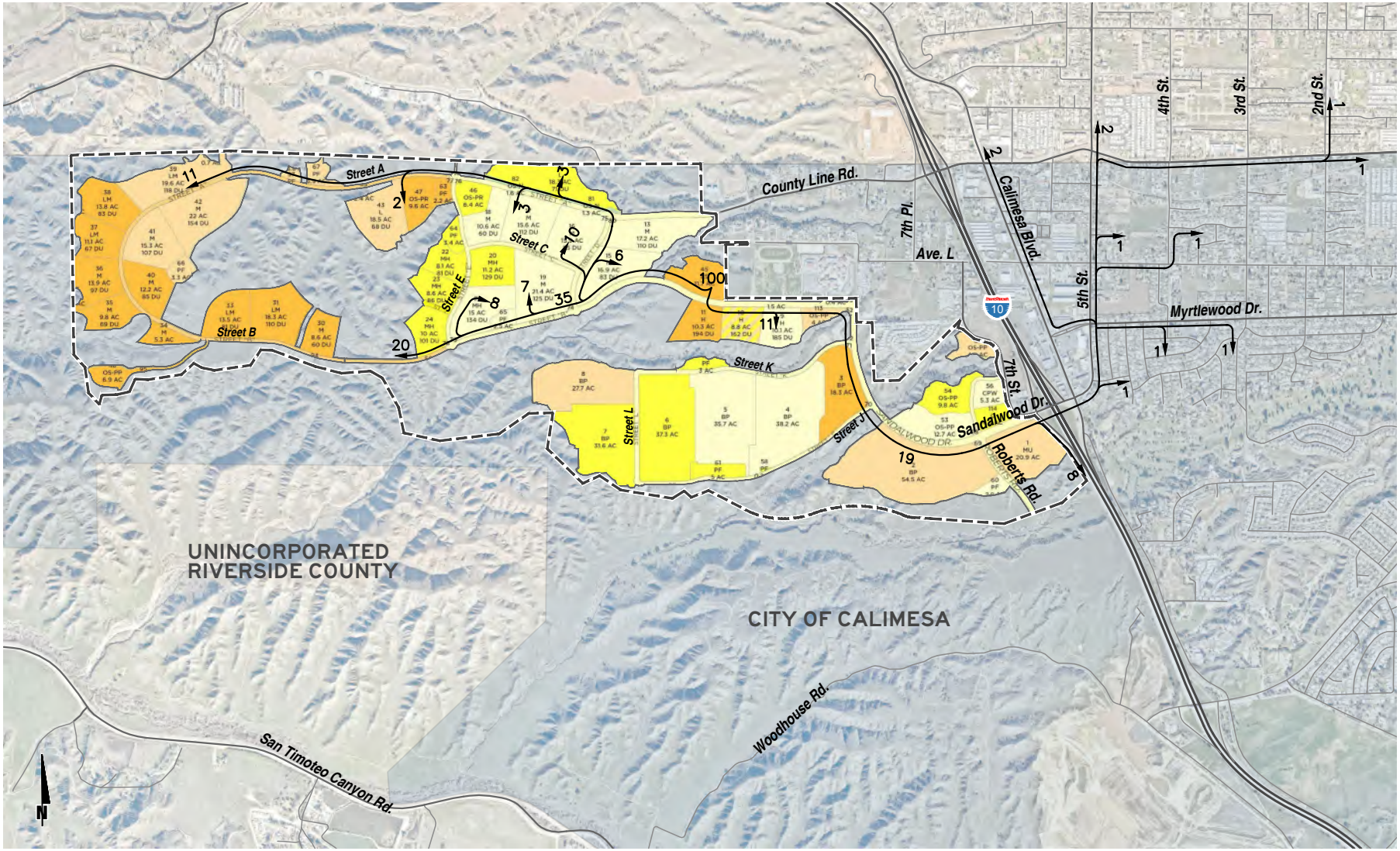


LEGEND:

10 = *Percent To/From Project*
→ = *Trip Distribution*

= *Phase 1*
= *Phase 2*
= *Phase 3*
= *Phase 4*

EXHIBIT 4.2-17 : PHASE 4 SCHOOL TRIP DISTRIBUTION

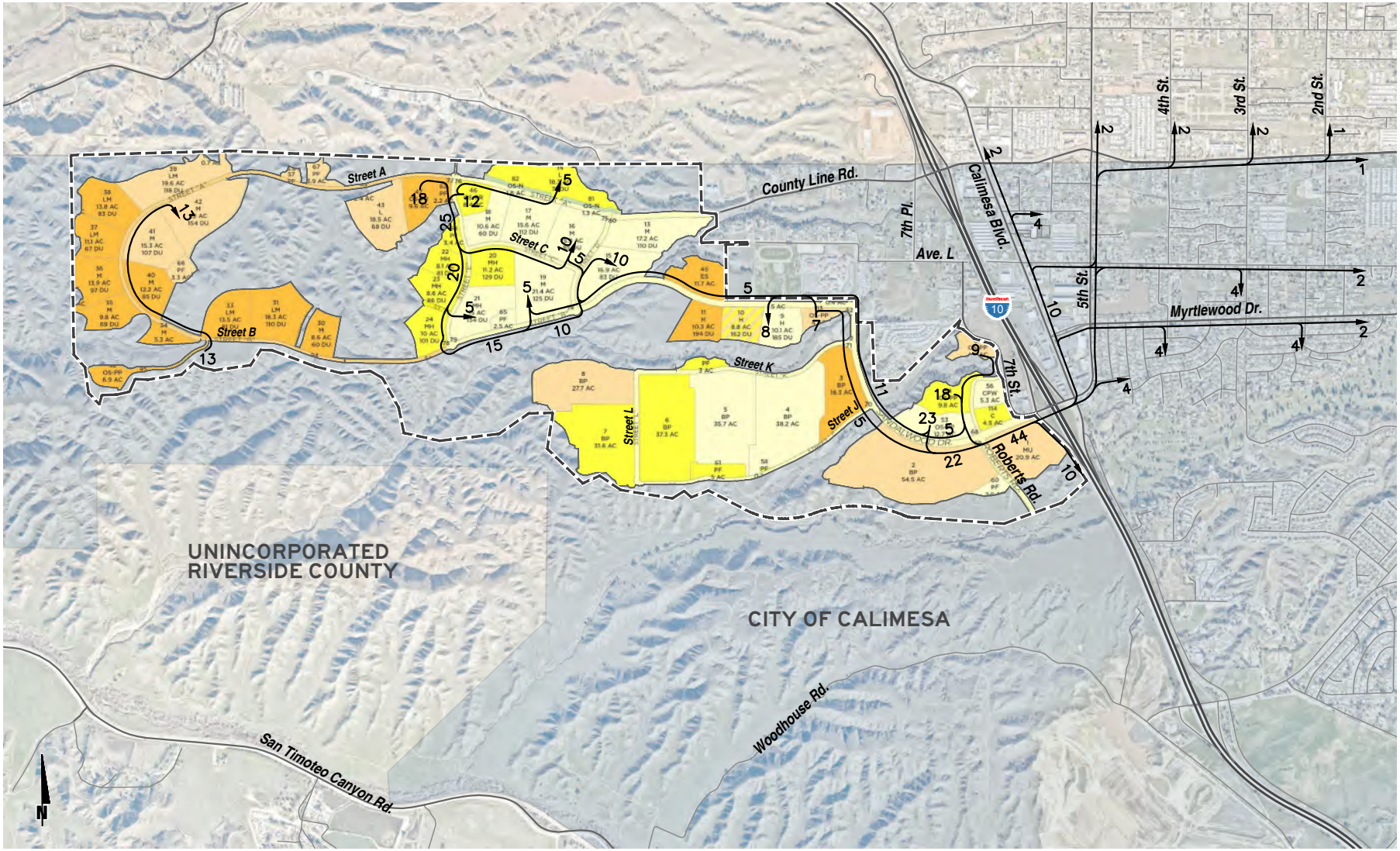


LEGEND:

10 = *Percent To/From Project*
→ = *Trip Distribution*

= *Phase 1*
= *Phase 2*
= *Phase 3*
= *Phase 4*

EXHIBIT 4.2-18 : PHASE 4 PARK TRIP DISTRIBUTION

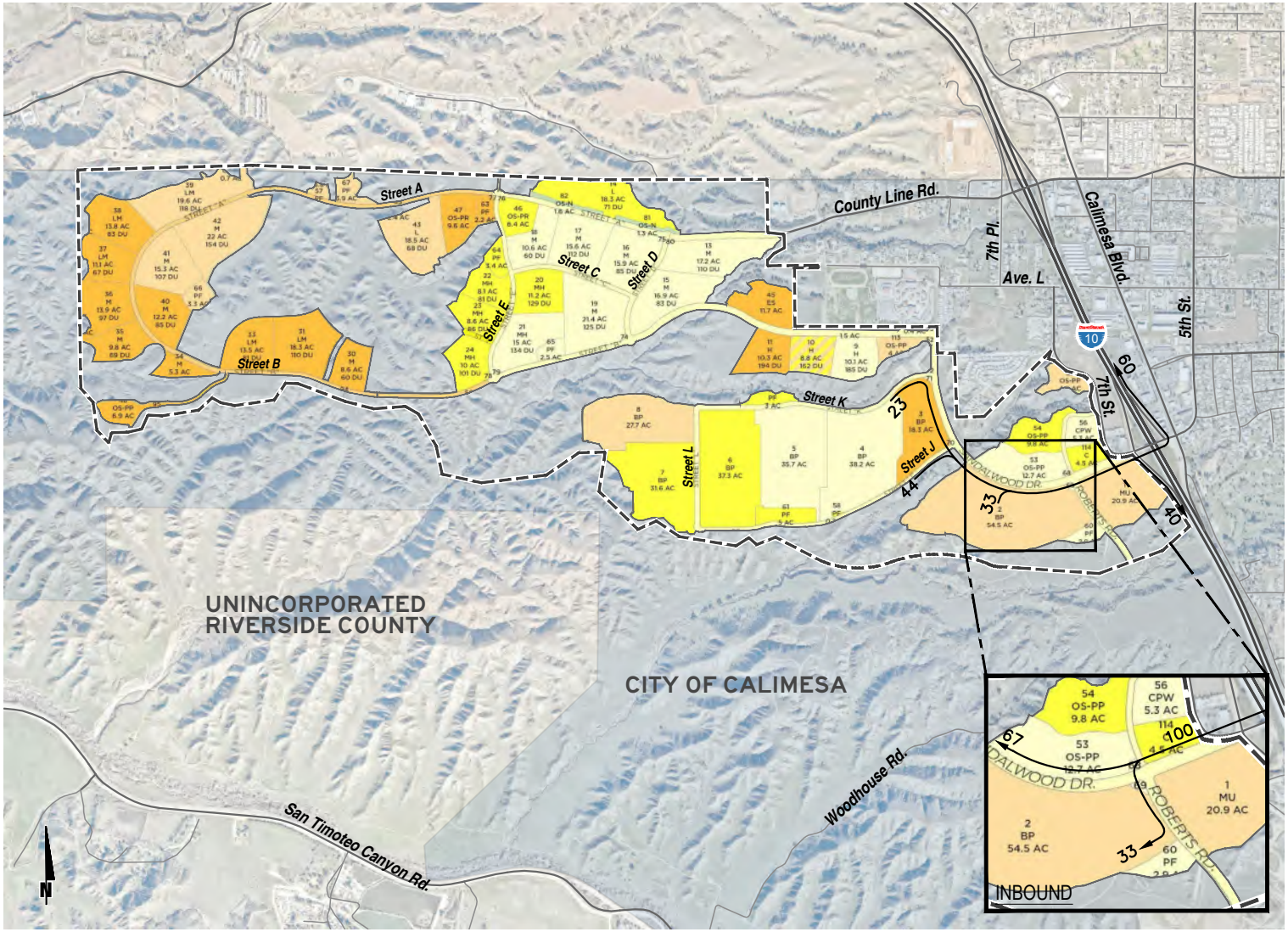


LEGEND:

10 = Percent To/From Project
→ = Trip Distribution

= Phase 1
= Phase 2
= Phase 3
= Phase 4

EXHIBIT 4.2-19 : PHASE 4 INDUSTRIAL (TRUCK) TRIP DISTRIBUTION

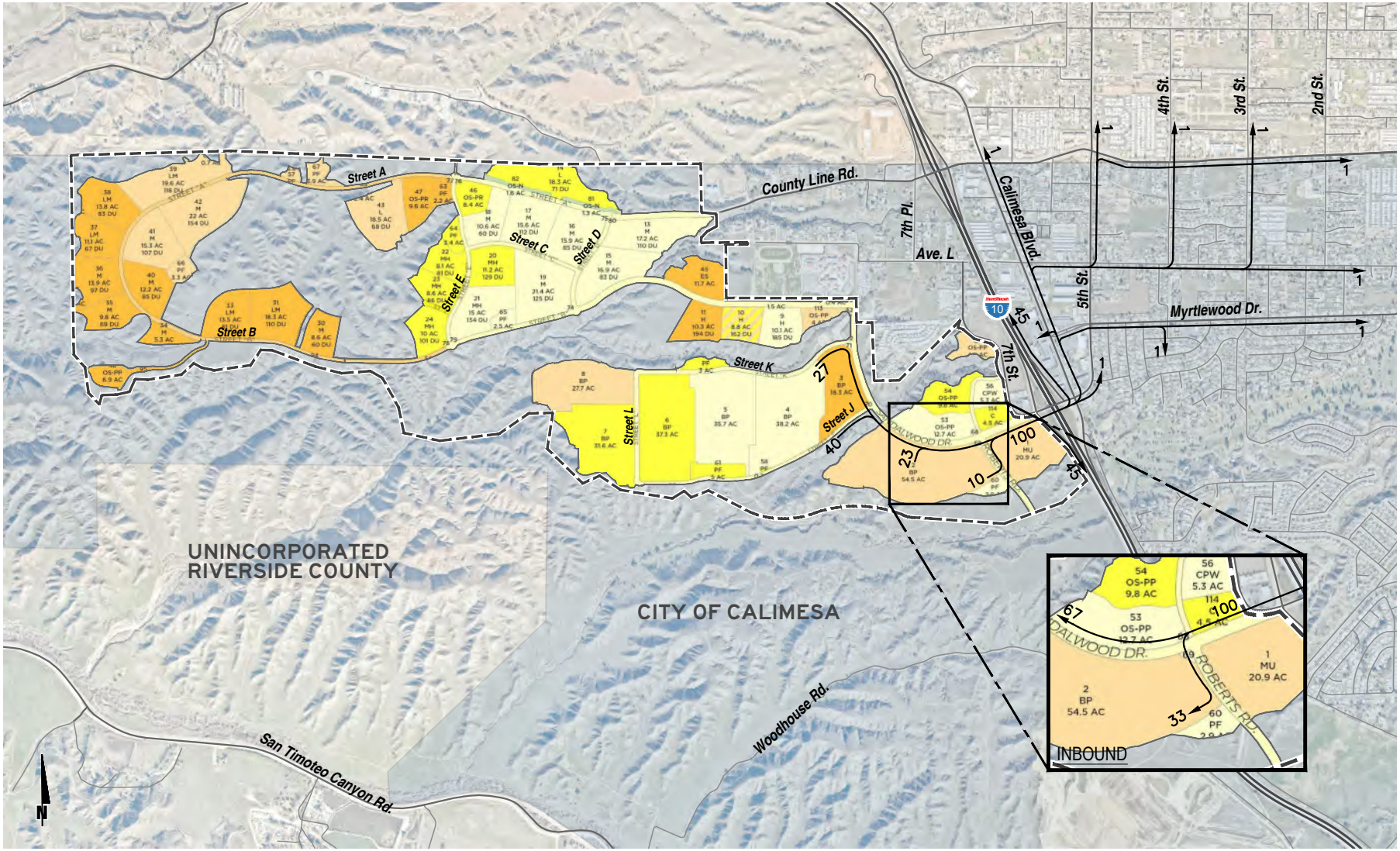


LEGEND:

10 = Percent To/From Project
→ = Trip Distribution

= Phase 1
= Phase 2
= Phase 3
= Phase 4

EXHIBIT 4.2-20 : PHASE 4 INDUSTRIAL (PASSENGER CAR) TRIP DISTRIBUTION

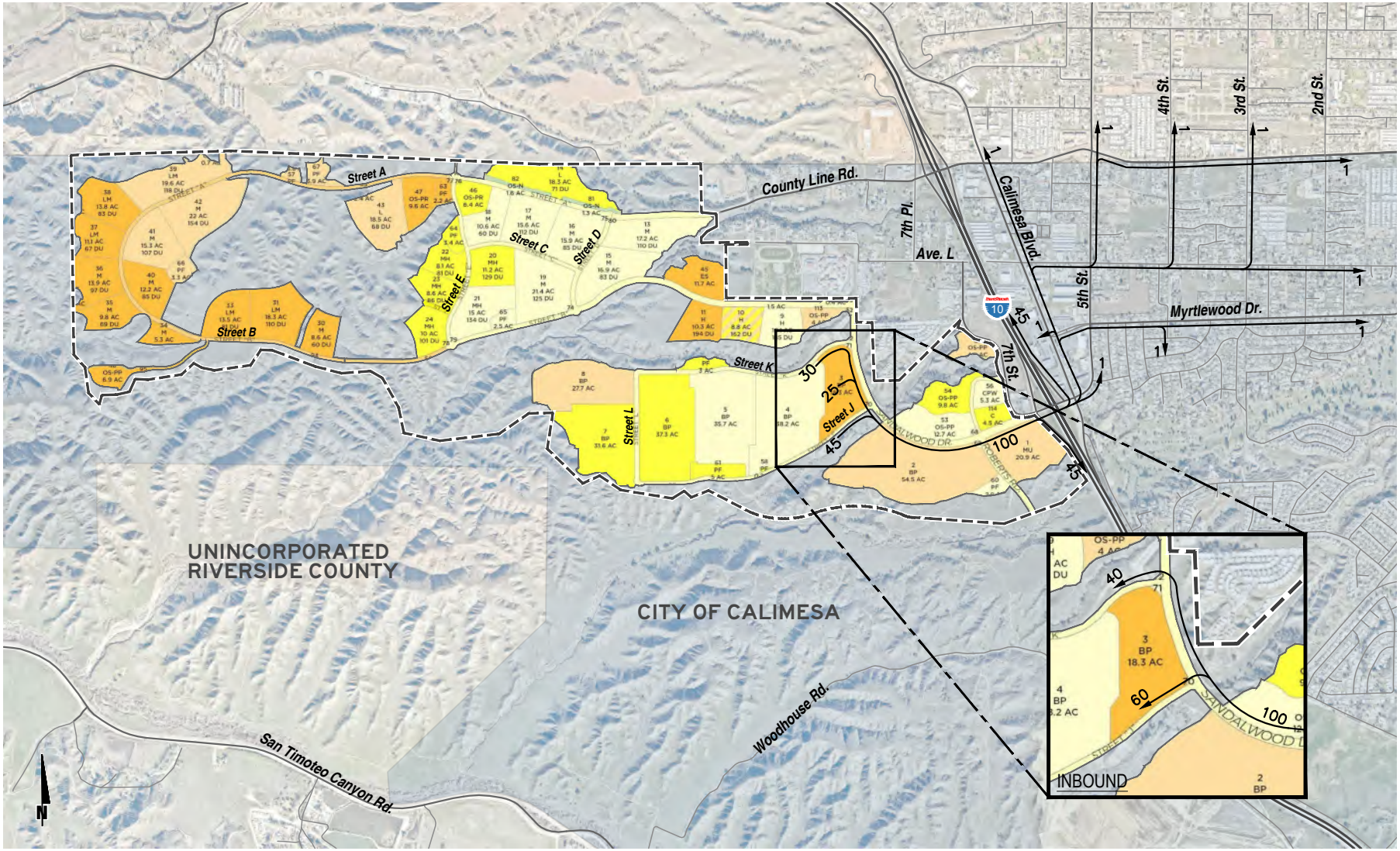


LEGEND:

10 = *Percent To/From Project*
→ = *Trip Distribution*

= *Phase 1*
= *Phase 2*
= *Phase 3*
= *Phase 4*

EXHIBIT 4.2-21 : PHASE 4 OFFICE TRIP DISTRIBUTION

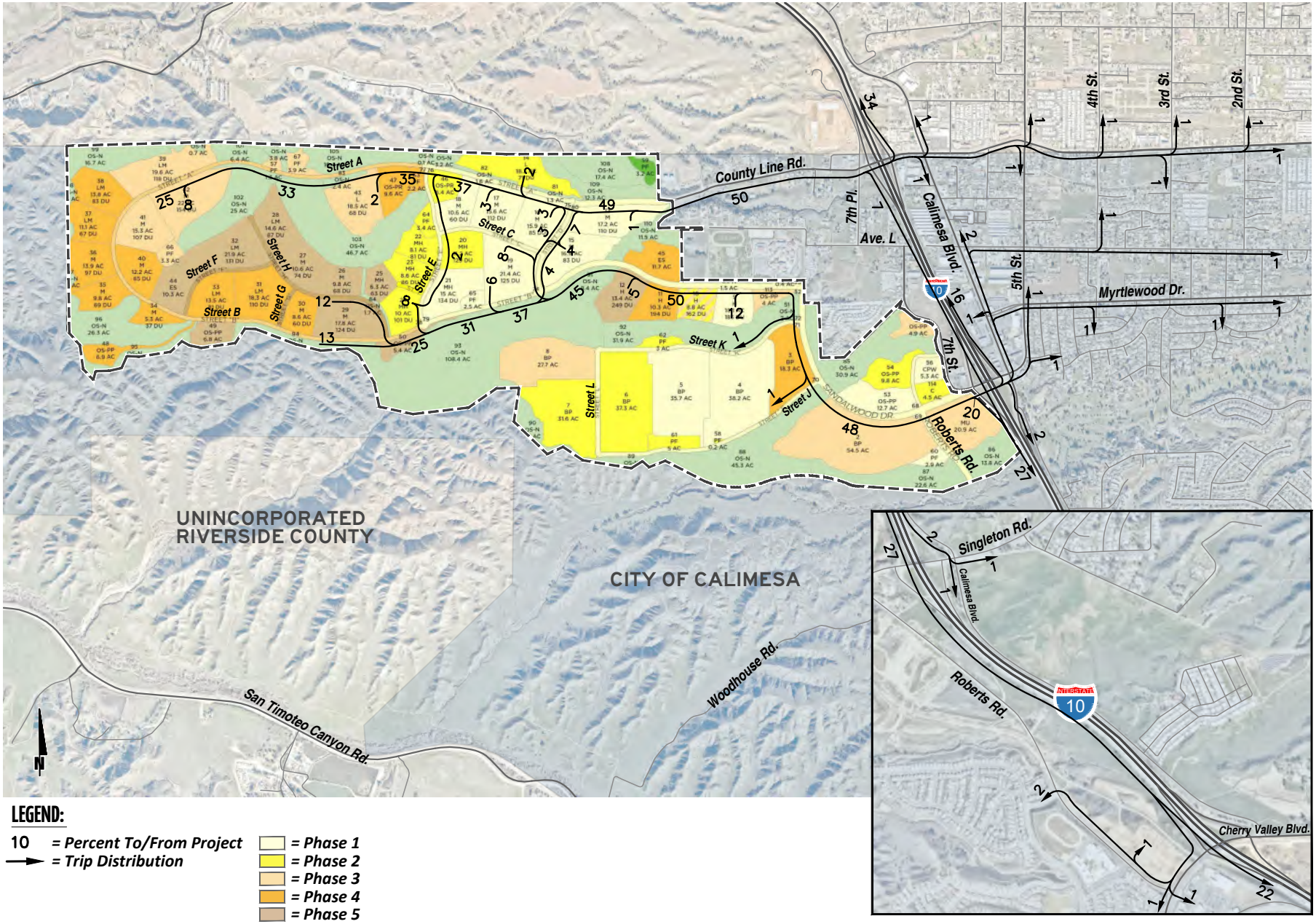


LEGEND:

10 = Percent To/From Project
→ = Trip Distribution

= Phase 1
= Phase 2
= Phase 3
= Phase 4

EXHIBIT 4.2-22 : PHASE 5 RESIDENTIAL TRIP DISTRIBUTION

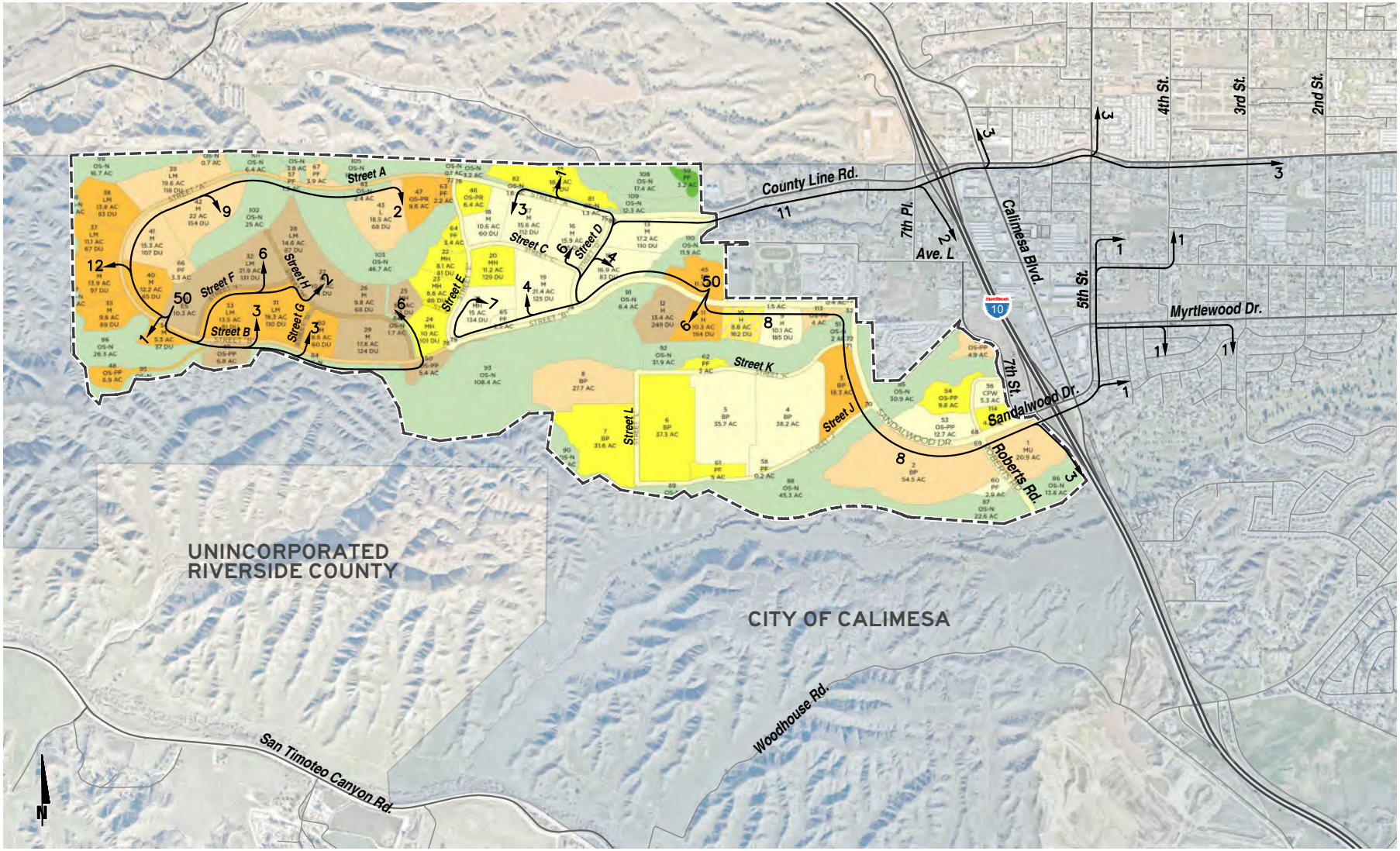


LEGEND:

10 = Percent To/From Project
→ = Trip Distribution

= Phase 1
= Phase 2
= Phase 3
= Phase 4
= Phase 5

EXHIBIT 4.2-23 : PHASE 5 SCHOOL TRIP DISTRIBUTION

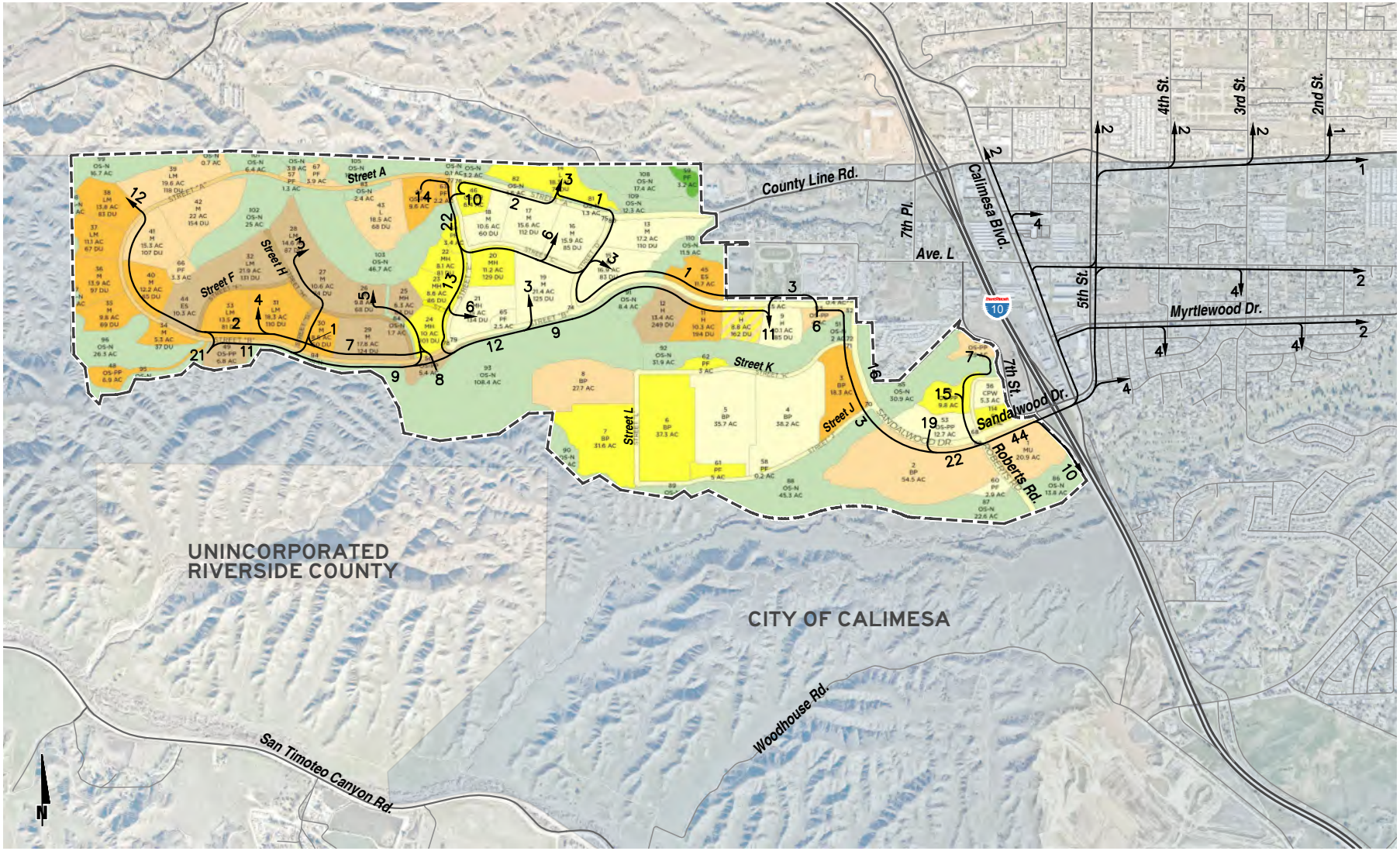


LEGEND:

10 = *Percent To/From Project*
→ = *Trip Distribution*

- = *Phase 1*
- = *Phase 2*
- = *Phase 3*
- = *Phase 4*
- = *Phase 5*

EXHIBIT 4.2-24 : PHASE 5 PARK TRIP DISTRIBUTION

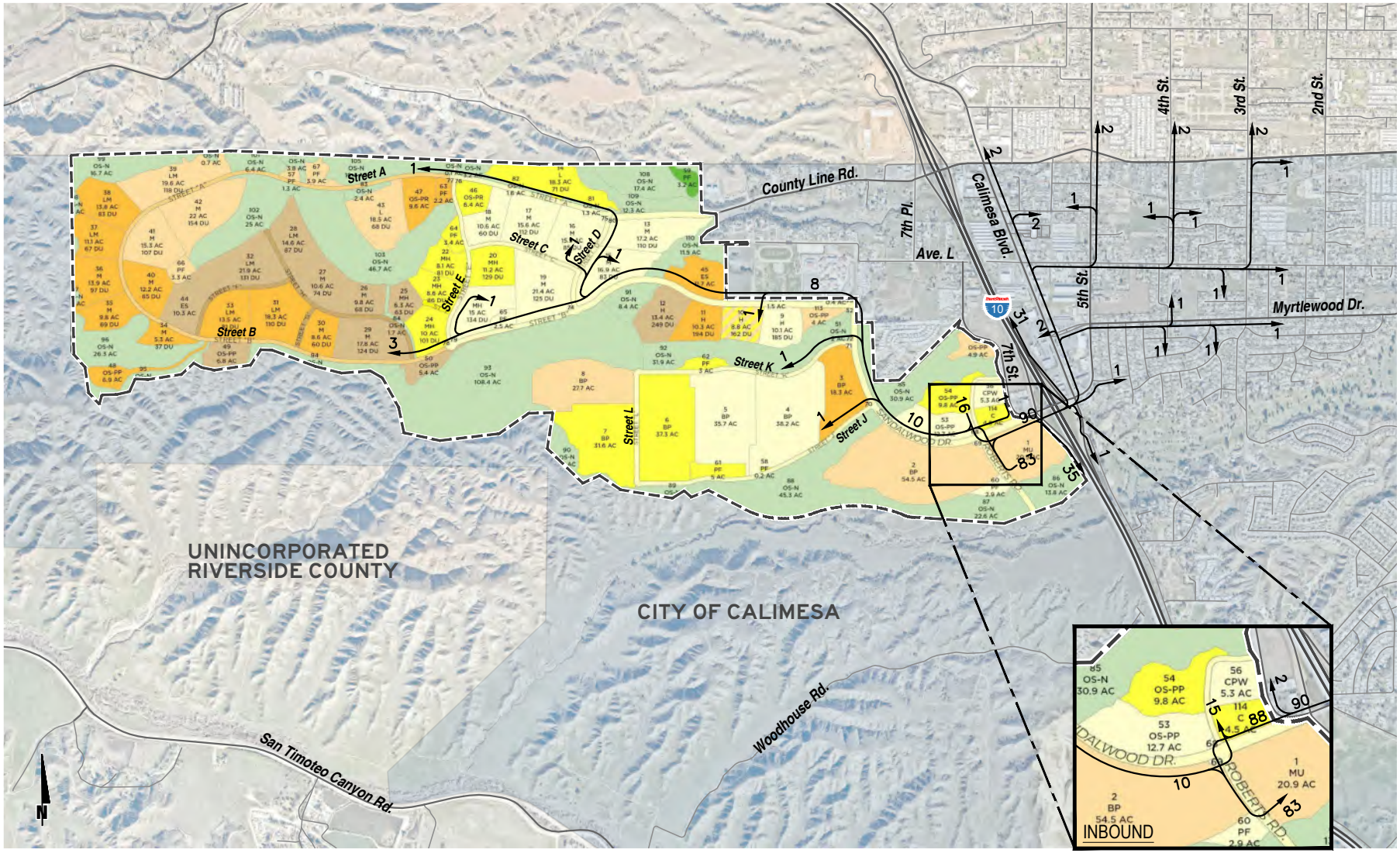


LEGEND:

10 = *Percent To/From Project*
→ = *Trip Distribution*

- = *Phase 1*
- = *Phase 2*
- = *Phase 3*
- = *Phase 4*
- = *Phase 5*

EXHIBIT 4.2-25 : PHASE 5 RETAIL TRIP DISTRIBUTION

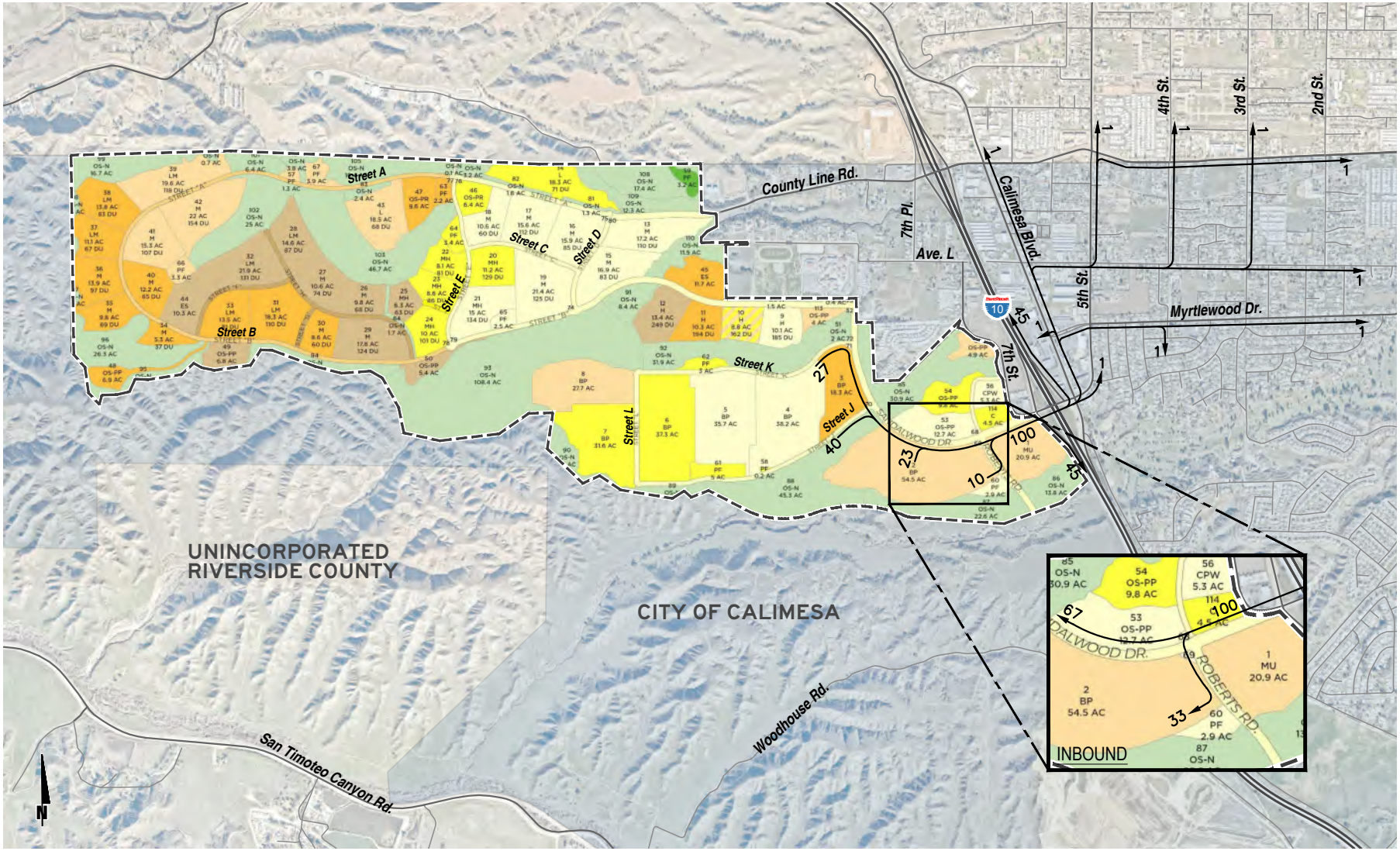


LEGEND:

10 = *Percent To/From Project*
→ = *Trip Distribution*

= *Phase 1*
= *Phase 2*
= *Phase 3*
= *Phase 4*
= *Phase 5*

EXHIBIT 4.2-26 : PHASE 5 INDUSTRIAL (PASSENGER CAR) TRIP DISTRIBUTION

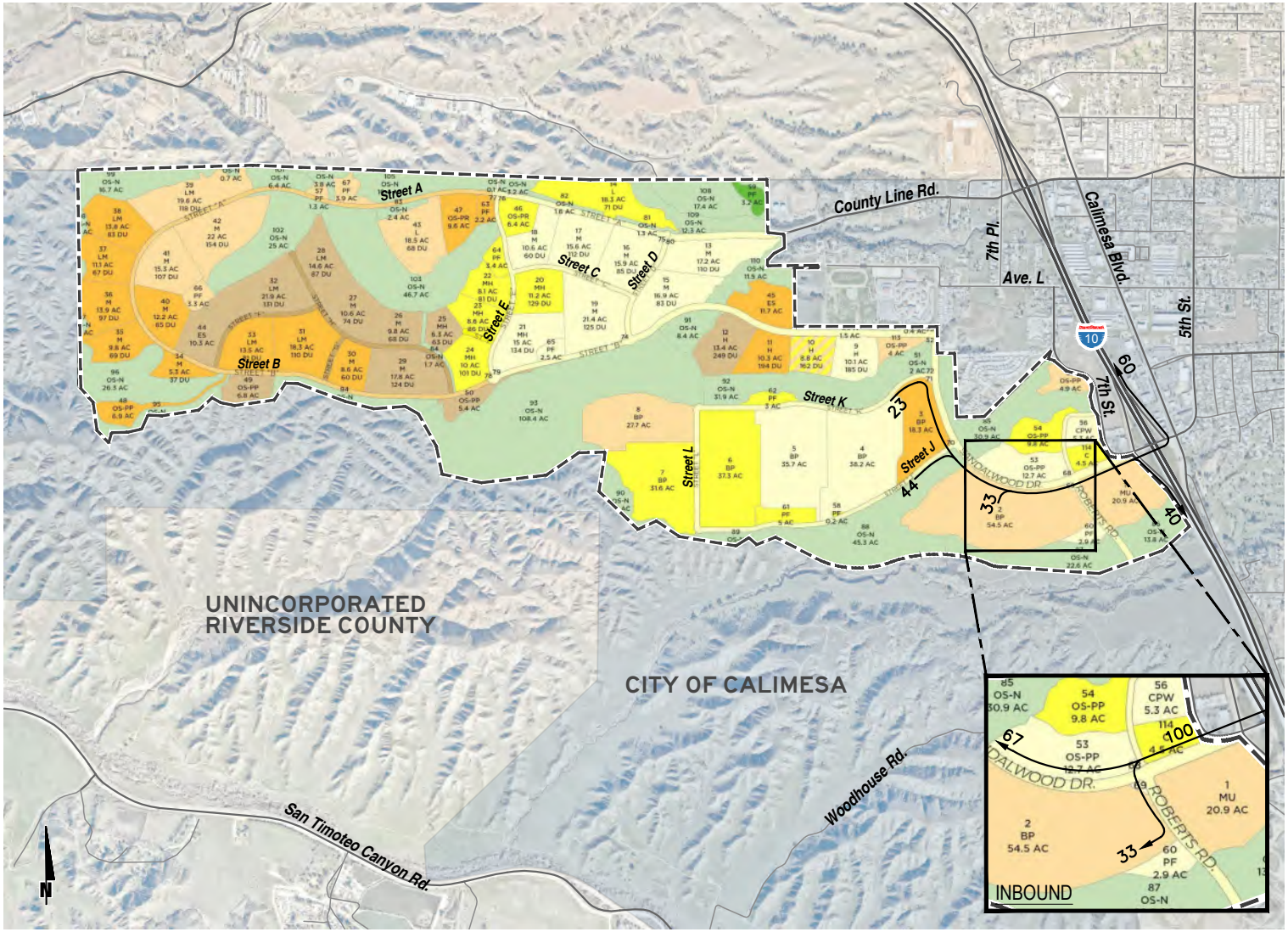


LEGEND:

10 = Percent To/From Project
→ = Trip Distribution

= Phase 1
= Phase 2
= Phase 3
= Phase 4
= Phase 5

EXHIBIT 4.2-27 : PHASE 5 INDUSTRIAL (TRUCK) TRIP DISTRIBUTION

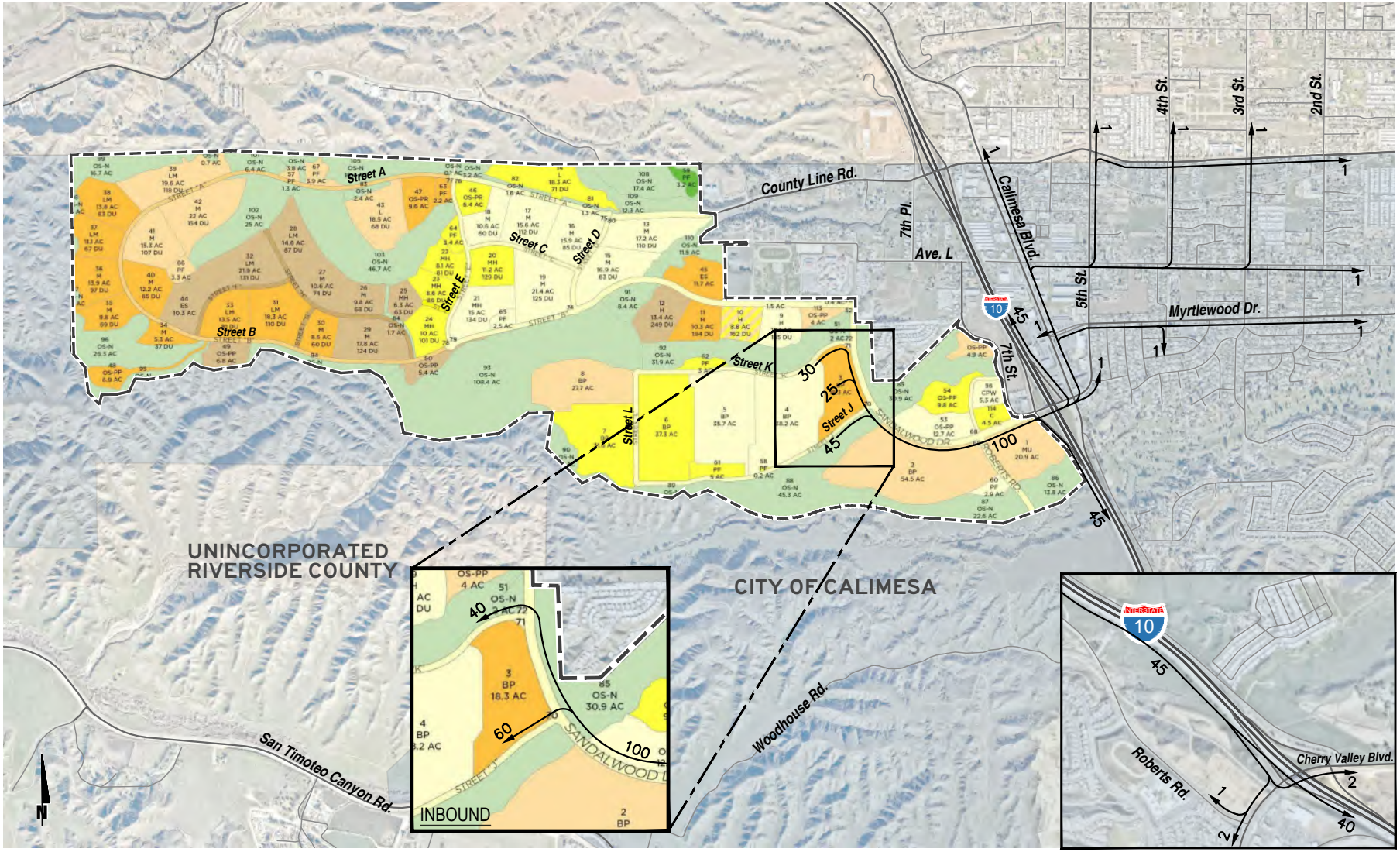


LEGEND:

10 = Percent To/From Project
→ = Trip Distribution

= Phase 1
= Phase 2
= Phase 3
= Phase 4
= Phase 5

EXHIBIT 4.2-28 : PHASE 5 OFFICE TRIP DISTRIBUTION



LEGEND:

10 = *Percent To/From Project*
→ = *Trip Distribution*

= *Phase 1*
= *Phase 2*
= *Phase 3*
= *Phase 4*
= *Phase 5*

EXHIBIT 4.2-29 : PHASE 5 (LONG RANGE ONLY) RESIDENTIAL TRIP DISTRIBUTION

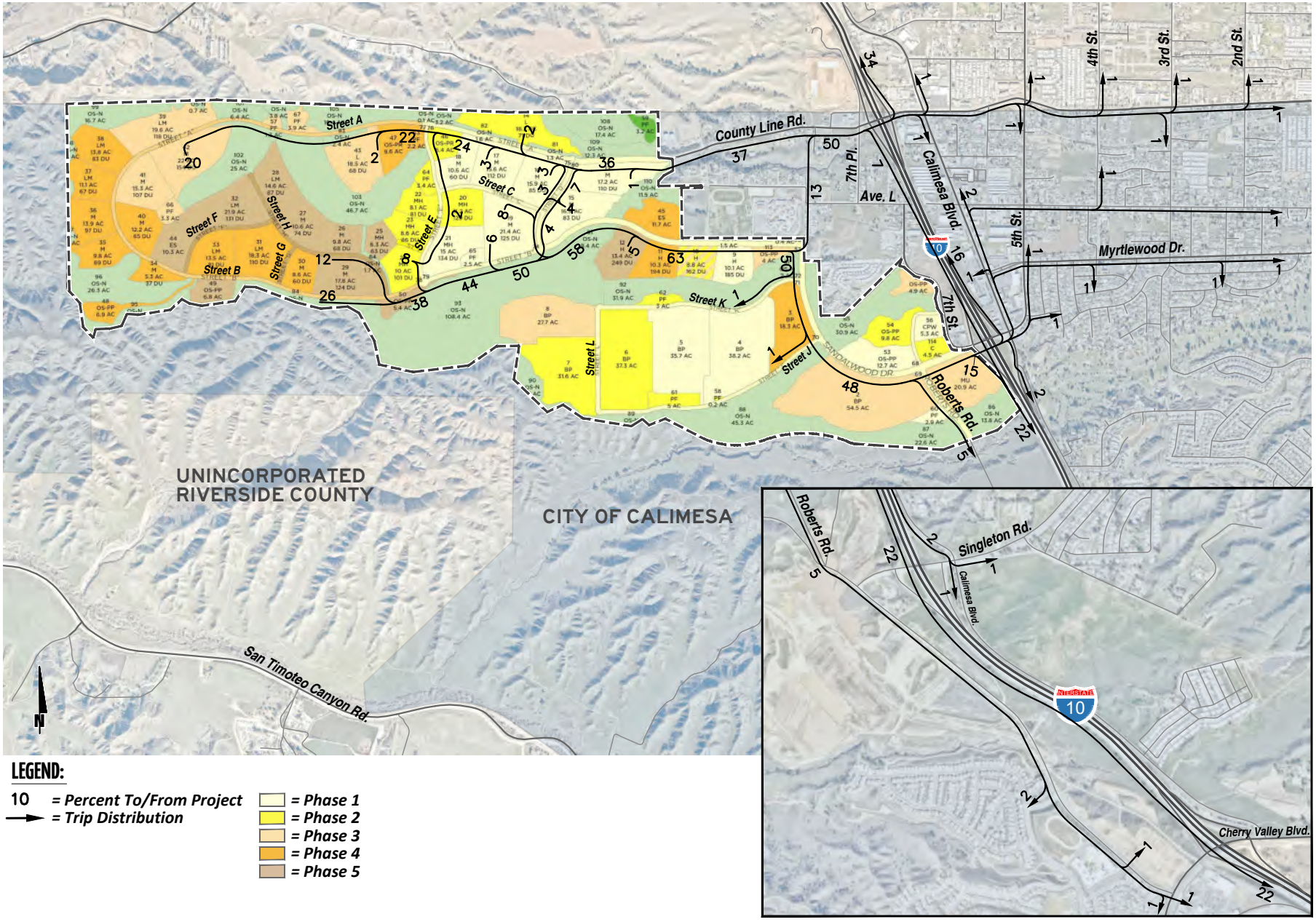
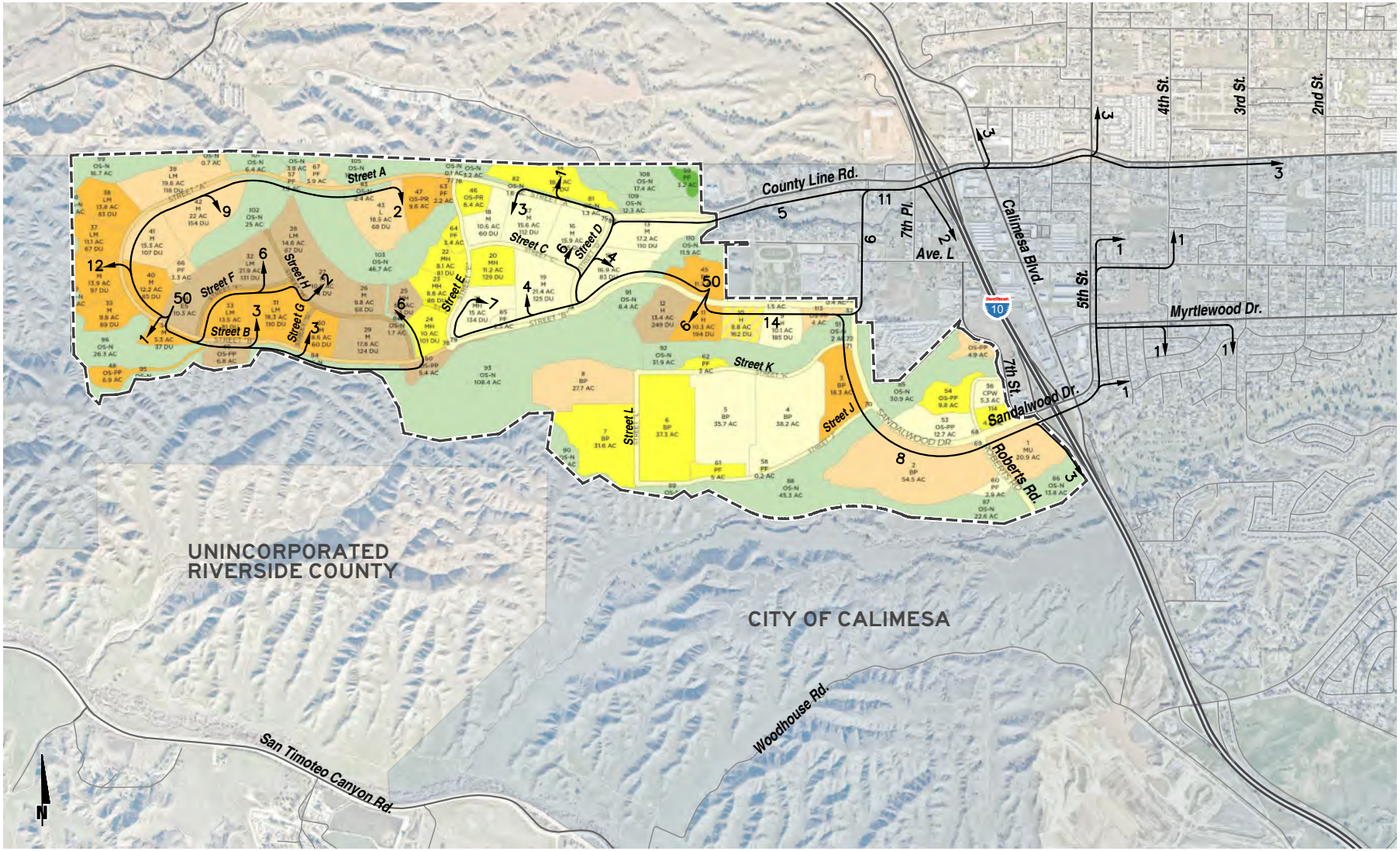


EXHIBIT 4.2-30 : PHASE 5 (LONG RANGE ONLY) SCHOOL TRIP DISTRIBUTION

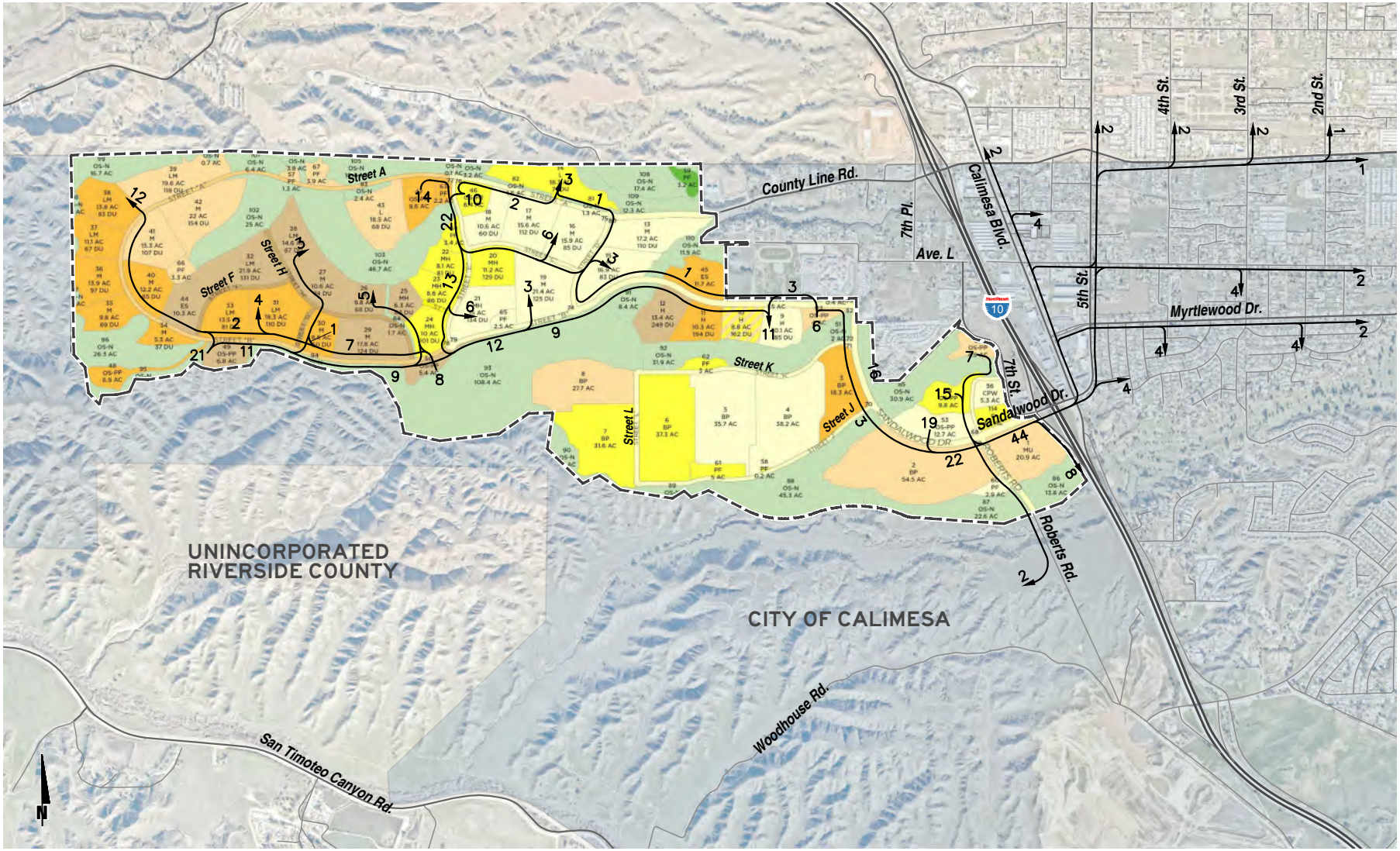


LEGEND:

10 = Percent To/From Project
→ = Trip Distribution

= Phase 1
= Phase 2
= Phase 3
= Phase 4
= Phase 5

EXHIBIT 4.2-31 : PHASE 5 (LONG RANGE ONLY) PARK TRIP DISTRIBUTION



LEGEND:

10 = Percent To/From Project
→ = Trip Distribution

= Phase 1
= Phase 2
= Phase 3
= Phase 4
= Phase 5

EXHIBIT 4.2-32 : PHASE 5 (LONG RANGE ONLY) RETAIL TRIP DISTRIBUTION

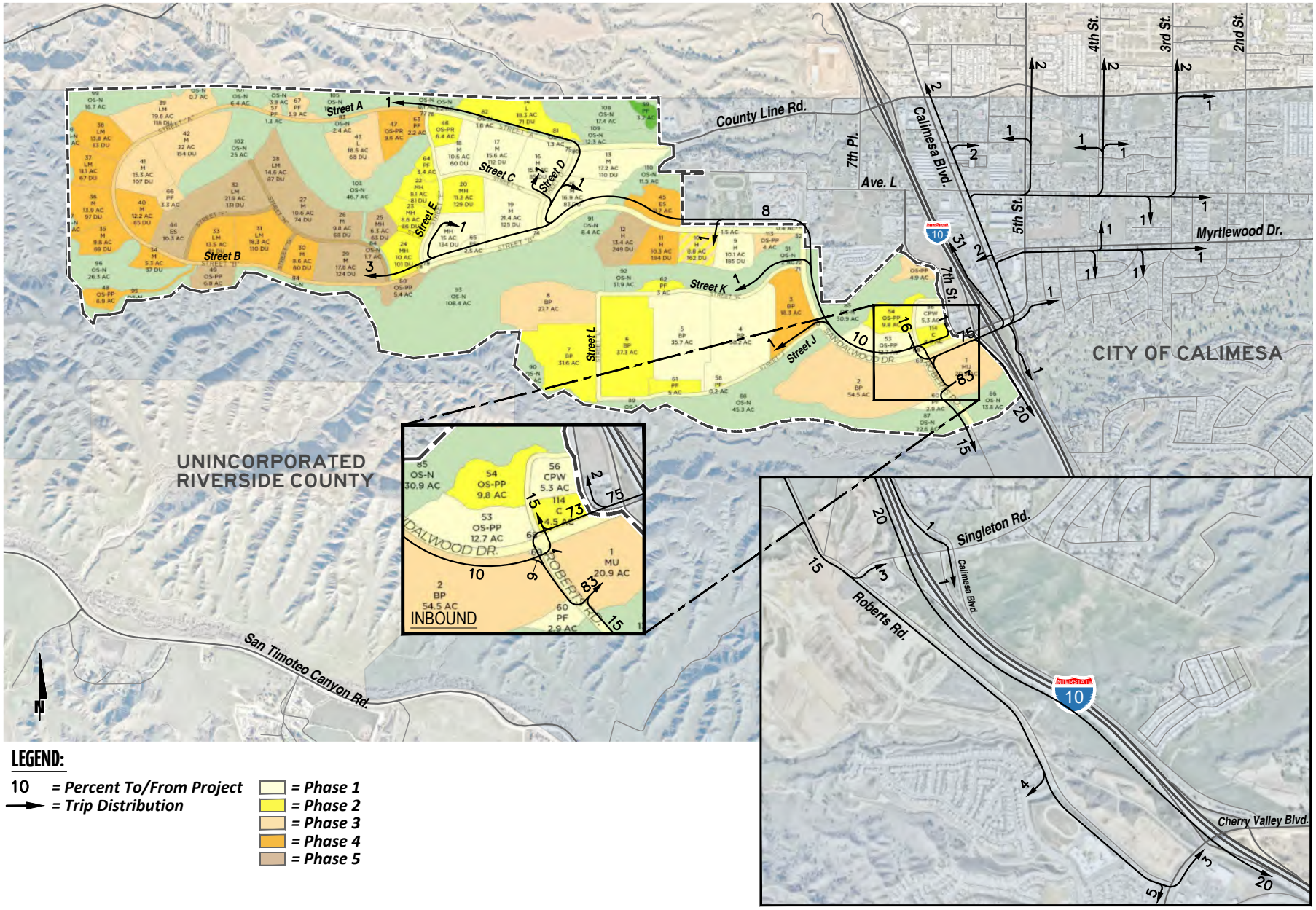
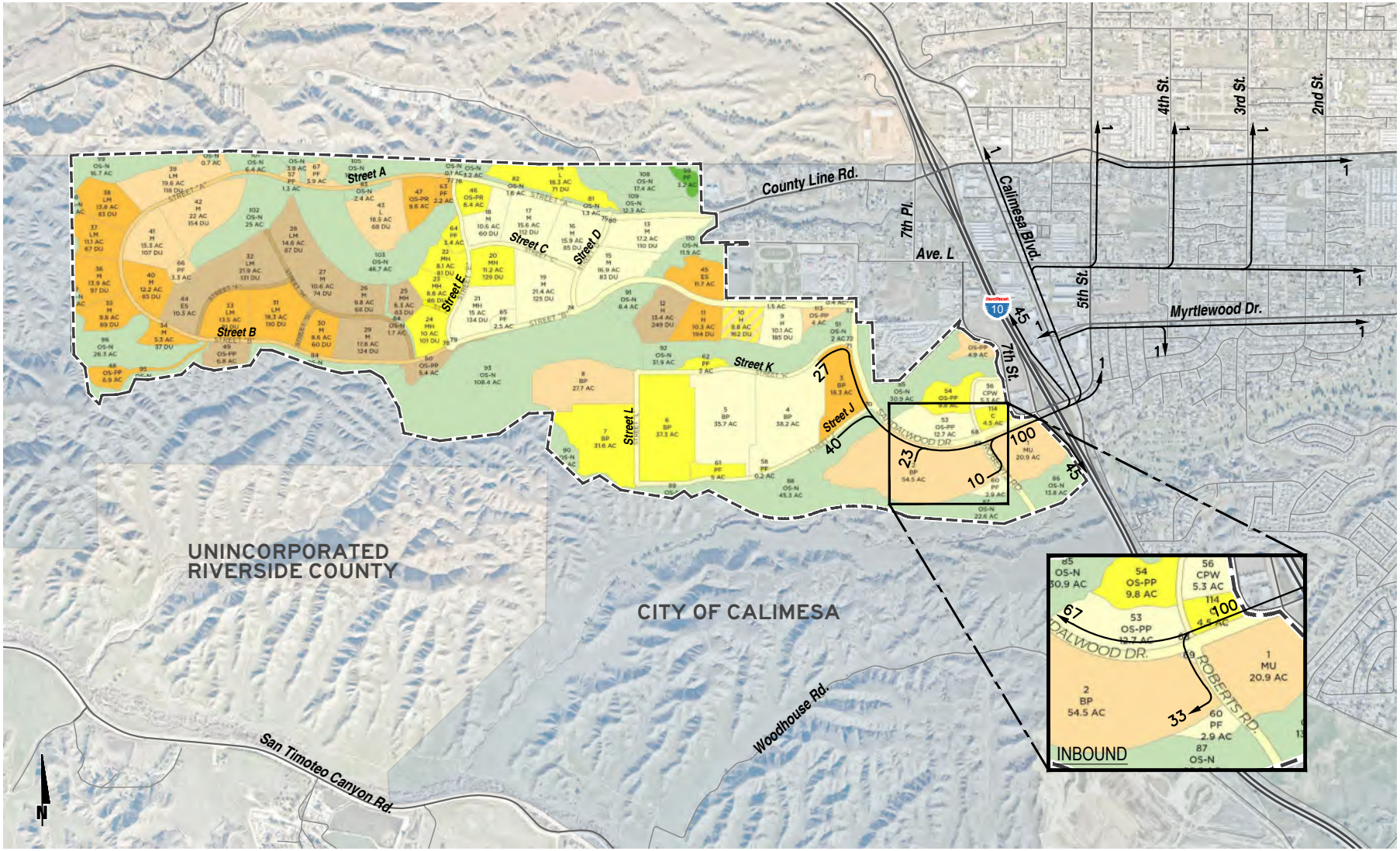


EXHIBIT 4.2-33 : PHASE 5 (LONG RANGE ONLY) INDUSTRIAL (PASSENGER CAR) TRIP DISTRIBUTION

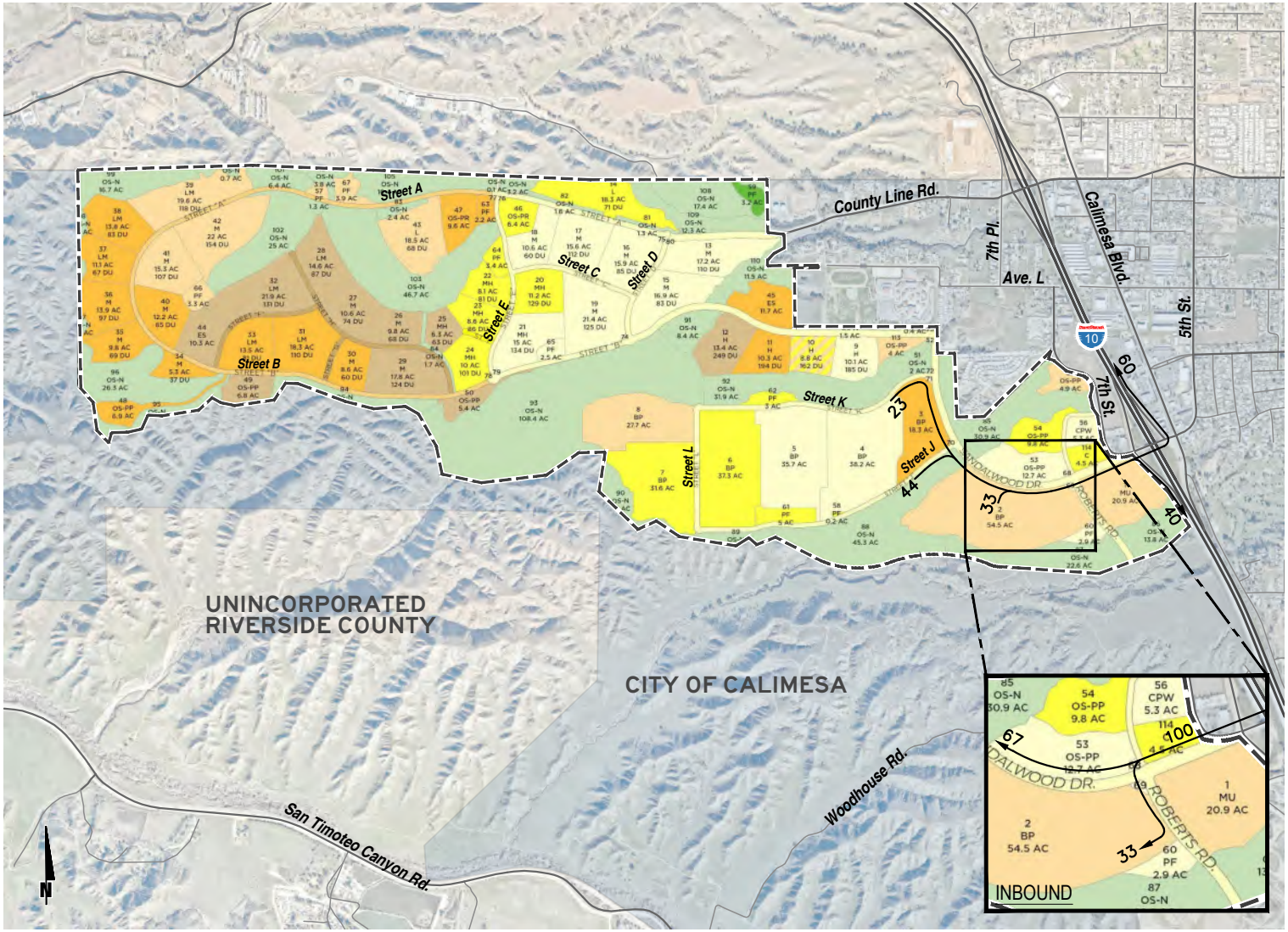


LEGEND:

10 = *Percent To/From Project*
→ = *Trip Distribution*

= *Phase 1*
= *Phase 2*
= *Phase 3*
= *Phase 4*
= *Phase 5*

EXHIBIT 4.2-34 : PHASE 5 (LONG RANGE ONLY) INDUSTRIAL (TRUCK) TRIP DISTRIBUTION

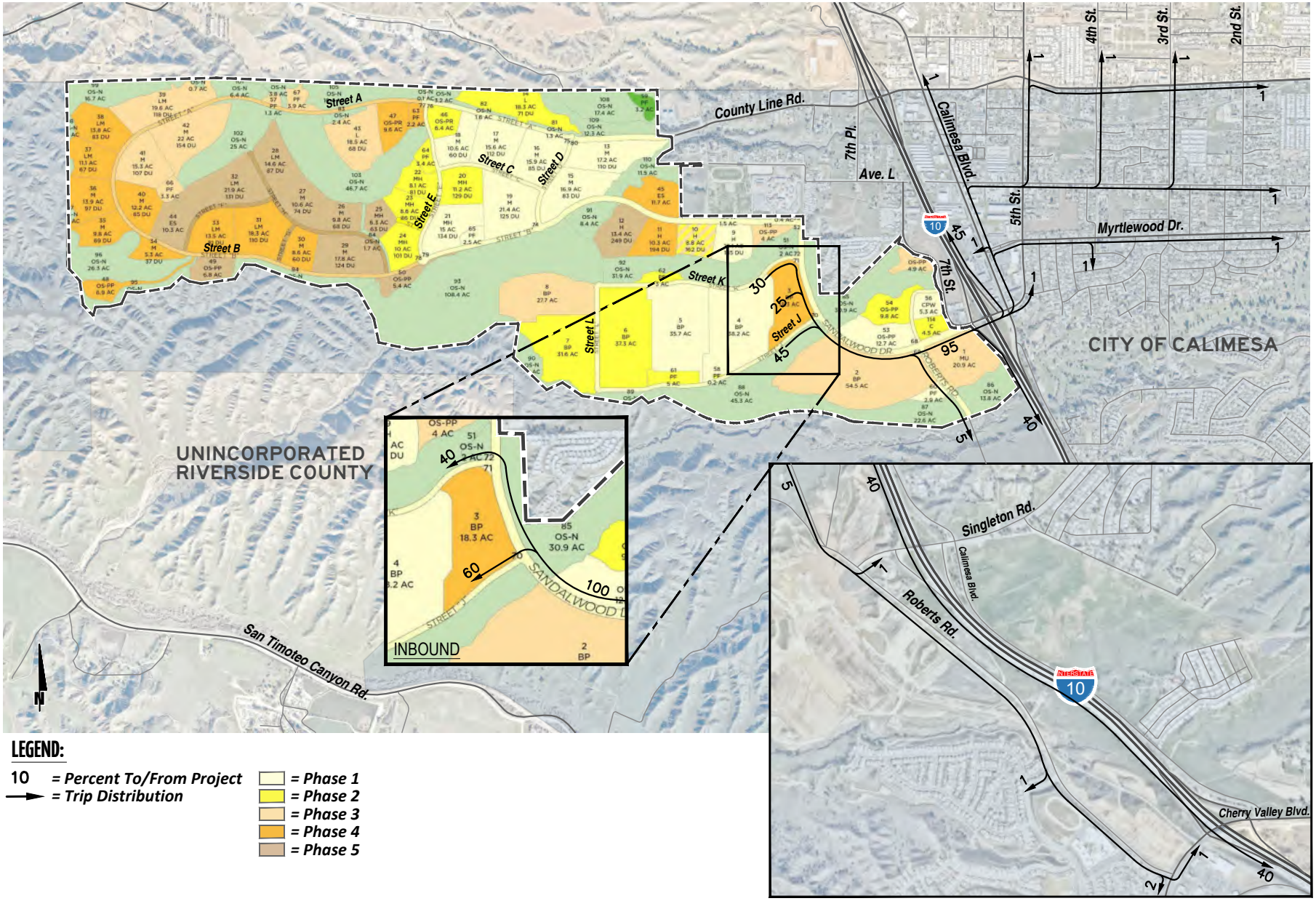


LEGEND:

10 = Percent To/From Project
→ = Trip Distribution

= Phase 1
= Phase 2
= Phase 3
= Phase 4
= Phase 5

EXHIBIT 4.2-35 : PHASE 5 (LONG RANGE ONLY) OFFICE TRIP DISTRIBUTION



LEGEND:

10 = *Percent To/From Project*
→ = *Trip Distribution*

= *Phase 1*
= *Phase 2*
= *Phase 3*
= *Phase 4*
= *Phase 5*

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APPENDIX 4.3: PROJECT ONLY & CUMULATIVE ONLY VOLUME EXHIBITS

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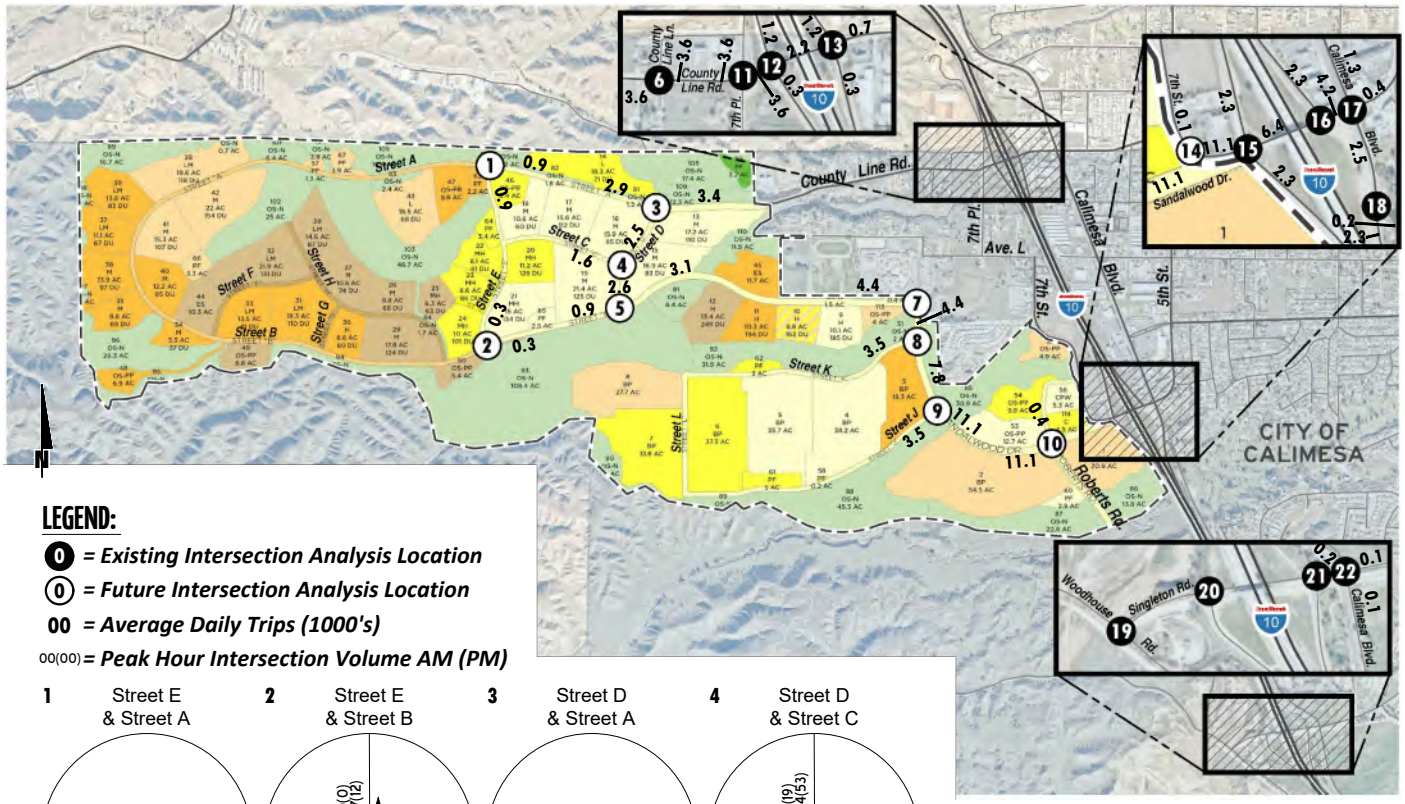
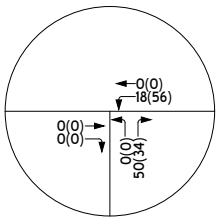
EXHIBIT 4.3-1 : PROJECT (PHASE 1) ONLY TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



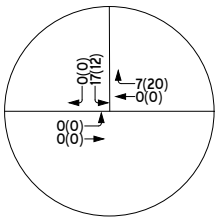
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

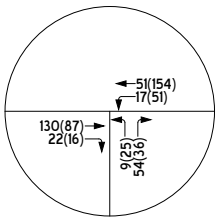
1 Street E & Street A



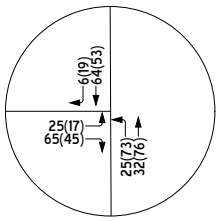
2 Street E & Street B



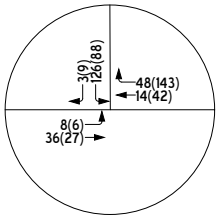
3 Street D & Street A



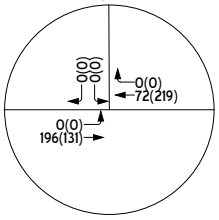
4 Street D & Street C



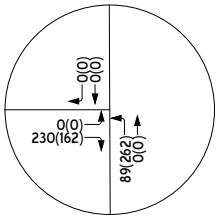
5 Street D & Street B



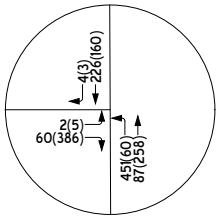
6 County Line Ln. & County Line Rd.



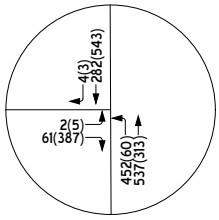
7 Sandalwood Dr. & Street B



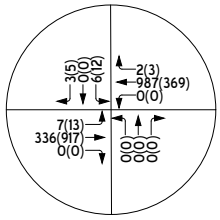
8 Sandalwood Dr. & Street K



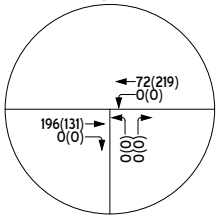
9 Sandalwood Dr. & Street J



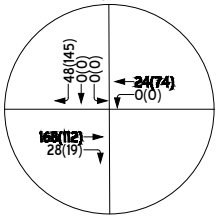
10 Roberts Rd. & Sandalwood Dr.



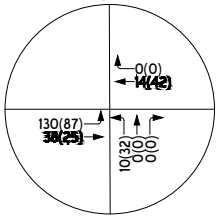
11 7th Pl. & County Line Rd.



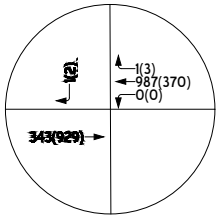
12 I-10 SB Ramps & County Line Rd.



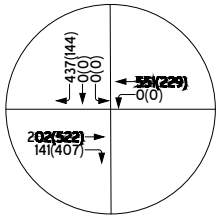
13 I-10 NB Ramps & County Line Rd.



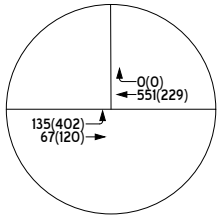
14 7th St. & Sandalwood Dr.



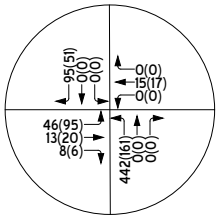
15 I-10 SB Ramps & Sandalwood Dr.



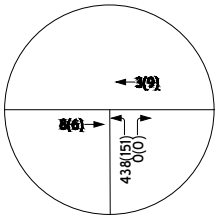
16 I-10 NB Ramps & Sandalwood Dr.



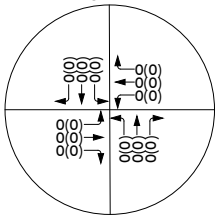
17 Calimesa Bl. & Sandalwood Dr.



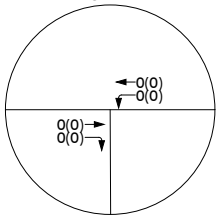
18 Calimesa Bl. & I-10 NB Off-Ramp



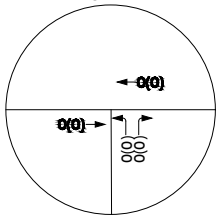
19 Roberts Rd. & Singleton Rd.



20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.

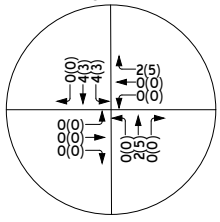
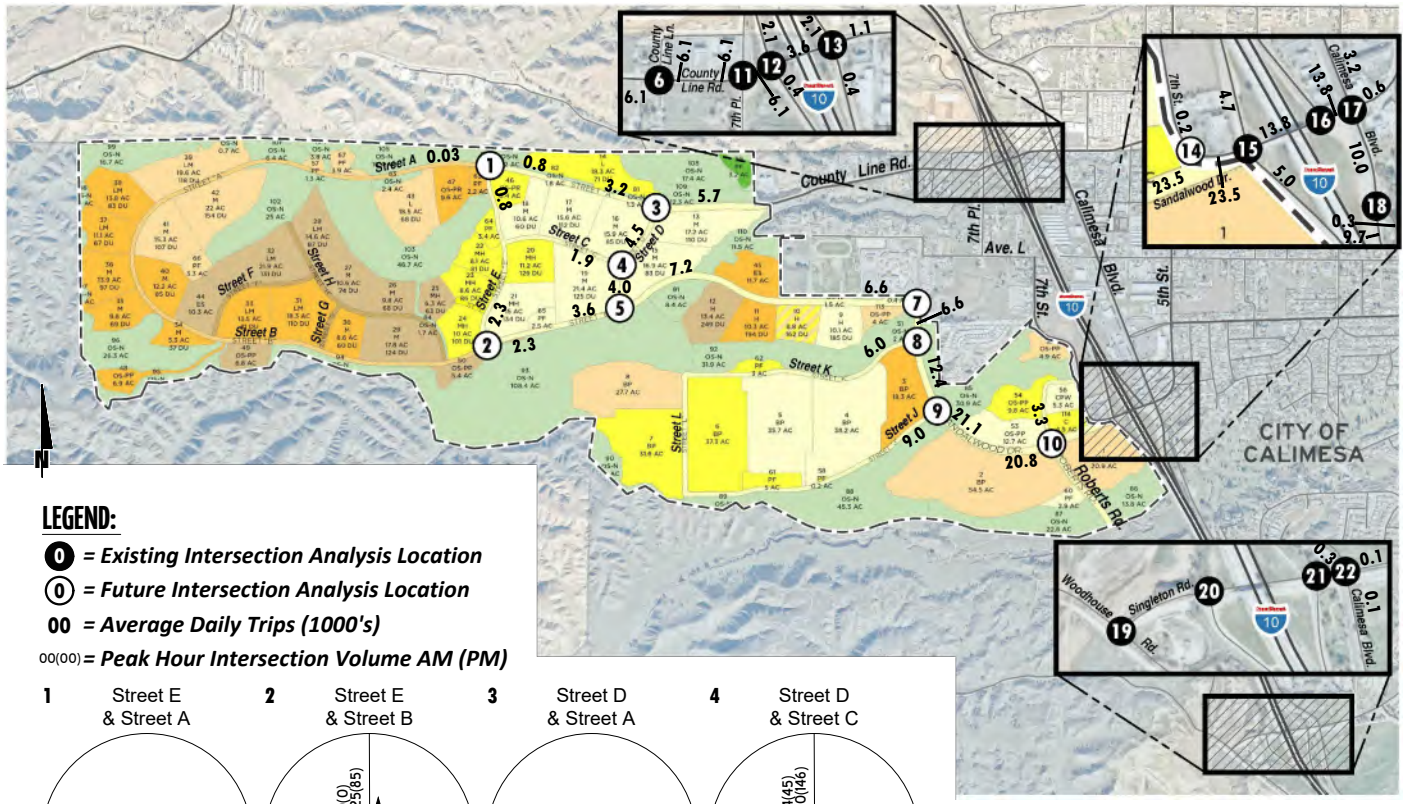


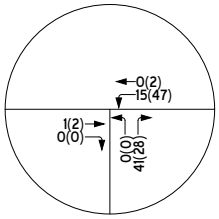
EXHIBIT 4.3-2 : PROJECT (PHASE 2) ONLY TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



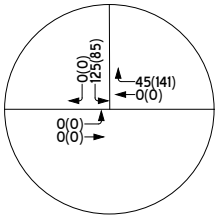
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

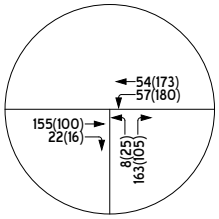
1 Street E & Street A



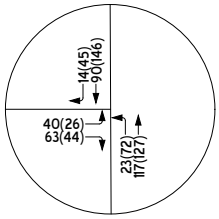
2 Street E & Street B



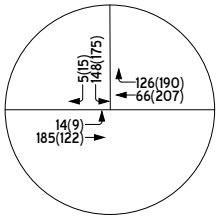
3 Street D & Street A



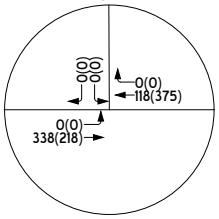
4 Street D & Street C



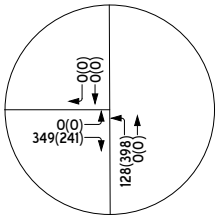
5 Street D & Street B



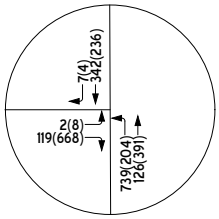
6 County Line Ln. & County Line Rd.



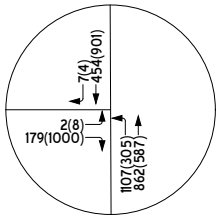
7 Sandalwood Dr. & Street B



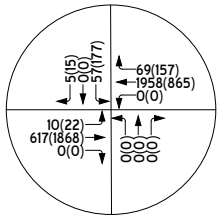
8 Sandalwood Dr. & Street K



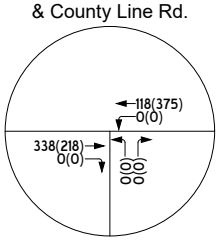
9 Sandalwood Dr. & Street J



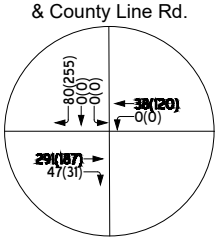
10 Roberts Rd. & Sandalwood Dr.



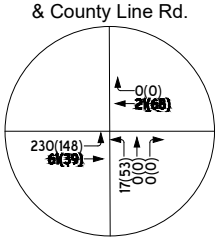
11 7th Pl. & County Line Rd.



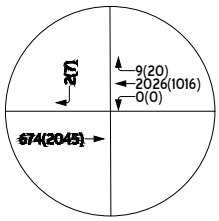
12 I-10 SB Ramps & County Line Rd.



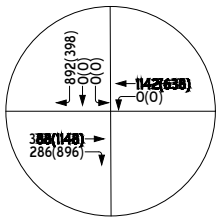
13 I-10 NB Ramps & County Line Rd.



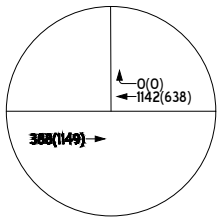
14 7th St. & Sandalwood Dr.



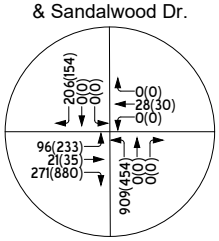
15 I-10 SB Ramps & Sandalwood Dr.



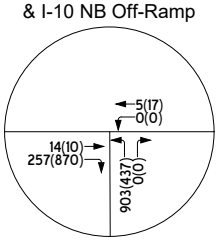
16 I-10 NB Ramps & Sandalwood Dr.



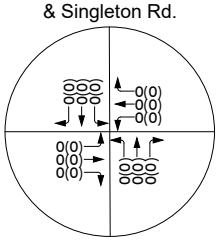
17 Calimesa Bl. & Sandalwood Dr.



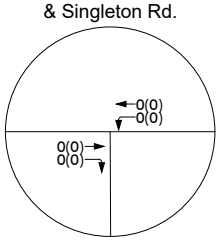
18 Calimesa Bl. & I-10 NB Off-Ramp



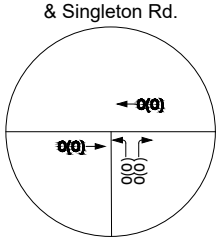
19 Roberts Rd. & Singleton Rd.



20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.

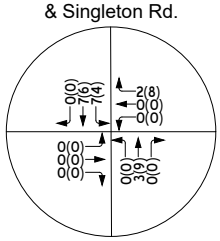
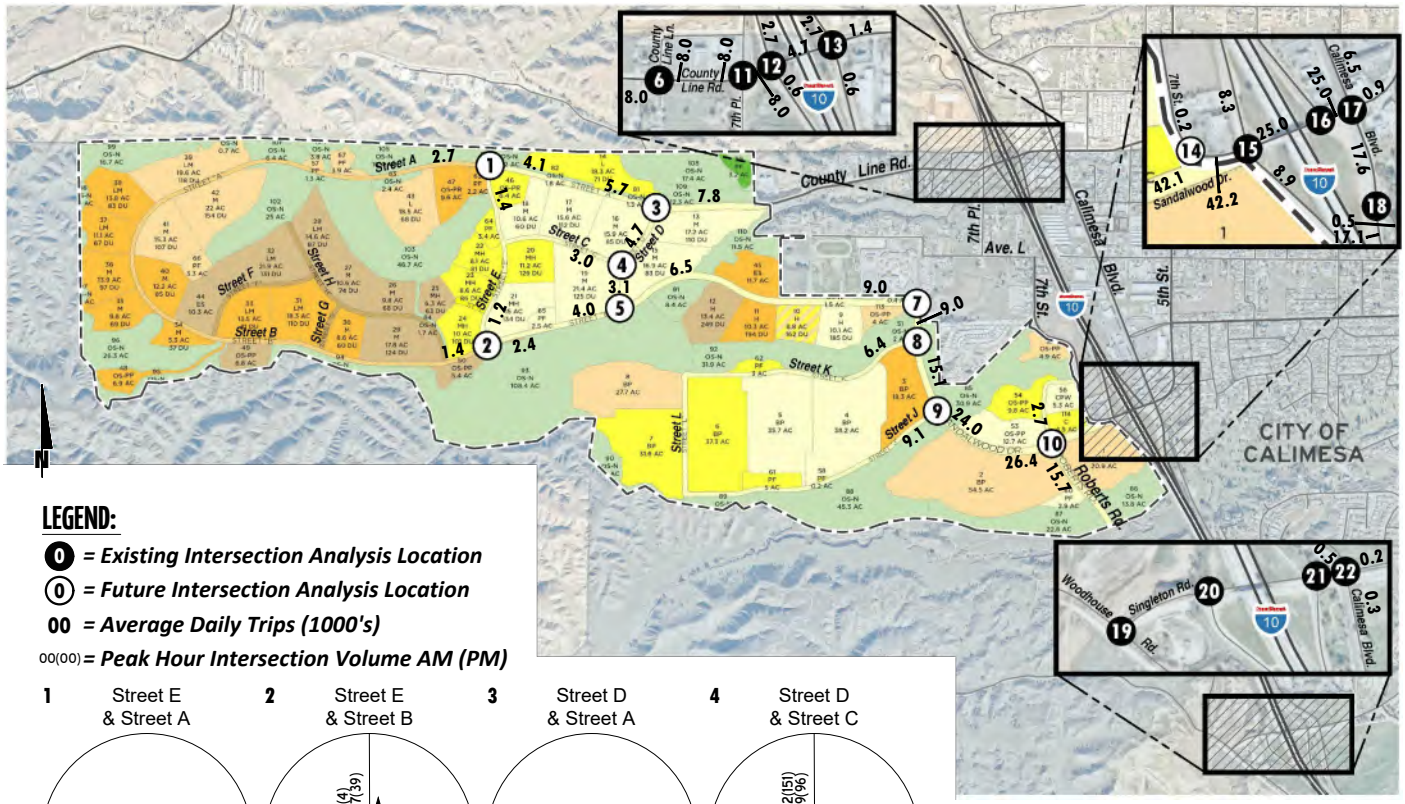


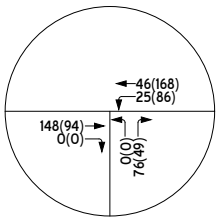
EXHIBIT 4.3-3 : PROJECT (PHASE 3) ONLY TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



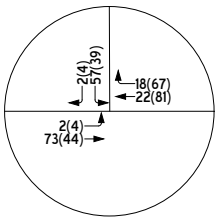
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

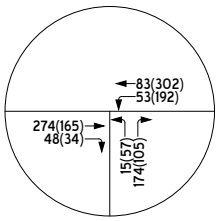
1 Street E & Street A



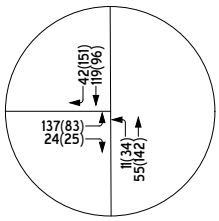
2 Street E & Street B



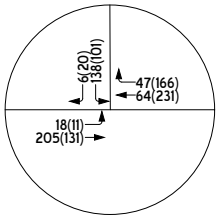
3 Street D & Street A



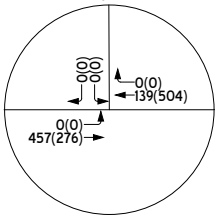
4 Street D & Street C



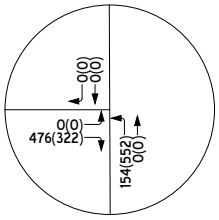
5 Street D & Street B



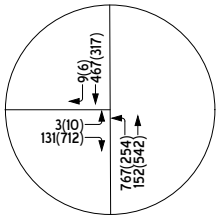
6 County Line Ln. & County Line Rd.



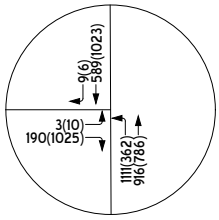
7 Sandalwood Dr. & Street B



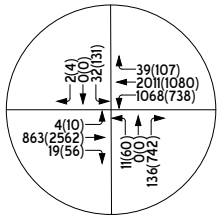
8 Sandalwood Dr. & Street K



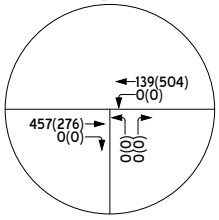
9 Sandalwood Dr. & Street J



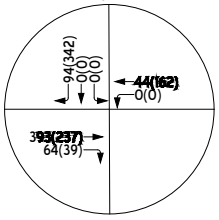
10 Roberts Rd. & Sandalwood Dr.



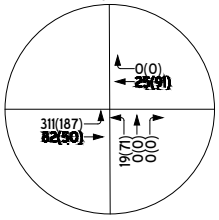
11 7th Pl. & County Line Rd.



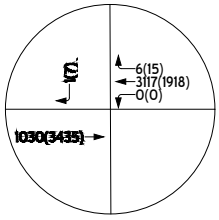
12 I-10 SB Ramps & County Line Rd.



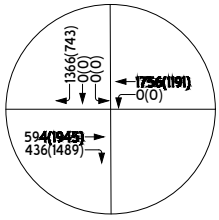
13 I-10 NB Ramps & County Line Rd.



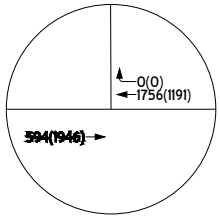
14 7th St. & Sandalwood Dr.



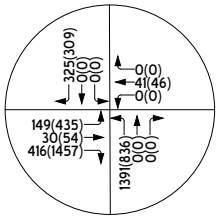
15 I-10 SB Ramps & Sandalwood Dr.



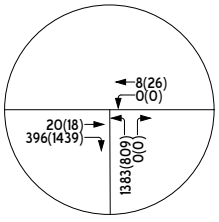
16 I-10 NB Ramps & Sandalwood Dr.



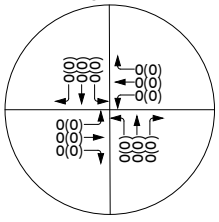
17 Calimesa Bl. & Sandalwood Dr.



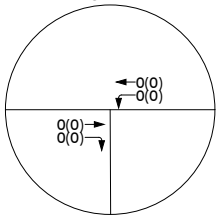
18 Calimesa Bl. & I-10 NB Off-Ramp



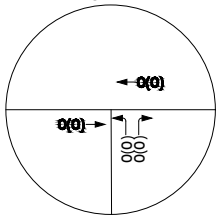
19 Roberts Rd. & Singleton Rd.



20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.

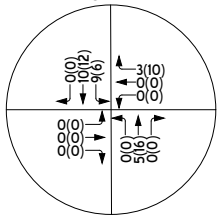
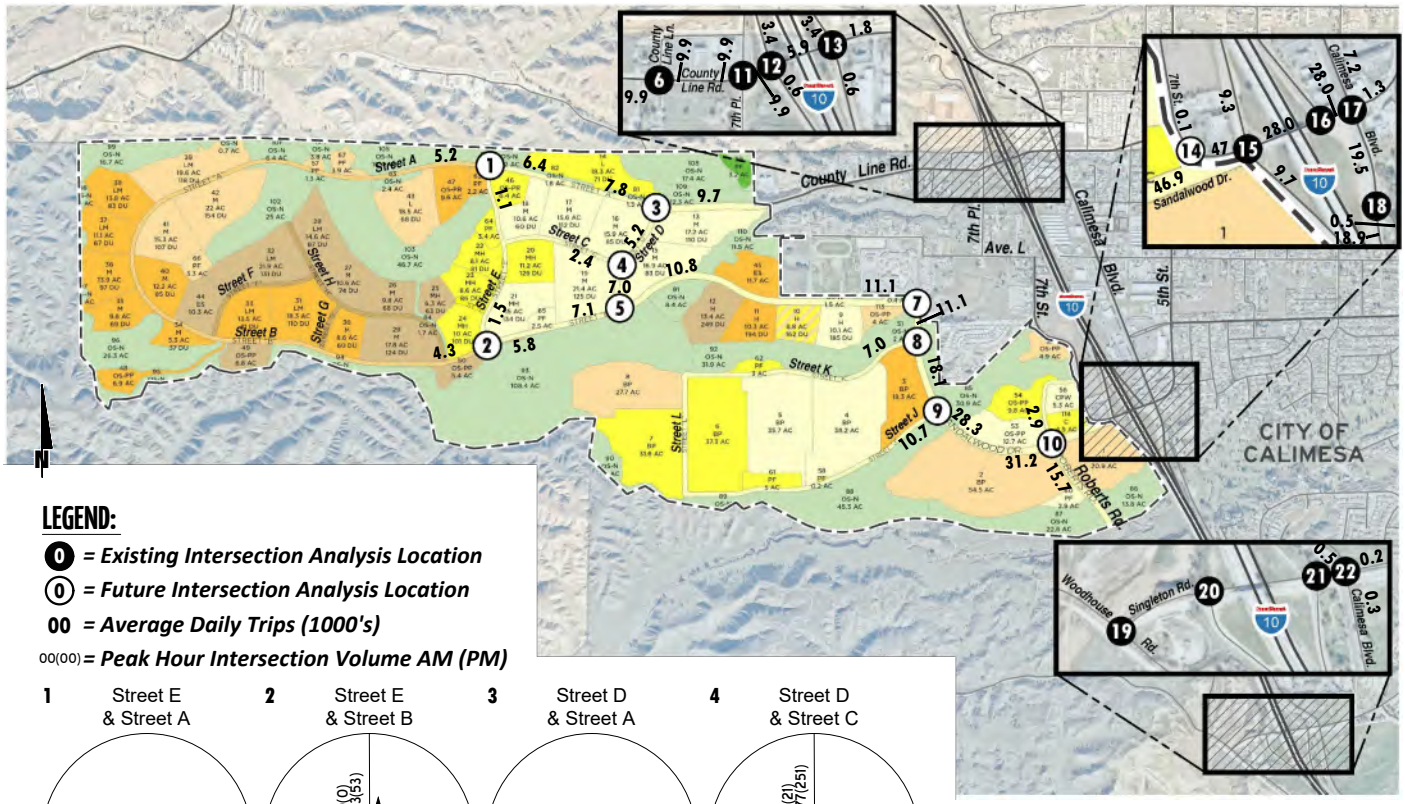


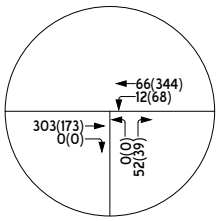
EXHIBIT 4.3-4 : PROJECT (PHASE 4) ONLY TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



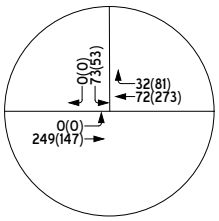
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

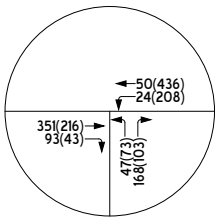
1 Street E & Street A



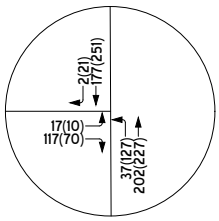
2 Street E & Street B



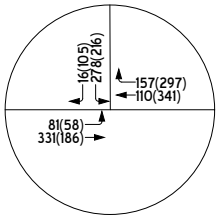
3 Street D & Street A



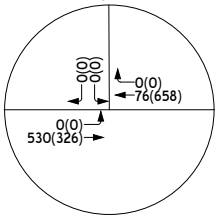
4 Street D & Street C



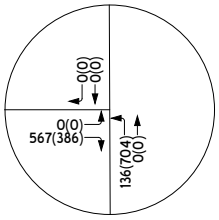
5 Street D & Street B



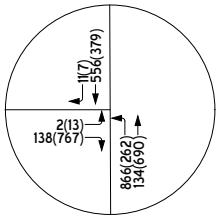
6 County Line Ln. & County Line Rd.



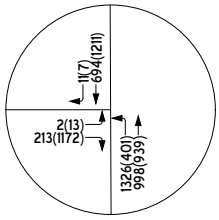
7 Sandalwood Dr. & Street B



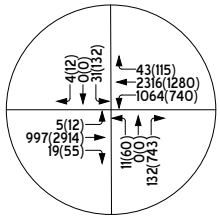
8 Sandalwood Dr. & Street K



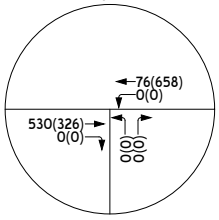
9 Sandalwood Dr. & Street J



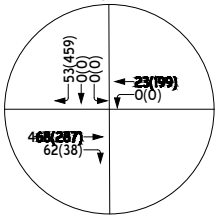
10 Roberts Rd. & Sandalwood Dr.



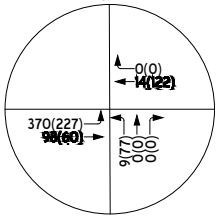
11 7th Pl. & County Line Rd.



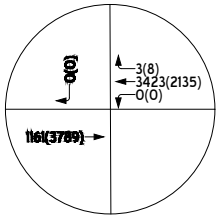
12 I-10 SB Ramps & County Line Rd.



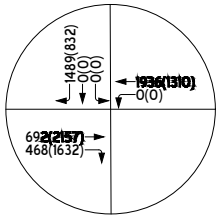
13 I-10 NB Ramps & County Line Rd.



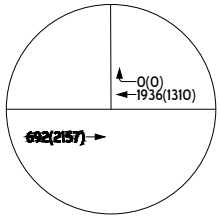
14 7th St. & Sandalwood Dr.



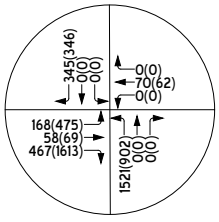
15 I-10 SB Ramps & Sandalwood Dr.



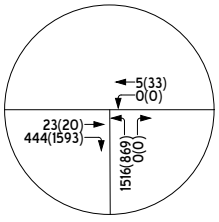
16 I-10 NB Ramps & Sandalwood Dr.



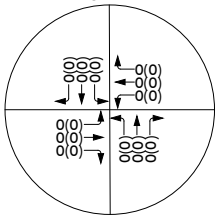
17 Calimesa Bl. & Sandalwood Dr.



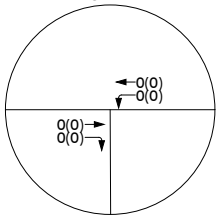
18 Calimesa Bl. & I-10 NB Off-Ramp



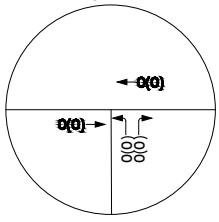
19 Roberts Rd. & Singleton Rd.



20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.

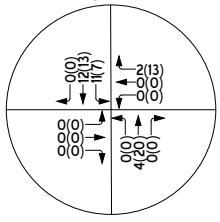
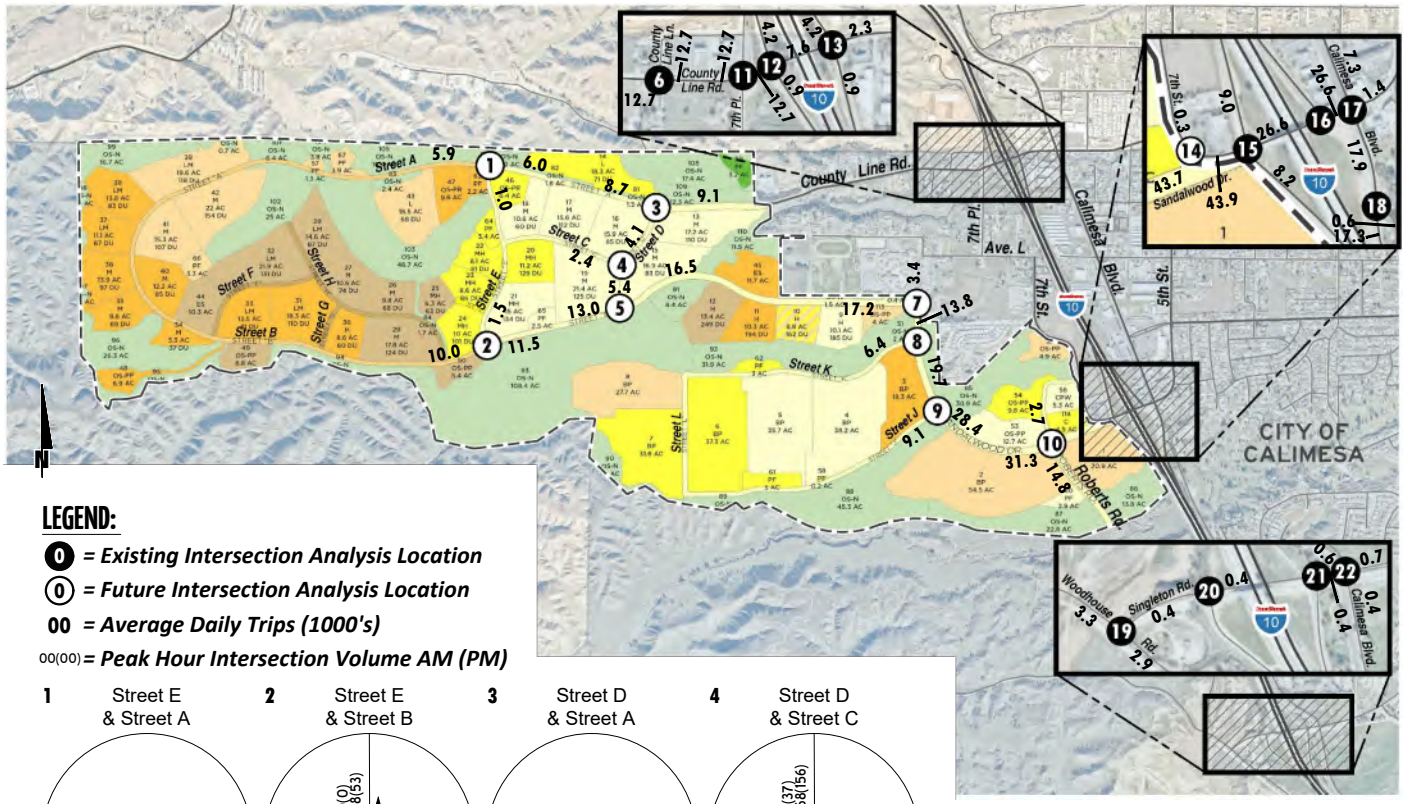


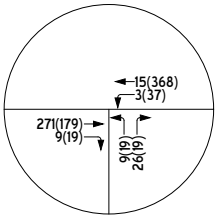
EXHIBIT 4.3-5 : PROJECT (PROJECT BUILDOUT) ONLY TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



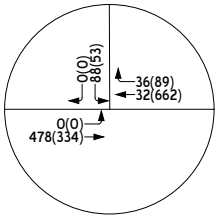
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

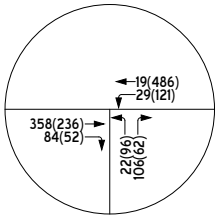
1 Street E & Street A



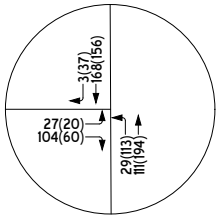
2 Street E & Street B



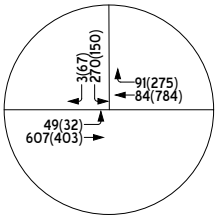
3 Street D & Street A



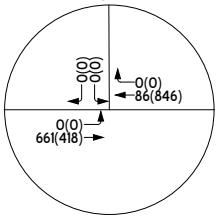
4 Street D & Street C



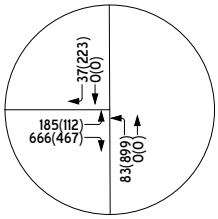
5 Street D & Street B



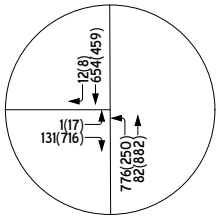
6 County Line Ln. & County Line Rd.



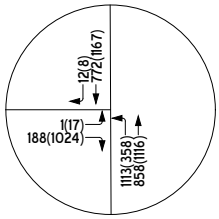
7 Sandalwood Dr. & Street B



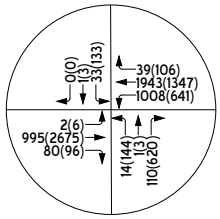
8 Sandalwood Dr. & Street K



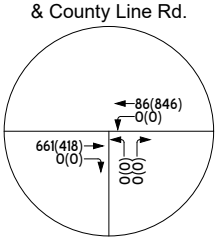
9 Sandalwood Dr. & Street J



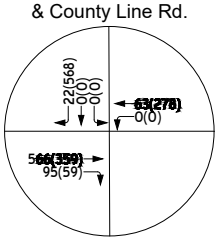
10 Roberts Rd. & Sandalwood Dr.



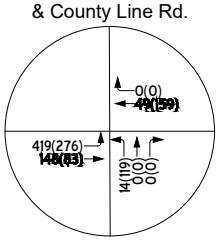
11 7th Pl. & County Line Rd.



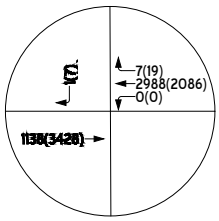
12 I-10 SB Ramps & County Line Rd.



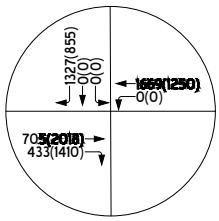
13 I-10 NB Ramps & County Line Rd.



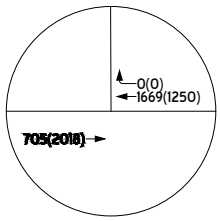
14 7th St. & Sandalwood Dr.



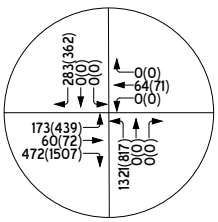
15 I-10 SB Ramps & Sandalwood Dr.



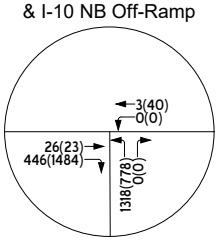
16 I-10 NB Ramps & Sandalwood Dr.



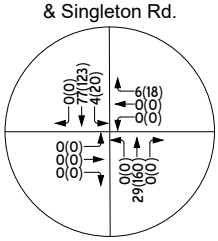
17 Calimesa Bl. & Sandalwood Dr.



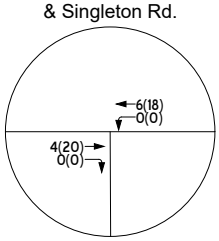
18 Calimesa Bl. & I-10 NB Off-Ramp



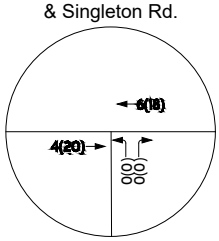
19 Roberts Rd. & Singleton Rd.



20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.

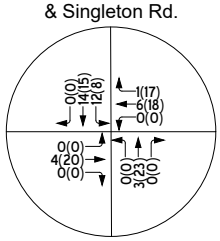
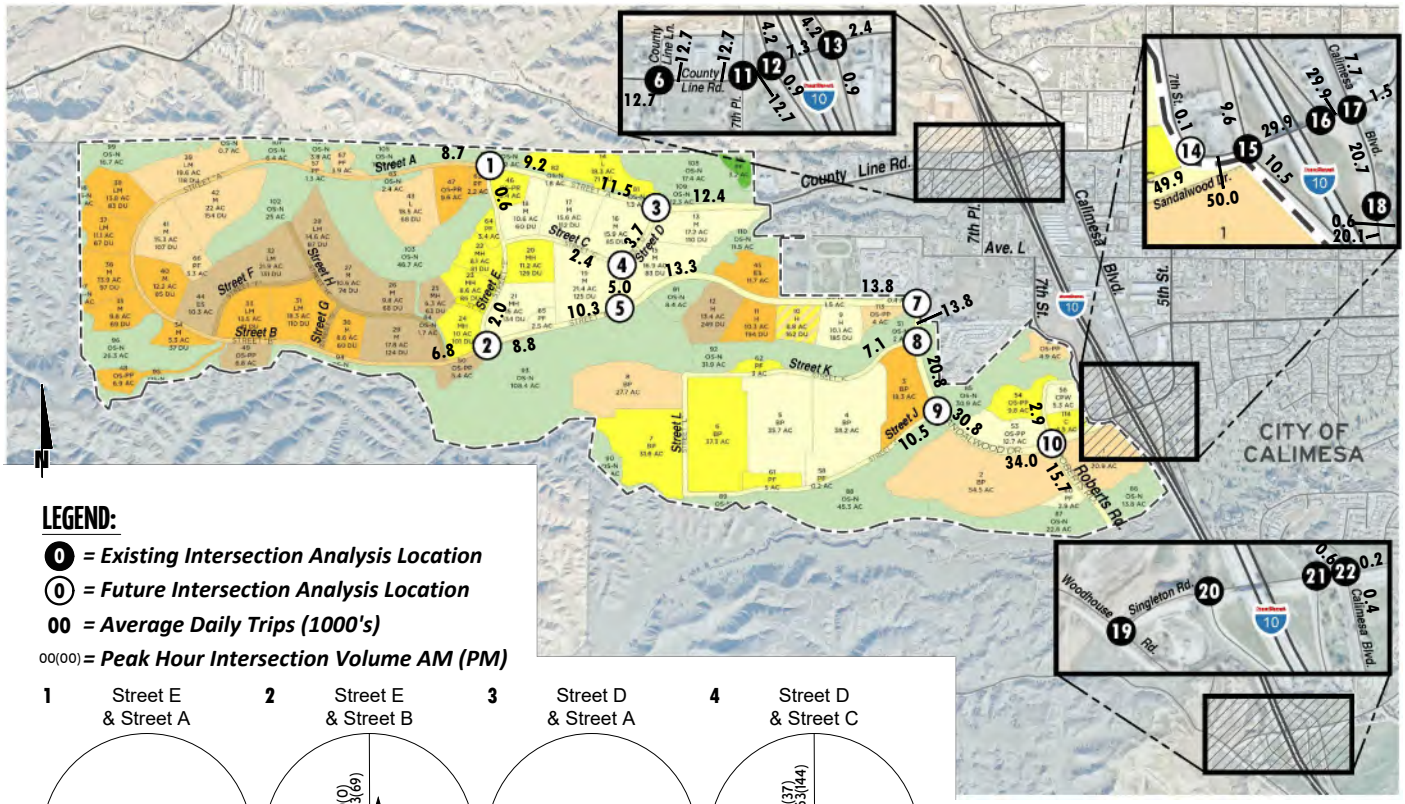


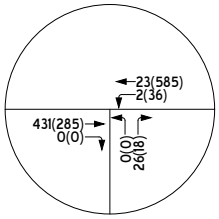
EXHIBIT 4.3-6 : PROJECT (E+P PROJECT BUILDOUT) ONLY TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



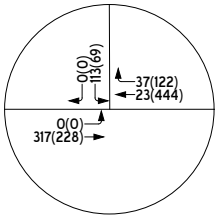
LEGEND:

- **0** = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- **00** = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

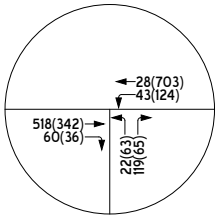
1 Street E & Street A



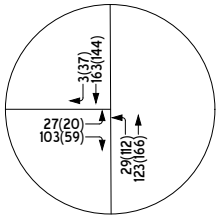
2 Street E & Street B



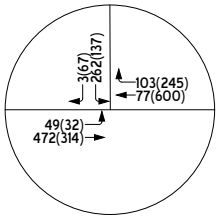
3 Street D & Street A



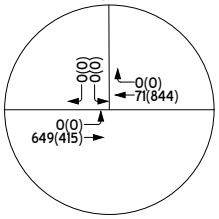
4 Street D & Street C



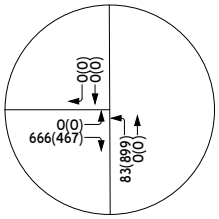
5 Street D & Street B



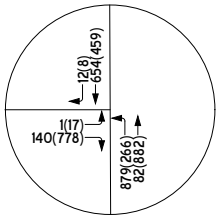
6 County Line Ln. & County Line Rd.



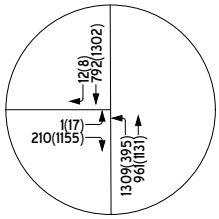
7 Sandalwood Dr. & Street B



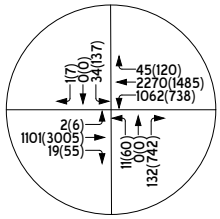
8 Sandalwood Dr. & Street K



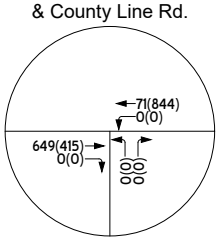
9 Sandalwood Dr. & Street J



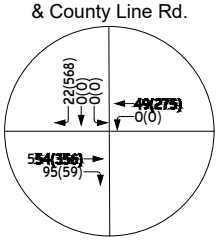
10 Roberts Rd. & Sandalwood Dr.



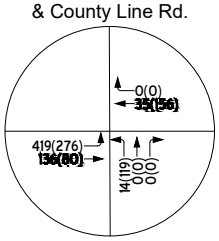
11 7th Pl. & County Line Rd.



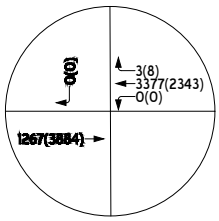
12 I-10 SB Ramps & County Line Rd.



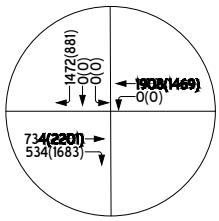
13 I-10 NB Ramps & County Line Rd.



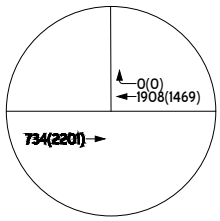
14 7th St. & Sandalwood Dr.



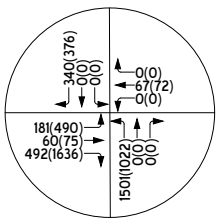
15 I-10 SB Ramps & Sandalwood Dr.



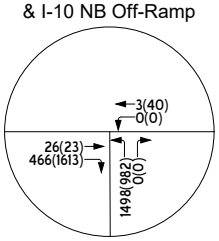
16 I-10 NB Ramps & Sandalwood Dr.



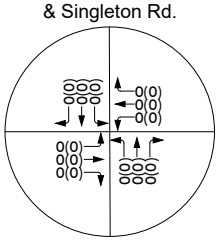
17 Calimesa Bl. & Sandalwood Dr.



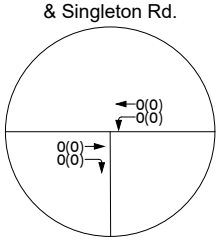
18 Calimesa Bl. & I-10 NB Off-Ramp



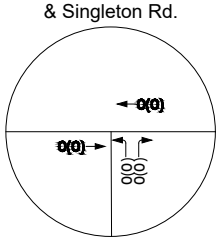
19 Roberts Rd. & Singleton Rd.



20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.

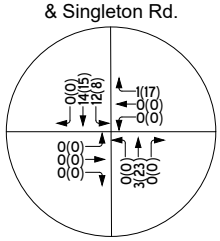
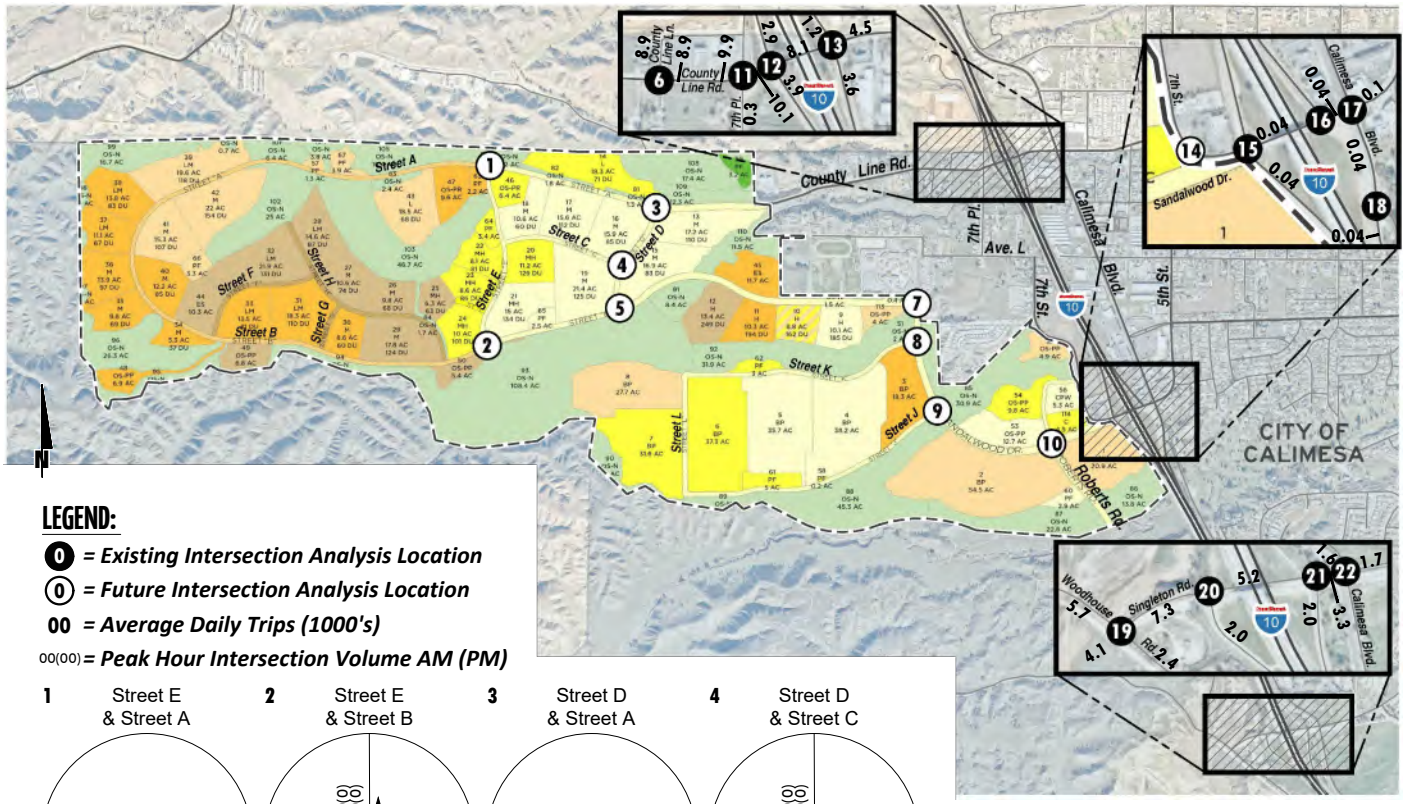


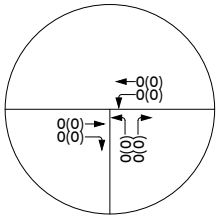
EXHIBIT 4.3-7 : CUMULATIVE ONLY TRAFFIC VOLUMES (IN ACTUAL VEHICLES)



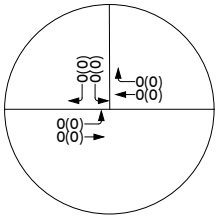
LEGEND:

- 0 = *Existing Intersection Analysis Location*
- (0) = *Future Intersection Analysis Location*
- 00 = *Average Daily Trips (1000's)*
- 00(00) = *Peak Hour Intersection Volume AM (PM)*

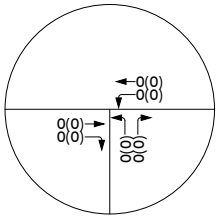
1 Street E & Street A



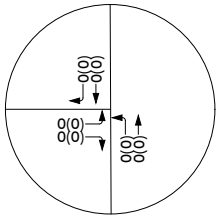
2 Street E & Street B



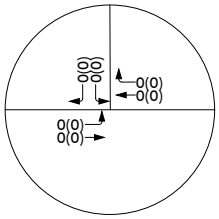
3 Street D & Street A



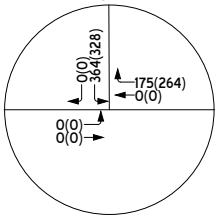
4 Street D & Street C



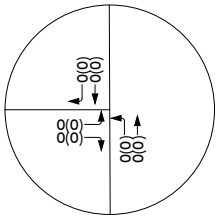
5 Street D & Street B



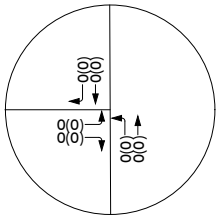
6 County Line Ln. & County Line Rd.



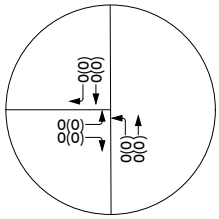
7 Sandalwood Dr. & Street B



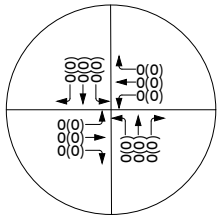
8 Sandalwood Dr. & Street K



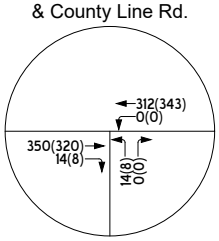
9 Sandalwood Dr. & Street J



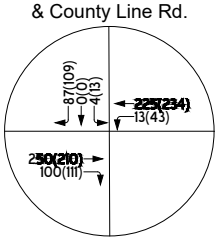
10 Roberts Rd. & Sandalwood Dr.



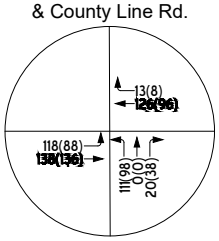
11 7th Pl. & County Line Rd.



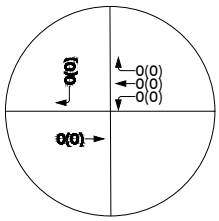
12 I-10 SB Ramps & County Line Rd.



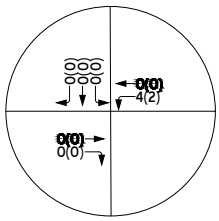
13 I-10 NB Ramps & County Line Rd.



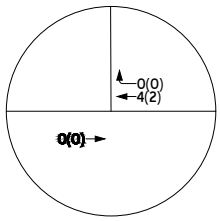
14 7th St. & Sandalwood Dr.



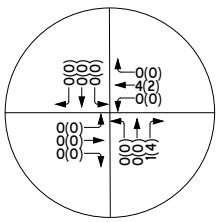
15 I-10 SB Ramps & Sandalwood Dr.



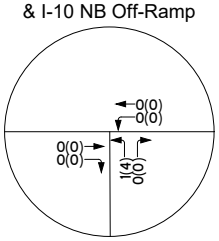
16 I-10 NB Ramps & Sandalwood Dr.



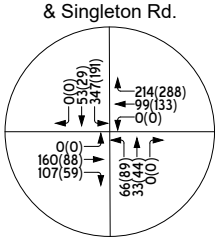
17 Calimesa Bl. & Sandalwood Dr.



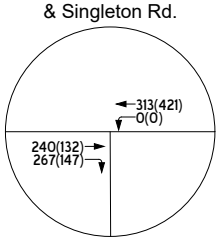
18 Calimesa Bl. & I-10 NB Off-Ramp



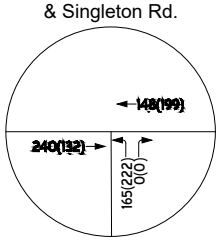
19 Roberts Rd. & Singleton Rd.



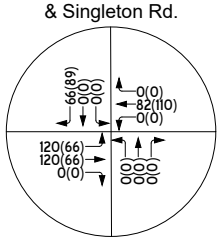
20 I-10 SB Ramps & Singleton Rd.



21 I-10 NB Ramps & Singleton Rd.



22 Calimesa Bl. & Singleton Rd.



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APPENDIX 4.4: POST PROCESSING WORKSHEETS

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Project:	Mesa Verde TA	Job #:	15218
Scenario:	Horizon Year (2040)	Analyst:	JB
		Date:	4/25/24

LOCATION: Sandalwood Dr./County Line Ln. & County Line Rd.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1	16	15	1500%	1	0	-1	-100%
	Right	2	69	67	3350%	2	80	78	3900%
	NB Total	3	85	82	2733%	3	80	77	2567%
SOUTH BOUND	Left	2	11	9	450%	2	0	-2	-100%
	Through	1	0	-1	-100%	1	0	-1	-100%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	3	11	8	267%	3	0	-3	-100%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	1	10	9	900%	1	0	-1	-100%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	1	274	273	27300%	1	0	-1	-100%
	WB Total	2	284	282	14100%	2	0	-2	-100%
TOTAL ENTERING VOLUME		8	380	372	4650%	8	80	72	900%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	11	0			
North Leg	Outbound	290	0			
North Leg	**TOTAL**	**301**	**0**	**38%**	**0%**	**800**
South Leg	Inbound	85	80			
South Leg	Outbound	10	0			
South Leg	**TOTAL**	**95**	**80**	**12%**	**10%**	**794**
East Leg	Inbound	284	0			
East Leg	Outbound	80	80			
East Leg	**TOTAL**	**364**	**80**	**23%**	**5%**	**1,594**
West Leg	Inbound	0	0			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
OVERALL TOTAL		***760***	***160***	**24%**	***5%***	***3,188***

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Project:	Mesa Verde TA	Job #:	15218
Scenario:	Horizon Year (2045) Without Project	Analyst:	JB
		Date:	4/25/24

LOCATION: I-10 EB Ramps & County Line Rd.
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
SOUTH BOUND	Left	229	244	15	7%	379	214	-165	-44%
	Through	5	5	0	0%	3	2	-1	-33%
	Right	50	32	-18	-36%	50	25	-25	-50%
	SB Total	284	281	-3	-1%	432	241	-191	-44%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	158	426	268	170%	101	285	184	182%
	Right	30	76	46	153%	34	96	62	182%
	EB Total	188	502	314	167%	135	381	246	182%
WEST BOUND	Left	307	729	422	137%	232	360	128	55%
	Through	133	198	65	49%	81	110	29	36%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	440	927	487	111%	313	470	157	50%
TOTAL ENTERING VOLUME		912	1,710	798	88%	880	1,092	212	24%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	281	241			
North Leg	Outbound	0	0			
North Leg	**TOTAL**	**281**	**241**	**13%**	**11%**	**2,158**
South Leg	Inbound	0	0			
South Leg	Outbound	810	458			
South Leg	**TOTAL**	**810**	**458**	**9%**	**5%**	**9,430**
East Leg	Inbound	927	470			
East Leg	Outbound	670	499			
East Leg	**TOTAL**	**1,597**	**969**	**10%**	**6%**	**15,614**
West Leg	Inbound	502	381			
West Leg	Outbound	230	135			
West Leg	**TOTAL**	**732**	**516**	**13%**	**9%**	**5,736**
OVERALL TOTAL		***3,420***	***2,184***	**10%**	***7%***	***32,938***

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Project:	Mesa Verde TA	Job #:	15218
Scenario:	Horizon Year (2045) Without Project	Analyst:	JB
		Date:	4/25/24

LOCATION: I-10 WB Ramps & County Line Rd.
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	10	61	51	510%	12	35	23	192%
	Through	3	5	2	67%	1	3	2	200%
	Right	86	38	-48	-56%	208	374	166	80%
	NB Total	99	104	5	5%	221	412	191	86%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
EAST BOUND	Left	76	344	268	353%	49	80	31	63%
	Through	311	362	51	16%	431	393	-38	-9%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	387	706	319	82%	480	473	-7	-1%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	430	899	469	109%	301	445	144	48%
	Right	641	371	-270	-42%	301	489	188	62%
	WB Total	1,071	1,270	199	19%	602	934	332	55%
TOTAL ENTERING VOLUME		1,557	2,080	523	34%	1,303	1,819	516	40%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	0	0			
North Leg	Outbound	720	572			
North Leg	**TOTAL**	**720**	**572**	**11%**	**9%**	**6,695**
South Leg	Inbound	104	412			
South Leg	Outbound	0	0			
South Leg	**TOTAL**	**104**	**412**	**2%**	**7%**	**6,075**
East Leg	Inbound	1,270	934			
East Leg	Outbound	400	767			
East Leg	**TOTAL**	**1,670**	**1,701**	**8%**	**8%**	**21,885**
West Leg	Inbound	706	473			
West Leg	Outbound	960	480			
West Leg	**TOTAL**	**1,666**	**953**	**11%**	**6%**	**15,614**
OVERALL TOTAL		***4,160***	***3,638***	***8%***	***7%***	***50,269***

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Project:	Mesa Verde TA	Job #:	15218
Scenario:	Horizon Year (2045) Without Project	Analyst:	JB
		Date:	4/25/24

LOCATION: 7th St. & Sandalwood Dr.
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	71	111	40	56%	6	66	60	1000%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	330	575	245	74%	81	831	750	926%
	NB Total	401	686	285	71%	87	897	810	931%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	34	14	-20	-59%	46	50	4	9%
	Right	70	100	30	43%	9	30	21	233%
	EB Total	104	114	10	10%	55	80	25	45%
WEST BOUND	Left	445	1,027	582	131%	29	108	79	272%
	Through	39	23	-16	-41%	43	55	12	28%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	484	1,050	566	117%	72	163	91	126%
TOTAL ENTERING VOLUME		989	1,850	861	87%	214	1,140	926	433%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	0	0			
North Leg	Outbound	0	0			
North Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
South Leg	Inbound	686	897			
South Leg	Outbound	1,127	138			
South Leg	**TOTAL**	**1,813**	**1,035**	**8%**	**4%**	**23,095**
East Leg	Inbound	1,050	163			
East Leg	Outbound	589	881			
East Leg	**TOTAL**	**1,639**	**1,044**	**7%**	**4%**	**23,921**
West Leg	Inbound	114	80			
West Leg	Outbound	134	121			
West Leg	**TOTAL**	**248**	**201**	**20%**	**16%**	**1,246**
OVERALL TOTAL		***3,700***	***2,280***	***8%***	***5%***	***48,262***

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Project:	Mesa Verde TA	Job #:	15218
Scenario:	Horizon Year (2045) Without Project	Analyst:	JB
		Date:	4/25/24

LOCATION: I-10 EB Ramps & Sandalwood
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
SOUTH BOUND	Left	111	111	0	0%	236	261	25	11%
	Through	6	14	8	133%	3	10	7	233%
	Right	163	668	505	310%	17	259	242	1424%
	SB Total	280	793	513	183%	256	530	274	107%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	322	541	219	68%	91	443	352	387%
	Right	42	168	126	300%	36	547	511	1419%
	EB Total	364	709	345	95%	127	990	863	680%
WEST BOUND	Left	169	286	117	69%	309	387	78	25%
	Through	321	932	611	190%	55	304	249	453%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	490	1,218	728	149%	364	691	327	90%
TOTAL ENTERING VOLUME		1,134	2,720	1586	140%	747	2,211	1464	196%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	793	530			
North Leg	Outbound	0	0			
North Leg	**TOTAL**	**793**	**530**	**8%**	**6%**	**9,596**
South Leg	Inbound	0	0			
South Leg	Outbound	468	944			
South Leg	**TOTAL**	**468**	**944**	**4%**	**8%**	**11,550**
East Leg	Inbound	1,218	691			
East Leg	Outbound	652	704			
East Leg	**TOTAL**	**1,870**	**1,395**	**10%**	**7%**	**19,535**
West Leg	Inbound	709	990			
West Leg	Outbound	1,600	563			
West Leg	**TOTAL**	**2,309**	**1,553**	**10%**	**6%**	**23,921**
OVERALL TOTAL		***5,440***	***4,422***	***8%***	***7%***	***64,602***

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Project:	Mesa Verde TA	Job #:	15218
Scenario:	Horizon Year (2045) Without Project	Analyst:	JB
		Date:	4/25/24

LOCATION: I-10 WB Ramps & Sandalwood
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
EAST BOUND	Left	75	109	34	45%	20	243	223	1115%
	Through	358	480	122	34%	307	393	86	28%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	433	589	156	36%	327	636	309	94%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	490	1,180	690	141%	364	695	331	91%
	Right	392	361	-31	-8%	184	110	-74	-40%
	WB Total	882	1,541	659	75%	548	805	257	47%
TOTAL ENTERING VOLUME		1,315	2,130	815	62%	875	1,441	566	65%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	0	0			
North Leg	Outbound	470	353			
North Leg	**TOTAL**	**470**	**353**	**11%**	**8%**	**4,428**
South Leg	Inbound	0	0			
South Leg	Outbound	0	0			
South Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
East Leg	Inbound	1,541	805			
East Leg	Outbound	480	393			
East Leg	**TOTAL**	**2,021**	**1,198**	**12%**	**7%**	**17,129**
West Leg	Inbound	589	636			
West Leg	Outbound	1,180	695			
West Leg	**TOTAL**	**1,769**	**1,331**	**9%**	**7%**	**19,535**
OVERALL TOTAL		***4,260***	***2,882***	**10%**	***7%***	***41,093***

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Project: Mesa Verde TA
Scenario: Horizon Year (2045) Without Project

Job #: 15218
Analyst: JB
Date: 4/25/24

LOCATION: Calimesa Bl. & Sandalwood Dr.
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	250	487	237	95%	69	149	80	116%
	Through	535	938	403	75%	303	491	188	62%
	Right	95	210	115	121%	131	304	173	132%
	NB Total	880	1,635	755	86%	503	944	441	88%
SOUTH BOUND	Left	13	19	6	46%	27	39	12	44%
	Through	44	41	-3	-7%	165	158	-7	-4%
	Right	345	454	109	32%	334	446	112	34%
	SB Total	402	514	112	28%	526	643	117	22%
EAST BOUND	Left	151	190	39	26%	122	139	17	14%
	Through	164	261	97	59%	97	158	61	63%
	Right	43	42	-1	-2%	88	96	8	9%
	EB Total	358	493	135	38%	307	393	86	28%
WEST BOUND	Left	20	27	7	35%	21	16	-5	-24%
	Through	287	549	262	91%	145	155	10	7%
	Right	30	52	22	73%	25	20	-5	-20%
	WB Total	337	628	291	86%	191	191	0	0%
TOTAL ENTERING VOLUME		1,977	3,270	1293	65%	1,527	2,171	644	42%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	514	643			
North Leg	Outbound	1,180	650			
North Leg	**TOTAL**	**1,694**	**1,293**	**9%**	**7%**	**18,094**
South Leg	Inbound	1,635	944			
South Leg	Outbound	110	270			
South Leg	**TOTAL**	**1,745**	**1,214**	**12%**	**8%**	**14,432**
East Leg	Inbound	628	191			
East Leg	Outbound	490	501			
East Leg	**TOTAL**	**1,118**	**692**	**37%**	**23%**	**3,043**
West Leg	Inbound	493	393			
West Leg	Outbound	1,490	750			
West Leg	**TOTAL**	**1,983**	**1,143**	**12%**	**7%**	**17,129**
OVERALL TOTAL		***6,540***	***4,342***	**12%**	***8%***	***52,698***

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Project:	Mesa Verde TA	Job #:	15218
Scenario:	Horizon Year (2045) Without Project	Analyst:	JB
		Date:	4/25/24

LOCATION: Calimesa Bl. & I-10 WB Off-Ramp
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	182	548	366	201%	337	788	451	134%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	1	1	0	0%	1	2	1	100%
	NB Total	183	549	366	200%	338	790	452	134%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	107	109	2	2%	274	258	-16	-6%
	Right	97	116	19	20%	94	110	16	17%
	EB Total	204	225	21	10%	368	368	0	0%
WEST BOUND	Left	188	174	-14	-7%	52	50	-2	-4%
	Through	511	912	401	78%	114	112	-2	-2%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	699	1,086	387	55%	166	162	-4	-2%
TOTAL ENTERING VOLUME		1,086	1,860	774	71%	872	1,320	448	51%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	0	0			
North Leg	Outbound	0	0			
North Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
South Leg	Inbound	549	790			
South Leg	Outbound	290	160			
South Leg	**TOTAL**	**839**	**950**	**8%**	**9%**	**10,655**
East Leg	Inbound	1,086	162			
East Leg	Outbound	110	260			
East Leg	**TOTAL**	**1,196**	**422**	**21%**	**7%**	**5,777**
West Leg	Inbound	225	368			
West Leg	Outbound	1,460	900			
West Leg	**TOTAL**	**1,685**	**1,268**	**11%**	**8%**	**15,647**
OVERALL TOTAL		***3,720***	***2,640***	**12%**	***8%***	***32,079***

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Project:	Mesa Verde	Job #:	15218
Scenario:	Horizon Year (2040)	Analyst:	JB
		Date:	4/25/24

LOCATION: Roberts Rd. & Singleton Rd.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	1	32	31	3100%	1	31	30	3000%
	Through	2	453	451	22550%	2	146	144	7200%
	Right	1	435	434	43400%	1	736	735	73500%
	NB Total	4	920	916	22900%	4	913	909	22725%
SOUTH BOUND	Left	1	4	3	300%	1	0	-1	-100%
	Through	2	16	14	700%	2	0	-2	-100%
	Right	1	0	-1	-100%	1	0	-1	-100%
	SB Total	4	20	16	400%	4	0	-4	-100%
EAST BOUND	Left	1	41	40	4000%	1	5	4	400%
	Through	2	351	349	17450%	2	214	212	10600%
	Right	1	159	158	15800%	1	35	34	3400%
	EB Total	4	551	547	13675%	4	254	250	6250%
WEST BOUND	Left	1	966	965	96500%	1	585	584	58400%
	Through	2	158	156	7800%	2	149	147	7350%
	Right	1	247	246	24600%	1	79	78	7800%
	WB Total	4	1,371	1,367	34175%	4	813	809	20225%
TOTAL ENTERING VOLUME		16	2,862	2846	17788%	16	1,980	1964	12275%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	20	0			
North Leg	Outbound	741	230			
North Leg	**TOTAL**	**761**	**230**	**22%**	**7%**	**3,440**
South Leg	Inbound	920	913			
South Leg	Outbound	1,141	620			
South Leg	**TOTAL**	**2,061**	**1,533**	**9%**	**7%**	**22,125**
East Leg	Inbound	1,371	813			
East Leg	Outbound	790	950			
East Leg	**TOTAL**	**2,161**	**1,763**	**9%**	**7%**	**24,342**
West Leg	Inbound	551	254			
West Leg	Outbound	190	180			
West Leg	**TOTAL**	**741**	**434**	**14%**	**8%**	**5,180**
OVERALL TOTAL		***5,724***	***3,960***	**10%**	***7%***	***55,087***

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Project:	Mesa Verde TA	Job #:	15218
Scenario:	Horizon Year (2045) Without Project	Analyst:	JB
		Date:	4/25/24

LOCATION: I-10 EB Ramps & Singleton Rd.
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
SOUTH BOUND	Left	1	304	303	30300%	1	288	287	28700%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	1	747	746	74600%	1	412	411	41100%
	SB Total	2	1,051	1,049	52450%	2	700	698	34900%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	2	486	484	24200%	2	622	620	31000%
	Right	1	112	111	11100%	1	97	96	9600%
	EB Total	3	598	595	19833%	3	719	716	23867%
WEST BOUND	Left	1	28	27	2700%	1	23	22	2200%
	Through	2	293	291	14550%	2	208	206	10300%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	3	321	318	10600%	3	231	228	7600%
TOTAL ENTERING VOLUME		8	1,970	1962	24525%	8	1,650	1642	20525%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,051	700			
North Leg	Outbound	0	0			
North Leg	**TOTAL**	**1,051**	**700**	**7%**	**5%**	**14,041**
South Leg	Inbound	0	0			
South Leg	Outbound	140	120			
South Leg	**TOTAL**	**140**	**120**	**5%**	**4%**	**2,743**
East Leg	Inbound	321	231			
East Leg	Outbound	790	910			
East Leg	**TOTAL**	**1,111**	**1,141**	**6%**	**6%**	**18,287**
West Leg	Inbound	598	719			
West Leg	Outbound	1,040	620			
West Leg	**TOTAL**	**1,638**	**1,339**	**7%**	**6%**	**24,342**
OVERALL TOTAL		***3,940***	***3,300***	***7%***	***6%***	***59,413***

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Project:	Mesa Verde TA	Job #:	15218
Scenario:	Horizon Year (2045) Without Project	Analyst:	JB
		Date:	4/25/24

LOCATION: I-10 EB Ramps & Singleton Rd.
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	1	24	23	2300%	1	63	62	6200%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	1	76	75	7500%	1	57	56	5600%
	NB Total	2	100	98	4900%	2	120	118	5900%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
EAST BOUND	Left	1	297	296	29600%	1	541	540	54000%
	Through	2	494	492	24600%	2	369	367	18350%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	3	791	788	26267%	3	910	907	30233%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	2	296	294	14700%	2	171	169	8450%
	Right	1	553	552	55200%	1	229	228	22800%
	WB Total	3	849	846	28200%	3	400	397	13233%
TOTAL ENTERING VOLUME		8	1,740	1732	21650%	8	1,430	1422	17775%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	0	0			
North Leg	Outbound	850	770			
North Leg	**TOTAL**	**850**	**770**	**7%**	**6%**	**12,915**
South Leg	Inbound	100	120			
South Leg	Outbound	0	0			
South Leg	**TOTAL**	**100**	**120**	**5%**	**6%**	**2,040**
East Leg	Inbound	849	400			
East Leg	Outbound	570	426			
East Leg	**TOTAL**	**1,419**	**826**	**9%**	**5%**	**15,937**
West Leg	Inbound	791	910			
West Leg	Outbound	320	234			
West Leg	**TOTAL**	**1,111**	**1,144**	**6%**	**6%**	**18,287**
OVERALL TOTAL		***3,480***	***2,860***	***7%***	***6%***	***49,180***

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Project: Mesa Verde TA
Scenario: Horizon Year (2045) Without Project

Job #: 15218
Analyst: JB
Date: 4/25/24

LOCATION: Calimesa Bl. & Singleton Rd.
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	2	72	70	3500%	0	0	0	#DIV/0!
	Through	471	718	247	52%	49	42	-7	-14%
	Right	200	319	119	60%	68	117	49	72%
	NB Total	673	1,109	436	65%	117	159	42	36%
SOUTH BOUND	Left	61	11	-50	-82%	144	92	-52	-36%
	Through	33	40	7	21%	90	70	-20	-22%
	Right	31	127	96	310%	24	28	4	17%
	SB Total	125	178	53	42%	258	190	-68	-26%
EAST BOUND	Left	52	143	91	175%	17	18	1	6%
	Through	181	520	339	187%	325	687	362	111%
	Right	2	38	36	1800%	2	5	3	150%
	EB Total	235	701	466	198%	344	710	366	106%
WEST BOUND	Left	26	22	-4	-15%	55	96	41	75%
	Through	344	981	637	185%	217	565	348	160%
	Right	154	19	-135	-88%	86	61	-25	-29%
	WB Total	524	1,022	498	95%	358	722	364	102%
TOTAL ENTERING VOLUME		1,557	3,010	1453	93%	1,077	1,781	704	65%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	178	190			
North Leg	Outbound	880	121			
North Leg	**TOTAL**	**1,058**	**311**	**78%**	**23%**	**1,365**
South Leg	Inbound	1,109	159			
South Leg	Outbound	100	171			
South Leg	**TOTAL**	**1,209**	**330**	**39%**	**11%**	**3,126**
East Leg	Inbound	1,022	722			
East Leg	Outbound	850	896			
East Leg	**TOTAL**	**1,872**	**1,618**	**12%**	**11%**	**15,305**
West Leg	Inbound	701	710			
West Leg	Outbound	1,180	593			
West Leg	**TOTAL**	**1,881**	**1,303**	**12%**	**8%**	**15,937**
OVERALL TOTAL		***6,020***	***3,562***	**17%**	***10%***	***35,733***

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APPENDIX 5.1: E+P (PHASE 1) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Intersection Delay, s/veh	2.9
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	0	20	54
Demand Flow Rate, veh/h	0	20	54
Vehicles Circulating, veh/h	20	0	0
Vehicles Exiting, veh/h	0	54	20
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	0.0	2.7	2.9
Approach LOS	-	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	0	20	54
Cap Entry Lane, veh/h	1352	1380	1380
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	0	20	54
Cap Entry, veh/h	1352	1380	1380
V/C Ratio	0.000	0.014	0.039
Control Delay, s/veh	2.7	2.7	2.9
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	2.7
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	0	8	18
Demand Flow Rate, veh/h	0	8	18
Vehicles Circulating, veh/h	18	0	0
Vehicles Exiting, veh/h	0	18	8
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	0.0	2.7	2.7
Approach LOS	-	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	0	8	18
Cap Entry Lane, veh/h	1355	1380	1380
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	0	8	18
Cap Entry, veh/h	1355	1380	1380
V/C Ratio	0.000	0.006	0.013
Control Delay, s/veh	2.7	2.7	2.7
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	3.5
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	165	73	69
Demand Flow Rate, veh/h	165	73	69
Vehicles Circulating, veh/h	18	10	141
Vehicles Exiting, veh/h	65	200	42
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.6	3.1	3.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	165	73	69
Cap Entry Lane, veh/h	1355	1366	1195
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	165	73	69
Cap Entry, veh/h	1355	1366	1195
V/C Ratio	0.122	0.053	0.058
Control Delay, s/veh	3.6	3.1	3.5
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	65	25	32	64	6
Future Vol, veh/h	25	65	25	32	64	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	27	71	27	35	70	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	162	73	76	0	-	0
Stage 1	73	-	-	-	-	-
Stage 2	89	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	834	995	1536	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	819	995	1536	-	-	-
Mov Cap-2 Maneuver	819	-	-	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	939	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.28	3.24	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1536	-	939	-	-
HCM Lane V/C Ratio	0.018	-	0.104	-	-
HCM Control Delay (s/veh)	7.4	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Intersection Delay, s/veh	3.2
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	48	67	140
Demand Flow Rate, veh/h	48	67	140
Vehicles Circulating, veh/h	137	9	15
Vehicles Exiting, veh/h	18	176	61
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.1	2.8	3.5
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.188	0.813	0.224	0.776	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	9	39	15	52	140
Cap Entry Lane, veh/h	1254	1254	1409	1409	1359
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	9	39	15	52	140
Cap Entry, veh/h	1254	1254	1409	1409	1359
V/C Ratio	0.007	0.031	0.011	0.037	0.103
Control Delay, s/veh	2.9	3.1	2.6	2.8	3.5
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	236	103	8	18	0
Future Vol, veh/h	0	236	103	8	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	323	141	11	25	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	152	0	-	0	470	147
Stage 1	-	-	-	-	147	-
Stage 2	-	-	-	-	323	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1441	-	-	-	556	906
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	738	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1441	-	-	-	556	906
Mov Cap-2 Maneuver	-	-	-	-	556	-
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	738	-

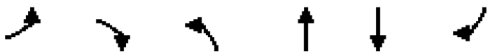
Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.78
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1441	-	-	-	556
HCM Lane V/C Ratio	-	-	-	-	0.044
HCM Control Delay (s/veh)	0	-	-	-	11.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	635	609		
Future Volume (vph)	635	609		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	40.0	49.0	80.0	31.0
Total Split (%)	33.3%	40.8%	67%	26%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min
Act Effct Green (s)	10.0	13.2		
Actuated g/C Ratio	0.21	0.28		
v/c Ratio	0.33	0.69		
Control Delay (s/veh)	0.4	19.7		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.4	19.7		
LOS	A	B		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 48	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay (s/veh): 9.9	Intersection LOS: A
Intersection Capacity Utilization 26.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	635	609	0	0	0
Future Volume (veh/h)	0	635	609	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	581	662	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	652	1021	1003	508	7	0
Arrive On Green	0.00	0.36	0.29	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	-96900	0
Grp Volume(v), veh/h	0	581	662	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	4.5	4.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.5	4.6	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	652	1021	1003	508	7	0
V/C Ratio(X)	0.00	0.57	0.66	0.00	0.00	0.00
Avail Cap(c_a), veh/h	2304	3608	5685	5191	1795	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.1	8.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.3	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	1.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	7.6	8.9	0.0	0.0	0.0
LnGrp LOS		A	A			
Approach Vol, veh/h	581			662	0	
Approach Delay, s/veh	7.6			8.9	0.0	
Approach LOS	A			A		

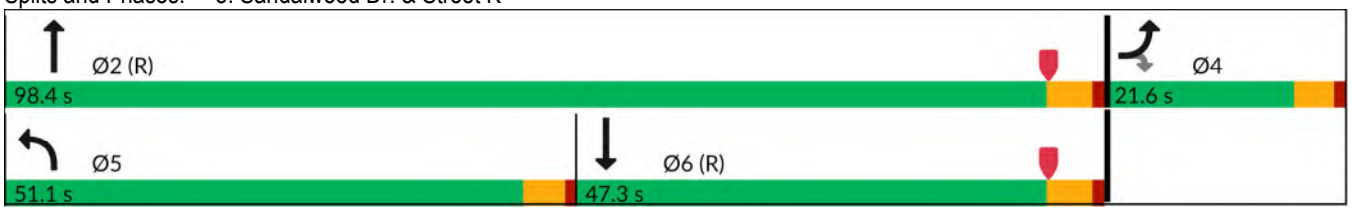
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		12.4		15.0	12.4	0.0
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		74.9		34.9	44.4	25.9
Max Q Clear Time (g_c+I1), s		0.0		6.5	6.6	0.0
Green Ext Time (p_c), s		0.0		2.5	1.3	0.0

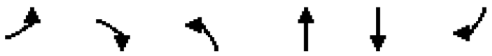
Intersection Summary	
HCM 7th Control Delay, s/veh	8.3
HCM 7th LOS	A

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	2	64	458	608	632
Future Volume (vph)	2	64	458	608	632
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	21.6	21.6	9.6	15.1	22.1
Total Split (s)	21.6	21.6	51.1	98.4	47.3
Total Split (%)	18.0%	18.0%	42.6%	82.0%	39.4%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	10.0	21.9	104.2	76.7
Actuated g/C Ratio	0.08	0.08	0.18	0.87	0.64
v/c Ratio	0.01	0.35	0.78	0.21	0.30
Control Delay (s/veh)	51.0	17.2	72.6	0.2	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.0	17.2	72.6	0.2	11.2
LOS	D	B	E	A	B
Approach Delay (s/veh)	18.2			31.3	11.2
Approach LOS	B			C	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 93.3 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 23.6	Intersection LOS: C
Intersection Capacity Utilization 50.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	64	458	608	632	4
Future Volume (veh/h)	2	64	458	608	632	4
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	70	498	661	687	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	137	122	560	3045	2375	14
Arrive On Green	0.08	0.08	0.32	1.00	0.65	0.65
Sat Flow, veh/h	1810	1610	3510	3705	3775	21
Grp Volume(v), veh/h	2	70	498	661	337	354
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1896
Q Serve(g_s), s	0.1	5.0	16.2	0.0	9.8	9.8
Cycle Q Clear(g_c), s	0.1	5.0	16.2	0.0	9.8	9.8
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	137	122	560	3045	1165	1224
V/C Ratio(X)	0.01	0.57	0.89	0.22	0.29	0.29
Avail Cap(c_a), veh/h	256	228	1360	3045	1165	1224
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.98	0.98	0.95	0.95
Uniform Delay (d), s/veh	51.3	53.6	39.8	0.0	9.3	9.3
Incr Delay (d2), s/veh	0.0	4.2	2.0	0.2	0.6	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	0.1	4.6	6.0	0.1	3.9	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.4	57.8	41.8	0.2	9.9	9.8
LnGrp LOS	D	E	D	A	A	A
Approach Vol, veh/h	72			1159	691	
Approach Delay, s/veh	57.6			18.1	9.9	
Approach LOS	E			B	A	

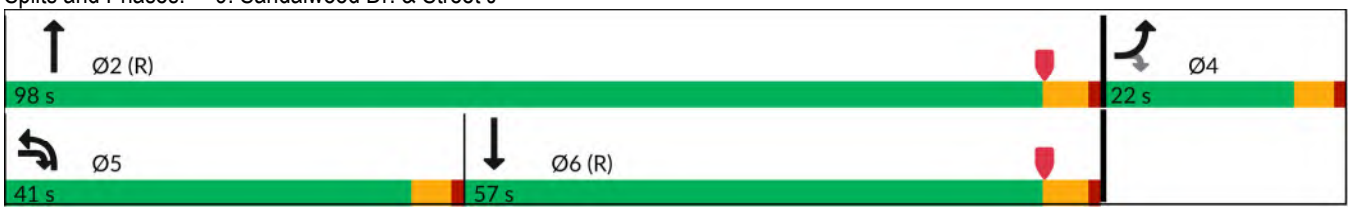
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		106.3		13.7	23.7	82.6
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	46.5	42.2
Max Q Clear Time (g_c+I1), s		2.0		7.0	18.2	11.8
Green Ext Time (p_c), s		5.4		0.1	1.0	4.7

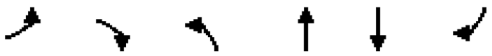
Intersection Summary		
HCM 7th Control Delay, s/veh		16.6
HCM 7th LOS		B

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	2	65	459	1064	692
Future Volume (vph)	2	65	459	1064	692
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	21.6	9.6	9.6	15.1	22.1
Total Split (s)	22.0	41.0	41.0	98.0	57.0
Total Split (%)	18.3%	34.2%	34.2%	81.7%	47.5%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	24.6	21.7	116.1	85.7
Actuated g/C Ratio	0.08	0.21	0.18	0.97	0.71
v/c Ratio	0.01	0.18	0.79	0.33	0.29
Control Delay (s/veh)	51.0	8.1	56.9	0.5	15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.0	8.1	56.9	0.5	15.6
LOS	D	A	E	A	B
Approach Delay (s/veh)	9.3			17.5	15.6
Approach LOS	A			B	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 48 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 16.7	Intersection LOS: B
Intersection Capacity Utilization 52.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	65	459	1064	692	4
Future Volume (veh/h)	2	65	459	1064	692	4
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	71	499	1157	752	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	138	379	559	3044	2377	13
Arrive On Green	0.08	0.08	0.32	1.00	1.00	1.00
Sat Flow, veh/h	1810	1610	3510	3705	3777	20
Grp Volume(v), veh/h	2	71	499	1157	369	387
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1896
Q Serve(g_s), s	0.1	4.2	16.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	4.2	16.2	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	138	379	559	3044	1165	1224
V/C Ratio(X)	0.01	0.19	0.89	0.38	0.32	0.32
Avail Cap(c_a), veh/h	262	490	1065	3044	1165	1224
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.87	0.87	0.96	0.96
Uniform Delay (d), s/veh	51.3	36.7	39.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	1.8	0.3	0.7	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	0.1	4.2	5.8	0.1	0.2	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.3	36.9	41.7	0.3	0.7	0.7
LnGrp LOS	D	D	D	A	A	A
Approach Vol, veh/h	73			1656	756	
Approach Delay, s/veh	37.3			12.8	0.7	
Approach LOS	D			B	A	

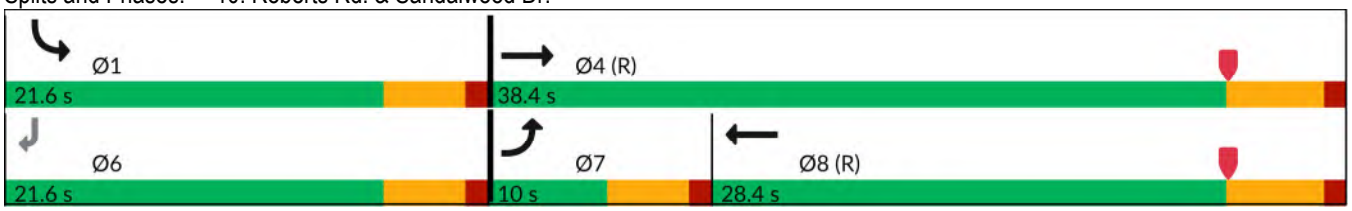
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		106.3		13.7	23.7	82.6
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		92.9		17.4	36.4	51.9
Max Q Clear Time (g_c+I1), s		2.0		6.2	18.2	2.0
Green Ext Time (p_c), s		10.9		0.1	0.9	5.5

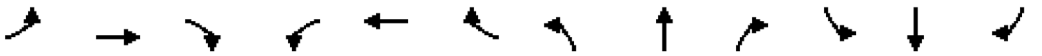
Intersection Summary	
HCM 7th Control Delay, s/veh	9.8
HCM 7th LOS	A

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	79	679	1520	43	3
Future Volume (vph)	79	679	1520	43	3
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	7	4	8	1	
Permitted Phases					6
Detector Phase	7	4	8	1	6
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	5.0	5.0
Minimum Split (s)	9.6	22.4	15.4	9.6	21.6
Total Split (s)	10.0	38.4	28.4	21.6	21.6
Total Split (%)	16.7%	64.0%	47.3%	36.0%	36.0%
Yellow Time (s)	3.6	4.4	4.4	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	4.6	4.6
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	C-Max	C-Max	None	None
Act Effct Green (s)	7.4	50.5	39.4	5.5	5.5
Actuated g/C Ratio	0.12	0.84	0.66	0.09	0.09
v/c Ratio	0.39	0.17	0.49	0.15	0.01
Control Delay (s/veh)	15.3	4.7	8.5	26.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.3	4.7	8.5	26.0	0.0
LOS	B	A	A	C	A
Approach Delay (s/veh)		5.8	8.5		
Approach LOS		A	A		

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay (s/veh): 8.0	Intersection LOS: A
Intersection Capacity Utilization 48.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	679	0	0	1520	2	0	0	0	43	0	3
Future Volume (veh/h)	79	679	0	0	1520	2	0	0	0	43	0	3
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900				1900	0	1900
Adj Flow Rate, veh/h	86	738	0	0	1652	2				47	0	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	115	4078	0	0	3457	4				165	0	76
Arrive On Green	0.06	0.79	0.00	0.00	0.65	0.65				0.05	0.00	0.05
Sat Flow, veh/h	1810	5358	0	0	5521	6				3510	0	1610
Grp Volume(v), veh/h	86	738	0	0	1068	586				47	0	3
Grp Sat Flow(s),veh/h/ln	1810	1729	0	0	1729	1899				1755	0	1610
Q Serve(g_s), s	2.8	2.1	0.0	0.0	9.5	9.5				0.8	0.0	0.1
Cycle Q Clear(g_c), s	2.8	2.1	0.0	0.0	9.5	9.5				0.8	0.0	0.1
Prop In Lane	1.00		0.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	115	4078	0	0	2234	1227				165	0	76
V/C Ratio(X)	0.75	0.18	0.00	0.00	0.48	0.48				0.28	0.00	0.04
Avail Cap(c_a), veh/h	163	4078	0	0	2234	1227				995	0	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	27.6	1.6	0.0	0.0	5.4	5.4				27.6	0.0	27.3
Incr Delay (d2), s/veh	5.8	0.1	0.0	0.0	0.7	1.3				0.3	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.1	0.0	0.0	2.2	2.6				0.3	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.4	1.7	0.0	0.0	6.2	6.8				28.0	0.0	27.4
LnGrp LOS	C	A			A	A				C		C
Approach Vol, veh/h		824			1654						50	
Approach Delay, s/veh		5.0			6.4						27.9	
Approach LOS		A			A						C	

Timer - Assigned Phs			4		6	7	8					
Phs Duration (G+Y+Rc), s			52.6		7.4	8.4	44.2					
Change Period (Y+Rc), s			5.4		4.6	4.6	5.4					
Max Green Setting (Gmax), s			33.0		17.0	5.4	23.0					
Max Q Clear Time (g_c+I1), s			4.1		2.8	4.8	11.5					
Green Ext Time (p_c), s			5.2		0.0	0.0	7.6					

Intersection Summary												
HCM 7th Control Delay, s/veh		6.4										
HCM 7th LOS		A										

Intersection	
Int Delay, s/veh	3.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	276	2	114	177	8	135
Future Vol, veh/h	276	2	114	177	8	135
Conflicting Peds, #/hr	0	2	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	317	2	131	203	9	155

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	322	0	786	320
Stage 1	-	-	-	-	320	-
Stage 2	-	-	-	-	466	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1250	-	364	725
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	636	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1247	-	320	724
Mov Cap-2 Maneuver	-	-	-	-	320	-
Stage 1	-	-	-	-	739	-
Stage 2	-	-	-	-	561	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	3.22	12.03
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	676	-	-	705	-
HCM Lane V/C Ratio	0.243	-	-	0.105	-
HCM Control Delay (s/veh)	12	-	-	8.2	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.4	-

Intersection	
Int Delay, s/veh	353.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	346	65	314	166	0	0	0	0	251	6	125
Future Vol, veh/h	0	346	65	314	166	0	0	0	0	251	6	125
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	407	76	369	195	0	0	0	0	295	7	147

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	485	0	0	1341	1419	195
Stage 1	-	-	-	-	-	-	934	934	-
Stage 2	-	-	-	-	-	-	407	485	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1089	-	0	~ 170	138	851
Stage 1	0	-	-	-	-	0	386	347	-
Stage 2	0	-	-	-	-	0	676	555	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1089	-	-	~ 112	0	851
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 66	0	-
Stage 1	-	-	-	-	-	-	386	0	-
Stage 2	-	-	-	-	-	-	447	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	6.54	$ 1170.12
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	1089	-	66	851
HCM Lane V/C Ratio	-	-	0.339	-	4.573	0.173
HCM Control Delay (s/veh)	-	-	10	$ 1734.3	10.1	
HCM Lane LOS	-	-	A	-	F	B
HCM 95th %tile Q(veh)	-	-	1.5	-	33	0.6

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

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	226	371	0	0	455	659	24	4	97	0	0	0
Future Vol, veh/h	226	371	0	0	455	659	24	4	97	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	243	399	0	0	489	709	26	4	104	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1198	0	-	-	-	0	1374	2083	399
Stage 1	-	-	-	-	-	-	885	885	-
Stage 2	-	-	-	-	-	-	489	1198	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	590	-	0	0	-	-	162	54	655
Stage 1	-	-	0	0	-	-	407	366	-
Stage 2	-	-	0	0	-	-	620	261	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	590	-	-	-	-	-	95	0	655
Mov Cap-2 Maneuver	-	-	-	-	-	-	174	0	-
Stage 1	-	-	-	-	-	-	239	0	-
Stage 2	-	-	-	-	-	-	620	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	5.8	0	15.66
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	174	655	590	-	-	-
HCM Lane V/C Ratio	0.173	0.159	0.412	-	-	-
HCM Control Delay (s/veh)	30	11.5	15.3	-	-	-
HCM Lane LOS	D	B	C	-	-	-
HCM 95th %tile Q(veh)	0.6	0.6	2	-	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	722	1451	45	0	71
Future Vol, veh/h	0	722	1451	45	0	71
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	785	1577	49	0	77

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	789
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	449
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	449
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	14.67
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	449
HCM Lane V/C Ratio	-	-	-	0.172
HCM Control Delay (s/veh)	-	-	-	14.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.6

Intersection	
Intersection Delay, s/veh	467
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	534	188	185	886	0	0	0	0	122	16	610
Future Vol, veh/h	0	534	188	185	886	0	0	0	0	122	16	610
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	659	232	228	1094	0	0	0	0	151	20	753
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	174.5	755.1	336.9
HCM LOS	F	F	F

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	17%	16%
Vol Thru, %	100%	0%	83%	2%
Vol Right, %	0%	100%	0%	82%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	534	188	1071	748
LT Vol	0	0	185	122
Through Vol	534	0	886	16
RT Vol	0	188	0	610
Lane Flow Rate	659	232	1322	923
Geometry Grp	5	5	4a	2
Degree of Util (X)	1.391	0.445	2.618	1.677
Departure Headway (Hd)	12.437	11.682	9.285	8.793
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	297	311	410	425
Service Time	10.137	9.382	7.285	6.793
HCM Lane V/C Ratio	2.219	0.746	3.224	2.172
HCM Control Delay, s/veh	227.7	23.4	755.1	336.9
HCM Lane LOS	F	C	F	F
HCM 95th-tile Q	21.3	2.2	83	40.9

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	217	440	1070	406	0	0
Future Vol, veh/h	217	440	1070	406	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	247	500	1216	461	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1677	0	-	0	-	1447
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	387	-	-	-	0	163
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	387	-	-	-	-	163
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

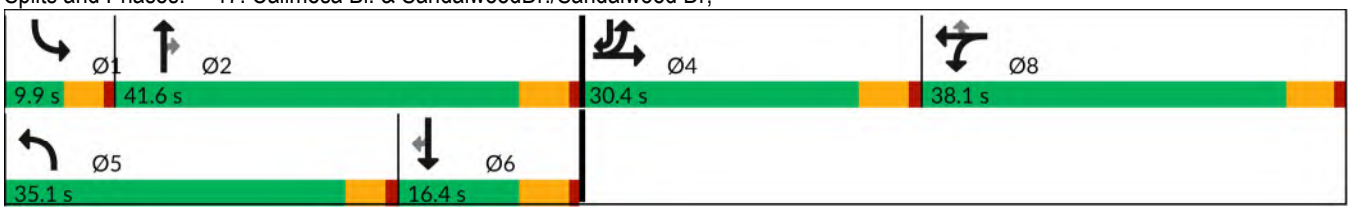
Approach	EB	WB	SB
HCM Control Delay, s/v	9.65	0	0
HCM LOS			A

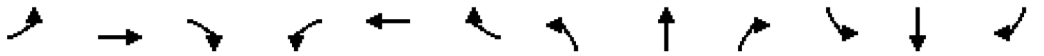
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	280	-	-	-	-
HCM Lane V/C Ratio	0.637	-	-	-	-
HCM Control Delay (s/veh)	29.2	0	-	-	0
HCM Lane LOS	D	A	-	-	A
HCM 95th %tile Q(veh)	4.2	-	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	202	186	20	318	32	702	544	99	14	46	457
Future Volume (vph)	202	186	20	318	32	702	544	99	14	46	457
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4	30.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	21.2	21.2	25.1	25.1	25.1	30.9	42.2	42.2	5.2	10.3	36.9
Actuated g/C Ratio	0.20	0.20	0.23	0.23	0.23	0.28	0.39	0.39	0.05	0.09	0.34
v/c Ratio	0.52	0.50	0.06	0.82	0.07	1.56	0.44	0.16	0.19	0.29	0.83
Control Delay (s/veh)	46.2	40.0	33.1	55.9	0.3	289.4	28.7	6.3	59.0	54.0	38.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.2	40.0	33.1	55.9	0.3	289.4	28.7	6.3	59.0	54.0	38.8
LOS	D	D	C	E	A	F	C	A	E	D	D
Approach Delay (s/veh)		42.0		49.9			163.1			40.7	
Approach LOS		D		D			F			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 108.5	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.56	
Intersection Signal Delay (s/veh): 103.9	Intersection LOS: F
Intersection Capacity Utilization 96.8%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	186	52	20	318	32	702	544	99	14	46	457
Future Volume (veh/h)	202	186	52	20	318	32	702	544	99	14	46	457
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	161	308	41	23	361	26	798	618	82	16	52	442
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	239	435	57	401	421	352	573	1489	663	33	217	397
Arrive On Green	0.13	0.13	0.13	0.22	0.22	0.22	0.32	0.41	0.41	0.02	0.11	0.11
Sat Flow, veh/h	1810	3288	433	1810	1900	1588	1810	3610	1608	1810	1900	1610
Grp Volume(v), veh/h	161	177	172	23	361	26	798	618	82	16	52	442
Grp Sat Flow(s),veh/h/ln	1810	1900	1822	1810	1900	1588	1810	1805	1608	1810	1900	1610
Q Serve(g_s), s	8.2	8.6	8.7	1.0	17.6	1.2	30.5	11.7	3.0	0.8	2.4	11.0
Cycle Q Clear(g_c), s	8.2	8.6	8.7	1.0	17.6	1.2	30.5	11.7	3.0	0.8	2.4	11.0
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	251	241	401	421	352	573	1489	663	33	217	397
V/C Ratio(X)	0.67	0.70	0.72	0.06	0.86	0.07	1.39	0.42	0.12	0.49	0.24	1.11
Avail Cap(c_a), veh/h	469	493	473	614	645	539	573	1489	663	99	217	397
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	40.0	40.1	29.6	36.1	29.7	32.9	20.1	17.5	46.9	38.9	31.5
Incr Delay (d2), s/veh	3.3	3.6	3.9	0.1	7.2	0.1	187.7	0.2	0.1	4.2	0.6	80.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	4.1	4.0	0.4	8.7	0.5	42.4	4.7	1.1	0.4	1.1	18.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.1	43.6	44.0	29.6	43.2	29.8	220.6	20.3	17.6	51.0	39.5	111.6
LnGrp LOS	D	D	D	C	D	C	F	C	B	D	D	F
Approach Vol, veh/h		510			410			1498			510	
Approach Delay, s/veh		43.6			41.6			126.8			102.3	
Approach LOS		D			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	45.2		18.1	35.1	16.4		26.8				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7				
Max Q Clear Time (g_c+I1), s	2.8	13.7		10.7	32.5	13.0		19.6				
Green Ext Time (p_c), s	0.0	4.2		2.0	0.0	0.0		1.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	96.1
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	180.2
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	117	0	0	712	633	1
Future Vol, veh/h	117	0	0	712	633	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	138	0	0	838	745	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	14.5	216.3	170.2
HCM LOS	B	F	F

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	0%
Vol Thru, %	0%	100%	100%
Vol Right, %	0%	0%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	634	117	712
LT Vol	633	0	0
Through Vol	0	117	712
RT Vol	1	0	0
Lane Flow Rate	746	138	838
Geometry Grp	1	1	1
Degree of Util (X)	1.298	0.268	1.412
Departure Headway (Hd)	7.126	8.418	6.832
Convergence, Y/N	Yes	Yes	Yes
Cap	515	429	536
Service Time	5.126	6.418	4.832
HCM Lane V/C Ratio	1.449	0.322	1.563
HCM Control Delay, s/veh	170.2	14.5	216.3
HCM Lane LOS	F	B	F
HCM 95th-tile Q	27.7	1.1	35.1

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	3	3	14	0	2
Future Vol, veh/h	4	3	3	14	0	2
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	4	4	20	0	3
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	6.8	6.5	7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	57%	0%
Vol Thru, %	18%	0%	100%
Vol Right, %	82%	43%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	17	7	2
LT Vol	0	4	0
Through Vol	3	0	2
RT Vol	14	3	0
Lane Flow Rate	24	10	3
Geometry Grp	1	1	1
Degree of Util (X)	0.023	0.01	0.003
Departure Headway (Hd)	3.426	3.804	3.935
Convergence, Y/N	Yes	Yes	Yes
Cap	1051	945	914
Service Time	1.428	1.808	1.939
HCM Lane V/C Ratio	0.023	0.011	0.003
HCM Control Delay, s/veh	6.5	6.8	7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0	0

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	2	395	7	0	0	0	0	0	0	0
Future Vol, veh/h	0	12	2	395	7	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	14	2	470	8	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	17	0	0	963	965	8
Stage 1	-	-	-	-	-	-	949	949	-
Stage 2	-	-	-	-	-	-	14	17	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1614	-	0	286	257	1079
Stage 1	0	-	-	-	-	0	379	342	-
Stage 2	0	-	-	-	-	0	1014	886	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1614	-	-	202	0	1079
Mov Cap-2 Maneuver	-	-	-	-	-	-	202	0	-
Stage 1	-	-	-	-	-	-	379	0	-
Stage 2	-	-	-	-	-	-	717	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	8	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1606	-	-
HCM Lane V/C Ratio	-	-	0.291	-	-
HCM Control Delay (s/veh)	-	-	8.1	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1.2	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	0	0	394	0	8	0	248	0	0	0
Future Vol, veh/h	0	12	0	0	394	0	8	0	248	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	13	0	0	438	0	9	0	276	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	438	0	-	-	-	0	451	451	13
Stage 1	-	-	-	-	-	-	13	13	-
Stage 2	-	-	-	-	-	-	438	438	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1133	-	0	0	-	-	570	507	1073
Stage 1	-	-	0	0	-	-	1015	888	-
Stage 2	-	-	0	0	-	-	655	582	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1133	-	-	-	-	-	570	0	1073
Mov Cap-2 Maneuver	-	-	-	-	-	-	570	0	-
Stage 1	-	-	-	-	-	-	1015	0	-
Stage 2	-	-	-	-	-	-	655	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	9.74
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1044	1133	-	-	-
HCM Lane V/C Ratio	0.272	-	-	-	-
HCM Control Delay (s/veh)	9.7	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	1.1	0	-	-	-

Intersection	
Intersection Delay, s/veh	136.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	52	206	2	29	361	158	2	481	210	66	39	31
Future Vol, veh/h	52	206	2	29	361	158	2	481	210	66	39	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	219	2	31	384	168	2	512	223	70	41	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	25.7	110.2	222.6	18
HCM LOS	D	F	F	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	20%	5%	49%
Vol Thru, %	69%	79%	66%	29%
Vol Right, %	30%	1%	29%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	693	260	548	136
LT Vol	2	52	29	66
Through Vol	481	206	361	39
RT Vol	210	2	158	31
Lane Flow Rate	737	277	583	145
Geometry Grp	1	1	1	1
Degree of Util (X)	1.422	0.604	1.128	0.34
Departure Headway (Hd)	7.399	9.386	8.098	9.968
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	494	387	455	363
Service Time	5.399	7.386	6.098	7.968
HCM Lane V/C Ratio	1.492	0.716	1.281	0.399
HCM Control Delay, s/veh	222.6	25.7	110.2	18
HCM Lane LOS	F	D	F	C
HCM 95th-tile Q	33.4	3.8	17.7	1.5

Intersection	
Intersection Delay, s/veh	2.9
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	0	61	37
Demand Flow Rate, veh/h	0	61	37
Vehicles Circulating, veh/h	61	0	0
Vehicles Exiting, veh/h	0	37	61
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	0.0	3.0	2.8
Approach LOS	-	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	0	61	37
Cap Entry Lane, veh/h	1297	1380	1380
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	0	61	37
Cap Entry, veh/h	1297	1380	1380
V/C Ratio	0.000	0.044	0.027
Control Delay, s/veh	2.8	3.0	2.8
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	2.7
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	0	22	13
Demand Flow Rate, veh/h	0	22	13
Vehicles Circulating, veh/h	13	0	0
Vehicles Exiting, veh/h	0	13	22
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	0.0	2.7	2.7
Approach LOS	-	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	0	22	13
Cap Entry Lane, veh/h	1362	1380	1380
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	0	22	13
Cap Entry, veh/h	1362	1380	1380
V/C Ratio	0.000	0.016	0.009
Control Delay, s/veh	2.6	2.7	2.7
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	3.8
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	112	222	66
Demand Flow Rate, veh/h	112	222	66
Vehicles Circulating, veh/h	55	27	95
Vehicles Exiting, veh/h	194	134	72
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.4	4.0	3.3
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	112	222	66
Cap Entry Lane, veh/h	1305	1342	1252
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	112	222	66
Cap Entry, veh/h	1305	1342	1252
V/C Ratio	0.086	0.165	0.053
Control Delay, s/veh	3.4	4.0	3.3
LOS	A	A	A
95th %tile Queue, veh	0	1	0

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	45	73	76	53	19
Future Vol, veh/h	17	45	73	76	53	19
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	49	79	83	58	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	309	68	78	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	241	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	687	1001	1533	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	804	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	652	1001	1533	-	-	-
Mov Cap-2 Maneuver	652	-	-	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	804	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.47	3.66	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1533	-	873	-	-
HCM Lane V/C Ratio	0.052	-	0.077	-	-
HCM Control Delay (s/veh)	7.5	-	9.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

Intersection	
Intersection Delay, s/veh	3.3
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	36	201	106
Demand Flow Rate, veh/h	36	201	106
Vehicles Circulating, veh/h	96	7	46
Vehicles Exiting, veh/h	56	125	162
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	2.9	3.3	3.4
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.194	0.806	0.229	0.771	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	7	29	46	155	106
Cap Entry Lane, veh/h	1301	1301	1411	1411	1317
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	7	29	46	155	106
Cap Entry, veh/h	1301	1301	1411	1411	1317
V/C Ratio	0.005	0.022	0.033	0.110	0.081
Control Delay, s/veh	2.8	2.9	2.8	3.4	3.4
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	160	237	1	4	0
Future Vol, veh/h	0	160	237	1	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	286	423	2	7	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	425	0	-	0	710	424
Stage 1	-	-	-	-	424	-
Stage 2	-	-	-	-	286	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1145	-	-	-	403	634
Stage 1	-	-	-	-	664	-
Stage 2	-	-	-	-	767	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1145	-	-	-	403	634
Mov Cap-2 Maneuver	-	-	-	-	403	-
Stage 1	-	-	-	-	664	-
Stage 2	-	-	-	-	767	-

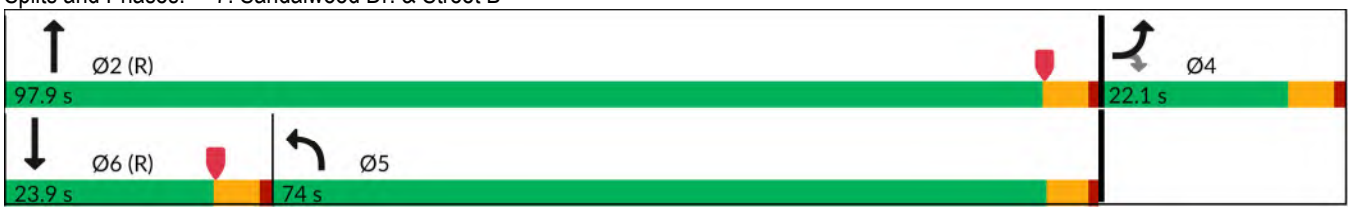
Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	14.09
HCM LOS			B

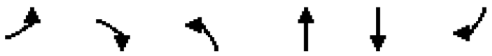
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1145	-	-	-	403
HCM Lane V/C Ratio	-	-	-	-	0.018
HCM Control Delay (s/veh)	0	-	-	-	14.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	250	302		
Future Volume (vph)	250	302		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	22.1	74.0	97.9	23.9
Total Split (%)	18.4%	61.7%	82%	20%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lag		Lead
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	16.1		
Actuated g/C Ratio	0.08	0.13		
v/c Ratio	0.14	0.70		
Control Delay (s/veh)	0.1	53.7		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.1	53.7		
LOS	A	D		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116.9 (97%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay (s/veh): 29.4	Intersection LOS: C
Intersection Capacity Utilization 13.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	250	302	0	0	0
Future Volume (veh/h)	0	250	302	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	169	328	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	150	235	2221	1581	298	0
Arrive On Green	0.00	0.08	0.63	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	1900	0
Grp Volume(v), veh/h	0	169	328	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	7.0	4.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.0	4.5	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	150	235	2221	1581	298	0
V/C Ratio(X)	0.00	0.72	0.15	0.00	0.00	0.00
Avail Cap(c_a), veh/h	256	401	2221	1581	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	53.6	8.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.1	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.5	1.7	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	57.7	8.9	0.0	0.0	0.0
LnGrp LOS		E	A			
Approach Vol, veh/h	169			328	0	
Approach Delay, s/veh	57.7			8.9	0.0	
Approach LOS	E			A		

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		104.9		15.1	81.0	23.9
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	69.4	* 19
Max Q Clear Time (g_c+I1), s		0.0		9.0	6.5	0.0
Green Ext Time (p_c), s		0.0		0.3	0.6	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	25.5
HCM 7th LOS	C

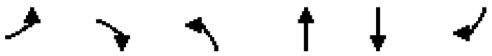
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	5	392	66	298	248
Future Volume (vph)	5	392	66	298	248
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	22.1	9.6	15.1	22.1
Total Split (s)	63.0	63.0	20.0	57.0	37.0
Total Split (%)	52.5%	52.5%	16.7%	47.5%	30.8%
Yellow Time (s)	4.1	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	12.4	12.4	6.9	97.4	87.8
Actuated g/C Ratio	0.10	0.10	0.06	0.81	0.73
v/c Ratio	0.03	0.78	0.36	0.11	0.10
Control Delay (s/veh)	45.6	15.0	55.8	2.3	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.6	15.0	55.8	2.3	5.7
LOS	D	B	E	A	A
Approach Delay (s/veh)	15.4			12.0	5.7
Approach LOS	B			B	A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 24.1 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 11.8	Intersection LOS: B
Intersection Capacity Utilization 41.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	392	66	298	248	3
Future Volume (veh/h)	5	392	66	298	248	3
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	5	426	72	324	270	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	518	461	133	2269	2020	22
Arrive On Green	0.29	0.29	0.01	0.21	1.00	1.00
Sat Flow, veh/h	1810	1610	3510	3705	3752	41
Grp Volume(v), veh/h	5	426	72	324	133	140
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1893
Q Serve(g_s), s	0.2	30.8	2.4	8.8	0.0	0.0
Cycle Q Clear(g_c), s	0.2	30.8	2.4	8.8	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	518	461	133	2269	997	1045
V/C Ratio(X)	0.01	0.92	0.54	0.14	0.13	0.13
Avail Cap(c_a), veh/h	873	777	451	2269	997	1045
HCM Platoon Ratio	1.00	1.00	0.33	0.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	41.5	58.2	21.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.5	1.3	0.1	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	25.7	1.1	4.1	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	30.6	52.1	59.5	21.3	0.3	0.3
LnGrp LOS	C	D	E	C	A	A
Approach Vol, veh/h	431			396	273	
Approach Delay, s/veh	51.8			28.2	0.3	
Approach LOS	D			C	A	

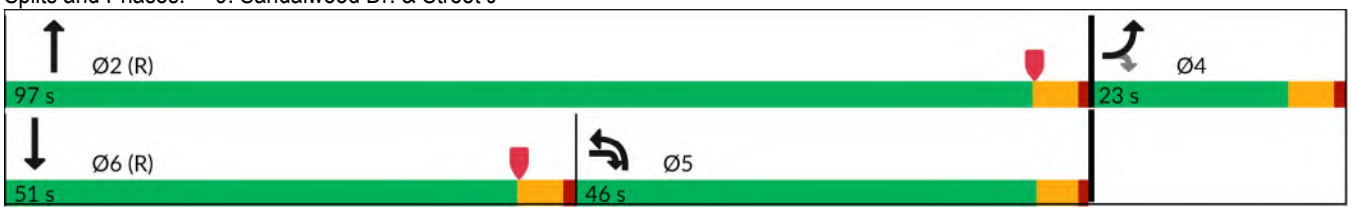
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		80.5		39.5	9.1	71.4
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		51.9		57.9	15.4	31.9
Max Q Clear Time (g_c+I1), s		10.8		32.8	4.4	2.0
Green Ext Time (p_c), s		2.3		1.6	0.1	1.6

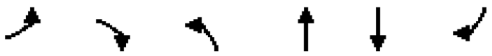
Intersection Summary	
HCM 7th Control Delay, s/veh	30.5
HCM 7th LOS	C

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	5	392	66	359	637
Future Volume (vph)	5	392	66	359	637
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	9.6	15.1	22.1
Total Split (s)	23.0	46.0	46.0	97.0	51.0
Total Split (%)	19.2%	38.3%	38.3%	80.8%	42.5%
Yellow Time (s)	4.1	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.6	4.6	5.1	5.1
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	35.1	32.1	116.0	75.2
Actuated g/C Ratio	0.08	0.29	0.27	0.97	0.63
v/c Ratio	0.03	0.79	0.08	0.11	0.31
Control Delay (s/veh)	51.2	38.9	28.3	0.1	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.2	38.9	28.3	0.1	12.6
LOS	D	D	C	A	B
Approach Delay (s/veh)	39.0			4.5	12.6
Approach LOS	D			A	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74 (62%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 17.4	Intersection LOS: B
Intersection Capacity Utilization 50.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	392	66	359	637	3
Future Volume (veh/h)	5	392	66	359	637	3
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	5	426	72	390	692	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	151	1022	1937	3002	875	4
Arrive On Green	0.08	0.08	0.55	0.83	0.08	0.08
Sat Flow, veh/h	1810	1610	3510	3705	3781	16
Grp Volume(v), veh/h	5	426	72	390	339	356
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1897
Q Serve(g_s), s	0.3	0.0	1.1	2.4	22.1	22.1
Cycle Q Clear(g_c), s	0.3	0.0	1.1	2.4	22.1	22.1
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	151	1022	1937	3002	429	451
V/C Ratio(X)	0.03	0.42	0.04	0.13	0.79	0.79
Avail Cap(c_a), veh/h	270	1128	1937	3002	690	726
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.85	0.85
Uniform Delay (d), s/veh	50.6	10.9	12.3	1.9	52.4	52.4
Incr Delay (d2), s/veh	0.1	0.3	0.0	0.1	11.9	11.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	14.3	0.4	0.5	12.2	12.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	50.6	11.1	12.3	2.0	64.3	63.8
LnGrp LOS	D	B	B	A	E	E
Approach Vol, veh/h	431			462	695	
Approach Delay, s/veh	11.6			3.6	64.0	
Approach LOS	B			A	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		104.9		15.1	71.3	33.6
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		91.9		17.9	41.4	* 46
Max Q Clear Time (g_c+I1), s		4.4		2.3	3.1	24.1
Green Ext Time (p_c), s		2.6		1.4	0.1	4.4

Intersection Summary	
HCM 7th Control Delay, s/veh	32.2
HCM 7th LOS	C

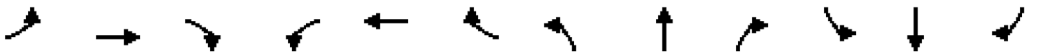
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	19	1010	420	58	5
Future Volume (vph)	19	1010	420	58	5
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	7	4	8	1	
Permitted Phases					6
Detector Phase	7	4	8	1	6
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	5.0	5.0
Minimum Split (s)	9.6	22.1	15.1	9.6	21.6
Total Split (s)	13.0	37.0	24.0	23.0	23.0
Total Split (%)	21.7%	61.7%	40.0%	38.3%	38.3%
Yellow Time (s)	3.6	4.1	4.1	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	4.6	4.6
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	C-Max	C-Max	None	None
Act Effct Green (s)	5.5	50.5	48.3	5.7	5.7
Actuated g/C Ratio	0.09	0.84	0.81	0.10	0.10
v/c Ratio	0.13	0.25	0.11	0.19	0.02
Control Delay (s/veh)	27.4	2.0	3.2	26.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.4	2.0	3.2	26.2	0.2
LOS	C	A	A	C	A
Approach Delay (s/veh)		2.4	3.2		
Approach LOS		A	A		

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.25	
Intersection Signal Delay (s/veh): 3.5	Intersection LOS: A
Intersection Capacity Utilization 30.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	1010	0	0	420	3	0	0	0	58	0	5
Future Volume (veh/h)	19	1010	0	0	420	3	0	0	0	58	0	5
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900				1900	0	1900
Adj Flow Rate, veh/h	21	1098	0	0	457	3				63	0	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	45	4055	0	0	3618	24				198	0	91
Arrive On Green	0.02	0.78	0.00	0.00	0.68	0.68				0.06	0.00	0.06
Sat Flow, veh/h	1810	5358	0	0	5488	35				3510	0	1610
Grp Volume(v), veh/h	21	1098	0	0	297	163				63	0	5
Grp Sat Flow(s),veh/h/ln	1810	1729	0	0	1729	1894				1755	0	1610
Q Serve(g_s), s	0.7	3.5	0.0	0.0	1.8	1.8				1.0	0.0	0.2
Cycle Q Clear(g_c), s	0.7	3.5	0.0	0.0	1.8	1.8				1.0	0.0	0.2
Prop In Lane	1.00		0.00	0.00		0.02				1.00		1.00
Lane Grp Cap(c), veh/h	45	4055	0	0	2353	1289				198	0	91
V/C Ratio(X)	0.47	0.27	0.00	0.00	0.13	0.13				0.32	0.00	0.05
Avail Cap(c_a), veh/h	253	4055	0	0	2353	1289				1077	0	494
HCM Platoon Ratio	1.00	1.00	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	0.00	1.00
Uniform Delay (d), s/veh	28.9	1.8	0.0	0.0	3.3	3.3				27.2	0.0	26.8
Incr Delay (d2), s/veh	2.6	0.1	0.0	0.0	0.1	0.2				0.3	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.0	0.0	0.4	0.4				0.4	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.5	2.0	0.0	0.0	3.5	3.6				27.5	0.0	26.9
LnGrp LOS	C	A			A	A				C		C
Approach Vol, veh/h		1119			460						68	
Approach Delay, s/veh		2.5			3.5						27.5	
Approach LOS		A			A						C	

Timer - Assigned Phs				4		6	7	8				
Phs Duration (G+Y+Rc), s				52.0		8.0	6.1	45.9				
Change Period (Y+Rc), s				5.1		4.6	4.6	5.1				
Max Green Setting (Gmax), s				31.9		18.4	8.4	18.9				
Max Q Clear Time (g_c+I1), s				5.5		3.0	2.7	3.8				
Green Ext Time (p_c), s				8.2		0.1	0.0	2.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			3.8									
HCM 7th LOS			A									

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	225	3	90	280	5	63
Future Vol, veh/h	225	3	90	280	5	63
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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	259	3	103	322	6	72

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	262	0	789	260
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	529	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1314	-	362	783
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	595	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1314	-	328	783
Mov Cap-2 Maneuver	-	-	-	-	328	-
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	538	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.94	10.69
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	710	-	-	438	-
HCM Lane V/C Ratio	0.11	-	-	0.079	-
HCM Control Delay (s/veh)	10.7	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.3	-

Intersection	
Int Delay, s/veh	74

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	226	62	240	170	0	0	0	0	396	3	200
Future Vol, veh/h	0	226	62	240	170	0	0	0	0	396	3	200
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	240	66	255	181	0	0	0	0	421	3	213

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	306	0	0	932	998	181
Stage 1	-	-	-	-	-	-	691	691	-
Stage 2	-	-	-	-	-	-	240	306	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1266	-	0	~ 298	246	867
Stage 1	0	-	-	-	-	0	501	448	-
Stage 2	0	-	-	-	-	0	804	665	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1266	-	-	~ 238	0	867
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 304	0	-
Stage 1	-	-	-	-	-	-	501	0	-
Stage 2	-	-	-	-	-	-	642	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	5.01	156.77
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	1266	-	304	867
HCM Lane V/C Ratio	-	-	0.202	-	1.396	0.245
HCM Control Delay (s/veh)	-	-	8.6	-	230.1	10.5
HCM Lane LOS	-	-	A	-	F	B
HCM 95th %tile Q(veh)	-	-	0.8	-	22.2	1

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

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	146	477	0	0	361	314	49	1	216	0	0	0
Future Vol, veh/h	146	477	0	0	361	314	49	1	216	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	155	507	0	0	384	334	52	1	230	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	718	0	-	-	-	0	1202	1536	507
Stage 1	-	-	-	-	-	-	818	818	-
Stage 2	-	-	-	-	-	-	384	718	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	892	-	0	0	-	-	206	117	569
Stage 1	-	-	0	0	-	-	437	393	-
Stage 2	-	-	0	0	-	-	693	436	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	892	-	-	-	-	-	170	0	569
Mov Cap-2 Maneuver	-	-	-	-	-	-	270	0	-
Stage 1	-	-	-	-	-	-	361	0	-
Stage 2	-	-	-	-	-	-	693	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	2.32	0	16.67
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	270	569	892	-	-	-
HCM Lane V/C Ratio	0.197	0.404	0.174	-	-	-
HCM Control Delay (s/veh)	21.6	15.5	9.9	-	-	-
HCM Lane LOS	C	C	A	-	-	-
HCM 95th %tile Q(veh)	0.7	1.9	0.6	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	1068	411	48	0	12
Future Vol, veh/h	0	1068	411	48	0	12
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1463	563	66	0	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	282
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	615
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	615
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.02
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	615
HCM Lane V/C Ratio	-	-	-	0.027
HCM Control Delay (s/veh)	-	-	-	11
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Intersection Delay, s/veh	107.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	621	447	316	291	0	0	0	0	243	7	168
Future Vol, veh/h	0	621	447	316	291	0	0	0	0	243	7	168
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	654	471	333	306	0	0	0	0	256	7	177
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	117.2	137.4	38.1
HCM LOS	F	F	E

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	52%	58%
Vol Thru, %	100%	0%	48%	2%
Vol Right, %	0%	100%	0%	40%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	621	447	607	418
LT Vol	0	0	316	243
Through Vol	621	0	291	7
RT Vol	0	447	0	168
Lane Flow Rate	654	471	639	440
Geometry Grp	5	5	4a	2
Degree of Util (X)	1.306	0.848	1.216	0.84
Departure Headway (Hd)	7.565	6.843	7.03	7.33
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	484	532	524	497
Service Time	5.265	4.543	5.03	5.33
HCM Lane V/C Ratio	1.351	0.885	1.219	0.885
HCM Control Delay, s/veh	175	36.8	137.4	38.1
HCM Lane LOS	F	E	F	E
HCM 95th-tile Q	26.9	8.9	23.7	8.5

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	429	435	607	192	0	0
Future Vol, veh/h	429	435	607	192	0	0
Conflicting Peds, #/hr	0	0	0	3	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	493	500	698	221	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	921	0	-	0	-	811
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	749	-	-	-	0	383
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	747	-	-	-	-	381
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

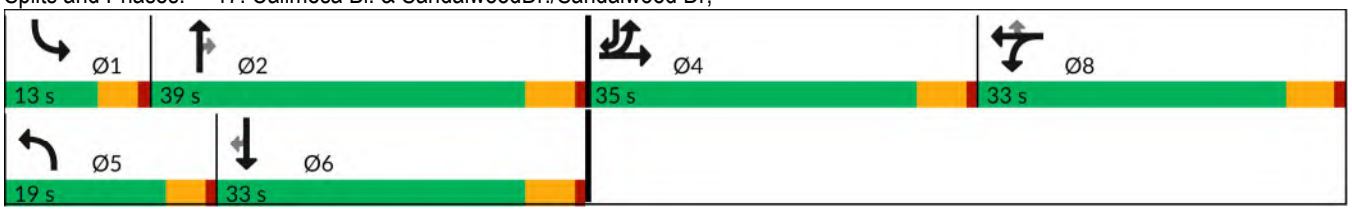
Approach	EB	WB	SB
HCM Control Delay, s/v	9.26	0	0
HCM LOS			A

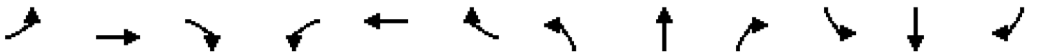
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	540	-	-	-	-
HCM Lane V/C Ratio	0.66	-	-	-	-
HCM Control Delay (s/veh)	18.7	0	-	-	0
HCM Lane LOS	C	A	-	-	A
HCM 95th %tile Q(veh)	5	-	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	219	119	22	166	26	240	312	136	29	168	393
Future Volume (vph)	219	119	22	166	26	240	312	136	29	168	393
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0	35.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%	29.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	15.7	15.7	13.4	13.4	13.4	14.7	28.6	28.6	6.2	13.4	29.1
Actuated g/C Ratio	0.20	0.20	0.17	0.17	0.17	0.19	0.36	0.36	0.08	0.17	0.37
v/c Ratio	0.47	0.44	0.07	0.54	0.07	0.75	0.25	0.21	0.22	0.55	0.53
Control Delay (s/veh)	33.8	23.9	30.6	38.1	0.3	48.6	21.5	6.0	41.8	38.2	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.8	23.9	30.6	38.1	0.3	48.6	21.5	6.0	41.8	38.2	6.6
LOS	C	C	C	D	A	D	C	A	D	D	A
Approach Delay (s/veh)		27.3		32.8			27.9			17.3	
Approach LOS		C		C			C			B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 78.4	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay (s/veh): 25.0	Intersection LOS: C
Intersection Capacity Utilization 60.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	119	99	22	166	26	240	312	136	29	168	393
Future Volume (veh/h)	219	119	99	22	166	26	240	312	136	29	168	393
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	148	242	87	23	175	18	253	328	116	31	177	342
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	269	400	140	272	285	237	300	1296	577	59	430	603
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.17	0.36	0.36	0.03	0.23	0.23
Sat Flow, veh/h	1810	2690	940	1810	1900	1580	1810	3610	1606	1810	1900	1607
Grp Volume(v), veh/h	148	169	160	23	175	18	253	328	116	31	177	342
Grp Sat Flow(s),veh/h/ln	1810	1900	1731	1810	1900	1580	1810	1805	1606	1810	1900	1607
Q Serve(g_s), s	5.1	5.6	5.8	0.7	5.8	0.7	9.1	4.3	3.4	1.1	5.3	11.4
Cycle Q Clear(g_c), s	5.1	5.6	5.8	0.7	5.8	0.7	9.1	4.3	3.4	1.1	5.3	11.4
Prop In Lane	1.00		0.54	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	269	283	257	272	285	237	300	1296	577	59	430	603
V/C Ratio(X)	0.55	0.60	0.62	0.08	0.61	0.08	0.84	0.25	0.20	0.52	0.41	0.57
Avail Cap(c_a), veh/h	797	837	762	743	780	649	388	1804	803	226	780	899
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	26.7	26.8	24.6	26.7	24.6	27.2	15.2	14.9	32.0	22.2	16.7
Incr Delay (d2), s/veh	1.8	2.0	2.5	0.1	2.1	0.1	10.2	0.1	0.2	2.7	0.6	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	2.5	2.4	0.3	2.6	0.2	4.4	1.6	1.1	0.5	2.2	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.3	28.8	29.3	24.7	28.9	24.7	37.4	15.3	15.1	34.7	22.8	17.5
LnGrp LOS	C	C	C	C	C	C	D	B	B	C	C	B
Approach Vol, veh/h		477			216			697			550	
Approach Delay, s/veh		28.8			28.1			23.3			20.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	29.5		15.4	15.7	20.6		15.5				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6				
Max Q Clear Time (g_c+I1), s	3.1	6.3		7.8	11.1	13.4		7.8				
Green Ext Time (p_c), s	0.0	2.4		2.2	0.1	1.8		0.9				

Intersection Summary		
HCM 7th Control Delay, s/veh	24.3	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	20.4
Intersection LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	288	0	0	180	508	1
Future Vol, veh/h	288	0	0	180	508	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	297	0	0	186	524	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	14.1	11.7	27
HCM LOS	B	B	D

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	0%
Vol Thru, %	0%	100%	100%
Vol Right, %	0%	0%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	509	288	180
LT Vol	508	0	0
Through Vol	0	288	180
RT Vol	1	0	0
Lane Flow Rate	525	297	186
Geometry Grp	1	1	1
Degree of Util (X)	0.801	0.477	0.308
Departure Headway (Hd)	5.493	5.784	5.976
Convergence, Y/N	Yes	Yes	Yes
Cap	656	621	599
Service Time	3.534	3.842	4.04
HCM Lane V/C Ratio	0.8	0.478	0.311
HCM Control Delay, s/veh	27	14.1	11.7
HCM Lane LOS	D	B	B
HCM 95th-tile Q	8.1	2.6	1.3

Intersection	
Intersection Delay, s/veh	7
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	1	0	14	3	1
Future Vol, veh/h	18	1	0	14	3	1
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	30	2	0	23	5	2
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.3	6.5	7.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	95%	75%
Vol Thru, %	0%	0%	25%
Vol Right, %	100%	5%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	14	19	4
LT Vol	0	18	3
Through Vol	0	0	1
RT Vol	14	1	0
Lane Flow Rate	23	32	7
Geometry Grp	1	1	1
Degree of Util (X)	0.022	0.036	0.008
Departure Headway (Hd)	3.36	4.111	4.123
Convergence, Y/N	Yes	Yes	Yes
Cap	1066	875	870
Service Time	1.377	2.116	2.14
HCM Lane V/C Ratio	0.022	0.037	0.008
HCM Control Delay, s/veh	6.5	7.3	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.1	0

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	17	0	235	19	0	0	0	0	0	0	0
Future Vol, veh/h	0	17	0	235	19	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	18	0	253	20	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	18	0	0	544	544	20
Stage 1	-	-	-	-	-	-	526	526	-
Stage 2	-	-	-	-	-	-	18	18	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1612	-	0	503	449	1063
Stage 1	0	-	-	-	-	0	597	532	-
Stage 2	0	-	-	-	-	0	1010	884	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1612	-	-	424	0	1063
Mov Cap-2 Maneuver	-	-	-	-	-	-	424	0	-
Stage 1	-	-	-	-	-	-	597	0	-
Stage 2	-	-	-	-	-	-	850	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	7.08	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1593	-	-
HCM Lane V/C Ratio	-	-	0.157	-	-
HCM Control Delay (s/veh)	-	-	7.6	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.6	-	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	17	0	0	253	0	1	0	340	0	0	0
Future Vol, veh/h	0	17	0	0	253	0	1	0	340	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	19	0	0	278	0	1	0	374	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	278	0	-	-	-	0	297	297	19
Stage 1	-	-	-	-	-	-	19	19	-
Stage 2	-	-	-	-	-	-	278	278	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1296	-	0	0	-	-	699	618	1065
Stage 1	-	-	0	0	-	-	1009	884	-
Stage 2	-	-	0	0	-	-	774	684	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1296	-	-	-	-	-	699	0	1065
Mov Cap-2 Maneuver	-	-	-	-	-	-	699	0	-
Stage 1	-	-	-	-	-	-	1009	0	-
Stage 2	-	-	-	-	-	-	774	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	10.21
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1064	1296	-	-	-
HCM Lane V/C Ratio	0.352	-	-	-	-
HCM Control Delay (s/veh)	10.2	0	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	1.6	0	-	-	-

Intersection	
Intersection Delay, s/veh	20.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	17	338	2	58	228	92	0	55	70	154	95	25
Future Vol, veh/h	17	338	2	58	228	92	0	55	70	154	95	25
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	371	2	64	251	101	0	60	77	169	104	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	22.3	23.1	12.6	18.5
HCM LOS	C	C	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	5%	15%	56%
Vol Thru, %	44%	95%	60%	35%
Vol Right, %	56%	1%	24%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	125	357	378	274
LT Vol	0	17	58	154
Through Vol	55	338	228	95
RT Vol	70	2	92	25
Lane Flow Rate	137	392	415	301
Geometry Grp	1	1	1	1
Degree of Util (X)	0.269	0.688	0.711	0.568
Departure Headway (Hd)	7.043	6.311	6.158	6.788
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	514	569	582	527
Service Time	5.043	4.397	4.242	4.878
HCM Lane V/C Ratio	0.267	0.689	0.713	0.571
HCM Control Delay, s/veh	12.6	22.3	23.1	18.5
HCM Lane LOS	B	C	C	C
HCM 95th-tile Q	1.1	5.3	5.8	3.5

APPENDIX 5.2: E+P (PHASE 2) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Intersection Delay, s/veh	2.8
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	1	16	45
Demand Flow Rate, veh/h	1	16	45
Vehicles Circulating, veh/h	16	0	1
Vehicles Exiting, veh/h	0	46	16
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	2.7	2.7	2.9
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	1	16	45
Cap Entry Lane, veh/h	1358	1380	1378
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	1	16	45
Cap Entry, veh/h	1358	1380	1378
V/C Ratio	0.001	0.012	0.033
Control Delay, s/veh	2.7	2.7	2.9
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	3.3
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	0	49	136
Demand Flow Rate, veh/h	0	49	136
Vehicles Circulating, veh/h	136	0	0
Vehicles Exiting, veh/h	0	136	49
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	0.0	2.9	3.4
Approach LOS	-	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	0	49	136
Cap Entry Lane, veh/h	1201	1380	1380
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	0	49	136
Cap Entry, veh/h	1201	1380	1380
V/C Ratio	0.000	0.036	0.099
Control Delay, s/veh	3.0	2.9	3.4
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	4.0
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	192	121	186
Demand Flow Rate, veh/h	192	121	186
Vehicles Circulating, veh/h	62	9	168
Vehicles Exiting, veh/h	68	345	86
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.0	3.3	4.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	192	121	186
Cap Entry Lane, veh/h	1295	1367	1163
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	192	121	186
Cap Entry, veh/h	1295	1367	1163
V/C Ratio	0.148	0.088	0.160
Control Delay, s/veh	4.0	3.3	4.5
LOS	A	A	A
95th %tile Queue, veh	1	0	1

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	63	23	117	90	14
Future Vol, veh/h	40	63	23	117	90	14
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	43	68	25	127	98	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	283	105	113	0	-	0
Stage 1	105	-	-	-	-	-
Stage 2	177	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	712	954	1489	-	-	-
Stage 1	924	-	-	-	-	-
Stage 2	858	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	700	954	1489	-	-	-
Mov Cap-2 Maneuver	700	-	-	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	858	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.97	1.23	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1489	-	836	-	-
HCM Lane V/C Ratio	0.017	-	0.134	-	-
HCM Control Delay (s/veh)	7.5	-	10	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Intersection	
Intersection Delay, s/veh	3.8
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	216	209	166
Demand Flow Rate, veh/h	216	209	166
Vehicles Circulating, veh/h	161	15	72
Vehicles Exiting, veh/h	77	362	152
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.2	3.2	3.9
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.069	0.931	0.344	0.656	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	15	201	72	137	166
Cap Entry Lane, veh/h	1227	1227	1401	1401	1282
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	15	201	72	137	166
Cap Entry, veh/h	1227	1227	1401	1401	1282
V/C Ratio	0.012	0.164	0.051	0.098	0.129
Control Delay, s/veh	3.0	4.3	3.0	3.3	3.9
LOS	A	A	A	A	A
95th %tile Queue, veh	0	1	0	0	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	378	149	8	18	0
Future Vol, veh/h	0	378	149	8	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	518	204	11	25	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	215	0	-	0	727	210
Stage 1	-	-	-	-	210	-
Stage 2	-	-	-	-	518	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1367	-	-	-	394	836
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	602	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1367	-	-	-	394	836
Mov Cap-2 Maneuver	-	-	-	-	394	-
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	602	-

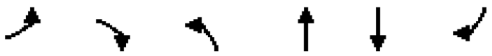
Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	14.75
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1367	-	-	-	394
HCM Lane V/C Ratio	-	-	-	-	0.063
HCM Control Delay (s/veh)	0	-	-	-	14.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	754	648		
Future Volume (vph)	754	648		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	40.0	49.0	80.0	31.0
Total Split (%)	33.3%	40.8%	67%	26%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min
Act Effct Green (s)	10.0	13.8		
Actuated g/C Ratio	0.21	0.28		
v/c Ratio	0.39	0.71		
Control Delay (s/veh)	0.5	19.9		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.5	19.9		
LOS	A	B		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 48.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay (s/veh): 9.5	Intersection LOS: A
Intersection Capacity Utilization 30.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	754	648	0	0	0
Future Volume (veh/h)	0	754	648	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	711	704	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	689	1080	1026	523	6	0
Arrive On Green	0.00	0.38	0.29	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	-96900	0
Grp Volume(v), veh/h	0	711	704	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	6.2	5.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.2	5.3	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	689	1080	1026	523	6	0
V/C Ratio(X)	0.00	0.66	0.69	0.00	0.00	0.00
Avail Cap(c_a), veh/h	2127	3332	5251	4794	1658	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.6	9.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.3	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.8	1.3	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	8.3	9.6	0.0	0.0	0.0
LnGrp LOS		A	A			
Approach Vol, veh/h	711			704	0	
Approach Delay, s/veh	8.3			9.6	0.0	
Approach LOS	A			A		

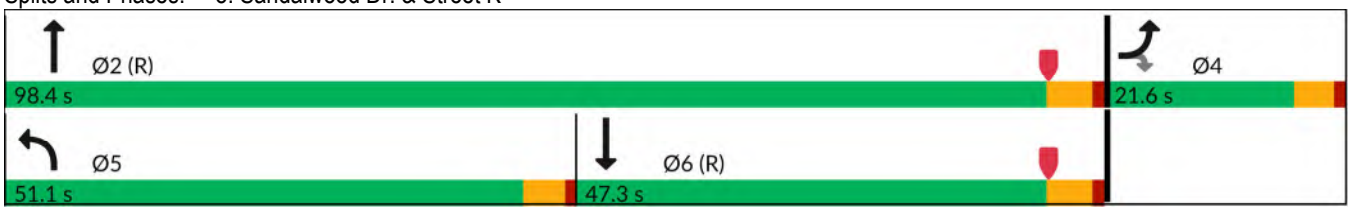
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		13.3		16.4	13.3	0.0
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		74.9		34.9	44.4	25.9
Max Q Clear Time (g_c+I1), s		0.0		8.2	7.3	0.0
Green Ext Time (p_c), s		0.0		3.2	1.4	0.0

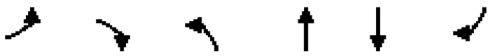
Intersection Summary		
HCM 7th Control Delay, s/veh		8.9
HCM 7th LOS		A

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	2	127	750	646	747
Future Volume (vph)	2	127	750	646	747
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	21.6	21.6	9.6	15.1	22.1
Total Split (s)	21.6	21.6	51.1	98.4	47.3
Total Split (%)	18.0%	18.0%	42.6%	82.0%	39.4%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.4	10.4	33.3	99.9	62.0
Actuated g/C Ratio	0.09	0.09	0.28	0.83	0.52
v/c Ratio	0.01	0.52	0.84	0.23	0.44
Control Delay (s/veh)	49.5	15.7	40.2	0.6	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.5	15.7	40.2	0.6	20.0
LOS	D	B	D	A	B
Approach Delay (s/veh)	16.2			21.9	20.0
Approach LOS	B			C	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 93.3 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay (s/veh): 20.9	Intersection LOS: C
Intersection Capacity Utilization 62.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	127	750	646	747	7
Future Volume (veh/h)	2	127	750	646	747	7
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	138	815	702	812	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	183	163	880	2953	1937	19
Arrive On Green	0.10	0.10	0.42	1.00	0.53	0.53
Sat Flow, veh/h	1810	1610	3510	3705	3757	36
Grp Volume(v), veh/h	2	138	815	702	400	420
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1894
Q Serve(g_s), s	0.1	10.1	26.5	0.0	16.1	16.1
Cycle Q Clear(g_c), s	0.1	10.1	26.5	0.0	16.1	16.1
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	183	163	880	2953	955	1001
V/C Ratio(X)	0.01	0.85	0.93	0.24	0.42	0.42
Avail Cap(c_a), veh/h	256	228	1360	2953	955	1001
HCM Platoon Ratio	1.00	1.00	1.67	1.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	0.93	0.93
Uniform Delay (d), s/veh	48.5	53.0	33.8	0.0	17.1	17.1
Incr Delay (d2), s/veh	0.0	18.3	5.4	0.2	1.3	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	0.1	9.6	10.3	0.1	6.9	7.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.5	71.3	39.3	0.2	18.4	18.3
LnGrp LOS	D	E	D	A	B	B
Approach Vol, veh/h	140			1517	820	
Approach Delay, s/veh	71.0			21.2	18.3	
Approach LOS	E			C	B	

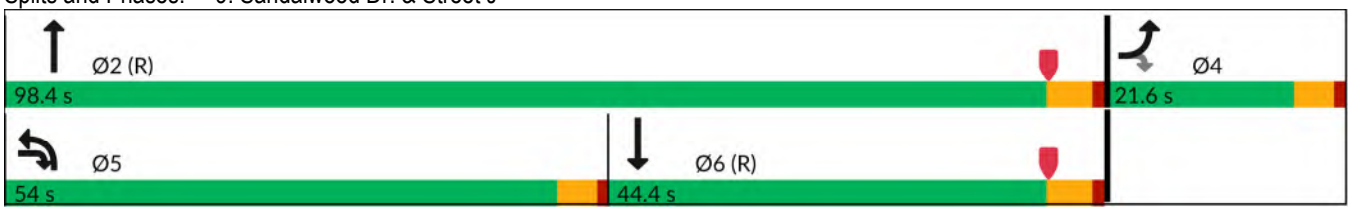
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		103.3		16.7	34.7	68.6
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	46.5	42.2
Max Q Clear Time (g_c+I1), s		2.0		12.1	28.5	18.1
Green Ext Time (p_c), s		5.8		0.2	1.6	5.5

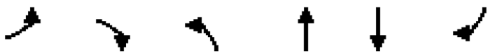
Intersection Summary						
HCM 7th Control Delay, s/veh			23.1			
HCM 7th LOS			C			

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	2	194	1128	1393	867
Future Volume (vph)	2	194	1128	1393	867
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	21.6	9.6	9.6	15.1	22.1
Total Split (s)	21.6	54.0	54.0	98.4	44.4
Total Split (%)	18.0%	45.0%	45.0%	82.0%	37.0%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	50.6	47.7	116.1	59.7
Actuated g/C Ratio	0.08	0.42	0.40	0.97	0.50
v/c Ratio	0.01	0.30	0.88	0.43	0.53
Control Delay (s/veh)	51.0	20.2	42.1	1.3	48.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.0	20.2	42.1	1.3	48.6
LOS	D	C	D	A	D
Approach Delay (s/veh)	20.5			19.5	48.6
Approach LOS	C			B	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 48 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay (s/veh): 26.7	Intersection LOS: C
Intersection Capacity Utilization 76.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	194	1128	1393	867	7
Future Volume (veh/h)	2	194	1128	1393	867	7
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	211	1226	1514	942	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	182	741	1262	2955	1544	13
Arrive On Green	0.10	0.10	0.72	1.00	0.84	0.84
Sat Flow, veh/h	1810	1610	3510	3705	3763	31
Grp Volume(v), veh/h	2	211	1226	1514	464	486
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1894
Q Serve(g_s), s	0.1	9.8	39.1	0.0	10.0	10.0
Cycle Q Clear(g_c), s	0.1	9.8	39.1	0.0	10.0	10.0
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	182	741	1262	2955	760	797
V/C Ratio(X)	0.01	0.28	0.97	0.51	0.61	0.61
Avail Cap(c_a), veh/h	256	807	1445	2955	760	797
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.68	0.68	0.89	0.89
Uniform Delay (d), s/veh	48.6	20.1	16.3	0.0	6.3	6.3
Incr Delay (d2), s/veh	0.0	0.2	12.2	0.4	3.2	3.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	10.9	7.9	0.2	2.9	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.6	20.3	28.5	0.4	9.5	9.4
LnGrp LOS	D	C	C	A	A	A
Approach Vol, veh/h	213			2740	950	
Approach Delay, s/veh	20.6			13.0	9.5	
Approach LOS	C			B	A	

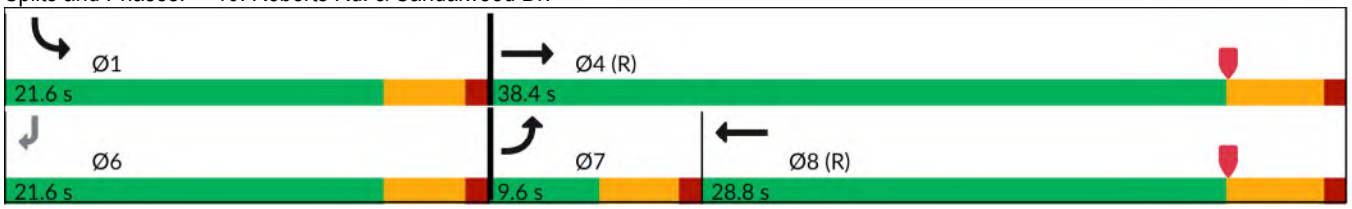
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		103.3		16.7	47.7	55.6
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	49.4	39.3
Max Q Clear Time (g_c+I1), s		2.0		11.8	41.1	12.0
Green Ext Time (p_c), s		18.0		0.3	2.0	6.9

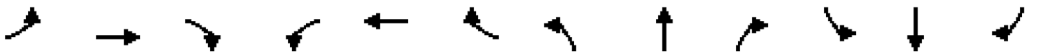
Intersection Summary	
HCM 7th Control Delay, s/veh	12.6
HCM 7th LOS	B

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	10	1045	2510	57	5
Future Volume (vph)	10	1045	2510	57	5
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	7	4	8	1	
Permitted Phases					6
Detector Phase	7	4	8	1	6
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	5.0	5.0
Minimum Split (s)	9.6	22.4	15.4	9.6	21.6
Total Split (s)	9.6	38.4	28.8	21.6	21.6
Total Split (%)	16.0%	64.0%	48.0%	36.0%	36.0%
Yellow Time (s)	3.6	4.4	4.4	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	4.6	4.6
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	C-Max	C-Max	None	None
Act Effct Green (s)	5.2	50.3	48.2	5.7	5.7
Actuated g/C Ratio	0.09	0.84	0.80	0.10	0.10
v/c Ratio	0.07	0.26	0.67	0.19	0.02
Control Delay (s/veh)	22.7	3.5	7.8	26.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.7	3.5	7.8	26.1	0.2
LOS	C	A	A	C	A
Approach Delay (s/veh)		3.7	7.8		
Approach LOS		A	A		

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay (s/veh): 6.9	Intersection LOS: A
Intersection Capacity Utilization 62.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1045	0	0	2510	69	0	0	0	57	0	5
Future Volume (veh/h)	10	1045	0	0	2510	69	0	0	0	57	0	5
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900				1900	0	1900
Adj Flow Rate, veh/h	11	1136	0	0	2728	75				62	0	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	25	4032	0	0	3564	97				197	0	90
Arrive On Green	0.01	0.78	0.00	0.00	0.69	0.69				0.06	0.00	0.06
Sat Flow, veh/h	1810	5358	0	0	5362	142				3510	0	1610
Grp Volume(v), veh/h	11	1136	0	0	1810	993				62	0	5
Grp Sat Flow(s),veh/h/ln	1810	1729	0	0	1729	1875				1755	0	1610
Q Serve(g_s), s	0.4	3.7	0.0	0.0	20.7	21.2				1.0	0.0	0.2
Cycle Q Clear(g_c), s	0.4	3.7	0.0	0.0	20.7	21.2				1.0	0.0	0.2
Prop In Lane	1.00		0.00	0.00		0.08				1.00		1.00
Lane Grp Cap(c), veh/h	25	4032	0	0	2374	1287				197	0	90
V/C Ratio(X)	0.44	0.28	0.00	0.00	0.76	0.77				0.32	0.00	0.06
Avail Cap(c_a), veh/h	151	4032	0	0	2374	1287				995	0	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	29.3	1.9	0.0	0.0	6.2	6.3				27.2	0.0	26.8
Incr Delay (d2), s/veh	3.6	0.1	0.0	0.0	2.4	4.5				0.3	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.0	0.0	4.4	5.6				0.4	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.9	2.0	0.0	0.0	8.6	10.8				27.5	0.0	26.9
LnGrp LOS	C	A			A	B				C		C
Approach Vol, veh/h		1147			2803						67	
Approach Delay, s/veh		2.3			9.3						27.5	
Approach LOS		A			A						C	

Timer - Assigned Phs			4		6	7	8					
Phs Duration (G+Y+Rc), s			52.0		8.0	5.4	46.6					
Change Period (Y+Rc), s			5.4		4.6	4.6	5.4					
Max Green Setting (Gmax), s			33.0		17.0	5.0	23.4					
Max Q Clear Time (g_c+I1), s			5.7		3.0	2.4	23.2					
Green Ext Time (p_c), s			8.7		0.1	0.0	0.2					

Intersection Summary	
HCM 7th Control Delay, s/veh	7.6
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	3.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	418	2	114	223	8	135
Future Vol, veh/h	418	2	114	223	8	135
Conflicting Peds, #/hr	0	2	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	480	2	131	256	9	155

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	485	0	1002	484
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	518	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1089	-	271	587
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	602	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1086	-	233	586
Mov Cap-2 Maneuver	-	-	-	-	233	-
Stage 1	-	-	-	-	623	-
Stage 2	-	-	-	-	517	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.97	14.55
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	540	-	-	609	-
HCM Lane V/C Ratio	0.304	-	-	0.121	-
HCM Control Delay (s/veh)	14.6	-	-	8.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.3	-	-	0.4	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	469	84	314	180	0	0	0	0	251	6	157
Future Vol, veh/h	0	469	84	314	180	0	0	0	0	251	6	157
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	552	99	369	212	0	0	0	0	295	7	185

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	652	0	0	1502	1602	212
Stage 1	-	-	-	-	-	-	951	951	-
Stage 2	-	-	-	-	-	-	552	652	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	944	-	0	~ 135	107	833
Stage 1	0	-	-	-	-	0	379	341	-
Stage 2	0	-	-	-	-	0	581	467	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	944	-	-	~ 82	0	833
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ -59	0	-
Stage 1	-	-	-	-	-	-	379	0	-
Stage 2	-	-	-	-	-	-	354	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	7.14	
HCM LOS			-

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	944	-	+	833
HCM Lane V/C Ratio	-	-	0.391	-	-	0.222
HCM Control Delay (s/veh)	-	-	11.2	-	-	10.5
HCM Lane LOS	-	-	B	-	-	B
HCM 95th %tile Q(veh)	-	-	1.9	-	-	0.8

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

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	326	394	0	0	462	659	31	4	97	0	0	0
Future Vol, veh/h	326	394	0	0	462	659	31	4	97	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	351	424	0	0	497	709	33	4	104	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1205	0	-	-	-	0	1622	2330	424
Stage 1	-	-	-	-	-	-	1125	1125	-
Stage 2	-	-	-	-	-	-	497	1205	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	586	-	0	0	-	-	114	38	635
Stage 1	-	-	0	0	-	-	313	283	-
Stage 2	-	-	0	0	-	-	616	259	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	586	-	-	-	-	-	46	0	635
Mov Cap-2 Maneuver	-	-	-	-	-	-	95	0	-
Stage 1	-	-	-	-	-	-	126	0	-
Stage 2	-	-	-	-	-	-	616	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	9	0	26.02
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	95	635	586	-	-	-
HCM Lane V/C Ratio	0.395	0.164	0.598	-	-	-
HCM Control Delay (s/veh)	65.5	11.8	19.9	-	-	-
HCM Lane LOS	F	B	C	-	-	-
HCM 95th %tile Q(veh)	1.6	0.6	3.9	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	697	2058	9	0	2
Future Vol, veh/h	0	697	2058	9	0	2
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	758	2237	10	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1118
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	337
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	337
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	15.76
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	337
HCM Lane V/C Ratio	-	-	-	0.006
HCM Control Delay (s/veh)	-	-	-	15.8
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Intersection Delay, s/veh	933.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	729	339	185	1484	0	0	0	0	122	16	1076
Future Vol, veh/h	0	729	339	185	1484	0	0	0	0	122	16	1076
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	900	419	228	1832	0	0	0	0	151	20	1328
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

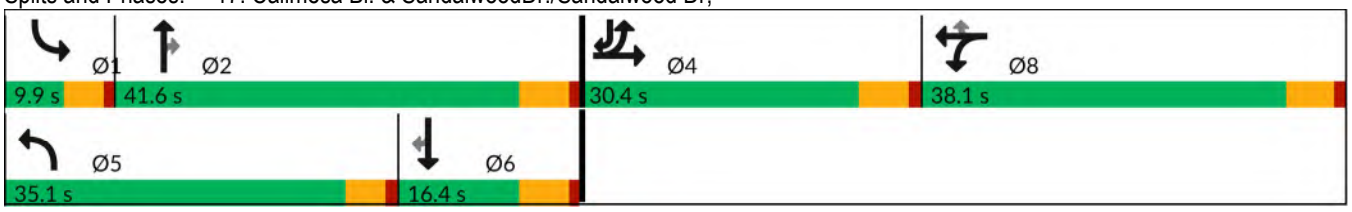
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	340.9	1413.1	794.2
HCM LOS	F	F	F

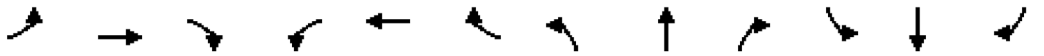
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	11%	10%
Vol Thru, %	100%	0%	89%	1%
Vol Right, %	0%	100%	0%	89%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	729	339	1669	1214
LT Vol	0	0	185	122
Through Vol	729	0	1484	16
RT Vol	0	339	0	1076
Lane Flow Rate	900	419	2060	1499
Geometry Grp	5	5	4a	2
Degree of Util (X)	1.899	0.802	4.073	2.699
Departure Headway (Hd)	20.063	19.261	11.784	10.431
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	189	193	330	375
Service Time	17.763	16.961	9.784	8.431
HCM Lane V/C Ratio	4.762	2.171	6.242	3.997
HCM Control Delay, s/veh	466	71.9	1413.1	794.2
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	25.2	5.5	121.2	77.8

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	252	194	154	197	32	1065	544	99	14	205	409
Future Volume (vph)	252	194	154	197	32	1065	544	99	14	205	409
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4	30.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	22.7	22.7	17.7	17.7	17.7	30.7	42.7	42.7	5.2	11.1	39.2
Actuated g/C Ratio	0.22	0.22	0.17	0.17	0.17	0.30	0.41	0.41	0.05	0.11	0.38
v/c Ratio	0.71	0.68	0.57	0.69	0.09	2.25	0.41	0.16	0.18	1.14	0.62
Control Delay (s/veh)	49.9	23.7	46.8	51.7	0.4	592.2	24.8	5.7	54.8	150.7	18.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.9	23.7	46.8	51.7	0.4	592.2	24.8	5.7	54.8	150.7	18.2
LOS	D	C	D	D	A	F	C	A	D	F	B
Approach Delay (s/veh)		31.3		45.5			377.4			62.3	
Approach LOS		C		D			F			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.1	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 2.25	
Intersection Signal Delay (s/veh): 207.6	Intersection LOS: F
Intersection Capacity Utilization 113.0%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	194	329	154	197	32	1065	544	99	14	205	409
Future Volume (veh/h)	252	194	329	154	197	32	1065	544	99	14	205	409
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	286	220	356	175	224	26	1210	618	82	16	233	388
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	434	456	386	270	284	237	541	1404	625	32	205	560
Arrive On Green	0.24	0.24	0.24	0.15	0.15	0.15	0.30	0.39	0.39	0.02	0.11	0.11
Sat Flow, veh/h	1810	1900	1610	1810	1900	1586	1810	3610	1608	1810	1900	1610
Grp Volume(v), veh/h	286	220	356	175	224	26	1210	618	82	16	233	388
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1586	1810	1805	1608	1810	1900	1610
Q Serve(g_s), s	14.6	10.2	22.0	9.3	11.6	1.4	30.5	12.9	3.4	0.9	11.0	11.0
Cycle Q Clear(g_c), s	14.6	10.2	22.0	9.3	11.6	1.4	30.5	12.9	3.4	0.9	11.0	11.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	434	456	386	270	284	237	541	1404	625	32	205	560
V/C Ratio(X)	0.66	0.48	0.92	0.65	0.79	0.11	2.24	0.44	0.13	0.49	1.14	0.69
Avail Cap(c_a), veh/h	443	465	394	580	609	508	541	1404	625	94	205	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	33.3	37.8	40.9	41.8	37.5	35.8	23.0	20.1	49.7	45.5	25.3
Incr Delay (d2), s/veh	3.5	0.8	26.4	2.6	4.9	0.2	562.7	0.2	0.1	4.3	104.8	3.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	4.6	11.2	4.2	5.6	0.6	97.3	5.3	1.2	0.4	11.0	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.5	34.1	64.2	43.5	46.7	37.7	598.5	23.2	20.2	54.0	150.4	28.9
LnGrp LOS	D	C	E	D	D	D	F	C	C	D	F	C
Approach Vol, veh/h		862			425			1910			637	
Approach Delay, s/veh		48.0			44.8			387.5			74.0	
Approach LOS		D			D			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	45.1		29.9	35.1	16.4		20.7				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7				
Max Q Clear Time (g_c+I1), s	2.9	14.9		24.0	32.5	13.0		13.6				
Green Ext Time (p_c), s	0.0	4.2		0.5	0.0	0.0		1.7				

Intersection Summary		
HCM 7th Control Delay, s/veh	221.1	
HCM 7th LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	493.2
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	122	564	113	604	1105	1
Future Vol, veh/h	122	564	113	604	1105	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	144	664	133	711	1300	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	253	333.7	745.6
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	16%
Vol Thru, %	0%	18%	84%
Vol Right, %	0%	82%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	1106	686	717
LT Vol	1105	0	113
Through Vol	0	122	604
RT Vol	1	564	0
Lane Flow Rate	1301	807	844
Geometry Grp	1	1	1
Degree of Util (X)	2.601	1.458	1.647
Departure Headway (Hd)	8.531	11.694	11.897
Convergence, Y/N	Yes	Yes	Yes
Cap	442	323	312
Service Time	6.531	9.694	9.897
HCM Lane V/C Ratio	2.943	2.498	2.705
HCM Control Delay, s/veh	745.6	253	333.7
HCM Lane LOS	F	F	F
HCM 95th-tile Q	89.1	24.5	30.6

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	3	3	14	0	2
Future Vol, veh/h	4	3	3	14	0	2
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	4	4	20	0	3
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	6.8	6.5	7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	57%	0%
Vol Thru, %	18%	0%	100%
Vol Right, %	82%	43%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	17	7	2
LT Vol	0	4	0
Through Vol	3	0	2
RT Vol	14	3	0
Lane Flow Rate	24	10	3
Geometry Grp	1	1	1
Degree of Util (X)	0.023	0.01	0.003
Departure Headway (Hd)	3.426	3.804	3.935
Convergence, Y/N	Yes	Yes	Yes
Cap	1051	945	914
Service Time	1.428	1.808	1.939
HCM Lane V/C Ratio	0.023	0.011	0.003
HCM Control Delay, s/veh	6.5	6.8	7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0	0

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	2	395	7	0	0	0	0	0	0	0
Future Vol, veh/h	0	12	2	395	7	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	14	2	470	8	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	17	0	0	963	965	8
Stage 1	-	-	-	-	-	-	949	949	-
Stage 2	-	-	-	-	-	-	14	17	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1614	-	0	286	257	1079
Stage 1	0	-	-	-	-	0	379	342	-
Stage 2	0	-	-	-	-	0	1014	886	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1614	-	-	202	0	1079
Mov Cap-2 Maneuver	-	-	-	-	-	-	202	0	-
Stage 1	-	-	-	-	-	-	379	0	-
Stage 2	-	-	-	-	-	-	717	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	8	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1606	-	-
HCM Lane V/C Ratio	-	-	0.291	-	-
HCM Control Delay (s/veh)	-	-	8.1	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1.2	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	0	0	394	0	8	0	248	0	0	0
Future Vol, veh/h	0	12	0	0	394	0	8	0	248	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	13	0	0	438	0	9	0	276	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	438	0	-	-	-	0	451	451	13
Stage 1	-	-	-	-	-	-	13	13	-
Stage 2	-	-	-	-	-	-	438	438	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1133	-	0	0	-	-	570	507	1073
Stage 1	-	-	0	0	-	-	1015	888	-
Stage 2	-	-	0	0	-	-	655	582	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1133	-	-	-	-	-	570	0	1073
Mov Cap-2 Maneuver	-	-	-	-	-	-	570	0	-
Stage 1	-	-	-	-	-	-	1015	0	-
Stage 2	-	-	-	-	-	-	655	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	9.74
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1044	1133	-	-	-
HCM Lane V/C Ratio	0.272	-	-	-	-
HCM Control Delay (s/veh)	9.7	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	1.1	0	-	-	-

Intersection	
Intersection Delay, s/veh	138.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	206	2	29	361	158	2	482	210	69	42	31
Future Vol, veh/h	52	206	2	29	361	158	2	482	210	69	42	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	219	2	31	384	168	2	513	223	73	45	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	26	112.2	226.6	18.4
HCM LOS	D	F	F	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	20%	5%	49%
Vol Thru, %	69%	79%	66%	30%
Vol Right, %	30%	1%	29%	22%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	694	260	548	142
LT Vol	2	52	29	69
Through Vol	482	206	361	42
RT Vol	210	2	158	31
Lane Flow Rate	738	277	583	151
Geometry Grp	1	1	1	1
Degree of Util (X)	1.431	0.607	1.133	0.355
Departure Headway (Hd)	7.447	9.465	8.155	10.02
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	495	384	449	361
Service Time	5.447	7.465	6.155	8.02
HCM Lane V/C Ratio	1.491	0.721	1.298	0.418
HCM Control Delay, s/veh	226.6	26	112.2	18.4
HCM Lane LOS	F	D	F	C
HCM 95th-tile Q	33.7	3.8	17.8	1.6

Intersection	
Intersection Delay, s/veh	2.9
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	2	53	30
Demand Flow Rate, veh/h	2	53	30
Vehicles Circulating, veh/h	51	0	2
Vehicles Exiting, veh/h	2	32	51
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	2.8	2.9	2.8
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	2	53	30
Cap Entry Lane, veh/h	1310	1380	1377
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	2	53	30
Cap Entry, veh/h	1310	1380	1377
V/C Ratio	0.002	0.038	0.022
Control Delay, s/veh	2.8	2.9	2.8
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	3.4
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	0	153	92
Demand Flow Rate, veh/h	0	153	92
Vehicles Circulating, veh/h	92	0	0
Vehicles Exiting, veh/h	0	92	153
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	0.0	3.5	3.1
Approach LOS	-	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	0	153	92
Cap Entry Lane, veh/h	1256	1380	1380
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	0	153	92
Cap Entry, veh/h	1256	1380	1380
V/C Ratio	0.000	0.111	0.067
Control Delay, s/veh	2.9	3.5	3.1
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	4.7
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	126	384	141
Demand Flow Rate, veh/h	126	384	141
Vehicles Circulating, veh/h	196	27	109
Vehicles Exiting, veh/h	215	223	213
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.1	5.2	3.9
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	126	384	141
Cap Entry Lane, veh/h	1130	1342	1235
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	126	384	141
Cap Entry, veh/h	1130	1342	1235
V/C Ratio	0.112	0.286	0.114
Control Delay, s/veh	4.1	5.2	3.9
LOS	A	A	A
95th %tile Queue, veh	0	1	0

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	44	72	127	146	45
Future Vol, veh/h	26	44	72	127	146	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	28	48	78	138	159	49

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	478	183	208	0	-	0
Stage 1	183	-	-	-	-	-
Stage 2	295	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	550	864	1375	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	760	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	519	864	1375	-	-	-
Mov Cap-2 Maneuver	519	-	-	-	-	-
Stage 1	805	-	-	-	-	-
Stage 2	760	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.84	2.81	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1375	-	693	-	-
HCM Lane V/C Ratio	0.057	-	0.11	-	-
HCM Control Delay (s/veh)	7.8	-	10.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	-	-

Intersection	
Intersection Delay, s/veh	4.1
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	143	432	206
Demand Flow Rate, veh/h	143	432	206
Vehicles Circulating, veh/h	190	10	225
Vehicles Exiting, veh/h	241	323	217
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.9	3.8	5.0
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.070	0.930	0.521	0.479	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	10	133	225	207	206
Cap Entry Lane, veh/h	1195	1195	1407	1407	1097
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	10	133	225	207	206
Cap Entry, veh/h	1195	1195	1407	1407	1097
V/C Ratio	0.008	0.111	0.160	0.147	0.188
Control Delay, s/veh	3.1	3.9	3.8	3.7	5.0
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	247	393	1	4	0
Future Vol, veh/h	0	247	393	1	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	441	702	2	7	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	704	0	-	0	1144	703
Stage 1	-	-	-	-	703	-
Stage 2	-	-	-	-	441	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	903	-	-	-	223	441
Stage 1	-	-	-	-	495	-
Stage 2	-	-	-	-	653	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	903	-	-	-	223	441
Mov Cap-2 Maneuver	-	-	-	-	223	-
Stage 1	-	-	-	-	495	-
Stage 2	-	-	-	-	653	-

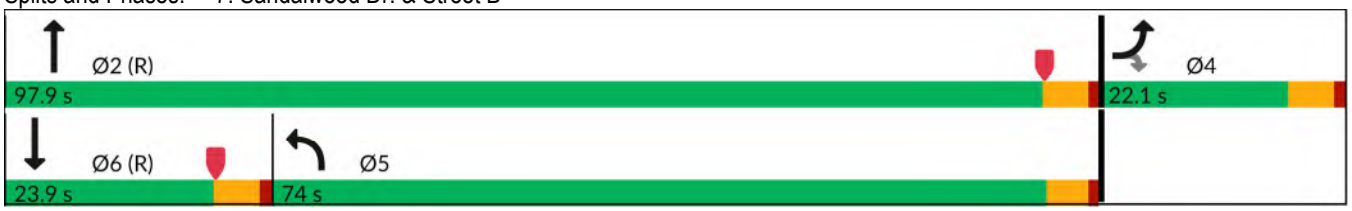
Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	21.67
HCM LOS			C

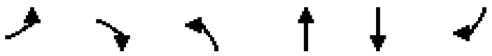
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	903	-	-	-	223
HCM Lane V/C Ratio	-	-	-	-	0.032
HCM Control Delay (s/veh)	0	-	-	-	21.7
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	329	438		
Future Volume (vph)	329	438		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	22.1	74.0	97.9	23.9
Total Split (%)	18.4%	61.7%	82%	20%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lag		Lead
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	21.8		
Actuated g/C Ratio	0.08	0.18		
v/c Ratio	0.18	0.75		
Control Delay (s/veh)	0.2	41.1		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.2	41.1		
LOS	A	D		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116.9 (97%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay (s/veh): 23.5	Intersection LOS: C
Intersection Capacity Utilization 16.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	329	438	0	0	0
Future Volume (veh/h)	0	329	438	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	255	476	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	195	306	2134	1533	298	0
Arrive On Green	0.00	0.11	0.61	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	1900	0
Grp Volume(v), veh/h	0	255	476	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	10.6	7.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.6	7.4	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	195	306	2134	1533	298	0
V/C Ratio(X)	0.00	0.83	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	256	401	2134	1533	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.99	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	52.5	10.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.9	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.5	2.8	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	63.4	10.7	0.0	0.0	0.0
LnGrp LOS		E	B			
Approach Vol, veh/h	255			476	0	
Approach Delay, s/veh	63.4			10.7	0.0	
Approach LOS	E			B		

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		101.9		18.1	78.0	23.9
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	69.4	* 19
Max Q Clear Time (g_c+I1), s		0.0		12.6	9.4	0.0
Green Ext Time (p_c), s		0.0		0.4	0.9	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	29.1
HCM 7th LOS	C

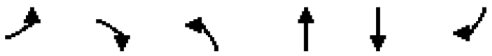
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	8	678	214	431	324
Future Volume (vph)	8	678	214	431	324
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	22.1	9.6	15.1	22.1
Total Split (s)	63.0	63.0	20.0	57.0	37.0
Total Split (%)	52.5%	52.5%	16.7%	47.5%	30.8%
Yellow Time (s)	4.1	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	33.7	33.7	12.3	76.1	59.2
Actuated g/C Ratio	0.28	0.28	0.10	0.63	0.49
v/c Ratio	0.02	0.92	0.65	0.20	0.20
Control Delay (s/veh)	22.3	29.6	63.3	10.8	21.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.3	29.6	63.3	10.8	21.5
LOS	C	C	E	B	C
Approach Delay (s/veh)	29.5			28.2	21.5
Approach LOS	C			C	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 24.1 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 27.4	Intersection LOS: C
Intersection Capacity Utilization 59.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	678	214	431	324	4
Future Volume (veh/h)	8	678	214	431	324	4
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	9	737	233	468	352	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	851	757	296	1605	1177	13
Arrive On Green	0.47	0.47	0.03	0.15	0.64	0.64
Sat Flow, veh/h	1810	1610	3510	3705	3751	42
Grp Volume(v), veh/h	9	737	233	468	174	182
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1893
Q Serve(g_s), s	0.3	53.6	7.9	13.9	5.1	5.1
Cycle Q Clear(g_c), s	0.3	53.6	7.9	13.9	5.1	5.1
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	851	757	296	1605	581	609
V/C Ratio(X)	0.01	0.97	0.79	0.29	0.30	0.30
Avail Cap(c_a), veh/h	873	777	451	1605	581	609
HCM Platoon Ratio	1.00	1.00	0.33	0.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.99	0.99
Uniform Delay (d), s/veh	16.9	31.0	57.3	34.4	15.4	15.4
Incr Delay (d2), s/veh	0.0	25.4	2.4	0.5	1.3	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	0.1	42.9	3.8	6.8	2.1	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.9	56.5	59.7	34.8	16.7	16.6
LnGrp LOS	B	E	E	C	B	B
Approach Vol, veh/h	746			701	356	
Approach Delay, s/veh	56.0			43.1	16.7	
Approach LOS	E			D	B	

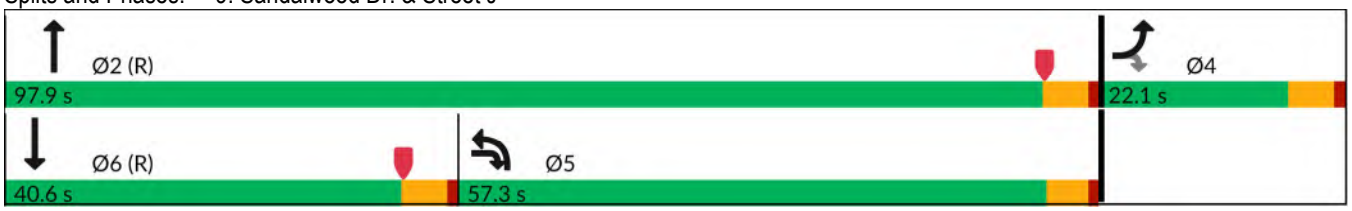
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		58.4		61.6	14.7	43.7
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		51.9		57.9	15.4	31.9
Max Q Clear Time (g_c+I1), s		15.9		55.6	9.9	7.1
Green Ext Time (p_c), s		3.5		0.8	0.2	2.1

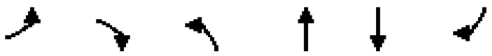
Intersection Summary	
HCM 7th Control Delay, s/veh	43.2
HCM 7th LOS	D

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	8	1019	323	637	998
Future Volume (vph)	8	1019	323	637	998
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	9.6	15.1	22.1
Total Split (s)	22.1	57.3	57.3	97.9	40.6
Total Split (%)	18.4%	47.8%	47.8%	81.6%	33.8%
Yellow Time (s)	4.1	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.6	4.6	5.1	5.1
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	55.7	52.7	116.0	54.6
Actuated g/C Ratio	0.08	0.46	0.44	0.97	0.46
v/c Ratio	0.06	1.47	0.23	0.20	0.66
Control Delay (s/veh)	51.9	246.6	20.1	1.0	27.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.9	246.6	20.1	1.0	27.4
LOS	D	F	C	A	C
Approach Delay (s/veh)	245.1			7.4	27.4
Approach LOS	F			A	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74 (62%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.47	
Intersection Signal Delay (s/veh): 95.8	Intersection LOS: F
Intersection Capacity Utilization 98.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	1019	323	637	998	4
Future Volume (veh/h)	8	1019	323	637	998	4
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	9	673	351	692	1085	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	151	929	1732	3002	1091	4
Arrive On Green	0.08	0.08	0.99	1.00	0.10	0.10
Sat Flow, veh/h	1810	1610	3510	3705	3784	14
Grp Volume(v), veh/h	9	673	351	692	531	558
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1898
Q Serve(g_s), s	0.5	0.0	0.2	0.0	35.3	35.3
Cycle Q Clear(g_c), s	0.5	0.0	0.2	0.0	35.3	35.3
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	151	929	1732	3002	534	561
V/C Ratio(X)	0.06	0.72	0.20	0.23	0.99	0.99
Avail Cap(c_a), veh/h	256	1022	1732	3002	534	561
HCM Platoon Ratio	1.00	1.00	2.00	2.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.95	0.95	0.67	0.67
Uniform Delay (d), s/veh	50.7	18.5	0.4	0.0	54.0	54.0
Incr Delay (d2), s/veh	0.2	2.3	0.0	0.2	30.5	29.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	23.0	0.1	0.1	21.6	22.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	50.8	20.8	0.4	0.2	84.5	83.8
LnGrp LOS	D	C	A	A	F	F
Approach Vol, veh/h	682			1043	1089	
Approach Delay, s/veh	21.2			0.3	84.2	
Approach LOS	C			A	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		104.9		15.1	64.3	40.6
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	52.7	* 36
Max Q Clear Time (g_c+I1), s		2.0		2.5	2.2	37.3
Green Ext Time (p_c), s		5.2		2.5	0.6	0.0

Intersection Summary		
HCM 7th Control Delay, s/veh	37.8	
HCM 7th LOS	D	

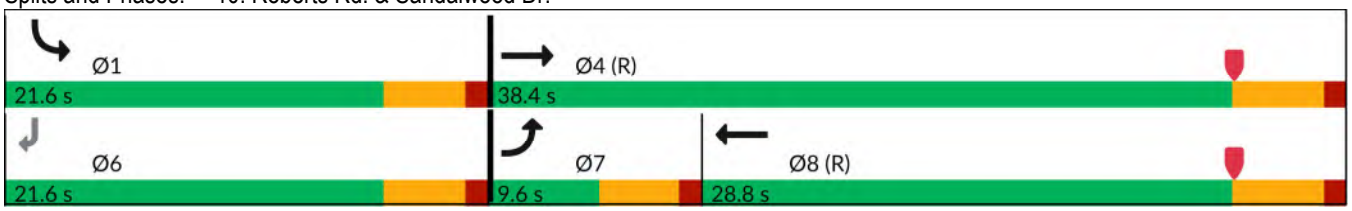
Notes

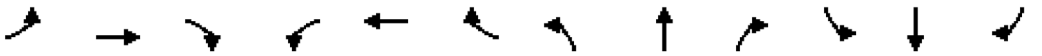
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	22	1984	933	177	15
Future Volume (vph)	22	1984	933	177	15
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	7	4	8	1	
Permitted Phases					6
Detector Phase	7	4	8	1	6
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	5.0	5.0
Minimum Split (s)	9.6	22.1	15.1	9.6	21.6
Total Split (s)	9.6	38.4	28.8	21.6	21.6
Total Split (%)	16.0%	64.0%	48.0%	36.0%	36.0%
Yellow Time (s)	3.6	4.1	4.1	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	4.6	4.6
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	C-Max	C-Max	None	None
Act Effct Green (s)	5.6	42.6	40.4	7.7	7.7
Actuated g/C Ratio	0.09	0.71	0.67	0.13	0.13
v/c Ratio	0.14	0.59	0.35	0.43	0.05
Control Delay (s/veh)	23.6	5.1	5.2	26.8	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.6	5.1	5.2	26.8	0.3
LOS	C	A	A	C	A
Approach Delay (s/veh)		5.3	5.2		
Approach LOS		A	A		

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay (s/veh): 6.4	Intersection LOS: A
Intersection Capacity Utilization 51.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1984	0	0	933	157	0	0	0	177	0	15
Future Volume (veh/h)	22	1984	0	0	933	157	0	0	0	177	0	15
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900				1900	0	1900
Adj Flow Rate, veh/h	24	2157	0	0	1014	171				192	0	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	50	3892	0	0	2889	486				309	0	142
Arrive On Green	0.03	0.75	0.00	0.00	0.65	0.65				0.09	0.00	0.09
Sat Flow, veh/h	1810	5358	0	0	4641	752				3510	0	1610
Grp Volume(v), veh/h	24	2157	0	0	784	401				192	0	16
Grp Sat Flow(s),veh/h/ln	1810	1729	0	0	1729	1765				1755	0	1610
Q Serve(g_s), s	0.8	10.7	0.0	0.0	6.2	6.2				3.2	0.0	0.5
Cycle Q Clear(g_c), s	0.8	10.7	0.0	0.0	6.2	6.2				3.2	0.0	0.5
Prop In Lane	1.00		0.00	0.00		0.43				1.00		1.00
Lane Grp Cap(c), veh/h	50	3892	0	0	2235	1140				309	0	142
V/C Ratio(X)	0.48	0.55	0.00	0.00	0.35	0.35				0.62	0.00	0.11
Avail Cap(c_a), veh/h	151	3892	0	0	2235	1140				995	0	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.25	0.25	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	28.8	3.2	0.0	0.0	4.9	4.9				26.4	0.0	25.2
Incr Delay (d2), s/veh	0.7	0.1	0.0	0.0	0.4	0.9				0.8	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.1	0.0	0.0	1.4	1.6				1.3	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.4	3.3	0.0	0.0	5.3	5.7				27.2	0.0	25.3
LnGrp LOS	C	A			A	A				C		C
Approach Vol, veh/h		2181			1185						208	
Approach Delay, s/veh		3.6			5.4						27.0	
Approach LOS		A			A						C	

Timer - Assigned Phs			4		6	7	8					
Phs Duration (G+Y+Rc), s			50.1		9.9	6.2	43.9					
Change Period (Y+Rc), s			5.1		4.6	4.6	5.1					
Max Green Setting (Gmax), s			33.3		17.0	5.0	23.7					
Max Q Clear Time (g_c+I1), s			12.7		5.2	2.8	8.2					
Green Ext Time (p_c), s			15.5		0.3	0.0	6.8					

Intersection Summary												
HCM 7th Control Delay, s/veh		5.6										
HCM 7th LOS		A										

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	312	3	90	436	5	63
Future Vol, veh/h	312	3	90	436	5	63
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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	359	3	103	501	6	72

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	362	0	1068	360
Stage 1	-	-	-	-	360	-
Stage 2	-	-	-	-	708	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1208	-	247	689
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	492	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1208	-	218	689
Mov Cap-2 Maneuver	-	-	-	-	218	-
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	434	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.41	11.97
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	594	-	-	308	-
HCM Lane V/C Ratio	0.131	-	-	0.086	-
HCM Control Delay (s/veh)	12	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.3	-

Intersection	
Int Delay, s/veh	91.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	301	74	240	216	0	0	0	0	396	3	310
Future Vol, veh/h	0	301	74	240	216	0	0	0	0	396	3	310
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	320	79	255	230	0	0	0	0	421	3	330

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	399	0	0			1061	1139	230
Stage 1	-	-	-	-	-	-			740	740	-
Stage 2	-	-	-	-	-	-			320	399	-
Critical Hdwy	-	-	-	4.1	-	-			6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-			5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-			3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1171	-	0			~ 250	203	814
Stage 1	0	-	-	-	-	0			475	426	-
Stage 2	0	-	-	-	-	0			740	606	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	1171	-	-			~ 196	0	814
Mov Cap-2 Maneuver	-	-	-	-	-	-			~ 259	0	-
Stage 1	-	-	-	-	-	-			475	0	-
Stage 2	-	-	-	-	-	-			579	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	4.7	196.4
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	1171	-	259	814
HCM Lane V/C Ratio	-	-	0.218	-	1.641	0.405
HCM Control Delay (s/veh)	-	-	8.9	-	$ 339.4	12.4
HCM Lane LOS	-	-	A	-	F	B
HCM 95th %tile Q(veh)	-	-	0.8	-	26.7	2

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

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	207	491	0	0	387	314	70	1	216	0	0	0
Future Vol, veh/h	207	491	0	0	387	314	70	1	216	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	220	522	0	0	412	334	74	1	230	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	746	0	-	-	-	0	1374	1709	522
Stage 1	-	-	-	-	-	-	963	963	-
Stage 2	-	-	-	-	-	-	412	746	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	871	-	0	0	-	-	162	92	558
Stage 1	-	-	0	0	-	-	374	337	-
Stage 2	-	-	0	0	-	-	673	424	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	871	-	-	-	-	-	121	0	558
Mov Cap-2 Maneuver	-	-	-	-	-	-	208	0	-
Stage 1	-	-	-	-	-	-	279	0	-
Stage 2	-	-	-	-	-	-	673	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	3.12	0	19.82
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	208	558	871	-	-	-
HCM Lane V/C Ratio	0.363	0.412	0.253	-	-	-
HCM Control Delay (s/veh)	31.8	15.9	10.5	-	-	-
HCM Lane LOS	D	C	B	-	-	-
HCM 95th %tile Q(veh)	1.6	2	1	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	2073	1044	20	0	7
Future Vol, veh/h	0	2073	1044	20	0	7
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2840	1430	27	0	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	715
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	324
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	324
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	16.46
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	324
HCM Lane V/C Ratio	-	-	-	0.03
HCM Control Delay (s/veh)	-	-	-	16.5
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Intersection Delay, s/veh	545.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1257	943	316	707	0	0	0	0	243	7	432
Future Vol, veh/h	0	1257	943	316	707	0	0	0	0	243	7	432
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1323	993	333	744	0	0	0	0	256	7	455
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

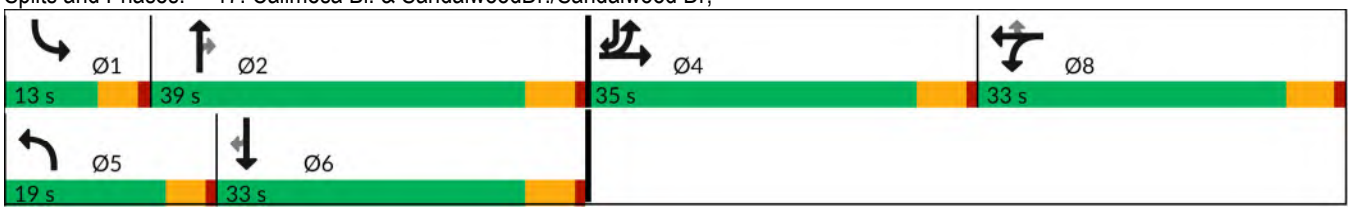
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	664.8	533	181.8
HCM LOS	F	F	F

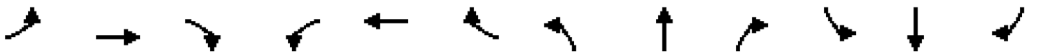
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	31%	36%
Vol Thru, %	100%	0%	69%	1%
Vol Right, %	0%	100%	0%	63%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1257	943	1023	682
LT Vol	0	0	316	243
Through Vol	1257	0	707	7
RT Vol	0	943	0	432
Lane Flow Rate	1323	993	1077	718
Geometry Grp	5	5	4a	2
Degree of Util (X)	2.792	1.902	2.141	1.324
Departure Headway (Hd)	10.345	9.604	5.823	7.363
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	370	387	635	503
Service Time	8.045	7.304	3.823	5.363
HCM Lane V/C Ratio	3.576	2.566	1.696	1.427
HCM Control Delay, s/veh	835.3	437.5	533	181.8
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	82.4	47.9	93.5	28.4

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	357	134	74	127	26	514	312	136	29	284	380
Future Volume (vph)	357	134	74	127	26	514	312	136	29	284	380
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0	35.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%	29.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	29.8	29.8	12.8	12.8	12.8	14.5	32.6	32.6	6.3	20.2	50.0
Actuated g/C Ratio	0.30	0.30	0.13	0.13	0.13	0.15	0.33	0.33	0.06	0.21	0.51
v/c Ratio	0.68	1.23dr	0.33	0.54	0.08	2.03	0.27	0.23	0.27	0.76	0.40
Control Delay (s/veh)	39.9	34.3	44.1	49.5	0.5	504.5	26.4	5.8	52.0	50.4	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.9	34.3	44.1	49.5	0.5	504.5	26.4	5.8	52.0	50.4	2.9
LOS	D	C	D	D	A	F	C	A	D	D	A
Approach Delay (s/veh)		35.6		42.2			279.1			24.4	
Approach LOS		D		D			F			C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 98.2		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 2.03		
Intersection Signal Delay (s/veh): 103.3	Intersection LOS: F	
Intersection Capacity Utilization 100.5%	ICU Level of Service G	
Analysis Period (min) 15		
dr Defacto Right Lane. Recode with 1 though lane as a right lane.		

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	357	134	990	74	127	26	514	312	136	29	284	380
Future Volume (veh/h)	357	134	990	74	127	26	514	312	136	29	284	380
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	376	141	1025	78	134	18	541	328	116	31	299	328
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	573	602	510	200	210	174	279	1155	514	54	371	824
Arrive On Green	0.32	0.32	0.32	0.11	0.11	0.11	0.15	0.32	0.32	0.03	0.20	0.20
Sat Flow, veh/h	1810	1900	1610	1810	1900	1576	1810	3610	1606	1810	1900	1606
Grp Volume(v), veh/h	376	141	1025	78	134	18	541	328	116	31	299	328
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1576	1810	1805	1606	1810	1900	1606
Q Serve(g_s), s	16.7	5.1	29.6	3.7	6.3	1.0	14.4	6.3	4.9	1.6	14.0	11.7
Cycle Q Clear(g_c), s	16.7	5.1	29.6	3.7	6.3	1.0	14.4	6.3	4.9	1.6	14.0	11.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	573	602	510	200	210	174	279	1155	514	54	371	824
V/C Ratio(X)	0.66	0.23	2.01	0.39	0.64	0.10	1.94	0.28	0.23	0.58	0.81	0.40
Avail Cap(c_a), veh/h	573	602	510	535	561	466	279	1299	578	163	561	985
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	23.5	31.9	38.6	39.7	37.4	39.5	23.7	23.3	44.7	35.9	14.0
Incr Delay (d2), s/veh	2.7	0.2	460.8	1.2	3.2	0.3	435.5	0.1	0.2	3.6	5.1	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	2.2	76.1	1.7	3.0	0.4	39.9	2.6	1.8	0.7	6.8	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.2	23.7	492.7	39.8	42.9	37.6	475.0	23.9	23.5	48.4	40.9	14.3
LnGrp LOS	C	C	F	D	D	D	F	C	C	D	D	B
Approach Vol, veh/h		1542			230			985			658	
Approach Delay, s/veh		337.0			41.5			271.6			28.0	
Approach LOS		F			D			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	35.3		35.0	19.0	23.7		15.7				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6				
Max Q Clear Time (g_c+I1), s	3.6	8.3		31.6	16.4	16.0		8.3				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	2.2		0.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	238.7
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	414.2
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	294	1053	26	163	800	1
Future Vol, veh/h	294	1053	26	163	800	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	303	1086	27	168	825	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	568.9	19.1	247.2
HCM LOS	F	C	F

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	14%
Vol Thru, %	0%	22%	86%
Vol Right, %	0%	78%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	801	1347	189
LT Vol	800	0	26
Through Vol	0	294	163
RT Vol	1	1053	0
Lane Flow Rate	826	1389	195
Geometry Grp	1	1	1
Degree of Util (X)	1.47	2.215	0.38
Departure Headway (Hd)	8.6	6.869	10.063
Convergence, Y/N	Yes	Yes	Yes
Cap	429	542	360
Service Time	6.6	4.869	8.063
HCM Lane V/C Ratio	1.925	2.563	0.542
HCM Control Delay, s/veh	247.2	568.9	19.1
HCM Lane LOS	F	F	C
HCM 95th-tile Q	31.8	84.7	1.7

Intersection	
Intersection Delay, s/veh	7
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	1	0	14	3	1
Future Vol, veh/h	18	1	0	14	3	1
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	30	2	0	23	5	2
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.3	6.5	7.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	95%	75%
Vol Thru, %	0%	0%	25%
Vol Right, %	100%	5%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	14	19	4
LT Vol	0	18	3
Through Vol	0	0	1
RT Vol	14	1	0
Lane Flow Rate	23	32	7
Geometry Grp	1	1	1
Degree of Util (X)	0.022	0.036	0.008
Departure Headway (Hd)	3.36	4.111	4.123
Convergence, Y/N	Yes	Yes	Yes
Cap	1066	875	870
Service Time	1.377	2.116	2.14
HCM Lane V/C Ratio	0.022	0.037	0.008
HCM Control Delay, s/veh	6.5	7.3	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.1	0

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	17	0	235	19	0	0	0	0	0	0	0
Future Vol, veh/h	0	17	0	235	19	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	18	0	253	20	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	18	0	0	544	544	20
Stage 1	-	-	-	-	-	-	526	526	-
Stage 2	-	-	-	-	-	-	18	18	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1612	-	0	503	449	1063
Stage 1	0	-	-	-	-	0	597	532	-
Stage 2	0	-	-	-	-	0	1010	884	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1612	-	-	424	0	1063
Mov Cap-2 Maneuver	-	-	-	-	-	-	424	0	-
Stage 1	-	-	-	-	-	-	597	0	-
Stage 2	-	-	-	-	-	-	850	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	7.08	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1593	-	-
HCM Lane V/C Ratio	-	-	0.157	-	-
HCM Control Delay (s/veh)	-	-	7.6	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.6	-	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	17	0	0	253	0	1	0	340	0	0	0
Future Vol, veh/h	0	17	0	0	253	0	1	0	340	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	19	0	0	278	0	1	0	374	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	278	0	-	-	-	0	297	297	19
Stage 1	-	-	-	-	-	-	19	19	-
Stage 2	-	-	-	-	-	-	278	278	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1296	-	0	0	-	-	699	618	1065
Stage 1	-	-	0	0	-	-	1009	884	-
Stage 2	-	-	0	0	-	-	774	684	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1296	-	-	-	-	-	699	0	1065
Mov Cap-2 Maneuver	-	-	-	-	-	-	699	0	-
Stage 1	-	-	-	-	-	-	1009	0	-
Stage 2	-	-	-	-	-	-	774	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	10.21
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1064	1296	-	-	-
HCM Lane V/C Ratio	0.352	-	-	-	-
HCM Control Delay (s/veh)	10.2	0	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	1.6	0	-	-	-

Intersection	
Intersection Delay, s/veh	21.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	338	2	58	228	95	0	59	70	155	98	25
Future Vol, veh/h	17	338	2	58	228	95	0	59	70	155	98	25
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	371	2	64	251	104	0	65	77	170	108	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	22.9	23.9	12.9	19.1
HCM LOS	C	C	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	5%	15%	56%
Vol Thru, %	46%	95%	60%	35%
Vol Right, %	54%	1%	25%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	129	357	381	278
LT Vol	0	17	58	155
Through Vol	59	338	228	98
RT Vol	70	2	95	25
Lane Flow Rate	142	392	419	305
Geometry Grp	1	1	1	1
Degree of Util (X)	0.28	0.695	0.722	0.58
Departure Headway (Hd)	7.115	6.375	6.211	6.838
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	507	561	578	525
Service Time	5.115	4.464	4.299	4.931
HCM Lane V/C Ratio	0.28	0.699	0.725	0.581
HCM Control Delay, s/veh	12.9	22.9	23.9	19.1
HCM Lane LOS	B	C	C	C
HCM 95th-tile Q	1.1	5.4	6	3.7

APPENDIX 5.3: E+P (PHASE 3) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Intersection Delay, s/veh	3.5
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	161	77	83
Demand Flow Rate, veh/h	161	77	83
Vehicles Circulating, veh/h	27	0	161
Vehicles Exiting, veh/h	50	244	27
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.6	3.0	3.7
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	161	77	83
Cap Entry Lane, veh/h	1342	1380	1171
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	161	77	83
Cap Entry, veh/h	1342	1380	1171
V/C Ratio	0.120	0.056	0.071
Control Delay, s/veh	3.6	3.0	3.7
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	3.1
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	81	44	64
Demand Flow Rate, veh/h	81	44	64
Vehicles Circulating, veh/h	62	2	24
Vehicles Exiting, veh/h	26	141	22
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.3	2.9	3.0
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	81	44	64
Cap Entry Lane, veh/h	1295	1377	1346
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	81	44	64
Cap Entry, veh/h	1295	1377	1346
V/C Ratio	0.063	0.032	0.048
Control Delay, s/veh	3.3	2.9	3.0
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	4.9
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	350	148	205
Demand Flow Rate, veh/h	350	148	205
Vehicles Circulating, veh/h	58	16	298
Vehicles Exiting, veh/h	106	487	110
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.1	3.5	5.4
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	350	148	205
Cap Entry Lane, veh/h	1301	1358	1018
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	350	148	205
Cap Entry, veh/h	1301	1358	1018
V/C Ratio	0.269	0.109	0.201
Control Delay, s/veh	5.1	3.5	5.4
LOS	A	A	A
95th %tile Queue, veh	1	0	1

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	137	24	11	55	119	42
Future Vol, veh/h	137	24	11	55	119	42
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	149	26	12	60	129	46

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	236	152	175	0	-	0
Stage 1	152	-	-	-	-	-
Stage 2	84	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	757	899	1414	-	-	-
Stage 1	881	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	750	899	1414	-	-	-
Mov Cap-2 Maneuver	750	-	-	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	945	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.05	1.26	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1414	-	769	-	-
HCM Lane V/C Ratio	0.008	-	0.227	-	-
HCM Control Delay (s/veh)	7.6	-	11.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.9	-	-

Intersection	
Intersection Delay, s/veh	3.8
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	243	121	157
Demand Flow Rate, veh/h	243	121	157
Vehicles Circulating, veh/h	150	20	70
Vehicles Exiting, veh/h	77	373	71
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.3	2.9	3.8
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.082	0.918	0.579	0.421	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	20	223	70	51	157
Cap Entry Lane, veh/h	1239	1239	1395	1395	1285
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	20	223	70	51	157
Cap Entry, veh/h	1239	1239	1395	1395	1285
V/C Ratio	0.016	0.180	0.050	0.037	0.122
Control Delay, s/veh	3.0	4.4	3.0	2.9	3.8
LOS	A	A	A	A	A
95th %tile Queue, veh	0	1	0	0	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	497	170	8	18	0
Future Vol, veh/h	0	497	170	8	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	681	233	11	25	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	244	0	-	0	919	238
Stage 1	-	-	-	-	238	-
Stage 2	-	-	-	-	681	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1334	-	-	-	304	806
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	506	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1334	-	-	-	304	806
Mov Cap-2 Maneuver	-	-	-	-	304	-
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	506	-

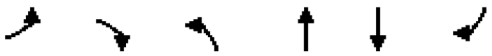
Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	17.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1334	-	-	-	304
HCM Lane V/C Ratio	-	-	-	-	0.081
HCM Control Delay (s/veh)	0	-	-	-	17.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	881	674		
Future Volume (vph)	881	674		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	40.0	49.0	80.0	31.0
Total Split (%)	33.3%	40.8%	67%	26%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min
Act Effct Green (s)	10.0	14.3		
Actuated g/C Ratio	0.20	0.29		
v/c Ratio	0.45	0.72		
Control Delay (s/veh)	0.7	20.1		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.7	20.1		
LOS	A	C		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 49.2	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay (s/veh): 9.1	Intersection LOS: A
Intersection Capacity Utilization 35.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	881	674	0	0	0
Future Volume (veh/h)	0	881	674	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	849	733	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	764	1196	1020	524	6	0
Arrive On Green	0.00	0.42	0.29	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	-96900	0
Grp Volume(v), veh/h	0	849	733	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	8.3	6.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.3	6.3	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	764	1196	1020	524	6	0
V/C Ratio(X)	0.00	0.71	0.72	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1871	2930	4618	4216	1458	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.1	10.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.4	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.4	1.8	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	8.8	11.1	0.0	0.0	0.0
LnGrp LOS		A	B			
Approach Vol, veh/h	849			733	0	
Approach Delay, s/veh	8.8			11.1	0.0	
Approach LOS	A			B		

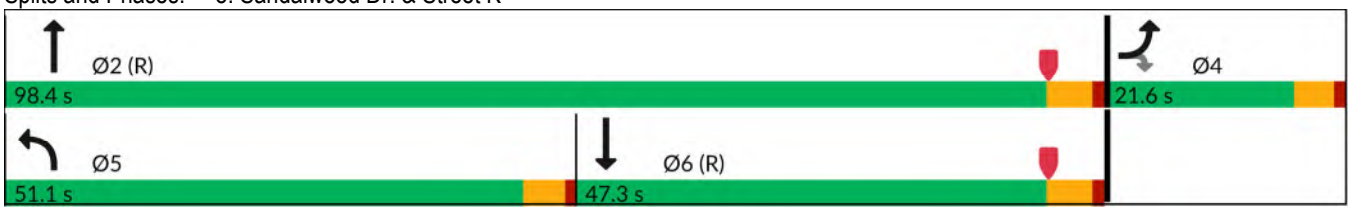
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		14.4		19.3	14.4	0.0
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		74.9		34.9	44.4	25.9
Max Q Clear Time (g_c+I1), s		0.0		10.3	8.3	0.0
Green Ext Time (p_c), s		0.0		3.9	1.5	0.0

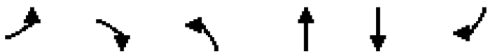
Intersection Summary	
HCM 7th Control Delay, s/veh	9.9
HCM 7th LOS	A

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	3	140	778	672	872
Future Volume (vph)	3	140	778	672	872
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	21.6	21.6	9.6	15.1	22.1
Total Split (s)	21.6	21.6	51.1	98.4	47.3
Total Split (%)	18.0%	18.0%	42.6%	82.0%	39.4%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.5	10.5	34.3	99.8	60.9
Actuated g/C Ratio	0.09	0.09	0.29	0.83	0.51
v/c Ratio	0.02	0.54	0.85	0.24	0.52
Control Delay (s/veh)	49.7	15.7	45.6	2.3	22.1
Queue Delay	0.0	0.0	0.0	0.0	0.4
Total Delay (s/veh)	49.7	15.7	45.6	2.3	22.5
LOS	D	B	D	A	C
Approach Delay (s/veh)	16.4			25.5	22.5
Approach LOS	B			C	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 93.3 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay (s/veh): 23.9	Intersection LOS: C
Intersection Capacity Utilization 66.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	140	778	672	872	9
Future Volume (veh/h)	3	140	778	672	872	9
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	152	846	730	948	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	199	177	911	2921	1871	20
Arrive On Green	0.11	0.11	0.43	1.00	0.51	0.51
Sat Flow, veh/h	1810	1610	3510	3705	3754	39
Grp Volume(v), veh/h	3	152	846	730	468	490
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1893
Q Serve(g_s), s	0.2	11.1	27.4	0.0	20.5	20.5
Cycle Q Clear(g_c), s	0.2	11.1	27.4	0.0	20.5	20.5
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	199	177	911	2921	923	968
V/C Ratio(X)	0.02	0.86	0.93	0.25	0.51	0.51
Avail Cap(c_a), veh/h	256	228	1360	2921	923	968
HCM Platoon Ratio	1.00	1.00	1.67	1.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	0.89	0.89
Uniform Delay (d), s/veh	47.6	52.5	33.0	0.0	19.3	19.3
Incr Delay (d2), s/veh	0.0	21.8	6.2	0.2	1.8	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	10.6	10.7	0.1	8.9	9.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	47.6	74.3	39.2	0.2	21.1	21.0
LnGrp LOS	D	E	D	A	C	C
Approach Vol, veh/h	155			1576	958	
Approach Delay, s/veh	73.8			21.1	21.1	
Approach LOS	E			C	C	

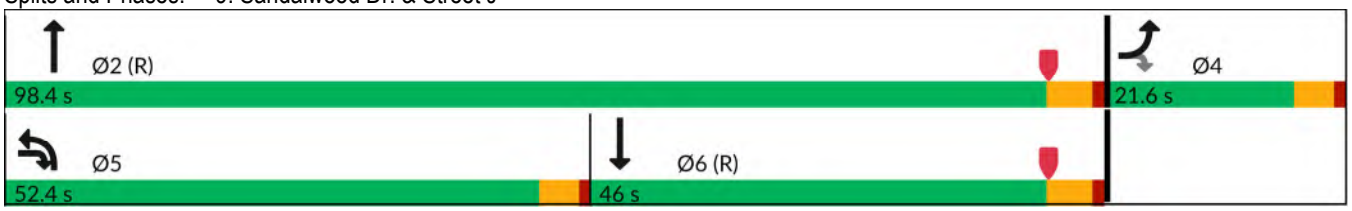
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		102.2		17.8	35.7	66.5
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	46.5	42.2
Max Q Clear Time (g_c+I1), s		2.0		13.1	29.4	22.5
Green Ext Time (p_c), s		6.2		0.1	1.7	6.2

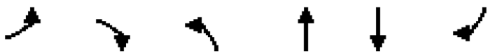
Intersection Summary		
HCM 7th Control Delay, s/veh		24.1
HCM 7th LOS		C

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	3	207	1132	1447	1003
Future Volume (vph)	3	207	1132	1447	1003
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	21.6	9.6	9.6	15.1	22.1
Total Split (s)	21.6	52.4	52.4	98.4	46.0
Total Split (%)	18.0%	43.7%	43.7%	82.0%	38.3%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	50.5	47.6	116.1	59.8
Actuated g/C Ratio	0.08	0.42	0.40	0.97	0.50
v/c Ratio	0.02	0.33	0.89	0.45	0.61
Control Delay (s/veh)	51.0	21.8	26.2	4.2	48.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.0	21.8	26.2	4.2	48.5
LOS	D	C	C	A	D
Approach Delay (s/veh)	22.1			13.8	48.5
Approach LOS	C			B	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 48 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay (s/veh): 23.5	Intersection LOS: C
Intersection Capacity Utilization 80.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	207	1132	1447	1003	9
Future Volume (veh/h)	3	207	1132	1447	1003	9
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	225	1230	1573	1090	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	189	764	1298	2941	1490	14
Arrive On Green	0.10	0.10	0.37	0.81	0.81	0.81
Sat Flow, veh/h	1810	1610	3510	3705	3760	34
Grp Volume(v), veh/h	3	225	1230	1573	537	563
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1894
Q Serve(g_s), s	0.2	10.2	40.8	17.2	16.4	16.5
Cycle Q Clear(g_c), s	0.2	10.2	40.8	17.2	16.4	16.5
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	189	764	1298	2941	734	770
V/C Ratio(X)	0.02	0.29	0.95	0.53	0.73	0.73
Avail Cap(c_a), veh/h	256	823	1398	2941	734	770
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.60	0.60	0.84	0.84
Uniform Delay (d), s/veh	48.2	19.3	36.7	3.7	8.2	8.2
Incr Delay (d2), s/veh	0.0	0.2	8.6	0.4	5.4	5.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	11.5	18.3	4.1	4.2	4.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.2	19.5	45.3	4.1	13.6	13.3
LnGrp LOS	D	B	D	A	B	B
Approach Vol, veh/h	228			2803	1100	
Approach Delay, s/veh	19.9			22.2	13.4	
Approach LOS	B			C	B	

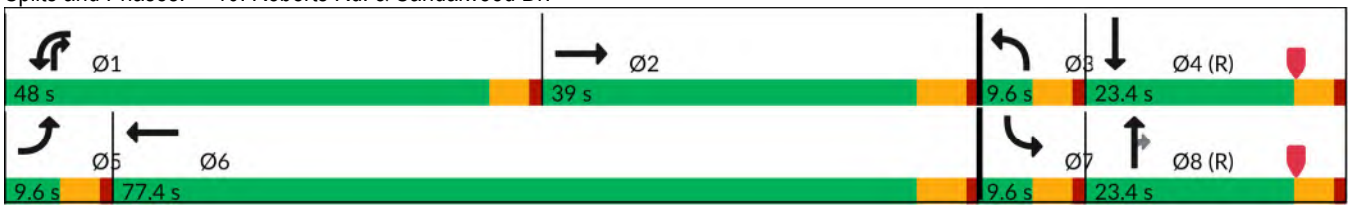
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		102.9		17.1	49.0	53.9
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	47.8	40.9
Max Q Clear Time (g_c+I1), s		19.2		12.2	42.8	18.5
Green Ext Time (p_c), s		19.1		0.3	1.6	7.8

Intersection Summary	
HCM 7th Control Delay, s/veh	19.7
HCM 7th LOS	B

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBL	SBT	Ø8
Lane Configurations									
Traffic Volume (vph)	4	1307	1084	2564	11	136	32	0	
Future Volume (vph)	4	1307	1084	2564	11	136	32	0	
Turn Type	Prot	NA	Prot	NA	Prot	pm+ov	Prot	NA	
Protected Phases	5	2	1	6	3	1	7	4	8
Permitted Phases						8			
Detector Phase	5	2	1	6	3	1	7	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	10.0	10.0
Minimum Split (s)	9.6	22.4	9.6	22.4	9.6	9.6	9.6	21.6	21.6
Total Split (s)	9.6	39.0	48.0	77.4	9.6	48.0	9.6	23.4	23.4
Total Split (%)	8.0%	32.5%	40.0%	64.5%	8.0%	40.0%	8.0%	19.5%	20%
Yellow Time (s)	3.6	4.4	3.6	4.4	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	5.4	4.6	5.4	4.6	4.6	4.6	4.6	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max
Act Effct Green (s)	5.0	34.0	41.3	78.0	5.0	70.2	5.0	26.2	
Actuated g/C Ratio	0.04	0.28	0.34	0.65	0.04	0.59	0.04	0.22	
v/c Ratio	0.05	0.86	0.92	0.74	0.08	0.13	0.23	0.00	
Control Delay (s/veh)	72.3	40.6	49.5	15.9	56.5	7.2	59.6	0.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	72.3	40.6	49.5	15.9	56.5	7.2	59.6	0.0	
LOS	E	D	D	B	E	A	E	A	
Approach Delay (s/veh)		40.7		25.8				56.3	
Approach LOS		D		C				E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 29.4	Intersection LOS: C
Intersection Capacity Utilization 77.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1307	19	1084	2564	39	11	0	136	32	0	2
Future Volume (veh/h)	4	1307	19	1084	2564	39	11	0	136	32	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1976	1900	1976	1976	1900	1900	1900	1976	1900	1900	1900
Adj Flow Rate, veh/h	4	1421	21	1178	2787	42	12	0	94	35	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	9	1586	23	1253	3494	52	50	784	903	104	0	356
Arrive On Green	0.01	0.27	0.27	0.33	0.60	0.60	0.01	0.00	0.21	0.03	0.00	0.22
Sat Flow, veh/h	1810	5826	86	3764	5825	87	3619	3800	1675	3619	0	1610
Grp Volume(v), veh/h	4	964	478	1178	1887	942	12	0	94	35	0	2
Grp Sat Flow(s),veh/h/ln	1810	1976	1961	1882	1976	1960	1810	1900	1675	1810	0	1610
Q Serve(g_s), s	0.3	28.2	28.2	36.5	43.9	44.5	0.4	0.0	3.3	1.1	0.0	0.1
Cycle Q Clear(g_c), s	0.3	28.2	28.2	36.5	43.9	44.5	0.4	0.0	3.3	1.1	0.0	0.1
Prop In Lane	1.00		0.04	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	9	1076	534	1253	2371	1176	50	784	903	104	0	356
V/C Ratio(X)	0.43	0.90	0.90	0.94	0.80	0.80	0.24	0.00	0.10	0.34	0.00	0.01
Avail Cap(c_a), veh/h	75	1107	549	1361	2371	1176	151	784	903	151	0	356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.5	42.0	42.0	38.9	18.4	18.5	58.6	0.0	13.5	57.2	0.0	36.4
Incr Delay (d2), s/veh	8.8	7.9	14.2	11.8	2.0	4.1	0.9	0.0	0.2	0.7	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	14.5	15.3	18.3	18.7	19.5	0.2	0.0	1.3	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.3	49.9	56.2	50.7	20.3	22.6	59.5	0.0	13.7	57.9	0.0	36.5
LnGrp LOS	E	D	E	D	C	C	E		B	E		D
Approach Vol, veh/h		1446			4007			106			37	
Approach Delay, s/veh		52.0			29.8			18.9			56.7	
Approach LOS		D			C			B			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	44.5	38.1	6.2	31.1	5.2	77.4	8.0	29.3
Change Period (Y+Rc), s	4.6	5.4	4.6	4.6	4.6	5.4	4.6	4.6
Max Green Setting (Gmax), s	43.4	33.6	5.0	18.8	5.0	72.0	5.0	18.8
Max Q Clear Time (g_c+I1), s	38.5	30.2	2.4	2.1	2.3	46.5	3.1	5.3
Green Ext Time (p_c), s	1.5	2.5	0.0	0.0	0.0	22.1	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	35.5
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	3.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	537	2	114	244	8	135
Future Vol, veh/h	537	2	114	244	8	135
Conflicting Peds, #/hr	0	2	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	617	2	131	280	9	155

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	622	0	1163	620
Stage 1	-	-	-	-	620	-
Stage 2	-	-	-	-	543	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	969	-	217	491
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	587	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	967	-	182	490
Mov Cap-2 Maneuver	-	-	-	-	182	-
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	492	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.96	17.62
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	448	-	-	573	-
HCM Lane V/C Ratio	0.367	-	-	0.135	-
HCM Control Delay (s/veh)	17.6	-	-	9.3	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.7	-	-	0.5	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	571	101	314	186	0	0	0	0	251	6	171
Future Vol, veh/h	0	571	101	314	186	0	0	0	0	251	6	171
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	672	119	369	219	0	0	0	0	295	7	201

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	792	0	0	1629	1749	219
Stage 1	-	-	-	-	-	-	958	958	-
Stage 2	-	-	-	-	-	-	672	792	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	838	-	0	~ 113	87	826
Stage 1	0	-	-	-	-	0	376	339	-
Stage 2	0	-	-	-	-	0	511	404	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	838	-	-	~ 63	0	826
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ -195	0	-
Stage 1	-	-	-	-	-	-	376	0	-
Stage 2	-	-	-	-	-	-	~ 286	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	7.94	
HCM LOS			-

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	838	-	+	826
HCM Lane V/C Ratio	-	-	0.441	-	-	0.244
HCM Control Delay (s/veh)	-	-	12.6	-	-	10.8
HCM Lane LOS	-	-	B	-	-	B
HCM 95th %tile Q(veh)	-	-	2.3	-	-	1

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

Intersection	
Int Delay, s/veh	9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	407	415	0	0	466	659	33	4	97	0	0	0
Future Vol, veh/h	407	415	0	0	466	659	33	4	97	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	438	446	0	0	501	709	35	4	104	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1210	0	-	-	-	0	1823	2531	446
Stage 1	-	-	-	-	-	-	1322	1322	-
Stage 2	-	-	-	-	-	-	501	1210	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	584	-	0	0	-	-	86	28	616
Stage 1	-	-	0	0	-	-	252	228	-
Stage 2	-	-	0	0	-	-	613	258	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	584	-	-	-	-	-	~ 22	0	616
Mov Cap-2 Maneuver	-	-	-	-	-	-	49	0	-
Stage 1	-	-	-	-	-	-	63	0	-
Stage 2	-	-	-	-	-	-	613	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	13.53	0	64.47
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	49	616	584	-	-	-
HCM Lane V/C Ratio	0.804	0.169	0.75	-	-	-
HCM Control Delay (s/veh)	201.9	12	27.3	-	-	-
HCM Lane LOS	F	B	D	-	-	-
HCM 95th %tile Q(veh)	3.3	0.6	6.6	-	-	-

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

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	1069	3165	6	0	1
Future Vol, veh/h	0	1069	3165	6	0	1
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1162	3440	7	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1720
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	301
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	301
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	17
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	301
HCM Lane V/C Ratio	-	-	-	0.004
HCM Control Delay (s/veh)	-	-	-	17
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Intersection Delay, s/veh	1429.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	945	496	185	2105	0	0	0	0	122	16	1560
Future Vol, veh/h	0	945	496	185	2105	0	0	0	0	122	16	1560
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1167	612	228	2599	0	0	0	0	151	20	1926
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

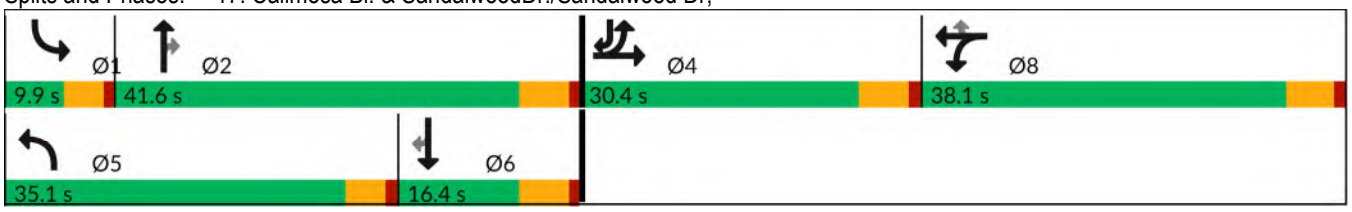
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	553.6	2095.3	1275.6
HCM LOS	F	F	F

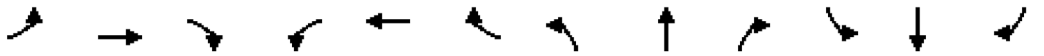
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	8%	7%
Vol Thru, %	100%	0%	92%	1%
Vol Right, %	0%	100%	0%	92%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	945	496	2290	1698
LT Vol	0	0	185	122
Through Vol	945	0	2105	16
RT Vol	0	496	0	1560
Lane Flow Rate	1167	612	2827	2096
Geometry Grp	5	5	4a	2
Degree of Util (X)	2.462	1.173	5.584	3.761
Departure Headway (Hd)	30.283	29.421	13.369	12.878
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	140	129	311	314
Service Time	27.983	27.121	11.369	10.878
HCM Lane V/C Ratio	8.336	4.744	9.09	6.675
HCM Control Delay, s/veh	738.4	201.6	2095.3	1275.6
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	26	8.8	157.9	100.4

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	305	203	154	210	32	1553	544	99	14	205	528
Future Volume (vph)	305	203	154	210	32	1553	544	99	14	205	528
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4	30.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	24.8	24.8	18.8	18.8	18.8	30.6	42.5	42.5	5.2	11.0	41.3
Actuated g/C Ratio	0.23	0.23	0.18	0.18	0.18	0.29	0.40	0.40	0.05	0.10	0.39
v/c Ratio	0.81	0.79	0.55	0.71	0.09	3.39	0.43	0.16	0.18	1.18	0.80
Control Delay (s/veh)	57.2	26.4	46.2	53.1	0.4	Error	26.1	5.8	55.6	165.2	29.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.2	26.4	46.2	53.1	0.4	Error	26.1	5.8	55.6	165.2	29.4
LOS	E	C	D	D	A	F	C	A	E	F	C
Approach Delay (s/veh)		34.9		46.2			783.6			67.2	
Approach LOS		C		D			F			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106.1	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 3.39	
Intersection Signal Delay (s/veh): 421.2	Intersection LOS: F
Intersection Capacity Utilization 145.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	305	203	483	154	210	32	1553	544	99	14	205	528
Future Volume (veh/h)	305	203	483	154	210	32	1553	544	99	14	205	528
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	347	231	531	175	239	26	1765	618	82	16	233	523
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	437	459	389	284	299	249	533	1382	616	32	202	560
Arrive On Green	0.24	0.24	0.24	0.16	0.16	0.16	0.29	0.38	0.38	0.02	0.11	0.11
Sat Flow, veh/h	1810	1900	1610	1810	1900	1586	1810	3610	1608	1810	1900	1610
Grp Volume(v), veh/h	347	231	531	175	239	26	1765	618	82	16	233	523
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1586	1810	1805	1608	1810	1900	1610
Q Serve(g_s), s	18.6	10.9	25.0	9.3	12.6	1.5	30.5	13.2	3.4	0.9	11.0	11.0
Cycle Q Clear(g_c), s	18.6	10.9	25.0	9.3	12.6	1.5	30.5	13.2	3.4	0.9	11.0	11.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	437	459	389	284	299	249	533	1382	616	32	202	560
V/C Ratio(X)	0.79	0.50	1.37	0.62	0.80	0.10	3.31	0.45	0.13	0.50	1.15	0.93
Avail Cap(c_a), veh/h	437	459	389	571	600	501	533	1382	616	93	202	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	33.9	39.3	40.7	42.1	37.4	36.5	23.8	20.8	50.4	46.3	25.6
Incr Delay (d2), s/veh	9.8	0.9	180.6	2.2	5.0	0.2	1045.4	0.2	0.1	4.3	111.3	23.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	5.0	29.0	4.2	6.1	0.6	167.5	5.4	1.3	0.4	11.3	16.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.6	34.8	219.9	42.9	47.0	37.6	1081.9	24.0	20.9	54.7	157.5	48.7
LnGrp LOS	D	C	F	D	D	D	F	C	C	D	F	D
Approach Vol, veh/h		1109			440			2465			772	
Approach Delay, s/veh		127.1			44.8			781.4			81.7	
Approach LOS		F			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	45.1		30.4	35.1	16.4		21.7				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7				
Max Q Clear Time (g_c+I1), s	2.9	15.2		27.0	32.5	13.0		14.6				
Green Ext Time (p_c), s	0.0	4.2		0.0	0.0	0.0		1.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	449.2
HCM 7th LOS	F

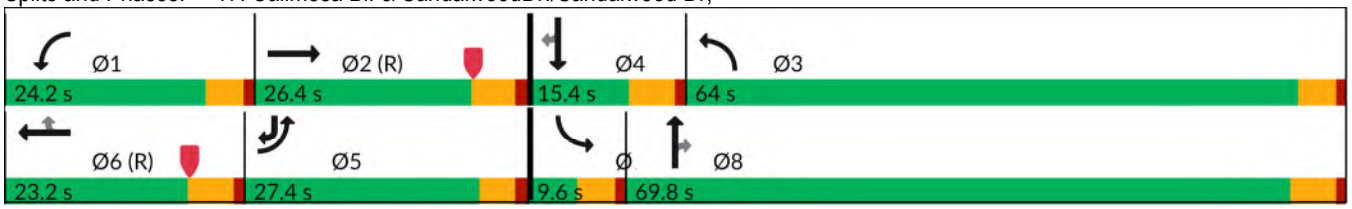
Notes

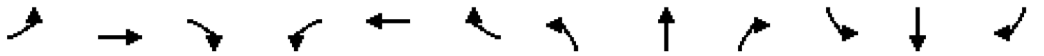
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	305	203	483	154	210	32	1553	544	99	14	205	528
Future Volume (vph)	305	203	483	154	210	32	1553	544	99	14	205	528
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	22.4		9.6	22.4	22.4	9.6	22.4	22.4	9.6	15.4	9.6
Total Split (s)	27.4	26.4		24.2	23.2	23.2	64.0	69.8	69.8	9.6	15.4	27.4
Total Split (%)	21.1%	20.3%		18.6%	17.8%	17.8%	49.2%	53.7%	53.7%	7.4%	11.8%	21.1%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	22.8	25.2	130.0	15.5	17.9	17.9	59.3	70.1	70.1	5.0	10.0	38.2
Actuated g/C Ratio	0.18	0.19	1.00	0.12	0.14	0.14	0.46	0.54	0.54	0.04	0.08	0.29
v/c Ratio	0.50	0.61	0.28	0.75	0.44	0.09	0.98	0.29	0.10	0.21	0.77	0.96
Control Delay (s/veh)	51.4	56.7	0.4	74.6	54.4	0.5	53.0	17.4	3.3	67.4	76.3	68.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	40.1	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.4	56.7	0.4	74.6	54.4	0.5	93.1	17.4	3.3	67.4	76.3	68.9
LOS	D	E	A	E	D	A	F	B	A	E	E	E
Approach Delay (s/veh)		27.6			58.0			70.3			70.9	
Approach LOS		C			E			E			E	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay (s/veh): 59.5	Intersection LOS: E
Intersection Capacity Utilization 97.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	305	203	483	154	210	32	1553	544	99	14	205	528
Future Volume (veh/h)	305	203	483	154	210	32	1553	544	99	14	205	528
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976
Adj Flow Rate, veh/h	347	231	0	175	239	26	1765	618	49	16	233	182
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	614	395		200	541	226	1720	2067	874	32	304	402
Arrive On Green	0.33	0.40	0.00	0.21	0.27	0.27	0.91	1.00	1.00	0.03	0.15	0.15
Sat Flow, veh/h	3764	1976	1675	1882	3952	1649	3764	3952	1671	1882	3952	1675
Grp Volume(v), veh/h	347	231	0	175	239	26	1765	618	49	16	233	182
Grp Sat Flow(s),veh/h/ln	1882	1976	1675	1882	1976	1649	1882	1976	1671	1882	1976	1675
Q Serve(g_s), s	9.9	11.9	0.0	11.7	6.5	1.4	59.4	0.0	0.0	1.1	7.4	0.0
Cycle Q Clear(g_c), s	9.9	11.9	0.0	11.7	6.5	1.4	59.4	0.0	0.0	1.1	7.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	614	395		200	541	226	1720	2067	874	32	304	402
V/C Ratio(X)	0.57	0.58		0.88	0.44	0.12	1.03	0.30	0.06	0.50	0.77	0.45
Avail Cap(c_a), veh/h	660	395		284	541	226	1720	2067	874	72	304	402
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.18	0.18	0.18	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	34.8	0.0	50.4	43.1	32.8	5.6	0.0	0.0	62.3	53.9	38.2
Incr Delay (d2), s/veh	0.5	6.2	0.0	14.8	2.6	1.0	17.0	0.0	0.0	4.5	11.1	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	5.5	0.0	5.7	3.1	0.7	6.4	0.0	0.0	0.5	3.9	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.5	41.0	0.0	65.2	45.7	33.8	22.6	0.0	0.0	66.8	65.0	39.0
LnGrp LOS	D	D		E	D	C	F	A	A	E	E	D
Approach Vol, veh/h		578			440			2432			431	
Approach Delay, s/veh		40.7			52.7			16.4			54.1	
Approach LOS		D			D			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	31.4	64.8	15.4	26.6	23.2	6.8	73.4
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	5.4	* 5.4	4.6	5.4
Max Green Setting (Gmax), s	19.6	21.0	59.4	* 10	22.8	* 18	5.0	64.4
Max Q Clear Time (g_c+I1), s	13.7	13.9	61.4	9.4	11.9	8.5	3.1	2.0
Green Ext Time (p_c), s	0.1	0.6	0.0	0.1	0.5	0.9	0.0	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	28.3
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	321.8
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	128	712	113	606	1591	1
Future Vol, veh/h	128	712	113	606	1591	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	151	838	133	713	1872	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	400.1	347.4	1258.5
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	16%
Vol Thru, %	0%	15%	84%
Vol Right, %	0%	85%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	1592	840	719
LT Vol	1591	0	113
Through Vol	0	128	606
RT Vol	1	712	0
Lane Flow Rate	1873	988	846
Geometry Grp	1	1	1
Degree of Util (X)	3.744	1.781	1.652
Departure Headway (Hd)	8.803	14.732	15.65
Convergence, Y/N	Yes	Yes	Yes
Cap	431	257	245
Service Time	6.803	12.732	13.65
HCM Lane V/C Ratio	4.346	3.844	3.453
HCM Control Delay, s/veh	1258.5	400.1	347.4
HCM Lane LOS	F	F	F
HCM 95th-tile Q	144.3	29.4	24.6

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	3	3	14	0	2
Future Vol, veh/h	4	3	3	14	0	2
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	4	4	20	0	3
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	6.8	6.5	7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	57%	0%
Vol Thru, %	18%	0%	100%
Vol Right, %	82%	43%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	17	7	2
LT Vol	0	4	0
Through Vol	3	0	2
RT Vol	14	3	0
Lane Flow Rate	24	10	3
Geometry Grp	1	1	1
Degree of Util (X)	0.023	0.01	0.003
Departure Headway (Hd)	3.426	3.804	3.935
Convergence, Y/N	Yes	Yes	Yes
Cap	1051	945	914
Service Time	1.428	1.808	1.939
HCM Lane V/C Ratio	0.023	0.011	0.003
HCM Control Delay, s/veh	6.5	6.8	7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0	0

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	2	395	7	0	0	0	0	0	0	0
Future Vol, veh/h	0	12	2	395	7	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	14	2	470	8	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	17	0	0	963	965	8
Stage 1	-	-	-	-	-	-	949	949	-
Stage 2	-	-	-	-	-	-	14	17	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1614	-	0	286	257	1079
Stage 1	0	-	-	-	-	0	379	342	-
Stage 2	0	-	-	-	-	0	1014	886	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1614	-	-	202	0	1079
Mov Cap-2 Maneuver	-	-	-	-	-	-	202	0	-
Stage 1	-	-	-	-	-	-	379	0	-
Stage 2	-	-	-	-	-	-	717	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	8	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1606	-	-
HCM Lane V/C Ratio	-	-	0.291	-	-
HCM Control Delay (s/veh)	-	-	8.1	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1.2	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	0	0	394	0	8	0	248	0	0	0
Future Vol, veh/h	0	12	0	0	394	0	8	0	248	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	13	0	0	438	0	9	0	276	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	438	0	-	-	-	0	451	451	13
Stage 1	-	-	-	-	-	-	13	13	-
Stage 2	-	-	-	-	-	-	438	438	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1133	-	0	0	-	-	570	507	1073
Stage 1	-	-	0	0	-	-	1015	888	-
Stage 2	-	-	0	0	-	-	655	582	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1133	-	-	-	-	-	570	0	1073
Mov Cap-2 Maneuver	-	-	-	-	-	-	570	0	-
Stage 1	-	-	-	-	-	-	1015	0	-
Stage 2	-	-	-	-	-	-	655	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	9.74
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1044	1133	-	-	-
HCM Lane V/C Ratio	0.272	-	-	-	-
HCM Control Delay (s/veh)	9.7	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	1.1	0	-	-	-

Intersection	
Intersection Delay, s/veh	141.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	206	2	29	361	159	2	484	210	71	45	31
Future Vol, veh/h	52	206	2	29	361	159	2	484	210	71	45	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	219	2	31	384	169	2	515	223	76	48	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	26.3	114.8	231.4	18.8
HCM LOS	D	F	F	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	20%	5%	48%
Vol Thru, %	70%	79%	66%	31%
Vol Right, %	30%	1%	29%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	696	260	549	147
LT Vol	2	52	29	71
Through Vol	484	206	361	45
RT Vol	210	2	159	31
Lane Flow Rate	740	277	584	156
Geometry Grp	1	1	1	1
Degree of Util (X)	1.442	0.609	1.14	0.368
Departure Headway (Hd)	7.494	9.548	8.209	10.076
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	489	382	450	360
Service Time	5.494	7.548	6.209	8.076
HCM Lane V/C Ratio	1.513	0.725	1.298	0.433
HCM Control Delay, s/veh	231.4	26.3	114.8	18.8
HCM Lane LOS	F	D	F	C
HCM 95th-tile Q	34.1	3.9	18.1	1.7

Intersection	
Intersection Delay, s/veh	4.0
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	102	276	53
Demand Flow Rate, veh/h	102	276	53
Vehicles Circulating, veh/h	93	0	102
Vehicles Exiting, veh/h	183	155	93
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.5	4.3	3.2
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	102	276	53
Cap Entry Lane, veh/h	1255	1380	1244
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	102	276	53
Cap Entry, veh/h	1255	1380	1244
V/C Ratio	0.081	0.200	0.043
Control Delay, s/veh	3.5	4.3	3.2
LOS	A	A	A
95th %tile Queue, veh	0	1	0

Intersection	
Intersection Delay, s/veh	3.4
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	52	161	46
Demand Flow Rate, veh/h	52	161	46
Vehicles Circulating, veh/h	42	4	88
Vehicles Exiting, veh/h	92	90	77
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.0	3.6	3.1
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	52	161	46
Cap Entry Lane, veh/h	1322	1374	1261
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	52	161	46
Cap Entry, veh/h	1322	1374	1261
V/C Ratio	0.039	0.117	0.036
Control Delay, s/veh	3.0	3.6	3.1
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	5.9
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	216	537	176
Demand Flow Rate, veh/h	216	537	176
Vehicles Circulating, veh/h	209	62	179
Vehicles Exiting, veh/h	390	293	246
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.0	6.8	4.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	216	537	176
Cap Entry Lane, veh/h	1115	1295	1150
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	216	537	176
Cap Entry, veh/h	1115	1295	1150
V/C Ratio	0.194	0.415	0.153
Control Delay, s/veh	5.0	6.8	4.5
LOS	A	A	A
95th %tile Queue, veh	1	2	1

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	83	25	34	142	96	151
Future Vol, veh/h	83	25	34	142	96	151
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	90	27	37	154	104	164

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	415	186	268	0	-	0
Stage 1	186	-	-	-	-	-
Stage 2	228	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	598	861	1307	-	-	-
Stage 1	850	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	581	861	1307	-	-	-
Mov Cap-2 Maneuver	581	-	-	-	-	-
Stage 1	826	-	-	-	-	-
Stage 2	814	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	12.04	1.51	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1307	-	628	-	-
HCM Lane V/C Ratio	0.028	-	0.187	-	-
HCM Control Delay (s/veh)	7.8	-	12	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-

Intersection	
Intersection Delay, s/veh	3.9
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	154	431	132
Demand Flow Rate, veh/h	154	431	132
Vehicles Circulating, veh/h	110	12	251
Vehicles Exiting, veh/h	273	252	192
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.6	3.8	4.5
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.078	0.922	0.582	0.418	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	12	142	251	180	132
Cap Entry Lane, veh/h	1285	1285	1405	1405	1068
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	12	142	251	180	132
Cap Entry, veh/h	1285	1285	1405	1405	1068
V/C Ratio	0.009	0.111	0.179	0.128	0.124
Control Delay, s/veh	2.9	3.7	4.0	3.6	4.5
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	1	0	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	305	522	1	4	0
Future Vol, veh/h	0	305	522	1	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	545	932	2	7	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	934	0	-	0	1478	933
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	545	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	741	-	-	-	140	325
Stage 1	-	-	-	-	386	-
Stage 2	-	-	-	-	585	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	741	-	-	-	140	325
Mov Cap-2 Maneuver	-	-	-	-	140	-
Stage 1	-	-	-	-	386	-
Stage 2	-	-	-	-	585	-

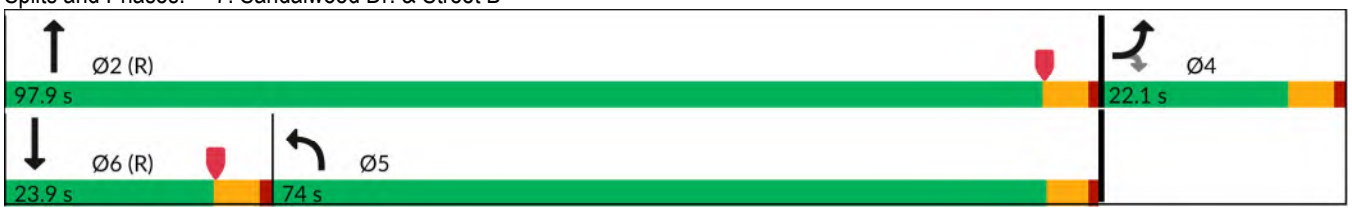
Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	32.06
HCM LOS			D

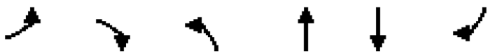
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	741	-	-	-	140
HCM Lane V/C Ratio	-	-	-	-	0.051
HCM Control Delay (s/veh)	0	-	-	-	32.1
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	410	592		
Future Volume (vph)	410	592		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	22.1	74.0	97.9	23.9
Total Split (%)	18.4%	61.7%	82%	20%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lag		Lead
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	28.4		
Actuated g/C Ratio	0.08	0.24		
v/c Ratio	0.22	0.78		
Control Delay (s/veh)	0.3	34.1		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.3	34.1		
LOS	A	C		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116.9 (97%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 20.2	Intersection LOS: C
Intersection Capacity Utilization 21.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	410	592	0	0	0
Future Volume (veh/h)	0	410	592	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	343	643	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	247	387	2034	1479	298	0
Arrive On Green	0.00	0.14	0.58	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	1900	0
Grp Volume(v), veh/h	0	343	643	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	14.3	11.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.3	11.3	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	247	387	2034	1479	298	0
V/C Ratio(X)	0.00	0.89	0.32	0.00	0.00	0.00
Avail Cap(c_a), veh/h	256	401	2034	1479	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.96	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	50.9	13.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	20.1	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.7	4.4	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	71.0	13.0	0.0	0.0	0.0
LnGrp LOS		E	B			
Approach Vol, veh/h	343			643	0	
Approach Delay, s/veh	71.0			13.0	0.0	
Approach LOS	E			B		

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		98.5		21.5	74.6	23.9
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	69.4	* 19
Max Q Clear Time (g_c+I1), s		0.0		16.3	13.3	0.0
Green Ext Time (p_c), s		0.0		0.1	1.3	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	33.2
HCM 7th LOS	C

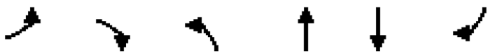
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	10	722	264	582	405
Future Volume (vph)	10	722	264	582	405
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	22.1	9.6	15.1	22.1
Total Split (s)	63.0	63.0	20.0	57.0	37.0
Total Split (%)	52.5%	52.5%	16.7%	47.5%	30.8%
Yellow Time (s)	4.1	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	41.9	41.9	14.1	67.9	49.2
Actuated g/C Ratio	0.35	0.35	0.12	0.57	0.41
v/c Ratio	0.02	0.93	0.70	0.31	0.30
Control Delay (s/veh)	18.8	32.3	59.0	16.2	28.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.8	32.3	59.0	16.2	28.4
LOS	B	C	E	B	C
Approach Delay (s/veh)	32.1			29.6	28.4
Approach LOS	C			C	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 24.1 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay (s/veh): 30.3	Intersection LOS: C
Intersection Capacity Utilization 64.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	722	264	582	405	6
Future Volume (veh/h)	10	722	264	582	405	6
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	785	287	633	440	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	873	777	346	1561	1075	17
Arrive On Green	0.48	0.48	0.10	0.43	0.59	0.59
Sat Flow, veh/h	1810	1610	3510	3705	3732	58
Grp Volume(v), veh/h	11	785	287	633	218	229
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1890
Q Serve(g_s), s	0.4	57.9	9.6	14.5	7.8	7.8
Cycle Q Clear(g_c), s	0.4	57.9	9.6	14.5	7.8	7.8
Prop In Lane	1.00	1.00	1.00			0.03
Lane Grp Cap(c), veh/h	873	777	346	1561	533	558
V/C Ratio(X)	0.01	1.01	0.83	0.41	0.41	0.41
Avail Cap(c_a), veh/h	873	777	451	1561	533	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.99	0.99	0.98	0.98
Uniform Delay (d), s/veh	16.2	31.0	53.1	23.4	18.9	18.9
Incr Delay (d2), s/veh	0.0	34.9	7.5	0.8	2.3	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	46.8	4.6	6.3	3.1	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.2	65.9	60.6	24.2	21.2	21.1
LnGrp LOS	B	F	E	C	C	C
Approach Vol, veh/h	796			920	447	
Approach Delay, s/veh	65.2			35.6	21.1	
Approach LOS	E			D	C	

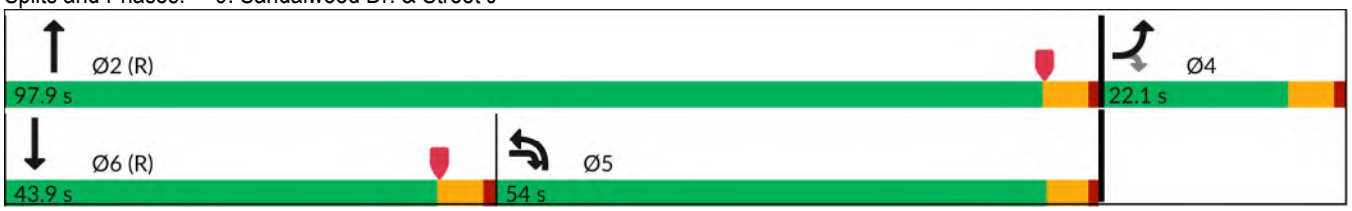
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		57.0		63.0	16.4	40.6
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		51.9		57.9	15.4	31.9
Max Q Clear Time (g_c+I1), s		16.5		59.9	11.6	9.8
Green Ext Time (p_c), s		4.9		0.0	0.2	2.6

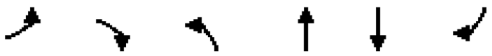
Intersection Summary	
HCM 7th Control Delay, s/veh	43.5
HCM 7th LOS	D

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	10	1044	380	835	1121
Future Volume (vph)	10	1044	380	835	1121
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	9.6	15.1	22.1
Total Split (s)	22.1	54.0	54.0	97.9	43.9
Total Split (%)	18.4%	45.0%	45.0%	81.6%	36.6%
Yellow Time (s)	4.1	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.6	4.6	5.1	5.1
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	52.4	49.4	116.0	57.9
Actuated g/C Ratio	0.08	0.44	0.41	0.97	0.48
v/c Ratio	0.07	1.60	0.29	0.26	0.70
Control Delay (s/veh)	52.1	304.6	16.7	0.9	26.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.1	304.6	16.7	0.9	26.5
LOS	D	F	B	A	C
Approach Delay (s/veh)	302.1			5.8	26.5
Approach LOS	F			A	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74 (62%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.60	
Intersection Signal Delay (s/veh): 104.6	Intersection LOS: F
Intersection Capacity Utilization 103.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	1044	380	835	1121	6
Future Volume (veh/h)	10	1044	380	835	1121	6
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	700	413	908	1218	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	151	884	1635	3002	1190	7
Arrive On Green	0.08	0.08	0.47	0.83	0.11	0.11
Sat Flow, veh/h	1810	1610	3510	3705	3775	21
Grp Volume(v), veh/h	11	700	413	908	597	628
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1896
Q Serve(g_s), s	0.7	0.0	8.5	6.8	38.8	38.8
Cycle Q Clear(g_c), s	0.7	0.0	8.5	6.8	38.8	38.8
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	151	884	1635	3002	584	613
V/C Ratio(X)	0.07	0.79	0.25	0.30	1.02	1.02
Avail Cap(c_a), veh/h	256	978	1635	3002	584	613
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.95	0.95	0.65	0.65
Uniform Delay (d), s/veh	50.7	21.6	19.4	2.3	53.6	53.6
Incr Delay (d2), s/veh	0.2	4.1	0.0	0.2	36.1	35.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	24.3	3.4	1.5	24.7	25.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	50.9	25.7	19.4	2.5	89.7	89.1
LnGrp LOS	D	C	B	A	F	F
Approach Vol, veh/h	711			1321	1225	
Approach Delay, s/veh	26.1			7.8	89.4	
Approach LOS	C			A	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		104.9		15.1	61.0	43.9
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	49.4	* 39
Max Q Clear Time (g_c+I1), s		8.8		2.7	10.5	40.8
Green Ext Time (p_c), s		7.4		2.6	0.7	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	42.5
HCM 7th LOS	D

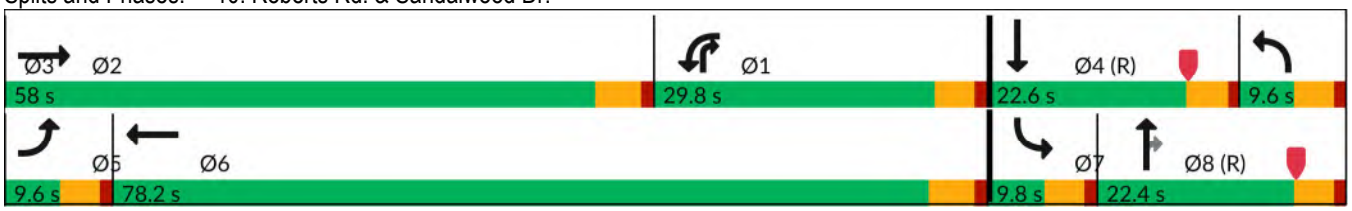
Notes

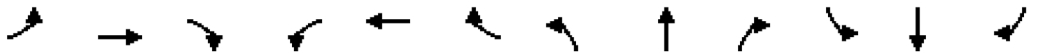
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBL	SBT	Ø8
Lane Configurations									
Traffic Volume (vph)	10	2694	752	1148	60	742	131	0	
Future Volume (vph)	10	2694	752	1148	60	742	131	0	
Turn Type	Prot	NA	Prot	NA	Prot	pm+ov	Prot	NA	
Protected Phases	5	2	1	6	3	1	7	4	8
Permitted Phases						8			
Detector Phase	5	2	1	6	3	1	7	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	10.0	10.0
Minimum Split (s)	9.6	22.1	9.6	22.1	9.6	9.6	9.6	21.6	21.6
Total Split (s)	9.6	58.0	29.8	78.2	9.6	29.8	9.8	22.6	22.4
Total Split (%)	8.0%	48.3%	24.8%	65.2%	8.0%	24.8%	8.2%	18.8%	19%
Yellow Time (s)	3.6	4.1	3.6	4.1	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	5.1	4.6	5.1	4.6	4.6	4.6	4.6	
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	None	Max	None	C-Max	C-Max
Act Effct Green (s)	5.0	52.9	25.2	80.8	5.0	43.0	5.2	19.9	
Actuated g/C Ratio	0.04	0.44	0.21	0.67	0.04	0.36	0.04	0.17	
v/c Ratio	0.14	1.11	0.96	0.33	0.40	1.02	0.84	0.01	
Control Delay (s/veh)	65.3	84.0	70.4	8.6	63.7	63.1	95.3	0.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	65.3	84.0	70.4	8.6	63.7	63.1	95.3	0.0	
LOS	E	F	E	A	E	E	F	A	
Approach Delay (s/veh)		84.0		31.8				92.6	
Approach LOS		F		C				F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay (s/veh): 62.9	Intersection LOS: E
Intersection Capacity Utilization 115.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	2694	56	752	1148	107	60	0	742	131	0	4
Future Volume (veh/h)	10	2694	56	752	1148	107	60	0	742	131	0	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1976	1900	1976	1976	1900	1900	1900	1976	1900	1900	1900
Adj Flow Rate, veh/h	11	2836	33	792	1208	60	63	0	413	138	0	4
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	23	2578	30	790	3596	179	648	543	830	157	0	242
Arrive On Green	0.02	0.75	0.75	0.36	1.00	1.00	0.30	0.00	0.49	0.07	0.00	0.25
Sat Flow, veh/h	1810	5848	68	3764	5600	278	3619	1900	1675	3619	0	1610
Grp Volume(v), veh/h	11	1913	956	792	852	416	63	0	413	138	0	4
Grp Sat Flow(s),veh/h/ln	1810	1976	1964	1882	1976	1926	1810	1900	1675	1810	0	1610
Q Serve(g_s), s	0.7	52.9	52.9	25.2	0.0	0.0	1.5	0.0	3.0	4.5	0.0	0.2
Cycle Q Clear(g_c), s	0.7	52.9	52.9	25.2	0.0	0.0	1.5	0.0	3.0	4.5	0.0	0.2
Prop In Lane	1.00		0.03	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	23	1742	866	790	2538	1237	648	543	830	157	0	242
V/C Ratio(X)	0.48	1.10	1.10	1.00	0.34	0.34	0.10	0.00	0.50	0.88	0.00	0.02
Avail Cap(c_a), veh/h	75	1742	866	790	2538	1237	648	543	830	157	0	242
HCM Platoon Ratio	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70
Upstream Filter(I)	0.20	0.20	0.20	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.3	15.0	15.0	38.6	0.0	0.0	34.8	0.0	12.6	55.3	0.0	38.1
Incr Delay (d2), s/veh	1.1	46.3	51.0	32.5	0.1	0.2	0.0	0.0	2.1	38.3	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	20.5	21.5	13.2	0.0	0.1	0.7	0.0	5.3	2.8	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.4	61.3	66.1	71.1	0.1	0.2	34.8	0.0	14.8	93.6	0.0	38.2
LnGrp LOS	E	F	F	F	A	A	C		B	F		D
Approach Vol, veh/h		2880			2060			476			142	
Approach Delay, s/veh		62.9			27.4			17.4			92.1	
Approach LOS		E			C			B			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.3	58.0	26.6	22.6	6.1	82.2	9.8	39.4
Change Period (Y+Rc), s	5.1	* 5.1	4.6	4.6	4.6	5.1	4.6	4.6
Max Green Setting (Gmax), s	25.2	* 53	5.0	18.0	5.0	73.1	5.2	17.8
Max Q Clear Time (g_c+I1), s	27.2	54.9	3.5	2.2	2.7	2.0	6.5	5.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	46.6
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	370	3	90	565	5	63
Future Vol, veh/h	370	3	90	565	5	63
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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	425	3	103	649	6	72

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	429	0	1283	427
Stage 1	-	-	-	-	427	-
Stage 2	-	-	-	-	856	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1141	-	184	632
Stage 1	-	-	-	-	662	-
Stage 2	-	-	-	-	419	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1141	-	158	632
Mov Cap-2 Maneuver	-	-	-	-	158	-
Stage 1	-	-	-	-	662	-
Stage 2	-	-	-	-	360	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.16	13.19
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	518	-	-	247	-
HCM Lane V/C Ratio	0.151	-	-	0.091	-
HCM Control Delay (s/veh)	13.2	-	-	8.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.3	-

Intersection	
Int Delay, s/veh	105.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	351	82	240	258	0	0	0	0	396	3	397
Future Vol, veh/h	0	351	82	240	258	0	0	0	0	396	3	397
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	373	87	255	274	0	0	0	0	421	3	422

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	461	0	0	1159	1246	274
Stage 1	-	-	-	-	-	-	785	785	-
Stage 2	-	-	-	-	-	-	373	461	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1111	-	0	~ 219	175	769
Stage 1	0	-	-	-	-	0	453	407	-
Stage 2	0	-	-	-	-	0	701	569	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1111	-	-	~ 168	0	769
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 229	0	-
Stage 1	-	-	-	-	-	-	453	0	-
Stage 2	-	-	-	-	-	-	540	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	4.44	226.62
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	1111	-	229	769
HCM Lane V/C Ratio	-	-	0.23	-	1.855	0.549
HCM Control Delay (s/veh)	-	-	9.2	-	$ 437	15.2
HCM Lane LOS	-	-	A	-	F	C
HCM 95th %tile Q(veh)	-	-	0.9	-	29.8	3.4

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

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	246	502	0	0	410	314	88	1	216	0	0	0
Future Vol, veh/h	246	502	0	0	410	314	88	1	216	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	262	534	0	0	436	334	94	1	230	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	770	0	-	-	-	0	1494	1828	534
Stage 1	-	-	-	-	-	-	1057	1057	-
Stage 2	-	-	-	-	-	-	436	770	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	853	-	0	0	-	-	137	78	550
Stage 1	-	-	0	0	-	-	337	304	-
Stage 2	-	-	0	0	-	-	656	413	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	853	-	-	-	-	-	95	0	550
Mov Cap-2 Maneuver	-	-	-	-	-	-	173	0	-
Stage 1	-	-	-	-	-	-	234	0	-
Stage 2	-	-	-	-	-	-	656	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	3.64	0	25.55
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	173	550	853	-	-	-
HCM Lane V/C Ratio	0.547	0.418	0.307	-	-	-
HCM Control Delay (s/veh)	48.3	16.2	11.1	-	-	-
HCM Lane LOS	E	C	B	-	-	-
HCM 95th %tile Q(veh)	2.8	2	1.3	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	3479	1960	15	0	7
Future Vol, veh/h	0	3479	1960	15	0	7
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	4766	2685	21	0	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1342
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	271
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	271
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	18.75
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	271
HCM Lane V/C Ratio	-	-	-	0.035
HCM Control Delay (s/veh)	-	-	-	18.7
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Intersection Delay, s/veh	1121.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2064	1543	316	1266	0	0	0	0	243	7	785
Future Vol, veh/h	0	2064	1543	316	1266	0	0	0	0	243	7	785
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2173	1624	333	1333	0	0	0	0	256	7	826
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	1349.7	1019.1	481.8
HCM LOS	F	F	F

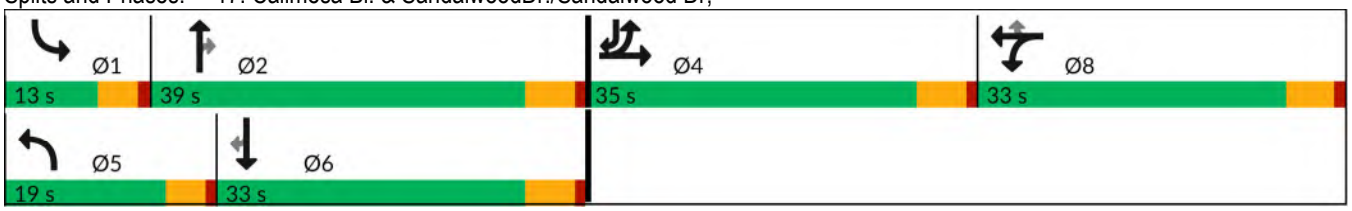
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	20%	23%
Vol Thru, %	100%	0%	80%	1%
Vol Right, %	0%	100%	0%	76%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2064	1543	1582	1035
LT Vol	0	0	316	243
Through Vol	2064	0	1266	7
RT Vol	0	1543	0	785
Lane Flow Rate	2173	1624	1665	1089
Geometry Grp	5	5	4a	2
Degree of Util (X)	4.543	3.08	-	1.994
Departure Headway (Hd)	14.978	14.207	-	10.783
Convergence, Y/N	Yes	Yes	-	Yes
Cap	282	276	-	349
Service Time	12.678	11.907	-	8.783
HCM Lane V/C Ratio	7.706	5.884	-	3.12
HCM Control Delay, s/veh	1631	973.5	+	481.8
HCM Lane LOS	F	F	-	F
HCM 95th-tile Q	110.2	70.1	-	46.8

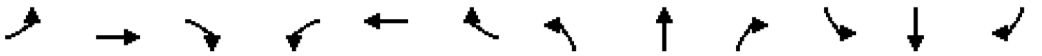
Notes
HCM 7th Edition AWSC methodology error - negative departure headway

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	559	153	74	143	26	901	312	136	29	284	535
Future Volume (vph)	559	153	74	143	26	901	312	136	29	284	535
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0	35.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%	29.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	29.8	29.8	13.6	13.6	13.6	14.5	32.7	32.7	6.3	20.3	50.1
Actuated g/C Ratio	0.30	0.30	0.14	0.14	0.14	0.15	0.33	0.33	0.06	0.20	0.51
v/c Ratio	1.07	1.97dr	0.31	0.58	0.08	3.60	0.28	0.23	0.27	0.77	0.58
Control Delay (s/veh)	97.3	235.2	43.2	50.2	0.4	Error	26.9	5.8	52.7	51.3	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	97.3	235.2	43.2	50.2	0.4	Error	26.9	5.8	52.7	51.3	7.8
LOS	F	F	D	D	A	F	C	A	D	D	A
Approach Delay (s/veh)		204.9		42.8			805.5			23.9	
Approach LOS		F		D			F			C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 99.2		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 3.60		
Intersection Signal Delay (s/veh): 335.3	Intersection LOS: F	
Intersection Capacity Utilization 138.9%	ICU Level of Service H	
Analysis Period (min) 15		
dr Defacto Right Lane. Recode with 1 though lane as a right lane.		

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	559	153	1576	74	143	26	901	312	136	29	284	535
Future Volume (veh/h)	559	153	1576	74	143	26	901	312	136	29	284	535
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	588	161	1642	78	151	18	948	328	116	31	299	491
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	537	564	478	198	208	173	261	1287	572	52	458	865
Arrive On Green	0.30	0.30	0.30	0.11	0.11	0.11	0.14	0.36	0.36	0.03	0.24	0.24
Sat Flow, veh/h	1810	1900	1610	1810	1900	1576	1810	3610	1606	1810	1900	1607
Grp Volume(v), veh/h	588	161	1642	78	151	18	948	328	116	31	299	491
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1576	1810	1805	1606	1810	1900	1607
Q Serve(g_s), s	29.6	6.5	29.6	4.0	7.7	1.0	14.4	6.4	5.0	1.7	14.1	20.3
Cycle Q Clear(g_c), s	29.6	6.5	29.6	4.0	7.7	1.0	14.4	6.4	5.0	1.7	14.1	20.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	537	564	478	198	208	173	261	1287	572	52	458	865
V/C Ratio(X)	1.10	0.29	3.44	0.39	0.72	0.10	3.63	0.25	0.20	0.59	0.65	0.57
Avail Cap(c_a), veh/h	537	564	478	500	525	436	261	1287	572	152	525	922
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	27.0	35.1	41.3	43.0	40.0	42.7	22.7	22.3	47.9	34.1	15.4
Incr Delay (d2), s/veh	67.5	0.3	1102.5	1.3	4.7	0.3	1193.3	0.1	0.2	3.9	2.4	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.4	2.9	157.2	1.8	3.8	0.4	92.8	2.6	1.8	0.8	6.6	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	102.6	27.2	1137.6	42.6	47.7	40.3	1236.0	22.8	22.4	51.8	36.5	16.1
LnGrp LOS	F	C	F	D	D	D	F	C	C	D	D	B
Approach Vol, veh/h		2391			247			1392			821	
Approach Delay, s/veh		808.3			45.5			849.0			24.9	
Approach LOS		F			D			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	41.0		35.0	19.0	29.5		16.3				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6				
Max Q Clear Time (g_c+I1), s	3.7	8.4		31.6	16.4	22.3		9.7				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	1.7		0.9				

Intersection Summary	
HCM 7th Control Delay, s/veh	648.5
HCM 7th LOS	F

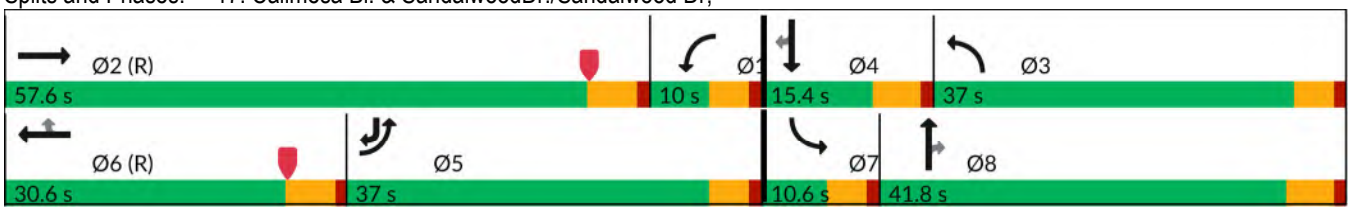
Notes

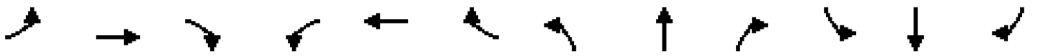
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	559	153	1576	74	143	26	901	312	136	29	284	535
Future Volume (vph)	559	153	1576	74	143	26	901	312	136	29	284	535
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.0	30.4		10.0	29.4	29.4	10.0	27.4	27.4	9.6	15.4	10.0
Total Split (s)	37.0	57.6		10.0	30.6	30.6	37.0	41.8	41.8	10.6	15.4	37.0
Total Split (%)	30.8%	48.0%		8.3%	25.5%	25.5%	30.8%	34.8%	34.8%	8.8%	12.8%	30.8%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	32.4	53.4	120.0	5.4	26.4	26.4	31.2	39.4	39.4	5.7	10.0	43.2
Actuated g/C Ratio	0.27	0.45	1.00	0.05	0.22	0.22	0.26	0.33	0.33	0.05	0.08	0.36
v/c Ratio	0.55	0.19	0.85	0.92	0.18	0.05	0.93	0.25	0.20	0.34	0.95	0.70
Control Delay (s/veh)	38.7	15.1	18.0	134.3	39.2	0.2	54.7	31.6	8.9	65.9	93.6	24.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.7	15.1	18.0	134.3	39.2	0.2	54.7	31.6	8.9	65.9	93.6	24.1
LOS	D	B	B	F	D	A	D	C	A	E	F	C
Approach Delay (s/veh)		22.9			64.1			44.7			48.8	
Approach LOS		C			E			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay (s/veh): 35.9	Intersection LOS: D
Intersection Capacity Utilization 91.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	559	153	1576	74	143	26	901	312	136	29	284	535
Future Volume (veh/h)	559	153	1576	74	143	26	901	312	136	29	284	535
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	588	161	0	78	151	18	948	328	116	31	299	386
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1332	827		233	798	332	1001	1300	527	49	317	704
Arrive On Green	0.12	0.14	0.00	0.13	0.21	0.21	0.27	0.33	0.33	0.03	0.08	0.08
Sat Flow, veh/h	3764	1900	1675	1810	3800	1583	3764	3952	1603	1810	3800	1604
Grp Volume(v), veh/h	588	161	0	78	151	18	948	328	116	31	299	386
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1583	1882	1976	1603	1810	1900	1604
Q Serve(g_s), s	17.5	9.0	0.0	4.7	3.9	1.1	29.7	7.3	5.1	2.0	9.4	0.0
Cycle Q Clear(g_c), s	17.5	9.0	0.0	4.7	3.9	1.1	29.7	7.3	5.1	2.0	9.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1332	827		233	798	332	1001	1300	527	49	317	704
V/C Ratio(X)	0.44	0.19		0.33	0.19	0.05	0.95	0.25	0.22	0.64	0.94	0.55
Avail Cap(c_a), veh/h	1332	827		233	798	332	1016	1300	527	90	317	704
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.84	0.84	0.84	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	32.9	0.0	47.6	39.0	35.6	43.2	29.5	19.2	57.8	54.7	25.0
Incr Delay (d2), s/veh	0.1	0.5	0.0	0.3	0.5	0.3	14.7	0.1	0.2	5.1	36.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	4.5	0.0	2.1	1.9	0.4	15.4	3.4	2.4	1.0	6.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.0	33.4	0.0	47.9	39.5	35.9	57.9	29.5	19.4	62.9	90.8	25.9
LnGrp LOS	D	C		D	D	D	E	C	B	E	F	C
Approach Vol, veh/h		749			247			1392			716	
Approach Delay, s/veh		40.2			41.9			48.0			54.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.4	57.6	37.3	15.4	47.4	30.6	7.8	44.9
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.4	52.2	32.4	* 10	32.4	25.2	6.0	36.4
Max Q Clear Time (g_c+I1), s	6.7	11.0	31.7	11.4	19.5	5.9	4.0	9.3
Green Ext Time (p_c), s	0.0	0.9	0.2	0.0	1.0	0.8	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	47.2
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	792
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	302	1631	26	172	1178	1
Future Vol, veh/h	302	1631	26	172	1178	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	311	1681	27	177	1214	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	1009.4	25.7	564.3
HCM LOS	F	D	F

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	13%
Vol Thru, %	0%	16%	87%
Vol Right, %	0%	84%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	1179	1933	198
LT Vol	1178	0	26
Through Vol	0	302	172
RT Vol	1	1631	0
Lane Flow Rate	1215	1993	204
Geometry Grp	1	1	1
Degree of Util (X)	2.184	3.191	0.398
Departure Headway (Hd)	10.252	8.378	13.869
Convergence, Y/N	Yes	Yes	Yes
Cap	365	458	263
Service Time	8.252	6.378	11.869
HCM Lane V/C Ratio	3.329	4.352	0.776
HCM Control Delay, s/veh	564.3	1009.4	25.7
HCM Lane LOS	F	F	D
HCM 95th-tile Q	57	121.9	1.8

Intersection	
Intersection Delay, s/veh	7
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	1	0	14	3	1
Future Vol, veh/h	18	1	0	14	3	1
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	30	2	0	23	5	2
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.3	6.5	7.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	95%	75%
Vol Thru, %	0%	0%	25%
Vol Right, %	100%	5%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	14	19	4
LT Vol	0	18	3
Through Vol	0	0	1
RT Vol	14	1	0
Lane Flow Rate	23	32	7
Geometry Grp	1	1	1
Degree of Util (X)	0.022	0.036	0.008
Departure Headway (Hd)	3.36	4.111	4.123
Convergence, Y/N	Yes	Yes	Yes
Cap	1066	875	870
Service Time	1.377	2.116	2.14
HCM Lane V/C Ratio	0.022	0.037	0.008
HCM Control Delay, s/veh	6.5	7.3	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.1	0

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	17	0	235	19	0	0	0	0	0	0	0
Future Vol, veh/h	0	17	0	235	19	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	18	0	253	20	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	18	0	0	544	544	20
Stage 1	-	-	-	-	-	-	526	526	-
Stage 2	-	-	-	-	-	-	18	18	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1612	-	0	503	449	1063
Stage 1	0	-	-	-	-	0	597	532	-
Stage 2	0	-	-	-	-	0	1010	884	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1612	-	-	424	0	1063
Mov Cap-2 Maneuver	-	-	-	-	-	-	424	0	-
Stage 1	-	-	-	-	-	-	597	0	-
Stage 2	-	-	-	-	-	-	850	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	7.08	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1593	-	-
HCM Lane V/C Ratio	-	-	0.157	-	-
HCM Control Delay (s/veh)	-	-	7.6	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.6	-	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	17	0	0	253	0	1	0	340	0	0	0
Future Vol, veh/h	0	17	0	0	253	0	1	0	340	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	19	0	0	278	0	1	0	374	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	278	0	-	-	-	0	297	297	19
Stage 1	-	-	-	-	-	-	19	19	-
Stage 2	-	-	-	-	-	-	278	278	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1296	-	0	0	-	-	699	618	1065
Stage 1	-	-	0	0	-	-	1009	884	-
Stage 2	-	-	0	0	-	-	774	684	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1296	-	-	-	-	-	699	0	1065
Mov Cap-2 Maneuver	-	-	-	-	-	-	699	0	-
Stage 1	-	-	-	-	-	-	1009	0	-
Stage 2	-	-	-	-	-	-	774	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	10.21
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1064	1296	-	-	-
HCM Lane V/C Ratio	0.352	-	-	-	-
HCM Control Delay (s/veh)	10.2	0	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	1.6	0	-	-	-

Intersection	
Intersection Delay, s/veh	22.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	338	2	58	228	97	0	66	70	157	104	25
Future Vol, veh/h	17	338	2	58	228	97	0	66	70	157	104	25
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	371	2	64	251	107	0	73	77	173	114	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	24.6	25.4	13.4	20.6
HCM LOS	C	D	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	5%	15%	55%
Vol Thru, %	49%	95%	60%	36%
Vol Right, %	51%	1%	25%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	136	357	383	286
LT Vol	0	17	58	157
Through Vol	66	338	228	104
RT Vol	70	2	97	25
Lane Flow Rate	149	392	421	314
Geometry Grp	1	1	1	1
Degree of Util (X)	0.3	0.718	0.738	0.613
Departure Headway (Hd)	7.236	6.587	6.448	7.018
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	496	549	564	515
Service Time	5.28	4.608	4.448	5.04
HCM Lane V/C Ratio	0.3	0.714	0.746	0.61
HCM Control Delay, s/veh	13.4	24.6	25.4	20.6
HCM Lane LOS	B	C	D	C
HCM 95th-tile Q	1.2	5.9	6.3	4.1

APPENDIX 5.4: E+P (PHASE 4) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Intersection Delay, s/veh	4.3
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	329	85	57
Demand Flow Rate, veh/h	329	85	57
Vehicles Circulating, veh/h	13	0	329
Vehicles Exiting, veh/h	72	386	13
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.7	3.1	4.2
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	329	85	57
Cap Entry Lane, veh/h	1362	1380	987
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	329	85	57
Cap Entry, veh/h	1362	1380	987
V/C Ratio	0.242	0.062	0.058
Control Delay, s/veh	4.7	3.1	4.2
LOS	A	A	A
95th %tile Queue, veh	1	0	0

Intersection	
Intersection Delay, s/veh	4.1
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	271	113	79
Demand Flow Rate, veh/h	271	113	79
Vehicles Circulating, veh/h	79	0	78
Vehicles Exiting, veh/h	78	350	35
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.7	3.3	3.3
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	271	113	79
Cap Entry Lane, veh/h	1273	1380	1274
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	271	113	79
Cap Entry, veh/h	1273	1380	1274
V/C Ratio	0.213	0.082	0.062
Control Delay, s/veh	4.7	3.3	3.3
LOS	A	A	A
95th %tile Queue, veh	1	0	0

Intersection	
Intersection Delay, s/veh	5.8
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	483	80	234
Demand Flow Rate, veh/h	483	80	234
Vehicles Circulating, veh/h	26	51	382
Vehicles Exiting, veh/h	105	565	127
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.0	3.2	6.4
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	483	80	234
Cap Entry Lane, veh/h	1344	1310	935
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	483	80	234
Cap Entry, veh/h	1344	1310	935
V/C Ratio	0.359	0.061	0.250
Control Delay, s/veh	6.0	3.2	6.4
LOS	A	A	A
95th %tile Queue, veh	2	0	1

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	117	37	202	177	2
Future Vol, veh/h	17	117	37	202	177	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	127	40	220	192	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	493	193	195	0	-	0
Stage 1	193	-	-	-	-	-
Stage 2	300	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	539	853	1391	-	-	-
Stage 1	844	-	-	-	-	-
Stage 2	756	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	523	853	1391	-	-	-
Mov Cap-2 Maneuver	523	-	-	-	-	-
Stage 1	820	-	-	-	-	-
Stage 2	756	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.59	1.19	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1391	-	790	-	-
HCM Lane V/C Ratio	0.029	-	0.184	-	-
HCM Control Delay (s/veh)	7.7	-	10.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-

Intersection	
Intersection Delay, s/veh	5.2
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	448	291	319
Demand Flow Rate, veh/h	448	291	319
Vehicles Circulating, veh/h	302	88	120
Vehicles Exiting, veh/h	137	662	259
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.2	3.7	5.3
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.196	0.804	0.412	0.588	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	88	360	120	171	319
Cap Entry Lane, veh/h	1079	1079	1311	1311	1221
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	88	360	120	171	319
Cap Entry, veh/h	1079	1079	1311	1311	1221
V/C Ratio	0.082	0.334	0.092	0.130	0.261
Control Delay, s/veh	4.0	6.7	3.5	3.8	5.3
LOS	A	A	A	A	A
95th %tile Queue, veh	0	1	0	0	1

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	570	107	8	18	0
Future Vol, veh/h	0	570	107	8	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	781	147	11	25	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	158	0	-	0	933	152
Stage 1	-	-	-	-	152	-
Stage 2	-	-	-	-	781	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1434	-	-	-	298	899
Stage 1	-	-	-	-	881	-
Stage 2	-	-	-	-	455	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1434	-	-	-	298	899
Mov Cap-2 Maneuver	-	-	-	-	298	-
Stage 1	-	-	-	-	881	-
Stage 2	-	-	-	-	455	-

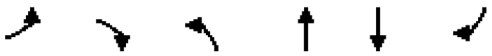
Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	18.17
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1434	-	-	-	298
HCM Lane V/C Ratio	-	-	-	-	0.083
HCM Control Delay (s/veh)	0	-	-	-	18.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	972	656		
Future Volume (vph)	972	656		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	40.0	49.0	80.0	31.0
Total Split (%)	33.3%	40.8%	67%	26%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min
Act Effct Green (s)	10.0	14.0		
Actuated g/C Ratio	0.20	0.29		
v/c Ratio	0.50	0.71		
Control Delay (s/veh)	0.9	20.0		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.9	20.0		
LOS	A	B		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 48.9	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay (s/veh): 8.5	Intersection LOS: A
Intersection Capacity Utilization 38.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	972	656	0	0	0
Future Volume (veh/h)	0	972	656	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	948	713	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	819	1283	980	504	5	0
Arrive On Green	0.00	0.45	0.28	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	-96900	0
Grp Volume(v), veh/h	0	948	713	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	9.9	6.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.9	6.6	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	819	1283	980	504	5	0
V/C Ratio(X)	0.00	0.74	0.73	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1746	2735	4310	3935	1361	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.1	11.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.4	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.5	2.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	9.0	12.2	0.0	0.0	0.0
LnGrp LOS		A	B			
Approach Vol, veh/h	948			713	0	
Approach Delay, s/veh	9.0			12.2	0.0	
Approach LOS	A			B		

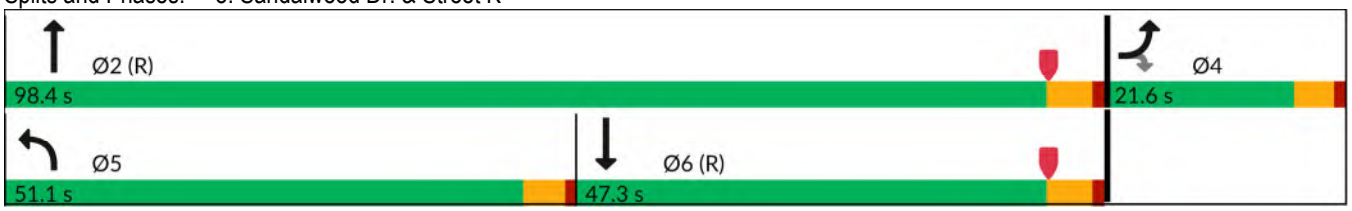
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		14.7		21.5	14.7	0.0
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		74.9		34.9	44.4	25.9
Max Q Clear Time (g_c+I1), s		0.0		11.9	8.6	0.0
Green Ext Time (p_c), s		0.0		4.4	1.5	0.0

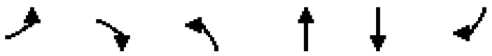
Intersection Summary		
HCM 7th Control Delay, s/veh		10.4
HCM 7th LOS		B

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	2	147	877	654	961
Future Volume (vph)	2	147	877	654	961
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	21.6	21.6	9.6	15.1	22.1
Total Split (s)	21.6	21.6	51.1	98.4	47.3
Total Split (%)	18.0%	18.0%	42.6%	82.0%	39.4%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.5	10.5	38.0	99.8	57.2
Actuated g/C Ratio	0.09	0.09	0.32	0.83	0.48
v/c Ratio	0.01	0.56	0.86	0.24	0.62
Control Delay (s/veh)	49.5	15.6	29.1	4.9	26.3
Queue Delay	0.0	0.0	0.0	0.0	0.6
Total Delay (s/veh)	49.5	15.6	29.1	4.9	26.9
LOS	D	B	C	A	C
Approach Delay (s/veh)	16.0			18.8	26.9
Approach LOS	B			B	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 93.3 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 21.6	Intersection LOS: C
Intersection Capacity Utilization 72.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	147	877	654	961	11
Future Volume (veh/h)	2	147	877	654	961	11
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	160	953	711	1045	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	208	185	1015	2903	1743	20
Arrive On Green	0.11	0.11	0.48	1.00	0.48	0.48
Sat Flow, veh/h	1810	1610	3510	3705	3750	42
Grp Volume(v), veh/h	2	160	953	711	516	541
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1892
Q Serve(g_s), s	0.1	11.7	30.8	0.0	25.1	25.1
Cycle Q Clear(g_c), s	0.1	11.7	30.8	0.0	25.1	25.1
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	208	185	1015	2903	861	902
V/C Ratio(X)	0.01	0.86	0.94	0.24	0.60	0.60
Avail Cap(c_a), veh/h	256	228	1360	2903	861	902
HCM Platoon Ratio	1.00	1.00	1.67	1.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93	0.86	0.86
Uniform Delay (d), s/veh	47.1	52.2	30.0	0.0	23.0	23.0
Incr Delay (d2), s/veh	0.0	23.8	8.7	0.2	2.7	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	11.3	12.1	0.1	11.1	11.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	47.1	75.9	38.7	0.2	25.7	25.5
LnGrp LOS	D	E	D	A	C	C
Approach Vol, veh/h	162			1664	1057	
Approach Delay, s/veh	75.6			22.2	25.6	
Approach LOS	E			C	C	

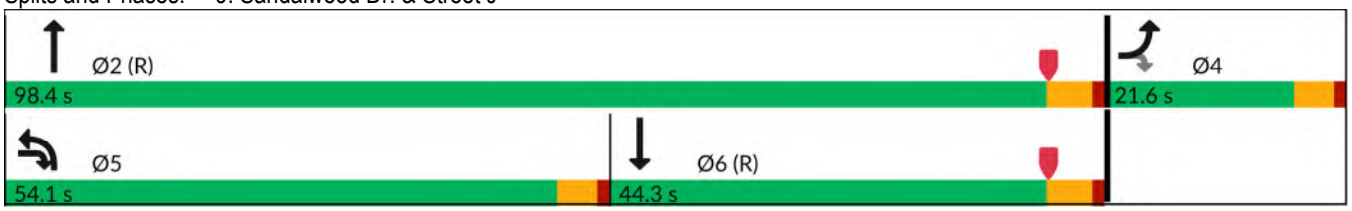
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		101.6		18.4	39.3	62.3
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	46.5	42.2
Max Q Clear Time (g_c+I1), s		2.0		13.7	32.8	27.1
Green Ext Time (p_c), s		5.9		0.1	1.9	6.2

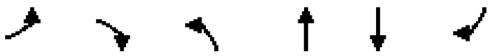
Intersection Summary		
HCM 7th Control Delay, s/veh		26.5
HCM 7th LOS		C

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	2	232	1350	1529	1108
Future Volume (vph)	2	232	1350	1529	1108
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	21.6	9.6	9.6	15.1	22.1
Total Split (s)	21.6	54.1	54.1	98.4	44.3
Total Split (%)	18.0%	45.1%	45.1%	82.0%	36.9%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	58.1	55.2	116.1	52.2
Actuated g/C Ratio	0.08	0.48	0.46	0.97	0.44
v/c Ratio	0.01	0.32	0.91	0.48	0.78
Control Delay (s/veh)	51.0	19.0	22.8	3.9	51.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.0	19.0	22.8	3.9	51.4
LOS	D	B	C	A	D
Approach Delay (s/veh)	19.3			12.7	51.4
Approach LOS	B			B	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 48 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay (s/veh): 23.3	Intersection LOS: C
Intersection Capacity Utilization 89.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	232	1350	1529	1108	11
Future Volume (veh/h)	2	232	1350	1529	1108	11
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	252	1467	1662	1204	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	196	839	1448	2927	1318	13
Arrive On Green	0.11	0.11	0.41	0.81	0.72	0.72
Sat Flow, veh/h	1810	1610	3510	3705	3757	36
Grp Volume(v), veh/h	2	252	1467	1662	593	623
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1893
Q Serve(g_s), s	0.1	10.7	49.5	19.4	32.2	32.3
Cycle Q Clear(g_c), s	0.1	10.7	49.5	19.4	32.2	32.3
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	196	839	1448	2927	650	682
V/C Ratio(X)	0.01	0.30	1.01	0.57	0.91	0.91
Avail Cap(c_a), veh/h	256	892	1448	2927	650	682
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.49	0.49	0.76	0.76
Uniform Delay (d), s/veh	47.8	16.3	35.2	4.0	15.3	15.3
Incr Delay (d2), s/veh	0.0	0.2	19.9	0.4	15.8	15.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	12.5	24.0	4.7	9.0	9.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	47.8	16.5	55.1	4.4	31.0	30.5
LnGrp LOS	D	B	F	A	C	C
Approach Vol, veh/h	254			3129	1216	
Approach Delay, s/veh	16.8			28.2	30.8	
Approach LOS	B			C	C	

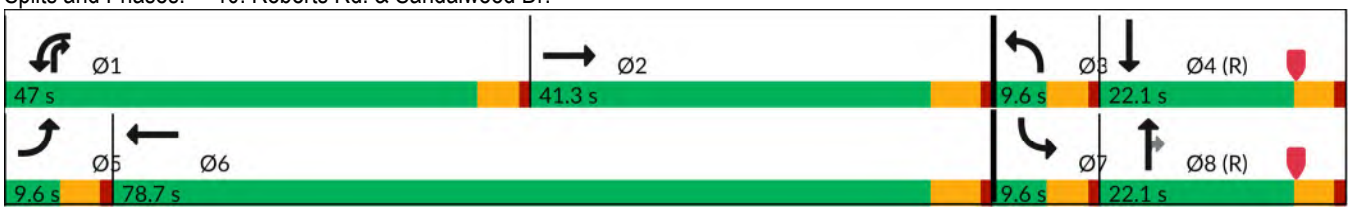
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		102.4		17.6	54.1	48.3
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	49.5	39.2
Max Q Clear Time (g_c+I1), s		21.4		12.7	51.5	34.3
Green Ext Time (p_c), s		21.4		0.3	0.0	3.2

Intersection Summary	
HCM 7th Control Delay, s/veh	28.2
HCM 7th LOS	C

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBL	SBT	Ø8
Lane Configurations									
Traffic Volume (vph)	5	1441	1078	2870	11	132	31	0	
Future Volume (vph)	5	1441	1078	2870	11	132	31	0	
Turn Type	Prot	NA	Prot	NA	Prot	pm+ov	Prot	NA	
Protected Phases	5	2	1	6	3	1	7	4	8
Permitted Phases						8			
Detector Phase	5	2	1	6	3	1	7	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	10.0	10.0
Minimum Split (s)	9.6	22.4	9.6	22.4	9.6	9.6	9.6	21.6	21.6
Total Split (s)	9.6	41.3	47.0	78.7	9.6	47.0	9.6	22.1	22.1
Total Split (%)	8.0%	34.4%	39.2%	65.6%	8.0%	39.2%	8.0%	18.4%	18%
Yellow Time (s)	3.6	4.4	3.6	4.4	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	5.4	4.6	5.4	4.6	4.6	4.6	4.6	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max
Act Effct Green (s)	5.0	37.7	40.6	81.0	5.0	66.6	5.0	23.3	
Actuated g/C Ratio	0.04	0.31	0.34	0.68	0.04	0.56	0.04	0.19	
v/c Ratio	0.07	0.86	0.93	0.80	0.08	0.13	0.23	0.01	
Control Delay (s/veh)	68.8	31.7	51.5	16.2	56.5	7.7	59.4	0.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	68.8	31.7	51.5	16.2	56.5	7.7	59.4	0.0	
LOS	E	C	D	B	E	A	E	A	
Approach Delay (s/veh)		31.8		25.8				53.2	
Approach LOS		C		C				D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay (s/veh): 27.1	Intersection LOS: C
Intersection Capacity Utilization 81.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1441	19	1078	2870	43	11	0	132	31	0	4
Future Volume (veh/h)	5	1441	19	1078	2870	43	11	0	132	31	0	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1976	1900	1976	1976	1900	1900	1900	1976	1900	1900	1900
Adj Flow Rate, veh/h	5	1566	21	1172	3120	47	12	0	89	34	0	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	12	1716	23	1243	3599	54	50	712	867	102	0	325
Arrive On Green	0.01	0.29	0.29	0.33	0.62	0.62	0.01	0.00	0.19	0.03	0.00	0.20
Sat Flow, veh/h	1810	5836	78	3764	5825	87	3619	3800	1675	3619	0	1610
Grp Volume(v), veh/h	5	1061	526	1172	2111	1056	12	0	89	34	0	4
Grp Sat Flow(s),veh/h/ln	1810	1976	1962	1882	1976	1960	1810	1900	1675	1810	0	1610
Q Serve(g_s), s	0.3	31.1	31.1	36.3	52.6	53.5	0.4	0.0	3.2	1.1	0.0	0.2
Cycle Q Clear(g_c), s	0.3	31.1	31.1	36.3	52.6	53.5	0.4	0.0	3.2	1.1	0.0	0.2
Prop In Lane	1.00		0.04	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	12	1162	577	1243	2442	1211	50	712	867	102	0	325
V/C Ratio(X)	0.43	0.91	0.91	0.94	0.86	0.87	0.24	0.00	0.10	0.33	0.00	0.01
Avail Cap(c_a), veh/h	75	1182	587	1330	2442	1211	151	712	867	151	0	325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.4	40.9	40.9	39.1	18.8	19.0	58.6	0.0	14.7	57.2	0.0	38.3
Incr Delay (d2), s/veh	6.0	7.4	13.3	12.6	3.5	7.2	0.9	0.0	0.2	0.7	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	15.9	16.7	18.3	22.5	23.9	0.2	0.0	1.3	0.5	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.4	48.3	54.1	51.6	22.3	26.1	59.5	0.0	15.0	57.9	0.0	38.4
LnGrp LOS	E	D	D	D	C	C	E		B	E		D
Approach Vol, veh/h		1592			4339			101			38	
Approach Delay, s/veh		50.3			31.2			20.3			55.8	
Approach LOS		D			C			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	44.2	40.7	6.2	28.8	5.4	79.6	8.0	27.1
Change Period (Y+Rc), s	4.6	5.4	4.6	4.6	4.6	5.4	4.6	4.6
Max Green Setting (Gmax), s	42.4	35.9	5.0	17.5	5.0	73.3	5.0	17.5
Max Q Clear Time (g_c+I1), s	38.3	33.1	2.4	2.2	2.3	55.5	3.1	5.2
Green Ext Time (p_c), s	1.3	2.2	0.0	0.0	0.0	16.8	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	36.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	3.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	610	2	114	181	8	135
Future Vol, veh/h	610	2	114	181	8	135
Conflicting Peds, #/hr	0	2	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	701	2	131	208	9	155

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	705	0	1174	704
Stage 1	-	-	-	-	704	-
Stage 2	-	-	-	-	470	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	902	-	214	440
Stage 1	-	-	-	-	494	-
Stage 2	-	-	-	-	633	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	900	-	178	439
Mov Cap-2 Maneuver	-	-	-	-	178	-
Stage 1	-	-	-	-	493	-
Stage 2	-	-	-	-	529	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	3.74	19.76
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	406	-	-	696	-
HCM Lane V/C Ratio	0.405	-	-	0.146	-
HCM Control Delay (s/veh)	19.8	-	-	9.7	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.9	-	-	0.5	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	646	99	314	165	0	0	0	0	251	6	130
Future Vol, veh/h	0	646	99	314	165	0	0	0	0	251	6	130
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	760	116	369	194	0	0	0	0	295	7	153

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	877	0	0	1693	1810	194
Stage 1	-	-	-	-	-	-	933	933	-
Stage 2	-	-	-	-	-	-	760	877	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	778	-	0	~ 103	80	852
Stage 1	0	-	-	-	-	0	386	348	-
Stage 2	0	-	-	-	-	0	465	369	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	778	-	-	~ 54	0	852
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ -307	0	-
Stage 1	-	-	-	-	-	-	386	0	-
Stage 2	-	-	-	-	-	-	~ 244	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	9	
HCM LOS			-

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	778	-	+	852
HCM Lane V/C Ratio	-	-	0.475	-	-	0.179
HCM Control Delay (s/veh)	-	-	13.7	-	-	10.1
HCM Lane LOS	-	-	B	-	-	B
HCM 95th %tile Q(veh)	-	-	2.6	-	-	0.7

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

Intersection	
Int Delay, s/veh	13.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	466	431	0	0	455	659	23	4	97	0	0	0
Future Vol, veh/h	466	431	0	0	455	659	23	4	97	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	501	463	0	0	489	709	25	4	104	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1198	0	-	-	-	0	1955	2663	463
Stage 1	-	-	-	-	-	-	1466	1466	-
Stage 2	-	-	-	-	-	-	489	1198	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	590	-	0	0	-	-	71	23	603
Stage 1	-	-	0	0	-	-	214	194	-
Stage 2	-	-	0	0	-	-	620	261	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	590	-	-	-	-	-	~ 11	0	603
Mov Cap-2 Maneuver	-	-	-	-	-	-	26	0	-
Stage 1	-	-	-	-	-	-	32	0	-
Stage 2	-	-	-	-	-	-	620	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	18.83	0	103.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	26	603	590	-	-	-
HCM Lane V/C Ratio	1.11	0.173	0.85	-	-	-
HCM Control Delay (s/veh)	$ 430.5	12.2	36.2	-	-	-
HCM Lane LOS	F	B	E	-	-	-
HCM 95th %tile Q(veh)	3.5	0.6	9.2	-	-	-

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

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	1200	3471	3	0	1
Future Vol, veh/h	0	1200	3471	3	0	1
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1304	3773	3	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1886
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	266
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	266
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	18.57
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	266
HCM Lane V/C Ratio	-	-	-	0.004
HCM Control Delay (s/veh)	-	-	-	18.6
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Intersection Delay, s/veh	1573.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1043	528	185	2284	0	0	0	0	122	16	1683
Future Vol, veh/h	0	1043	528	185	2284	0	0	0	0	122	16	1683
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1288	652	228	2820	0	0	0	0	151	20	2078
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

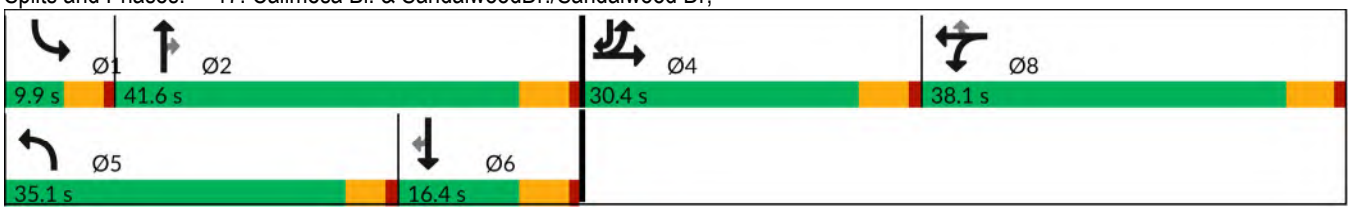
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	649.9	2291.2	1398.5
HCM LOS	F	F	F

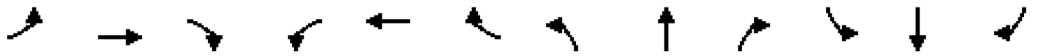
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	7%	7%
Vol Thru, %	100%	0%	93%	1%
Vol Right, %	0%	100%	0%	92%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1043	528	2469	1821
LT Vol	0	0	185	122
Through Vol	1043	0	2284	16
RT Vol	0	528	0	1683
Lane Flow Rate	1288	652	3048	2248
Geometry Grp	5	5	4a	2
Degree of Util (X)	2.717	1.249	6.019	4.03
Departure Headway (Hd)	33.425	32.544	13.534	13.836
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	129	117	305	292
Service Time	31.125	30.244	11.534	11.836
HCM Lane V/C Ratio	9.984	5.573	9.993	7.699
HCM Control Delay, s/veh	858.5	237.7	2291.2	1398.5
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	27.2	9.1	170.4	102.4

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	324	231	154	239	32	1684	544	99	14	205	548
Future Volume (vph)	324	231	154	239	32	1684	544	99	14	205	548
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4	30.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	25.1	25.1	21.1	21.1	21.1	30.6	42.5	42.5	5.2	11.0	41.5
Actuated g/C Ratio	0.23	0.23	0.19	0.19	0.19	0.28	0.39	0.39	0.05	0.10	0.38
v/c Ratio	0.87	0.94dr	0.50	0.74	0.08	3.77	0.44	0.16	0.19	1.21	0.87
Control Delay (s/veh)	65.5	36.3	43.7	53.5	0.4	Error	27.5	6.0	57.4	175.8	37.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	65.5	36.3	43.7	53.5	0.4	Error	27.5	6.0	57.4	175.8	37.4
LOS	E	D	D	D	A	F	C	A	E	F	D
Approach Delay (s/veh)		44.1		46.0			922.3			74.7	
Approach LOS		D		D			F			E	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 108.6		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 3.77		
Intersection Signal Delay (s/veh): 492.9	Intersection LOS: F	
Intersection Capacity Utilization 156.0%	ICU Level of Service H	
Analysis Period (min) 15		
dr Defacto Right Lane. Recode with 1 though lane as a right lane.		

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	324	231	534	154	239	32	1684	544	99	14	205	548
Future Volume (veh/h)	324	231	534	154	239	32	1684	544	99	14	205	548
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	368	262	589	175	272	26	1914	618	82	16	233	546
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	428	449	381	315	331	276	522	1353	603	32	198	548
Arrive On Green	0.24	0.24	0.24	0.17	0.17	0.17	0.29	0.37	0.37	0.02	0.10	0.10
Sat Flow, veh/h	1810	1900	1610	1810	1900	1587	1810	3610	1608	1810	1900	1610
Grp Volume(v), veh/h	368	262	589	175	272	26	1914	618	82	16	233	546
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1587	1810	1805	1608	1810	1900	1610
Q Serve(g_s), s	20.6	12.9	25.0	9.3	14.6	1.5	30.5	13.7	3.6	0.9	11.0	11.0
Cycle Q Clear(g_c), s	20.6	12.9	25.0	9.3	14.6	1.5	30.5	13.7	3.6	0.9	11.0	11.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	428	449	381	315	331	276	522	1353	603	32	198	548
V/C Ratio(X)	0.86	0.58	1.55	0.56	0.82	0.09	3.67	0.46	0.14	0.50	1.18	1.00
Avail Cap(c_a), veh/h	428	449	381	560	588	491	522	1353	603	91	198	548
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.7	35.7	40.4	39.9	42.1	36.6	37.6	24.9	21.8	51.5	47.4	26.6
Incr Delay (d2), s/veh	16.1	1.9	258.8	1.5	5.1	0.1	1204.6	0.2	0.1	4.4	120.5	37.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	6.0	36.9	4.2	7.1	0.6	187.6	5.6	1.3	0.5	11.7	19.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.8	37.7	299.2	41.4	47.2	36.8	1242.2	25.2	21.9	55.8	167.8	63.9
LnGrp LOS	D	D	F	D	D	D	F	C	C	E	F	E
Approach Vol, veh/h		1219			473			2614			795	
Approach Delay, s/veh		169.2			44.5			916.2			94.2	
Approach LOS		F			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.5	45.0		30.4	35.1	16.4		23.8				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7				
Max Q Clear Time (g_c+I1), s	2.9	15.7		27.0	32.5	13.0		16.6				
Green Ext Time (p_c), s	0.0	4.1		0.0	0.0	0.0		1.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	528.7
HCM 7th LOS	F

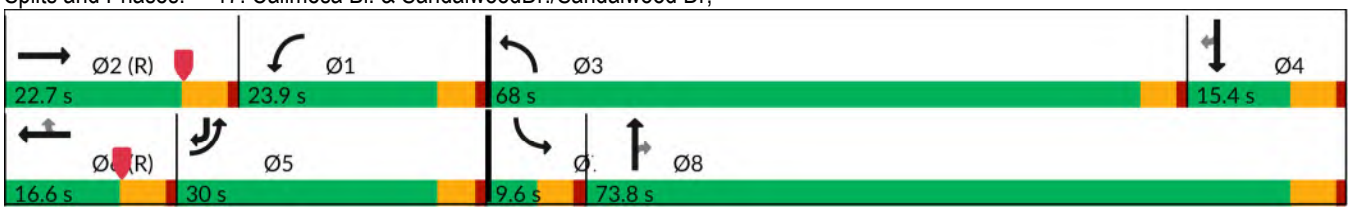
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	324	231	534	154	239	32	1684	544	99	14	205	548
Future Volume (vph)	324	231	534	154	239	32	1684	544	99	14	205	548
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	15.4		9.6	15.4	15.4	9.6	15.4	15.4	9.6	15.4	9.6
Total Split (s)	30.0	22.7		23.9	16.6	16.6	68.0	73.8	73.8	9.6	15.4	30.0
Total Split (%)	23.1%	17.5%		18.4%	12.8%	12.8%	52.3%	56.8%	56.8%	7.4%	11.8%	23.1%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Min	C-Min	Max	Min	Min	None	Min	None
Act Effct Green (s)	25.4	17.3	130.0	19.3	11.2	11.2	63.4	74.2	74.2	5.0	10.0	36.2
Actuated g/C Ratio	0.20	0.13	1.00	0.15	0.09	0.09	0.49	0.57	0.57	0.04	0.08	0.28
v/c Ratio	0.48	1.01	0.31	0.60	0.81	0.11	1.00	0.28	0.10	0.21	0.77	1.01
Control Delay (s/veh)	48.8	113.4	0.4	61.3	77.0	0.7	53.8	15.2	1.3	67.4	76.3	73.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	37.3	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.8	113.4	0.4	61.3	77.0	0.7	91.1	15.2	1.3	67.4	76.3	73.0
LOS	D	F	A	E	E	A	F	B	A	E	E	E
Approach Delay (s/veh)		38.8			65.6			69.5			73.8	
Approach LOS		D			E			E			E	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay (s/veh): 62.6	Intersection LOS: E
Intersection Capacity Utilization 102.5%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	324	231	534	154	239	32	1684	544	99	14	205	548
Future Volume (veh/h)	324	231	534	154	239	32	1684	544	99	14	205	548
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976
Adj Flow Rate, veh/h	368	262	0	175	272	26	1914	618	49	16	233	205
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	748	263		279	327	136	1836	2165	916	32	304	462
Arrive On Green	0.40	0.27	0.00	0.30	0.17	0.17	0.98	1.00	1.00	0.03	0.15	0.15
Sat Flow, veh/h	3764	1976	1675	1882	3952	1645	3764	3952	1672	1882	3952	1675
Grp Volume(v), veh/h	368	262	0	175	272	26	1914	618	49	16	233	205
Grp Sat Flow(s),veh/h/ln	1882	1976	1675	1882	1976	1645	1882	1976	1672	1882	1976	1675
Q Serve(g_s), s	9.5	17.2	0.0	10.4	8.7	1.6	63.4	0.0	0.0	1.1	7.4	10.0
Cycle Q Clear(g_c), s	9.5	17.2	0.0	10.4	8.7	1.6	63.4	0.0	0.0	1.1	7.4	10.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	748	263		279	327	136	1836	2165	916	32	304	462
V/C Ratio(X)	0.49	1.00		0.63	0.83	0.19	1.04	0.29	0.05	0.50	0.77	0.44
Avail Cap(c_a), veh/h	748	263		279	340	142	1836	2165	916	72	304	462
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.12	0.12	0.12	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	47.7	0.0	42.6	53.4	40.7	1.6	0.0	0.0	62.3	53.9	19.9
Incr Delay (d2), s/veh	0.2	54.6	0.0	3.3	21.3	3.1	21.8	0.0	0.0	4.5	11.1	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	11.0	0.0	4.5	4.9	0.8	6.2	0.0	0.0	0.5	3.9	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.4	102.3	0.0	45.9	74.7	43.8	23.4	0.0	0.0	66.8	65.0	20.5
LnGrp LOS	C	F		D	E	D	F	A	A	E	E	C
Approach Vol, veh/h		630			473			2581			454	
Approach Delay, s/veh		62.6			62.3			17.3			45.0	
Approach LOS		E			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.9	22.7	68.0	15.4	30.4	16.2	6.8	76.6
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	19.3	17.3	63.4	10.0	25.4	11.2	5.0	68.4
Max Q Clear Time (g_c+I1), s	12.4	19.2	65.4	12.0	11.5	10.7	3.1	2.0
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.6	0.1	0.0	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	32.4
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	917.5
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	131	760	113	604	1724	1
Future Vol, veh/h	131	760	113	604	1724	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	154	894	133	711	2028	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	449.1	340.7	1399.2
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	16%
Vol Thru, %	0%	15%	84%
Vol Right, %	0%	85%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	1725	891	717
LT Vol	1724	0	113
Through Vol	0	131	604
RT Vol	1	760	0
Lane Flow Rate	2029	1048	844
Geometry Grp	1	1	1
Degree of Util (X)	4.057	1.889	1.628
Departure Headway (Hd)	8.876	15.501	16.783
Convergence, Y/N	Yes	Yes	Yes
Cap	426	252	228
Service Time	6.876	13.501	14.783
HCM Lane V/C Ratio	4.763	4.159	3.702
HCM Control Delay, s/veh	1399.2	449.1	340.7
HCM Lane LOS	F	F	F
HCM 95th-tile Q	158.9	31.1	22.6

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	3	3	14	0	2
Future Vol, veh/h	4	3	3	14	0	2
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	4	4	20	0	3
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	6.8	6.5	7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	57%	0%
Vol Thru, %	18%	0%	100%
Vol Right, %	82%	43%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	17	7	2
LT Vol	0	4	0
Through Vol	3	0	2
RT Vol	14	3	0
Lane Flow Rate	24	10	3
Geometry Grp	1	1	1
Degree of Util (X)	0.023	0.01	0.003
Departure Headway (Hd)	3.426	3.804	3.935
Convergence, Y/N	Yes	Yes	Yes
Cap	1051	945	914
Service Time	1.428	1.808	1.939
HCM Lane V/C Ratio	0.023	0.011	0.003
HCM Control Delay, s/veh	6.5	6.8	7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0	0

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	2	395	7	0	0	0	0	0	0	0
Future Vol, veh/h	0	12	2	395	7	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	14	2	470	8	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	17	0	0	963	965	8
Stage 1	-	-	-	-	-	-	949	949	-
Stage 2	-	-	-	-	-	-	14	17	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1614	-	0	286	257	1079
Stage 1	0	-	-	-	-	0	379	342	-
Stage 2	0	-	-	-	-	0	1014	886	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1614	-	-	202	0	1079
Mov Cap-2 Maneuver	-	-	-	-	-	-	202	0	-
Stage 1	-	-	-	-	-	-	379	0	-
Stage 2	-	-	-	-	-	-	717	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	8	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1606	-	-
HCM Lane V/C Ratio	-	-	0.291	-	-
HCM Control Delay (s/veh)	-	-	8.1	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1.2	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	0	0	394	0	8	0	248	0	0	0
Future Vol, veh/h	0	12	0	0	394	0	8	0	248	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	13	0	0	438	0	9	0	276	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	438	0	-	-	-	0	451	451	13
Stage 1	-	-	-	-	-	-	13	13	-
Stage 2	-	-	-	-	-	-	438	438	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1133	-	0	0	-	-	570	507	1073
Stage 1	-	-	0	0	-	-	1015	888	-
Stage 2	-	-	0	0	-	-	655	582	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1133	-	-	-	-	-	570	0	1073
Mov Cap-2 Maneuver	-	-	-	-	-	-	570	0	-
Stage 1	-	-	-	-	-	-	1015	0	-
Stage 2	-	-	-	-	-	-	655	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	9.74
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1044	1133	-	-	-
HCM Lane V/C Ratio	0.272	-	-	-	-
HCM Control Delay (s/veh)	9.7	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	1.1	0	-	-	-

Intersection	
Intersection Delay, s/veh	141.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	206	2	29	361	158	2	483	210	73	47	31
Future Vol, veh/h	52	206	2	29	361	158	2	483	210	73	47	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	219	2	31	384	168	2	514	223	78	50	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	26.5	115.7	232.4	19.1
HCM LOS	D	F	F	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	20%	5%	48%
Vol Thru, %	69%	79%	66%	31%
Vol Right, %	30%	1%	29%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	695	260	548	151
LT Vol	2	52	29	73
Through Vol	483	206	361	47
RT Vol	210	2	158	31
Lane Flow Rate	739	277	583	161
Geometry Grp	1	1	1	1
Degree of Util (X)	1.444	0.611	1.142	0.379
Departure Headway (Hd)	7.526	9.59	8.241	10.097
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	488	379	443	358
Service Time	5.526	7.59	6.241	8.097
HCM Lane V/C Ratio	1.514	0.731	1.316	0.45
HCM Control Delay, s/veh	232.4	26.5	115.7	19.1
HCM Lane LOS	F	D	F	C
HCM 95th-tile Q	34.1	3.9	18.1	1.7

Intersection	
Intersection Delay, s/veh	5.0
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	188	448	42
Demand Flow Rate, veh/h	188	448	42
Vehicles Circulating, veh/h	74	0	188
Vehicles Exiting, veh/h	374	230	74
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.0	5.5	3.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	188	448	42
Cap Entry Lane, veh/h	1280	1380	1139
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	188	448	42
Cap Entry, veh/h	1280	1380	1139
V/C Ratio	0.147	0.325	0.037
Control Delay, s/veh	4.0	5.5	3.5
LOS	A	A	A
95th %tile Queue, veh	1	1	0

Intersection	
Intersection Delay, s/veh	4.6
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	160	385	58
Demand Flow Rate, veh/h	160	385	58
Vehicles Circulating, veh/h	58	0	297
Vehicles Exiting, veh/h	297	218	88
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.8	5.0	4.0
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	160	385	58
Cap Entry Lane, veh/h	1301	1380	1019
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	160	385	58
Cap Entry, veh/h	1301	1380	1019
V/C Ratio	0.123	0.279	0.057
Control Delay, s/veh	3.8	5.0	4.0
LOS	A	A	A
95th %tile Queue, veh	0	1	0

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	282	700	191
Demand Flow Rate, veh/h	282	700	191
Vehicles Circulating, veh/h	226	79	235
Vehicles Exiting, veh/h	553	347	273
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.7	9.0	4.9
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	282	700	191
Cap Entry Lane, veh/h	1096	1273	1086
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	282	700	191
Cap Entry, veh/h	1096	1273	1086
V/C Ratio	0.257	0.550	0.176
Control Delay, s/veh	5.7	9.0	4.9
LOS	A	A	A
95th %tile Queue, veh	1	3	1

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	70	127	227	251	21
Future Vol, veh/h	10	70	127	227	251	21
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	76	138	247	273	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	807	284	296	0	-	0
Stage 1	284	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	354	760	1277	-	-	-
Stage 1	769	-	-	-	-	-
Stage 2	599	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	315	760	1277	-	-	-
Mov Cap-2 Maneuver	315	-	-	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	599	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.44	2.93	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1277	-	646	-	-
HCM Lane V/C Ratio	0.108	-	0.135	-	-
HCM Control Delay (s/veh)	8.2	-	11.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.5	-	-

Intersection	
Intersection Delay, s/veh	5.6
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	265	694	349
Demand Flow Rate, veh/h	265	694	349
Vehicles Circulating, veh/h	235	63	371
Vehicles Exiting, veh/h	485	437	386
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.4	4.9	7.9
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.238	0.762	0.535	0.465	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	63	202	371	323	349
Cap Entry Lane, veh/h	1147	1147	1341	1341	945
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	63	202	371	323	349
Cap Entry, veh/h	1147	1147	1341	1341	945
V/C Ratio	0.055	0.176	0.277	0.241	0.369
Control Delay, s/veh	3.6	4.7	5.1	4.7	7.9
LOS	A	A	A	A	A
95th %tile Queue, veh	0	1	1	1	2

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	355	676	1	4	0
Future Vol, veh/h	0	355	676	1	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	634	1207	2	7	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1209	0	-	0	1842	1208
Stage 1	-	-	-	-	1208	-
Stage 2	-	-	-	-	634	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	584	-	-	-	84	225
Stage 1	-	-	-	-	286	-
Stage 2	-	-	-	-	532	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	584	-	-	-	84	225
Mov Cap-2 Maneuver	-	-	-	-	84	-
Stage 1	-	-	-	-	286	-
Stage 2	-	-	-	-	532	-

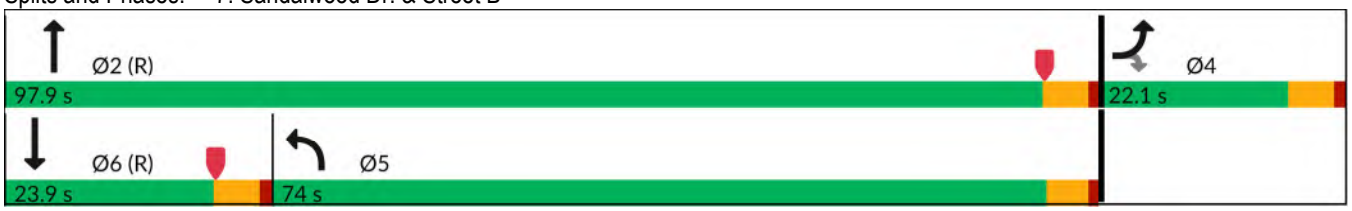
Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	52.02
HCM LOS			F

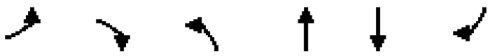
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	584	-	-	-	84
HCM Lane V/C Ratio	-	-	-	-	0.085
HCM Control Delay (s/veh)	0	-	-	-	52
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	474	744		
Future Volume (vph)	474	744		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	22.1	74.0	97.9	23.9
Total Split (%)	18.4%	61.7%	82%	20%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lag		Lead
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	35.3		
Actuated g/C Ratio	0.08	0.29		
v/c Ratio	0.26	0.79		
Control Delay (s/veh)	0.3	21.2		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.3	21.2		
LOS	A	C		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116.9 (97%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 13.1	Intersection LOS: B
Intersection Capacity Utilization 25.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	474	744	0	0	0
Future Volume (veh/h)	0	474	744	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	412	809	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	256	401	2016	1469	298	0
Arrive On Green	0.00	0.14	0.57	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	1900	0
Grp Volume(v), veh/h	0	412	809	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	17.0	15.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.0	15.3	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	256	401	2016	1469	298	0
V/C Ratio(X)	0.00	1.03	0.40	0.00	0.00	0.00
Avail Cap(c_a), veh/h	256	401	2030	1469	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.91	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	51.5	14.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	51.8	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.3	5.9	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	103.3	14.2	0.0	0.0	0.0
LnGrp LOS		F	B			
Approach Vol, veh/h	412			809	0	
Approach Delay, s/veh	103.3			14.2	0.0	
Approach LOS	F			B		

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		97.9		22.1	74.0	23.9
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	69.4	* 19
Max Q Clear Time (g_c+I1), s		0.0		19.0	17.3	0.0
Green Ext Time (p_c), s		0.0		0.0	1.7	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	44.2
HCM 7th LOS	D

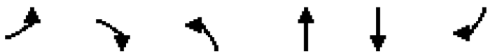
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	13	777	272	730	467
Future Volume (vph)	13	777	272	730	467
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	22.1	9.6	15.1	22.1
Total Split (s)	63.0	63.0	20.0	57.0	37.0
Total Split (%)	52.5%	52.5%	16.7%	47.5%	30.8%
Yellow Time (s)	4.1	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	49.1	49.1	13.8	60.7	42.3
Actuated g/C Ratio	0.41	0.41	0.12	0.51	0.35
v/c Ratio	0.02	0.93	0.73	0.43	0.41
Control Delay (s/veh)	16.5	33.9	73.6	16.9	33.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.5	33.9	73.6	16.9	33.5
LOS	B	C	E	B	C
Approach Delay (s/veh)	33.6			32.3	33.5
Approach LOS	C			C	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 24.1 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay (s/veh): 33.0	Intersection LOS: C
Intersection Capacity Utilization 69.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	777	272	730	467	7
Future Volume (veh/h)	13	777	272	730	467	7
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	845	296	793	508	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	873	777	355	1561	1066	17
Arrive On Green	0.48	0.48	0.10	0.43	0.59	0.59
Sat Flow, veh/h	1810	1610	3510	3705	3732	57
Grp Volume(v), veh/h	14	845	296	793	252	264
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1890
Q Serve(g_s), s	0.5	57.9	9.9	19.2	9.6	9.6
Cycle Q Clear(g_c), s	0.5	57.9	9.9	19.2	9.6	9.6
Prop In Lane	1.00	1.00	1.00			0.03
Lane Grp Cap(c), veh/h	873	777	355	1561	529	554
V/C Ratio(X)	0.02	1.09	0.83	0.51	0.48	0.48
Avail Cap(c_a), veh/h	873	777	451	1561	529	554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.98	0.98	0.98	0.98
Uniform Delay (d), s/veh	16.2	31.0	52.9	24.8	19.6	19.6
Incr Delay (d2), s/veh	0.0	58.7	8.3	1.2	3.0	2.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	52.0	4.8	8.4	3.8	3.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.2	89.8	61.2	25.9	22.6	22.4
LnGrp LOS	B	F	E	C	C	C
Approach Vol, veh/h	859			1089	516	
Approach Delay, s/veh	88.6			35.5	22.5	
Approach LOS	F			D	C	

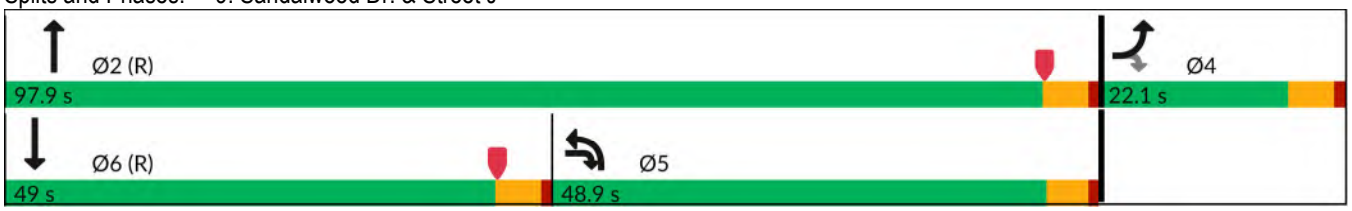
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		57.0		63.0	16.7	40.3
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		51.9		57.9	15.4	31.9
Max Q Clear Time (g_c+I1), s		21.2		59.9	11.9	11.6
Green Ext Time (p_c), s		6.3		0.0	0.2	3.0

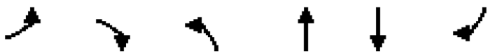
Intersection Summary	
HCM 7th Control Delay, s/veh	51.3
HCM 7th LOS	D

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	13	1193	422	989	1309
Future Volume (vph)	13	1193	422	989	1309
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	9.6	15.1	22.1
Total Split (s)	22.1	48.9	48.9	97.9	49.0
Total Split (%)	18.4%	40.8%	40.8%	81.6%	40.8%
Yellow Time (s)	4.1	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.6	4.6	5.1	5.1
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	50.3	44.3	111.9	60.0
Actuated g/C Ratio	0.08	0.42	0.37	0.93	0.50
v/c Ratio	0.09	1.79	0.36	0.32	0.79
Control Delay (s/veh)	52.5	385.6	19.8	1.6	27.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.5	385.6	19.8	1.6	27.7
LOS	D	F	B	A	C
Approach Delay (s/veh)	382.0			7.1	27.7
Approach LOS	F			A	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74 (62%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.79	
Intersection Signal Delay (s/veh): 128.9	Intersection LOS: F
Intersection Capacity Utilization 118.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	1193	422	989	1309	7
Future Volume (veh/h)	13	1193	422	989	1309	7
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.00	1.00	1.00
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	1900	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	754	459	1075	1423	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	151	848	1486	3002	1346	8
Arrive On Green	0.08	0.08	0.42	0.83	0.12	0.12
Sat Flow, veh/h	1810	1675	3510	3705	3776	21
Grp Volume(v), veh/h	14	754	459	1075	698	733
Grp Sat Flow(s),veh/h/ln	1810	1675	1755	1805	1805	1896
Q Serve(g_s), s	0.9	0.0	10.4	8.6	43.9	43.9
Cycle Q Clear(g_c), s	0.9	0.0	10.4	8.6	43.9	43.9
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	151	848	1486	3002	660	694
V/C Ratio(X)	0.09	0.89	0.31	0.36	1.06	1.06
Avail Cap(c_a), veh/h	256	946	1486	3002	660	694
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.92	0.92	0.60	0.60
Uniform Delay (d), s/veh	50.8	26.6	23.0	2.4	52.8	52.8
Incr Delay (d2), s/veh	0.3	9.7	0.0	0.3	43.4	42.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	27.4	4.2	1.9	29.2	30.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.1	36.2	23.0	2.7	96.1	95.7
LnGrp LOS	D	D	C	A	F	F
Approach Vol, veh/h	768			1534	1431	
Approach Delay, s/veh	36.5			8.8	95.9	
Approach LOS	D			A	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		104.9		15.1	55.9	49.0
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	44.3	* 44
Max Q Clear Time (g_c+I1), s		10.6		2.9	12.4	45.9
Green Ext Time (p_c), s		9.6		2.9	0.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	47.9
HCM 7th LOS	D

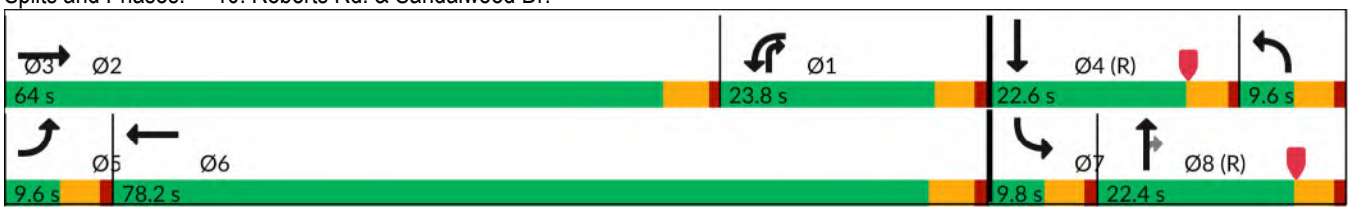
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBL	SBT	Ø8
Lane Configurations									
Traffic Volume (vph)	12	3046	751	1350	60	743	132	0	
Future Volume (vph)	12	3046	751	1350	60	743	132	0	
Turn Type	Prot	NA	Prot	NA	Prot	pm+ov	Prot	NA	
Protected Phases	5	2	1	6	3	1	7	4	8
Permitted Phases						8			
Detector Phase	5	2	1	6	3	1	7	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	10.0	10.0
Minimum Split (s)	9.6	22.1	9.6	22.1	9.6	9.6	9.6	21.6	21.6
Total Split (s)	9.6	64.0	23.8	78.2	9.6	23.8	9.8	22.6	22.4
Total Split (%)	8.0%	53.3%	19.8%	65.2%	8.0%	19.8%	8.2%	18.8%	19%
Yellow Time (s)	3.6	4.1	3.6	4.1	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	5.1	4.6	5.1	4.6	4.6	4.6	4.6	
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	None	Max	None	C-Max	C-Max
Act Effct Green (s)	5.0	58.9	19.2	78.9	5.0	37.0	5.2	19.9	
Actuated g/C Ratio	0.04	0.49	0.16	0.66	0.04	0.31	0.04	0.17	
v/c Ratio	0.16	1.13	1.26	0.40	0.40	1.16	0.85	0.03	
Control Delay (s/veh)	64.3	86.0	170.9	10.2	63.7	115.2	96.2	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	64.3	86.0	170.9	10.2	63.7	115.2	96.2	0.2	
LOS	E	F	F	B	E	F	F	A	
Approach Delay (s/veh)		85.9		64.7				88.0	
Approach LOS		F		E				F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.26	
Intersection Signal Delay (s/veh): 81.7	Intersection LOS: F
Intersection Capacity Utilization 122.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	3046	55	751	1350	115	60	0	743	132	0	12
Future Volume (veh/h)	12	3046	55	751	1350	115	60	0	743	132	0	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1976	1900	1976	1976	1900	1900	1900	1976	1900	1900	1900
Adj Flow Rate, veh/h	13	3206	11	791	1421	68	63	0	414	139	0	13
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	27	2898	10	602	3593	172	648	543	747	157	0	242
Arrive On Green	0.03	0.98	0.98	0.32	1.00	1.00	0.36	0.00	0.57	0.09	0.00	0.30
Sat Flow, veh/h	1810	5904	20	3764	5611	269	3619	1900	1675	3619	0	1610
Grp Volume(v), veh/h	13	2145	1072	791	1001	488	63	0	414	139	0	13
Grp Sat Flow(s),veh/h/ln	1810	1976	1972	1882	1976	1928	1810	1900	1675	1810	0	1610
Q Serve(g_s), s	0.8	58.9	58.9	19.2	0.0	0.0	1.4	0.0	2.9	4.6	0.0	0.7
Cycle Q Clear(g_c), s	0.8	58.9	58.9	19.2	0.0	0.0	1.4	0.0	2.9	4.6	0.0	0.7
Prop In Lane	1.00		0.01	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	27	1940	968	602	2531	1234	648	543	747	157	0	242
V/C Ratio(X)	0.49	1.11	1.11	1.31	0.40	0.40	0.10	0.00	0.55	0.89	0.00	0.05
Avail Cap(c_a), veh/h	75	1940	968	602	2531	1234	648	543	747	157	0	242
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.8	1.1	1.1	40.8	0.0	0.0	32.0	0.0	12.3	54.5	0.0	35.9
Incr Delay (d2), s/veh	0.5	48.4	50.1	152.6	0.1	0.2	0.0	0.0	3.0	39.8	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	13.5	14.0	19.8	0.0	0.1	0.6	0.0	4.9	2.9	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.3	49.5	51.2	193.4	0.1	0.2	32.1	0.0	15.3	94.3	0.0	36.4
LnGrp LOS	E	F	F	F	A	A	C		B	F		D
Approach Vol, veh/h		3230			2280			477			152	
Approach Delay, s/veh		50.1			67.2			17.5			89.4	
Approach LOS		D			E			B			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.3	64.0	26.6	22.6	6.4	81.9	9.8	39.4
Change Period (Y+Rc), s	5.1	* 5.1	4.6	4.6	4.6	5.1	4.6	4.6
Max Green Setting (Gmax), s	19.2	* 59	5.0	18.0	5.0	73.1	5.2	17.8
Max Q Clear Time (g_c+I1), s	21.2	60.9	3.4	2.7	2.8	2.0	6.6	4.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	14.5	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	54.9
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	420	3	90	719	5	63
Future Vol, veh/h	420	3	90	719	5	63
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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	483	3	103	826	6	72

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	486	0	1518	484
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	1033	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1087	-	132	587
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	346	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1087	-	109	587
Mov Cap-2 Maneuver	-	-	-	-	109	-
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	285	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.96	14.84
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	444	-	-	200	-
HCM Lane V/C Ratio	0.176	-	-	0.095	-
HCM Control Delay (s/veh)	14.8	-	-	8.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.3	-

Intersection	
Int Delay, s/veh	120.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	401	81	240	295	0	0	0	0	396	3	514
Future Vol, veh/h	0	401	81	240	295	0	0	0	0	396	3	514
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	427	86	255	314	0	0	0	0	421	3	547

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	513	0	0	1251	1337	314
Stage 1	-	-	-	-	-	-	824	824	-
Stage 2	-	-	-	-	-	-	427	513	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1063	-	0	~ 192	155	731
Stage 1	0	-	-	-	-	0	434	390	-
Stage 2	0	-	-	-	-	0	663	539	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1063	-	-	~ 146	0	731
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 202	0	-
Stage 1	-	-	-	-	-	-	434	0	-
Stage 2	-	-	-	-	-	-	503	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	4.24	253.15
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	1063	-	202	731
HCM Lane V/C Ratio	-	-	0.24	-	2.1	0.748
HCM Control Delay (s/veh)	-	-	9.5	-	$ 549.6	23
HCM Lane LOS	-	-	A	-	F	C
HCM 95th %tile Q(veh)	-	-	0.9	-	32.7	6.9

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

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	286	512	0	0	441	314	94	1	216	0	0	0
Future Vol, veh/h	286	512	0	0	441	314	94	1	216	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	304	545	0	0	469	334	100	1	230	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	803	0	-	-	-	0	1622	1956	545
Stage 1	-	-	-	-	-	-	1153	1153	-
Stage 2	-	-	-	-	-	-	469	803	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	830	-	0	0	-	-	114	65	542
Stage 1	-	-	0	0	-	-	303	274	-
Stage 2	-	-	0	0	-	-	634	399	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	830	-	-	-	-	-	~ 72	0	542
Mov Cap-2 Maneuver	-	-	-	-	-	-	141	0	-
Stage 1	-	-	-	-	-	-	192	0	-
Stage 2	-	-	-	-	-	-	634	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	4.24	0	35.28
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	141	542	830	-	-	-
HCM Lane V/C Ratio	0.719	0.424	0.367	-	-	-
HCM Control Delay (s/veh)	78.1	16.4	11.8	-	-	-
HCM Lane LOS	F	C	B	-	-	-
HCM 95th %tile Q(veh)	4.2	2.1	1.7	-	-	-

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

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	3833	2177	8	0	1
Future Vol, veh/h	0	3833	2177	8	0	1
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	5251	2982	11	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1491
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	235
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	235
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	20.43
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	235
HCM Lane V/C Ratio	-	-	-	0.006
HCM Control Delay (s/veh)	-	-	-	20.4
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Intersection Delay, s/veh	1280
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2276	1685	316	1385	0	0	0	0	243	7	874
Future Vol, veh/h	0	2276	1685	316	1385	0	0	0	0	243	7	874
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2396	1774	333	1458	0	0	0	0	256	7	920
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	1547.2	1132	562.1
HCM LOS	F	F	F

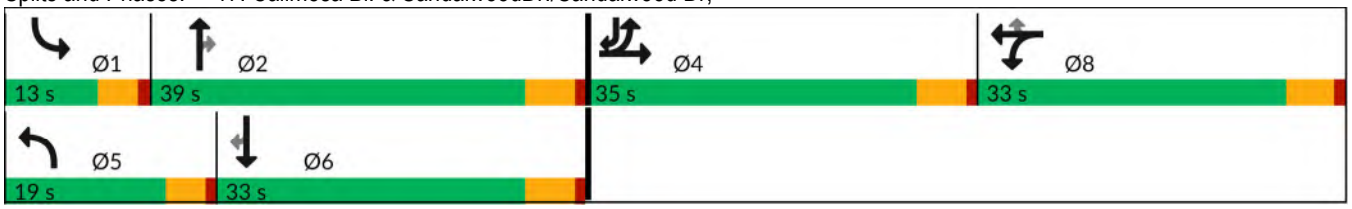
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	19%	22%
Vol Thru, %	100%	0%	81%	1%
Vol Right, %	0%	100%	0%	78%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2276	1685	1701	1124
LT Vol	0	0	316	243
Through Vol	2276	0	1385	7
RT Vol	0	1685	0	874
Lane Flow Rate	2396	1774	1791	1183
Geometry Grp	5	5	4a	2
Degree of Util (X)	5.056	3.398	-	2.161
Departure Headway (Hd)	16.288	15.509	-	13.186
Convergence, Y/N	Yes	Yes	-	Yes
Cap	264	266	-	296
Service Time	13.988	13.209	-	11.186
HCM Lane V/C Ratio	9.076	6.669	-	3.997
HCM Control Delay, s/veh	1864.3	1118.9	+	562.1
HCM Lane LOS	F	F	-	F
HCM 95th-tile Q	115.7	73.6	-	44.6

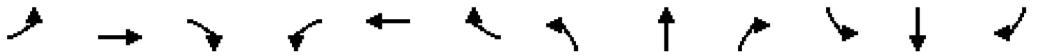
Notes
HCM 7th Edition AWSC methodology error - negative departure headway

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	599	168	74	159	26	968	312	136	29	284	572
Future Volume (vph)	599	168	74	159	26	968	312	136	29	284	572
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0	35.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%	29.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	29.8	29.8	14.4	14.4	14.4	14.5	32.9	32.9	6.3	20.4	50.3
Actuated g/C Ratio	0.30	0.30	0.14	0.14	0.14	0.14	0.33	0.33	0.06	0.20	0.50
v/c Ratio	1.16	2.17dr	0.30	0.61	0.07	3.90	0.28	0.23	0.27	0.77	0.63
Control Delay (s/veh)	127.9	303.2	42.5	51.0	0.4	Error	27.3	6.0	53.5	52.1	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	127.9	303.2	42.5	51.0	0.4	Error	27.3	6.0	53.5	52.1	10.2
LOS	F	F	D	D	A	F	C	A	D	D	B
Approach Delay (s/veh)		265.4		43.6			916.4			25.1	
Approach LOS		F		D			F			C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 100.2		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 3.90		
Intersection Signal Delay (s/veh): 394.1	Intersection LOS: F	
Intersection Capacity Utilization 147.1%	ICU Level of Service H	
Analysis Period (min) 15		
dr Defacto Right Lane. Recode with 1 though lane as a right lane.		

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	599	168	1733	74	159	26	968	312	136	29	284	572
Future Volume (veh/h)	599	168	1733	74	159	26	968	312	136	29	284	572
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	631	177	1807	78	167	18	1019	328	116	31	299	530
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	519	545	462	212	223	185	253	1319	587	52	483	871
Arrive On Green	0.29	0.29	0.29	0.12	0.12	0.12	0.14	0.37	0.37	0.03	0.25	0.25
Sat Flow, veh/h	1810	1900	1610	1810	1900	1577	1810	3610	1606	1810	1900	1607
Grp Volume(v), veh/h	631	177	1807	78	167	18	1019	328	116	31	299	530
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1577	1810	1805	1606	1810	1900	1607
Q Serve(g_s), s	29.6	7.6	29.6	4.1	8.8	1.1	14.4	6.5	5.1	1.7	14.4	23.3
Cycle Q Clear(g_c), s	29.6	7.6	29.6	4.1	8.8	1.1	14.4	6.5	5.1	1.7	14.4	23.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	519	545	462	212	223	185	253	1319	587	52	483	871
V/C Ratio(X)	1.21	0.32	3.91	0.37	0.75	0.10	4.03	0.25	0.20	0.60	0.62	0.61
Avail Cap(c_a), veh/h	519	545	462	484	509	422	253	1319	587	147	509	892
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	28.9	36.8	42.0	44.0	40.6	44.4	22.8	22.4	49.5	34.0	16.2
Incr Delay (d2), s/veh	113.3	0.3	1314.4	1.1	5.0	0.2	1373.9	0.1	0.2	4.1	2.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	28.8	3.4	179.8	1.9	4.3	0.4	102.7	2.7	1.9	0.8	6.7	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	150.1	29.2	1351.1	43.0	49.0	40.9	1418.2	22.9	22.5	53.6	36.1	17.3
LnGrp LOS	F	C	F	D	D	D	F	C	C	D	D	B
Approach Vol, veh/h		2615			263			1463			860	
Approach Delay, s/veh		971.8			46.7			994.8			25.2	
Approach LOS		F			D			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	43.1		35.0	19.0	31.6		17.5				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6				
Max Q Clear Time (g_c+I1), s	3.7	8.5		31.6	16.4	25.3		10.8				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	0.9		1.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	775.0
HCM 7th LOS	F

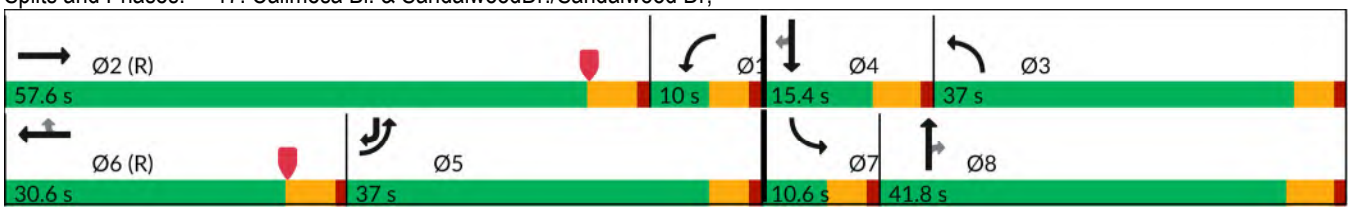
Notes

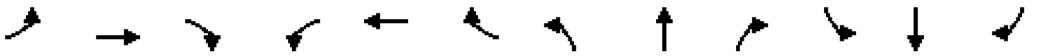
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	599	168	1733	74	159	26	968	312	136	29	284	572
Future Volume (vph)	599	168	1733	74	159	26	968	312	136	29	284	572
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.0	30.4		10.0	29.4	29.4	10.0	27.4	27.4	9.6	15.4	10.0
Total Split (s)	37.0	57.6		10.0	30.6	30.6	37.0	41.8	41.8	10.6	15.4	37.0
Total Split (%)	30.8%	48.0%		8.3%	25.5%	25.5%	30.8%	34.8%	34.8%	8.8%	12.8%	30.8%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	32.4	52.4	120.0	5.4	25.4	25.4	32.2	40.4	40.4	5.7	10.0	43.2
Actuated g/C Ratio	0.27	0.44	1.00	0.05	0.21	0.21	0.27	0.34	0.34	0.05	0.08	0.36
v/c Ratio	0.60	0.21	0.93	0.92	0.21	0.05	0.97	0.25	0.20	0.34	0.95	0.76
Control Delay (s/veh)	38.7	14.6	25.1	134.3	39.9	0.2	60.3	32.0	9.4	65.9	93.6	28.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.7	14.6	25.1	134.3	39.9	0.2	60.3	32.0	9.4	65.9	93.6	28.4
LOS	D	B	C	F	D	A	E	C	A	E	F	C
Approach Delay (s/veh)		27.7			63.0			49.2			50.5	
Approach LOS		C			E			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay (s/veh): 39.5	Intersection LOS: D
Intersection Capacity Utilization 95.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	599	168	1733	74	159	26	968	312	136	29	284	572
Future Volume (veh/h)	599	168	1733	74	159	26	968	312	136	29	284	572
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	631	177	0	78	167	18	1019	328	116	31	299	425
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1844	827		480	798	332	1016	1317	534	49	317	923
Arrive On Green	0.16	0.14	0.00	0.27	0.21	0.21	0.27	0.33	0.33	0.03	0.08	0.08
Sat Flow, veh/h	3764	1900	1675	1810	3800	1583	3764	3952	1603	1810	3800	1604
Grp Volume(v), veh/h	631	177	0	78	167	18	1019	328	116	31	299	425
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1583	1882	1976	1603	1810	1900	1604
Q Serve(g_s), s	17.9	9.9	0.0	4.0	4.4	1.3	32.4	7.2	5.1	2.0	9.4	0.0
Cycle Q Clear(g_c), s	17.9	9.9	0.0	4.0	4.4	1.3	32.4	7.2	5.1	2.0	9.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1844	827		480	798	332	1016	1317	534	49	317	923
V/C Ratio(X)	0.34	0.21		0.16	0.21	0.05	1.00	0.25	0.22	0.64	0.94	0.46
Avail Cap(c_a), veh/h	1844	827		480	798	332	1016	1317	534	90	317	923
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.1	33.3	0.0	33.9	39.2	49.9	43.8	29.1	19.2	57.8	54.7	14.8
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.1	0.6	0.3	26.2	0.1	0.2	5.1	36.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	5.0	0.0	1.7	2.1	0.4	18.3	3.4	2.3	1.0	6.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.2	33.9	0.0	33.9	39.8	50.2	70.0	29.2	19.4	62.9	90.8	15.2
LnGrp LOS	C	C		C	D	D	F	C	B	E	F	B
Approach Vol, veh/h		808			263			1463			755	
Approach Delay, s/veh		33.3			38.7			56.8			47.1	
Approach LOS		C			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.2	57.6	37.8	15.4	64.2	30.6	7.8	45.4
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.4	52.2	32.4	* 10	32.4	25.2	6.0	36.4
Max Q Clear Time (g_c+I1), s	6.0	11.9	34.4	11.4	19.9	6.4	4.0	9.2
Green Ext Time (p_c), s	0.0	1.0	0.0	0.0	1.1	0.9	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	47.4
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	885.9
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	304	1786	26	179	1238	1
Future Vol, veh/h	304	1786	26	179	1238	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	313	1841	27	185	1276	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	1128.9	27.7	617.9
HCM LOS	F	D	F

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	13%
Vol Thru, %	0%	15%	87%
Vol Right, %	0%	85%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	1239	2090	205
LT Vol	1238	0	26
Through Vol	0	304	179
RT Vol	1	1786	0
Lane Flow Rate	1277	2155	211
Geometry Grp	1	1	1
Degree of Util (X)	2.302	3.456	0.412
Departure Headway (Hd)	10.692	8.648	14.743
Convergence, Y/N	Yes	Yes	Yes
Cap	358	452	247
Service Time	8.692	6.648	12.743
HCM Lane V/C Ratio	3.567	4.768	0.854
HCM Control Delay, s/veh	617.9	1128.9	27.7
HCM Lane LOS	F	F	D
HCM 95th-tile Q	59.7	131.9	1.9

Intersection	
Intersection Delay, s/veh	7
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	1	0	14	3	1
Future Vol, veh/h	18	1	0	14	3	1
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	30	2	0	23	5	2
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.3	6.5	7.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	95%	75%
Vol Thru, %	0%	0%	25%
Vol Right, %	100%	5%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	14	19	4
LT Vol	0	18	3
Through Vol	0	0	1
RT Vol	14	1	0
Lane Flow Rate	23	32	7
Geometry Grp	1	1	1
Degree of Util (X)	0.022	0.036	0.008
Departure Headway (Hd)	3.36	4.111	4.123
Convergence, Y/N	Yes	Yes	Yes
Cap	1066	875	870
Service Time	1.377	2.116	2.14
HCM Lane V/C Ratio	0.022	0.037	0.008
HCM Control Delay, s/veh	6.5	7.3	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.1	0

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	17	0	235	19	0	0	0	0	0	0	0
Future Vol, veh/h	0	17	0	235	19	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	18	0	253	20	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	18	0	0	544	544	20
Stage 1	-	-	-	-	-	-	526	526	-
Stage 2	-	-	-	-	-	-	18	18	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1612	-	0	503	449	1063
Stage 1	0	-	-	-	-	0	597	532	-
Stage 2	0	-	-	-	-	0	1010	884	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1612	-	-	424	0	1063
Mov Cap-2 Maneuver	-	-	-	-	-	-	424	0	-
Stage 1	-	-	-	-	-	-	597	0	-
Stage 2	-	-	-	-	-	-	850	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	7.08	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1593	-	-
HCM Lane V/C Ratio	-	-	0.157	-	-
HCM Control Delay (s/veh)	-	-	7.6	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.6	-	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	17	0	0	253	0	1	0	340	0	0	0
Future Vol, veh/h	0	17	0	0	253	0	1	0	340	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	19	0	0	278	0	1	0	374	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	278	0	-	-	-	0	297	297	19
Stage 1	-	-	-	-	-	-	19	19	-
Stage 2	-	-	-	-	-	-	278	278	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1296	-	0	0	-	-	699	618	1065
Stage 1	-	-	0	0	-	-	1009	884	-
Stage 2	-	-	0	0	-	-	774	684	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1296	-	-	-	-	-	699	0	1065
Mov Cap-2 Maneuver	-	-	-	-	-	-	699	0	-
Stage 1	-	-	-	-	-	-	1009	0	-
Stage 2	-	-	-	-	-	-	774	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	10.21
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1064	1296	-	-	-
HCM Lane V/C Ratio	0.352	-	-	-	-
HCM Control Delay (s/veh)	10.2	0	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	1.6	0	-	-	-

Intersection	
Intersection Delay, s/veh	23.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	338	2	58	228	100	0	70	70	158	105	25
Future Vol, veh/h	17	338	2	58	228	100	0	70	70	158	105	25
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	371	2	64	251	110	0	77	77	174	115	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	25.5	27.5	13.7	21.1
HCM LOS	D	D	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	5%	15%	55%
Vol Thru, %	50%	95%	59%	36%
Vol Right, %	50%	1%	26%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	140	357	386	288
LT Vol	0	17	58	158
Through Vol	70	338	228	105
RT Vol	70	2	100	25
Lane Flow Rate	154	392	424	316
Geometry Grp	1	1	1	1
Degree of Util (X)	0.312	0.727	0.764	0.621
Departure Headway (Hd)	7.298	6.669	6.481	7.061
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	491	545	560	510
Service Time	5.38	4.69	4.503	5.127
HCM Lane V/C Ratio	0.314	0.719	0.757	0.62
HCM Control Delay, s/veh	13.7	25.5	27.5	21.1
HCM Lane LOS	B	D	D	C
HCM 95th-tile Q	1.3	6	6.8	4.2

APPENDIX 5.5: E+P (PROJECT BUILDOUT) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Intersection Delay, s/veh	5.4
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	468	27	28
Demand Flow Rate, veh/h	468	27	28
Vehicles Circulating, veh/h	2	0	468
Vehicles Exiting, veh/h	25	496	2
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.7	2.8	4.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	468	27	28
Cap Entry Lane, veh/h	1377	1380	856
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	468	27	28
Cap Entry, veh/h	1377	1380	856
V/C Ratio	0.340	0.020	0.033
Control Delay, s/veh	5.7	2.8	4.5
LOS	A	A	A
95th %tile Queue, veh	2	0	0

Intersection	
Intersection Delay, s/veh	4.7
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	345	65	123
Demand Flow Rate, veh/h	345	65	123
Vehicles Circulating, veh/h	123	0	25
Vehicles Exiting, veh/h	25	468	40
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.5	3.0	3.4
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	345	65	123
Cap Entry Lane, veh/h	1217	1380	1345
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	345	65	123
Cap Entry, veh/h	1217	1380	1345
V/C Ratio	0.283	0.047	0.091
Control Delay, s/veh	5.5	3.0	3.4
LOS	A	A	A
95th %tile Queue, veh	1	0	0

Intersection	
Intersection Delay, s/veh	7.0
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	628	77	153
Demand Flow Rate, veh/h	628	77	153
Vehicles Circulating, veh/h	47	24	563
Vehicles Exiting, veh/h	54	692	112
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.6	3.1	6.7
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	628	77	153
Cap Entry Lane, veh/h	1315	1346	777
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	628	77	153
Cap Entry, veh/h	1315	1346	777
V/C Ratio	0.477	0.057	0.197
Control Delay, s/veh	7.6	3.1	6.7
LOS	A	A	A
95th %tile Queue, veh	3	0	1

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	27	103	29	123	161	3
Future Vol, veh/h	27	103	29	123	161	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	29	112	32	134	175	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	373	177	178	0	-	0
Stage 1	177	-	-	-	-	-
Stage 2	197	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	632	872	1410	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	841	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	617	872	1410	-	-	-
Mov Cap-2 Maneuver	617	-	-	-	-	-
Stage 1	840	-	-	-	-	-
Stage 2	841	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.44	1.45	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1410	-	803	-	-
HCM Lane V/C Ratio	0.022	-	0.176	-	-
HCM Control Delay (s/veh)	7.6	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

Intersection	
Intersection Delay, s/veh	6.3
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	566	196	288
Demand Flow Rate, veh/h	566	196	288
Vehicles Circulating, veh/h	285	53	84
Vehicles Exiting, veh/h	87	798	165
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	8.0	3.2	4.8
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.094	0.906	0.429	0.571	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	53	513	84	112	288
Cap Entry Lane, veh/h	1096	1096	1353	1353	1267
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	53	513	84	112	288
Cap Entry, veh/h	1096	1096	1353	1353	1267
V/C Ratio	0.048	0.468	0.062	0.083	0.227
Control Delay, s/veh	3.7	8.5	3.1	3.3	4.8
LOS	A	A	A	A	A
95th %tile Queue, veh	0	3	0	0	1

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	689	102	8	18	0
Future Vol, veh/h	0	689	102	8	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	944	140	11	25	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	151	0	-	0	1089	145
Stage 1	-	-	-	-	145	-
Stage 2	-	-	-	-	944	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1443	-	-	-	241	907
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	382	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1443	-	-	-	241	907
Mov Cap-2 Maneuver	-	-	-	-	241	-
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	382	-

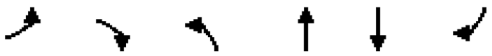
Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	21.67
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1443	-	-	-	241
HCM Lane V/C Ratio	-	-	-	-	0.103
HCM Control Delay (s/veh)	0	-	-	-	21.7
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	1071	603		
Future Volume (vph)	1071	603		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	40.0	49.0	80.0	31.0
Total Split (%)	33.3%	40.8%	67%	26%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min
Act Effct Green (s)	10.0	13.1		
Actuated g/C Ratio	0.21	0.27		
v/c Ratio	0.55	0.69		
Control Delay (s/veh)	1.0	19.7		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	1.0	19.7		
LOS	A	B		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 47.9	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay (s/veh): 7.8	Intersection LOS: A
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1071	603	0	0	0
Future Volume (veh/h)	0	1071	603	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	1055	655	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	882	1382	903	464	5	0
Arrive On Green	0.00	0.49	0.26	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	-96900	0
Grp Volume(v), veh/h	0	1055	655	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	11.6	6.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.6	6.5	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	882	1382	903	464	5	0
V/C Ratio(X)	0.00	0.76	0.72	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1661	2601	4099	3742	1294	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.0	12.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.4	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	2.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	8.9	13.3	0.0	0.0	0.0
LnGrp LOS		A	B			
Approach Vol, veh/h	1055			655	0	
Approach Delay, s/veh	8.9			13.3	0.0	
Approach LOS	A			B		

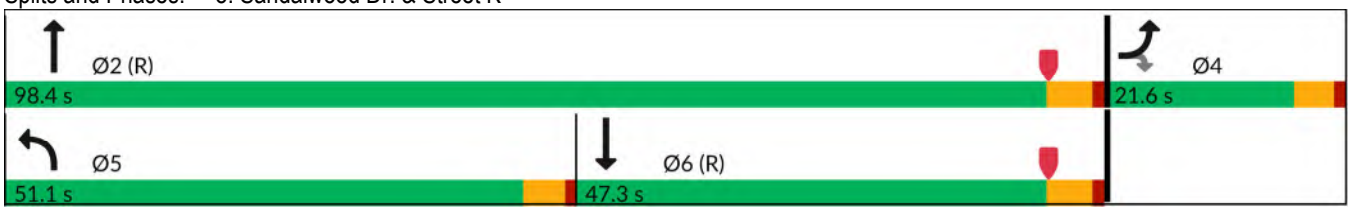
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		14.4		23.6	14.4	0.0
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		74.9		34.9	44.4	25.9
Max Q Clear Time (g_c+I1), s		0.0		13.6	8.5	0.0
Green Ext Time (p_c), s		0.0		5.0	1.3	0.0

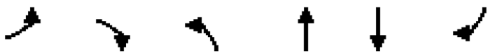
Intersection Summary		
HCM 7th Control Delay, s/veh		10.6
HCM 7th LOS		B

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	1	148	890	602	1059
Future Volume (vph)	1	148	890	602	1059
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	21.6	21.6	9.6	15.1	22.1
Total Split (s)	21.6	21.6	51.1	98.4	47.3
Total Split (%)	18.0%	18.0%	42.6%	82.0%	39.4%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.5	10.5	38.4	99.8	56.8
Actuated g/C Ratio	0.09	0.09	0.32	0.83	0.47
v/c Ratio	0.01	0.56	0.86	0.22	0.68
Control Delay (s/veh)	49.0	15.6	31.0	6.3	28.3
Queue Delay	0.0	0.0	0.0	0.0	1.0
Total Delay (s/veh)	49.0	15.6	31.0	6.3	29.3
LOS	D	B	C	A	C
Approach Delay (s/veh)	15.8			21.0	29.3
Approach LOS	B			C	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 93.3 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 24.0	Intersection LOS: C
Intersection Capacity Utilization 75.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	148	890	602	1059	12
Future Volume (veh/h)	1	148	890	602	1059	12
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	161	967	654	1151	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	209	186	1029	2901	1727	20
Arrive On Green	0.12	0.12	0.49	1.00	0.47	0.47
Sat Flow, veh/h	1810	1610	3510	3705	3751	41
Grp Volume(v), veh/h	1	161	967	654	568	596
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1893
Q Serve(g_s), s	0.1	11.8	31.3	0.0	29.1	29.1
Cycle Q Clear(g_c), s	0.1	11.8	31.3	0.0	29.1	29.1
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	209	186	1029	2901	853	894
V/C Ratio(X)	0.00	0.87	0.94	0.23	0.67	0.67
Avail Cap(c_a), veh/h	256	228	1360	2901	853	894
HCM Platoon Ratio	1.00	1.00	1.67	1.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93	0.82	0.82
Uniform Delay (d), s/veh	47.0	52.2	29.6	0.0	24.4	24.4
Incr Delay (d2), s/veh	0.0	24.0	9.0	0.2	3.4	3.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.3	12.2	0.1	13.0	13.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	47.0	76.2	38.6	0.2	27.8	27.6
LnGrp LOS	D	E	D	A	C	C
Approach Vol, veh/h	162			1621	1164	
Approach Delay, s/veh	76.0			23.1	27.7	
Approach LOS	E			C	C	

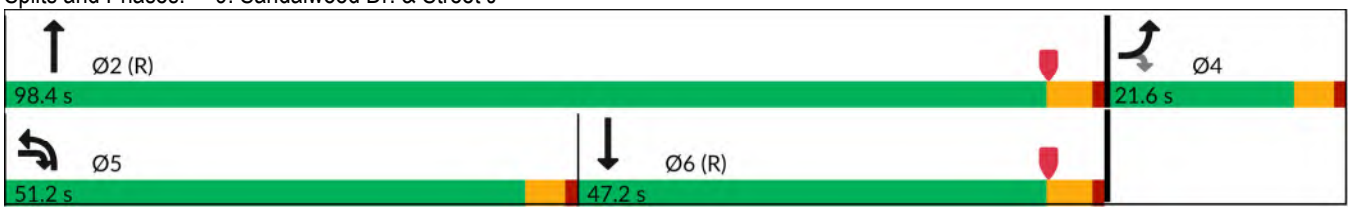
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		101.5		18.5	39.8	61.8
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	46.5	42.2
Max Q Clear Time (g_c+I1), s		2.0		13.8	33.3	31.1
Green Ext Time (p_c), s		5.3		0.1	1.9	5.7

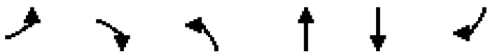
Intersection Summary		
HCM 7th Control Delay, s/veh		27.8
HCM 7th LOS		C

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	1	229	1332	1492	1206
Future Volume (vph)	1	229	1332	1492	1206
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	21.6	9.6	9.6	15.1	22.1
Total Split (s)	21.6	51.2	51.2	98.4	47.2
Total Split (%)	18.0%	42.7%	42.7%	82.0%	39.3%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	60.7	57.7	116.1	49.6
Actuated g/C Ratio	0.08	0.51	0.48	0.97	0.41
v/c Ratio	0.01	0.29	0.86	0.46	0.89
Control Delay (s/veh)	51.0	17.8	18.7	3.8	57.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.0	17.8	18.7	3.8	57.1
LOS	D	B	B	A	E
Approach Delay (s/veh)	17.9			10.8	57.1
Approach LOS	B			B	E

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 48 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay (s/veh): 24.4	Intersection LOS: C
Intersection Capacity Utilization 92.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	229	1332	1492	1206	12
Future Volume (veh/h)	1	229	1332	1492	1206	12
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.00	1.00	1.00
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	1900	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	249	1448	1622	1311	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	194	830	1363	2930	1410	14
Arrive On Green	0.11	0.11	0.39	0.81	0.77	0.77
Sat Flow, veh/h	1810	1675	3510	3705	3757	36
Grp Volume(v), veh/h	1	249	1448	1622	646	678
Grp Sat Flow(s),veh/h/ln	1810	1675	1755	1805	1805	1893
Q Serve(g_s), s	0.1	10.6	46.6	18.4	34.7	34.8
Cycle Q Clear(g_c), s	0.1	10.6	46.6	18.4	34.7	34.8
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	194	830	1363	2930	695	729
V/C Ratio(X)	0.01	0.30	1.06	0.55	0.93	0.93
Avail Cap(c_a), veh/h	256	888	1363	2930	695	729
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.51	0.51	0.69	0.69
Uniform Delay (d), s/veh	47.8	17.9	36.7	3.9	12.5	12.5
Incr Delay (d2), s/veh	0.0	0.2	36.7	0.4	15.8	15.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	12.5	25.9	4.5	7.9	8.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	47.8	18.1	73.4	4.3	28.2	27.7
LnGrp LOS	D	B	F	A	C	C
Approach Vol, veh/h	250			3070	1324	
Approach Delay, s/veh	18.2			36.9	28.0	
Approach LOS	B			D	C	

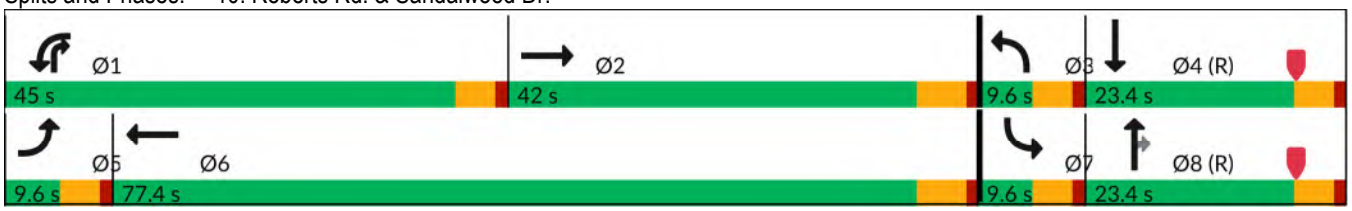
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		102.5		17.5	51.2	51.3
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	46.6	42.1
Max Q Clear Time (g_c+I1), s		20.4		12.6	48.6	36.8
Green Ext Time (p_c), s		20.3		0.3	0.0	3.6

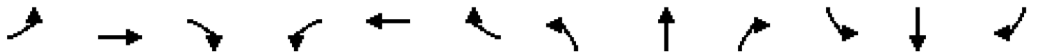
Intersection Summary	
HCM 7th Control Delay, s/veh	33.3
HCM 7th LOS	C

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBL	SBT	Ø8
Lane Configurations									
Traffic Volume (vph)	2	1545	1076	2824	11	132	34	0	
Future Volume (vph)	2	1545	1076	2824	11	132	34	0	
Turn Type	Prot	NA	Prot	NA	Prot	pm+ov	Prot	NA	
Protected Phases	5	2	1	6	3	1	7	4	8
Permitted Phases						8			
Detector Phase	5	2	1	6	3	1	7	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	10.0	10.0
Minimum Split (s)	9.6	22.4	9.6	22.4	9.6	9.6	9.6	21.6	21.6
Total Split (s)	9.6	42.0	45.0	77.4	9.6	45.0	9.6	23.4	23.4
Total Split (%)	8.0%	35.0%	37.5%	64.5%	8.0%	37.5%	8.0%	19.5%	20%
Yellow Time (s)	3.6	4.4	3.6	4.4	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	5.4	4.6	5.4	4.6	4.6	4.6	4.6	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max
Act Effct Green (s)	5.0	37.4	39.6	79.7	5.0	66.8	5.0	24.6	
Actuated g/C Ratio	0.04	0.31	0.33	0.66	0.04	0.56	0.04	0.21	
v/c Ratio	0.03	0.92	0.95	0.80	0.08	0.13	0.25	0.00	
Control Delay (s/veh)	73.5	32.6	55.9	17.0	56.5	7.8	59.9	0.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	73.5	32.6	55.9	17.0	56.5	7.8	59.9	0.0	
LOS	E	C	E	B	E	A	E	A	
Approach Delay (s/veh)		32.7		27.6				58.3	
Approach LOS		C		C				E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay (s/veh): 28.8	Intersection LOS: C
Intersection Capacity Utilization 81.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	1545	19	1076	2824	45	11	0	132	34	0	1
Future Volume (veh/h)	2	1545	19	1076	2824	45	11	0	132	34	0	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1976	1900	1976	1976	1900	1900	1900	1976	1900	1900	1900
Adj Flow Rate, veh/h	2	1679	21	1170	3070	49	12	0	89	37	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	5	1775	22	1229	3653	58	50	684	848	107	0	315
Arrive On Green	0.00	0.30	0.30	0.33	0.63	0.63	0.01	0.00	0.18	0.03	0.00	0.20
Sat Flow, veh/h	1810	5842	73	3764	5819	92	3619	3800	1675	3619	0	1610
Grp Volume(v), veh/h	2	1136	564	1170	2079	1040	12	0	89	37	0	1
Grp Sat Flow(s),veh/h/ln	1810	1976	1963	1882	1976	1959	1810	1900	1675	1810	0	1610
Q Serve(g_s), s	0.1	33.7	33.7	36.5	49.6	50.5	0.4	0.0	3.3	1.2	0.0	0.1
Cycle Q Clear(g_c), s	0.1	33.7	33.7	36.5	49.6	50.5	0.4	0.0	3.3	1.2	0.0	0.1
Prop In Lane	1.00		0.04	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	1201	596	1229	2481	1230	50	684	848	107	0	315
V/C Ratio(X)	0.41	0.95	0.95	0.95	0.84	0.85	0.24	0.00	0.10	0.35	0.00	0.00
Avail Cap(c_a), veh/h	75	1205	599	1267	2481	1230	151	684	848	151	0	315
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.51	0.51	0.51	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.7	40.8	40.8	39.5	17.6	17.7	58.6	0.0	15.4	57.1	0.0	38.8
Incr Delay (d2), s/veh	10.2	8.9	15.1	14.8	2.7	5.6	0.9	0.0	0.2	0.7	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	17.3	18.2	18.7	20.8	22.0	0.2	0.0	1.3	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.9	49.7	55.9	54.3	20.3	23.3	59.5	0.0	15.7	57.8	0.0	38.8
LnGrp LOS	E	D	E	D	C	C	E		B	E		D
Approach Vol, veh/h		1702			4289			101			38	
Approach Delay, s/veh		51.8			30.3			20.9			57.3	
Approach LOS		D			C			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	43.8	41.9	6.2	28.1	4.9	80.7	8.1	26.2
Change Period (Y+Rc), s	4.6	5.4	4.6	4.6	4.6	5.4	4.6	4.6
Max Green Setting (Gmax), s	40.4	36.6	5.0	18.8	5.0	72.0	5.0	18.8
Max Q Clear Time (g_c+I1), s	38.5	35.7	2.4	2.1	2.1	52.5	3.2	5.3
Green Ext Time (p_c), s	0.7	0.8	0.0	0.0	0.0	18.2	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	36.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	729	2	114	176	8	135
Future Vol, veh/h	729	2	114	176	8	135
Conflicting Peds, #/hr	0	2	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	838	2	131	202	9	155

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	842	0	1305	841
Stage 1	-	-	-	-	841	-
Stage 2	-	-	-	-	464	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	802	-	178	368
Stage 1	-	-	-	-	426	-
Stage 2	-	-	-	-	637	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	801	-	145	367
Mov Cap-2 Maneuver	-	-	-	-	145	-
Stage 1	-	-	-	-	426	-
Stage 2	-	-	-	-	519	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	4.08	25.32
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	338	-	-	708	-
HCM Lane V/C Ratio	0.486	-	-	0.164	-
HCM Control Delay (s/veh)	25.3	-	-	10.4	0
HCM Lane LOS	D	-	-	B	A
HCM 95th %tile Q(veh)	2.5	-	-	0.6	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	732	132	314	191	0	0	0	0	251	6	99
Future Vol, veh/h	0	732	132	314	191	0	0	0	0	251	6	99
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	861	155	369	225	0	0	0	0	295	7	116

Major/Minor	Major1			Major2				Minor2		
Conflicting Flow All	-	0	0	1017	0	0		1825	1981	225
Stage 1	-	-	-	-	-	-		964	964	-
Stage 2	-	-	-	-	-	-		861	1017	-
Critical Hdwy	-	-	-	4.1	-	-		6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-		5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-		3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	690	-	0		~ 86	62	820
Stage 1	0	-	-	-	-	0		373	336	-
Stage 2	0	-	-	-	-	0		417	318	-
Platoon blocked, %		-	-		-					
Mov Cap-1 Maneuver	-	-	-	690	-	-		~ 40	0	820
Mov Cap-2 Maneuver	-	-	-	-	-	-		~ -519	0	-
Stage 1	-	-	-	-	-	-		373	0	-
Stage 2	-	-	-	-	-	-		~ 194	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	10	3.25
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	690	-	+	820
HCM Lane V/C Ratio	-	-	0.536	-	-	0.142
HCM Control Delay (s/veh)	-	-	16.1	-	0.6	10.1
HCM Lane LOS	-	-	C	-	A	B
HCM 95th %tile Q(veh)	-	-	3.2	-	-	0.5

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

Intersection	
Int Delay, s/veh	55.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	515	469	0	0	476	659	28	4	97	0	0	0
Future Vol, veh/h	515	469	0	0	476	659	28	4	97	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	554	504	0	0	512	709	30	4	104	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1220	0	-	-	-	0	2124	2832	504
Stage 1	-	-	-	-	-	-	1612	1612	-
Stage 2	-	-	-	-	-	-	512	1220	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	578	-	0	0	-	-	56	18	572
Stage 1	-	-	0	0	-	-	182	165	-
Stage 2	-	-	0	0	-	-	606	255	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	578	-	-	-	-	-	~ 2	0	572
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 7	0	-
Stage 1	-	-	-	-	-	-	~ 8	0	-
Stage 2	-	-	-	-	-	-	606	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	28.44	0	$ 751.86
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	7	572	578	-	-	-
HCM Lane V/C Ratio	5.242	0.182	0.958	-	-	-
HCM Control Delay (s/veh)	$ 2992.4	12.7	54.3	-	-	-
HCM Lane LOS	F	B	F	-	-	-
HCM 95th %tile Q(veh)	5.7	0.7	13	-	-	-

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

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	1306	3425	3	0	1
Future Vol, veh/h	0	1306	3425	3	0	1
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1420	3723	3	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1861
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	271
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	271
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	18.32
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	271
HCM Lane V/C Ratio	-	-	-	0.004
HCM Control Delay (s/veh)	-	-	-	18.3
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Intersection Delay, s/veh	1547.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1084	593	185	2256	0	0	0	0	122	16	1666
Future Vol, veh/h	0	1084	593	185	2256	0	0	0	0	122	16	1666
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1338	732	228	2785	0	0	0	0	151	20	2057
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

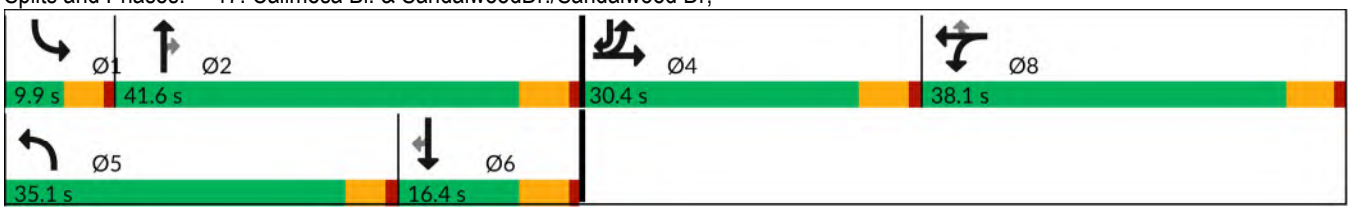
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	688.8	2258.7	1383
HCM LOS	F	F	F

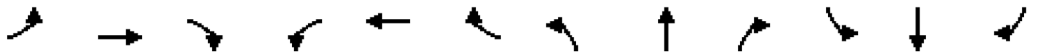
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	8%	7%
Vol Thru, %	100%	0%	92%	1%
Vol Right, %	0%	100%	0%	92%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1084	593	2441	1804
LT Vol	0	0	185	122
Through Vol	1084	0	2256	16
RT Vol	0	593	0	1666
Lane Flow Rate	1338	732	3014	2227
Geometry Grp	5	5	4a	2
Degree of Util (X)	2.824	1.403	5.951	3.993
Departure Headway (Hd)	32.955	32.077	12.647	14.304
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	134	124	331	290
Service Time	30.655	29.777	10.647	12.304
HCM Lane V/C Ratio	9.985	5.903	9.106	7.679
HCM Control Delay, s/veh	904.6	294.2	2258.7	1383
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	28.9	11	179.7	98

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	337	233	154	236	32	1663	544	99	14	205	543
Future Volume (vph)	337	233	154	236	32	1663	544	99	14	205	543
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4	30.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	25.1	25.1	20.8	20.8	20.8	30.6	42.5	42.5	5.2	11.0	41.5
Actuated g/C Ratio	0.23	0.23	0.19	0.19	0.19	0.28	0.39	0.39	0.05	0.10	0.38
v/c Ratio	0.91	0.96dr	0.51	0.74	0.08	3.71	0.44	0.16	0.19	1.21	0.85
Control Delay (s/veh)	70.4	37.9	44.0	53.4	0.4	Error	27.3	6.0	57.2	174.3	35.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	70.4	37.9	44.0	53.4	0.4	Error	27.3	6.0	57.2	174.3	35.9
LOS	E	D	D	D	A	F	C	A	E	F	D
Approach Delay (s/veh)		46.6		46.0			900.7			73.5	
Approach LOS		D		D			F			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 108.3	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 3.71	
Intersection Signal Delay (s/veh): 477.4	Intersection LOS: F
Intersection Capacity Utilization 155.5%	ICU Level of Service H
Analysis Period (min) 15	
dr Defacto Right Lane. Recode with 1 though lane as a right lane.	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	337	233	559	154	236	32	1663	544	99	14	205	543
Future Volume (veh/h)	337	233	559	154	236	32	1663	544	99	14	205	543
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	383	265	617	175	268	26	1890	618	82	16	233	540
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	429	450	382	312	327	273	523	1357	604	32	198	550
Arrive On Green	0.24	0.24	0.24	0.17	0.17	0.17	0.29	0.38	0.38	0.02	0.10	0.10
Sat Flow, veh/h	1810	1900	1610	1810	1900	1587	1810	3610	1608	1810	1900	1610
Grp Volume(v), veh/h	383	265	617	175	268	26	1890	618	82	16	233	540
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1587	1810	1805	1608	1810	1900	1610
Q Serve(g_s), s	21.6	13.0	25.0	9.3	14.3	1.5	30.5	13.6	3.5	0.9	11.0	11.0
Cycle Q Clear(g_c), s	21.6	13.0	25.0	9.3	14.3	1.5	30.5	13.6	3.5	0.9	11.0	11.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	429	450	382	312	327	273	523	1357	604	32	198	550
V/C Ratio(X)	0.89	0.59	1.62	0.56	0.82	0.10	3.61	0.46	0.14	0.50	1.18	0.98
Avail Cap(c_a), veh/h	429	450	382	561	589	492	523	1357	604	91	198	550
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	35.7	40.2	40.0	42.1	36.7	37.5	24.8	21.6	51.3	47.2	26.5
Incr Delay (d2), s/veh	20.4	2.0	289.2	1.6	5.1	0.1	1179.8	0.2	0.1	4.4	119.3	33.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	6.1	40.2	4.2	7.0	0.6	184.4	5.6	1.3	0.4	11.6	19.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.4	37.7	329.5	41.6	47.1	36.9	1217.3	25.0	21.8	55.7	166.5	60.3
LnGrp LOS	E	D	F	D	D	D	F	C	C	E	F	E
Approach Vol, veh/h		1265			469			2590			789	
Approach Delay, s/veh		186.6			44.5			895.0			91.6	
Approach LOS		F			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.5	45.0		30.4	35.1	16.4		23.6				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7				
Max Q Clear Time (g_c+I1), s	2.9	15.6		27.0	32.5	13.0		16.3				
Green Ext Time (p_c), s	0.0	4.1		0.0	0.0	0.0		1.8				

Intersection Summary		
HCM 7th Control Delay, s/veh	517.7	
HCM 7th LOS	F	

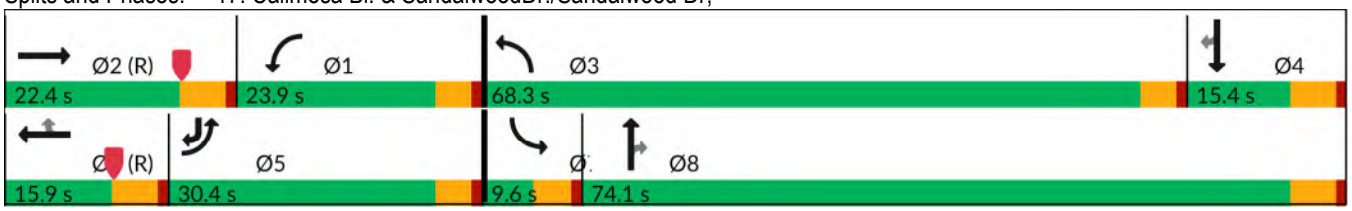
Notes

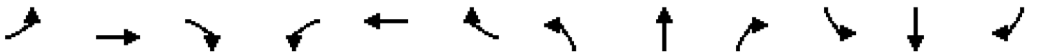
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	233	559	154	236	32	1663	544	99	14	205	543
Future Volume (vph)	337	233	559	154	236	32	1663	544	99	14	205	543
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	15.4		9.6	15.4	15.4	9.6	15.4	15.4	9.6	15.4	9.6
Total Split (s)	30.4	22.4		23.9	15.9	15.9	68.3	74.1	74.1	9.6	15.4	30.4
Total Split (%)	23.4%	17.2%		18.4%	12.2%	12.2%	52.5%	57.0%	57.0%	7.4%	11.8%	23.4%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Min	C-Min	Max	Min	Min	None	Min	None
Act Effct Green (s)	25.8	17.0	130.0	19.3	10.5	10.5	63.7	74.5	74.5	5.0	10.0	36.6
Actuated g/C Ratio	0.20	0.13	1.00	0.15	0.08	0.08	0.49	0.57	0.57	0.04	0.08	0.28
v/c Ratio	0.49	1.04	0.32	0.60	0.85	0.11	0.98	0.27	0.10	0.21	0.77	0.99
Control Delay (s/veh)	48.8	120.1	0.4	61.3	82.3	0.7	49.5	15.0	1.3	67.4	76.3	68.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	40.6	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.8	120.1	0.4	61.3	82.3	0.7	90.1	15.0	1.3	67.4	76.3	68.3
LOS	D	F	A	E	F	A	F	B	A	E	E	E
Approach Delay (s/veh)		39.6			68.5			68.6			70.5	
Approach LOS		D			E			E			E	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay (s/veh): 61.8	Intersection LOS: E
Intersection Capacity Utilization 101.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	337	233	559	154	236	32	1663	544	99	14	205	543
Future Volume (veh/h)	337	233	559	154	236	32	1663	544	99	14	205	543
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976
Adj Flow Rate, veh/h	383	265	0	175	268	26	1890	618	49	16	233	199
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	747	258		279	319	133	1844	2174	919	32	304	461
Arrive On Green	0.40	0.26	0.00	0.30	0.16	0.16	0.98	1.00	1.00	0.03	0.15	0.15
Sat Flow, veh/h	3764	1976	1675	1882	3952	1645	3764	3952	1672	1882	3952	1675
Grp Volume(v), veh/h	383	265	0	175	268	26	1890	618	49	16	233	199
Grp Sat Flow(s),veh/h/ln	1882	1976	1675	1882	1976	1645	1882	1976	1672	1882	1976	1675
Q Serve(g_s), s	10.0	17.0	0.0	10.4	8.6	1.6	63.7	0.0	0.0	1.1	7.4	9.8
Cycle Q Clear(g_c), s	10.0	17.0	0.0	10.4	8.6	1.6	63.7	0.0	0.0	1.1	7.4	9.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	747	258		279	319	133	1844	2174	919	32	304	461
V/C Ratio(X)	0.51	1.03		0.63	0.84	0.20	1.02	0.28	0.05	0.50	0.77	0.43
Avail Cap(c_a), veh/h	747	258		279	319	133	1844	2174	919	72	304	461
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	48.0	0.0	42.6	53.7	41.0	1.3	0.0	0.0	62.3	53.9	19.8
Incr Delay (d2), s/veh	0.3	62.7	0.0	3.3	22.5	3.3	14.0	0.0	0.0	4.5	11.1	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	11.5	0.0	4.5	4.9	0.8	4.2	0.0	0.0	0.5	3.9	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.7	110.7	0.0	45.9	76.2	44.3	15.3	0.0	0.0	66.8	65.0	20.4
LnGrp LOS	C	F		D	E	D	F	A	A	E	E	C
Approach Vol, veh/h		648			469			2557			448	
Approach Delay, s/veh		65.8			63.1			11.3			45.3	
Approach LOS		E			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.9	22.4	68.3	15.4	30.4	15.9	6.8	76.9
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	19.3	17.0	63.7	10.0	25.8	10.5	5.0	68.7
Max Q Clear Time (g_c+I1), s	12.4	19.0	65.7	11.8	12.0	10.6	3.1	2.0
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.6	0.0	0.0	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	29.5
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	908.6
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	134	782	113	601	1706	1
Future Vol, veh/h	134	782	113	601	1706	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	158	920	133	707	2007	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	471.5	341.2	1380.4
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	16%
Vol Thru, %	0%	15%	84%
Vol Right, %	0%	85%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	1707	916	714
LT Vol	1706	0	113
Through Vol	0	134	601
RT Vol	1	782	0
Lane Flow Rate	2008	1078	840
Geometry Grp	1	1	1
Degree of Util (X)	4.015	1.941	1.629
Departure Headway (Hd)	8.921	15.391	16.799
Convergence, Y/N	Yes	Yes	Yes
Cap	442	248	227
Service Time	6.921	13.391	14.799
HCM Lane V/C Ratio	4.543	4.347	3.7
HCM Control Delay, s/veh	1380.4	471.5	341.2
HCM Lane LOS	F	F	F
HCM 95th-tile Q	156	32.7	22.6

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	3	3	14	0	2
Future Vol, veh/h	4	3	3	14	0	2
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	4	4	20	0	3
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	6.8	6.5	7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	57%	0%
Vol Thru, %	18%	0%	100%
Vol Right, %	82%	43%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	17	7	2
LT Vol	0	4	0
Through Vol	3	0	2
RT Vol	14	3	0
Lane Flow Rate	24	10	3
Geometry Grp	1	1	1
Degree of Util (X)	0.023	0.01	0.003
Departure Headway (Hd)	3.426	3.804	3.935
Convergence, Y/N	Yes	Yes	Yes
Cap	1051	945	914
Service Time	1.428	1.808	1.939
HCM Lane V/C Ratio	0.023	0.011	0.003
HCM Control Delay, s/veh	6.5	6.8	7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0	0

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	2	395	7	0	0	0	0	0	0	0
Future Vol, veh/h	0	12	2	395	7	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	14	2	470	8	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	17	0	0	963	965	8
Stage 1	-	-	-	-	-	-	949	949	-
Stage 2	-	-	-	-	-	-	14	17	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1614	-	0	286	257	1079
Stage 1	0	-	-	-	-	0	379	342	-
Stage 2	0	-	-	-	-	0	1014	886	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1614	-	-	202	0	1079
Mov Cap-2 Maneuver	-	-	-	-	-	-	202	0	-
Stage 1	-	-	-	-	-	-	379	0	-
Stage 2	-	-	-	-	-	-	717	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	8	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1606	-	-
HCM Lane V/C Ratio	-	-	0.291	-	-
HCM Control Delay (s/veh)	-	-	8.1	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1.2	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	0	0	394	0	8	0	248	0	0	0
Future Vol, veh/h	0	12	0	0	394	0	8	0	248	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	13	0	0	438	0	9	0	276	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	438	0	-	-	-	0	451	451	13
Stage 1	-	-	-	-	-	-	13	13	-
Stage 2	-	-	-	-	-	-	438	438	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1133	-	0	0	-	-	570	507	1073
Stage 1	-	-	0	0	-	-	1015	888	-
Stage 2	-	-	0	0	-	-	655	582	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1133	-	-	-	-	-	570	0	1073
Mov Cap-2 Maneuver	-	-	-	-	-	-	570	0	-
Stage 1	-	-	-	-	-	-	1015	0	-
Stage 2	-	-	-	-	-	-	655	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	9.74
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1044	1133	-	-	-
HCM Lane V/C Ratio	0.272	-	-	-	-
HCM Control Delay (s/veh)	9.7	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	1.1	0	-	-	-

Intersection	
Intersection Delay, s/veh	145.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	206	2	29	361	157	2	482	210	74	49	31
Future Vol, veh/h	52	206	2	29	361	157	2	482	210	74	49	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	219	2	31	384	167	2	513	223	79	52	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	26.8	116	241.8	19.4
HCM LOS	D	F	F	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	20%	5%	48%
Vol Thru, %	69%	79%	66%	32%
Vol Right, %	30%	1%	29%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	694	260	547	154
LT Vol	2	52	29	74
Through Vol	482	206	361	49
RT Vol	210	2	157	31
Lane Flow Rate	738	277	582	164
Geometry Grp	1	1	1	1
Degree of Util (X)	1.466	0.613	1.142	0.386
Departure Headway (Hd)	7.545	9.669	8.309	10.156
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	487	376	442	357
Service Time	5.545	7.669	6.309	8.156
HCM Lane V/C Ratio	1.515	0.737	1.317	0.459
HCM Control Delay, s/veh	241.8	26.8	116	19.4
HCM Lane LOS	F	D	F	C
HCM 95th-tile Q	35.2	3.9	18	1.8

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	310	675	20
Demand Flow Rate, veh/h	310	675	20
Vehicles Circulating, veh/h	39	0	310
Vehicles Exiting, veh/h	636	330	39
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.7	7.5	3.8
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	310	675	20
Cap Entry Lane, veh/h	1326	1380	1006
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	310	675	20
Cap Entry, veh/h	1326	1380	1006
V/C Ratio	0.234	0.489	0.020
Control Delay, s/veh	4.7	7.5	3.8
LOS	A	A	A
95th %tile Queue, veh	1	3	0

Intersection	
Intersection Delay, s/veh	6.1
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	248	616	75
Demand Flow Rate, veh/h	248	616	75
Vehicles Circulating, veh/h	75	0	483
Vehicles Exiting, veh/h	483	323	133
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.5	6.9	5.1
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	248	616	75
Cap Entry Lane, veh/h	1278	1380	843
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	248	616	75
Cap Entry, veh/h	1278	1380	843
V/C Ratio	0.194	0.446	0.089
Control Delay, s/veh	4.5	6.9	5.1
LOS	A	A	A
95th %tile Queue, veh	1	2	0

Intersection	
Intersection Delay, s/veh	10.0
Intersection LOS	B

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	411	899	139
Demand Flow Rate, veh/h	411	899	139
Vehicles Circulating, veh/h	135	68	372
Vehicles Exiting, veh/h	832	443	174
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.3	12.5	5.2
Approach LOS	A	B	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	411	899	139
Cap Entry Lane, veh/h	1202	1287	944
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	411	899	139
Cap Entry, veh/h	1202	1287	944
V/C Ratio	0.342	0.698	0.147
Control Delay, s/veh	6.3	12.5	5.2
LOS	A	B	A
95th %tile Queue, veh	2	6	1

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	59	112	166	144	37
Future Vol, veh/h	20	59	112	166	144	37
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	64	122	180	157	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	601	177	197	0	-	0
Stage 1	177	-	-	-	-	-
Stage 2	424	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	467	872	1388	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	426	872	1388	-	-	-
Mov Cap-2 Maneuver	426	-	-	-	-	-
Stage 1	784	-	-	-	-	-
Stage 2	665	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.97	3.16	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1388	-	689	-	-
HCM Lane V/C Ratio	0.088	-	0.125	-	-
HCM Control Delay (s/veh)	7.8	-	11	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.4	-	-

Intersection	
Intersection Delay, s/veh	6.5
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	376	918	222
Demand Flow Rate, veh/h	376	918	222
Vehicles Circulating, veh/h	149	35	652
Vehicles Exiting, veh/h	725	490	301
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.2	6.4	8.9
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.093	0.907	0.710	0.290	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	35	341	652	266	222
Cap Entry Lane, veh/h	1240	1240	1376	1376	710
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	35	341	652	266	222
Cap Entry, veh/h	1240	1240	1376	1376	710
V/C Ratio	0.028	0.275	0.474	0.193	0.313
Control Delay, s/veh	3.1	5.4	7.3	4.2	8.9
LOS	A	A	A	A	A
95th %tile Queue, veh	0	1	3	1	1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	444	862	1	4	0
Future Vol, veh/h	0	444	862	1	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	793	1539	2	7	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1541	0	-	0	2333	1540
Stage 1	-	-	-	-	1540	-
Stage 2	-	-	-	-	793	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	437	-	-	-	41	144
Stage 1	-	-	-	-	197	-
Stage 2	-	-	-	-	449	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	437	-	-	-	41	144
Mov Cap-2 Maneuver	-	-	-	-	41	-
Stage 1	-	-	-	-	197	-
Stage 2	-	-	-	-	449	-

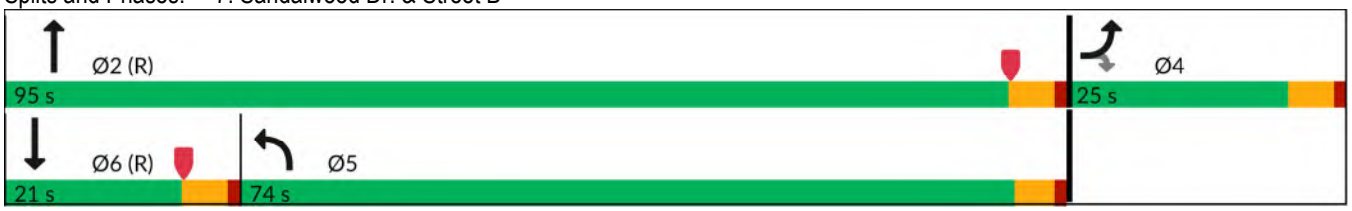
Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	110.12
HCM LOS			F

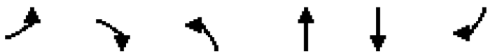
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	437	-	-	-	41
HCM Lane V/C Ratio	-	-	-	-	0.174
HCM Control Delay (s/veh)	0	-	-	-	110.1
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	0.6

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	555	939		
Future Volume (vph)	555	939		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	25.0	74.0	95.0	21.0
Total Split (%)	20.8%	61.7%	79%	18%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lag		Lead
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	44.4		
Actuated g/C Ratio	0.08	0.37		
v/c Ratio	0.30	0.79		
Control Delay (s/veh)	0.4	24.5		
Queue Delay	0.0	0.1		
Total Delay (s/veh)	0.4	24.5		
LOS	A	C		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116.9 (97%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 15.6	Intersection LOS: B
Intersection Capacity Utilization 31.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	555	939	0	0	0
Future Volume (veh/h)	0	555	939	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	500	1021	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	300	470	2016	1423	252	0
Arrive On Green	0.00	0.17	0.57	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	1900	0
Grp Volume(v), veh/h	0	500	1021	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	19.9	21.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	19.9	21.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	300	470	2016	1423	252	0
V/C Ratio(X)	0.00	1.06	0.51	0.00	0.00	0.00
Avail Cap(c_a), veh/h	300	470	2030	1423	252	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.81	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	50.1	15.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	59.6	0.1	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.2	8.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	109.6	15.4	0.0	0.0	0.0
LnGrp LOS		F	B			
Approach Vol, veh/h	500			1021	0	
Approach Delay, s/veh	109.6			15.4	0.0	
Approach LOS	F			B		

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		95.0		25.0	74.0	21.0
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		89.9		19.9	69.4	* 16
Max Q Clear Time (g_c+I1), s		0.0		21.9	23.0	0.0
Green Ext Time (p_c), s		0.0		0.0	2.3	0.0

Intersection Summary		
HCM 7th Control Delay, s/veh		46.4
HCM 7th LOS		D

Notes

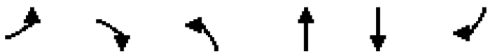
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	17	788	275	922	547
Future Volume (vph)	17	788	275	922	547
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	22.1	9.6	15.1	22.1
Total Split (s)	63.0	63.0	20.0	57.0	37.0
Total Split (%)	52.5%	52.5%	16.7%	47.5%	30.8%
Yellow Time (s)	4.1	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	50.7	50.7	13.9	59.1	40.6
Actuated g/C Ratio	0.42	0.42	0.12	0.49	0.34
v/c Ratio	0.02	0.94	0.74	0.56	0.50
Control Delay (s/veh)	16.8	36.2	57.5	17.6	35.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.8	36.2	57.5	17.6	35.7
LOS	B	D	E	B	D
Approach Delay (s/veh)	35.8			26.8	35.7
Approach LOS	D			C	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 24.1 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay (s/veh): 31.5	Intersection LOS: C
Intersection Capacity Utilization 72.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	788	275	922	547	8
Future Volume (veh/h)	17	788	275	922	547	8
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	18	857	299	1002	595	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	873	777	358	1561	1064	16
Arrive On Green	0.48	0.48	0.10	0.43	0.58	0.58
Sat Flow, veh/h	1810	1610	3510	3705	3735	55
Grp Volume(v), veh/h	18	857	299	1002	295	309
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1890
Q Serve(g_s), s	0.6	57.9	10.0	26.2	12.1	12.1
Cycle Q Clear(g_c), s	0.6	57.9	10.0	26.2	12.1	12.1
Prop In Lane	1.00	1.00	1.00			0.03
Lane Grp Cap(c), veh/h	873	777	358	1561	527	552
V/C Ratio(X)	0.02	1.10	0.84	0.64	0.56	0.56
Avail Cap(c_a), veh/h	873	777	451	1561	527	552
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	0.96	0.96
Uniform Delay (d), s/veh	16.2	31.0	52.9	26.7	20.2	20.2
Incr Delay (d2), s/veh	0.0	64.3	8.5	2.0	4.1	3.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	53.1	4.8	11.5	4.6	4.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.2	95.3	61.3	28.7	24.2	24.1
LnGrp LOS	B	F	E	C	C	C
Approach Vol, veh/h	875			1301	604	
Approach Delay, s/veh	93.7			36.2	24.2	
Approach LOS	F			D	C	

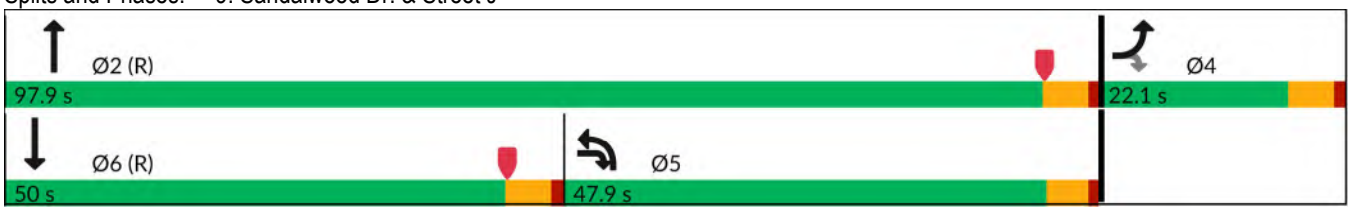
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		57.0		63.0	16.8	40.2
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		51.9		57.9	15.4	31.9
Max Q Clear Time (g_c+I1), s		28.2		59.9	12.0	14.1
Green Ext Time (p_c), s		7.9		0.0	0.2	3.5

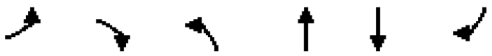
Intersection Summary	
HCM 7th Control Delay, s/veh	51.7
HCM 7th LOS	D

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	17	1176	415	1181	1400
Future Volume (vph)	17	1176	415	1181	1400
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	9.6	15.1	22.1
Total Split (s)	22.1	47.9	47.9	97.9	50.0
Total Split (%)	18.4%	39.9%	39.9%	81.6%	41.7%
Yellow Time (s)	4.1	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.6	4.6	5.1	5.1
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	49.3	43.3	111.9	61.0
Actuated g/C Ratio	0.08	0.41	0.36	0.93	0.51
v/c Ratio	0.12	1.80	0.36	0.38	0.84
Control Delay (s/veh)	53.1	390.6	21.4	1.3	28.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.1	390.6	21.4	1.3	28.1
LOS	D	F	C	A	C
Approach Delay (s/veh)	386.0			6.5	28.1
Approach LOS	F			A	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74 (62%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.80	
Intersection Signal Delay (s/veh): 121.5	Intersection LOS: F
Intersection Capacity Utilization 119.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	1176	415	1181	1400	8
Future Volume (veh/h)	17	1176	415	1181	1400	8
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.00	1.00	1.00
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	1900	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	18	735	451	1284	1522	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	151	834	1457	3002	1377	8
Arrive On Green	0.08	0.08	0.42	0.83	0.12	0.12
Sat Flow, veh/h	1810	1675	3510	3705	3774	22
Grp Volume(v), veh/h	18	735	451	1284	746	785
Grp Sat Flow(s),veh/h/ln	1810	1675	1755	1805	1805	1896
Q Serve(g_s), s	1.1	0.0	10.3	11.2	44.9	44.9
Cycle Q Clear(g_c), s	1.1	0.0	10.3	11.2	44.9	44.9
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	151	834	1457	3002	675	709
V/C Ratio(X)	0.12	0.88	0.31	0.43	1.11	1.11
Avail Cap(c_a), veh/h	256	932	1457	3002	675	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.90	0.90	0.57	0.57
Uniform Delay (d), s/veh	50.9	26.9	23.6	2.6	52.6	52.6
Incr Delay (d2), s/veh	0.3	9.1	0.0	0.4	59.9	59.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	26.6	4.2	2.4	33.0	34.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.3	36.0	23.6	3.0	112.5	112.3
LnGrp LOS	D	D	C	A	F	F
Approach Vol, veh/h	753			1735	1531	
Approach Delay, s/veh	36.4			8.4	112.4	
Approach LOS	D			A	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		104.9		15.1	54.9	50.0
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	43.3	* 45
Max Q Clear Time (g_c+I1), s		13.2		3.1	12.3	46.9
Green Ext Time (p_c), s		13.0		2.8	0.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	53.3
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBL	SBT	Ø8
Lane Configurations									
Traffic Volume (vph)	6	3137	750	1555	60	742	137	0	
Future Volume (vph)	6	3137	750	1555	60	742	137	0	
Turn Type	Prot	NA	Prot	NA	Prot	pm+ov	Prot	NA	
Protected Phases	5	2	1	6	3	1	7	4	8
Permitted Phases						8			
Detector Phase	5	2	1	6	3	1	7	4	
Switch Phase									
Minimum Initial (s)	5.0	8.0	5.0	8.0	5.0	5.0	5.0	8.0	8.0
Minimum Split (s)	9.6	22.1	9.6	22.1	9.6	9.6	9.6	19.6	19.6
Total Split (s)	9.6	65.0	24.0	79.4	9.6	24.0	9.6	21.4	21.4
Total Split (%)	8.0%	54.2%	20.0%	66.2%	8.0%	20.0%	8.0%	17.8%	18%
Yellow Time (s)	3.6	4.1	3.6	4.1	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	5.1	4.6	5.1	4.6	4.6	4.6	4.6	
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	None	Max	None	C-Max	C-Max
Act Effct Green (s)	5.0	59.9	19.4	82.0	5.0	40.8	5.0	18.7	
Actuated g/C Ratio	0.04	0.50	0.16	0.68	0.04	0.34	0.04	0.16	
v/c Ratio	0.08	1.14	1.24	0.44	0.40	1.06	0.91	0.02	
Control Delay (s/veh)	57.8	93.5	164.9	9.2	63.7	84.8	108.8	0.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	57.8	93.5	164.9	9.2	63.7	84.8	108.8	0.1	
LOS	E	F	F	A	E	F	F	A	
Approach Delay (s/veh)		93.4		57.3				103.7	
Approach LOS		F		E				F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 119 (99%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.24	
Intersection Signal Delay (s/veh): 79.1	Intersection LOS: E
Intersection Capacity Utilization 123.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	3137	55	750	1555	120	60	0	742	137	0	7
Future Volume (veh/h)	6	3137	55	750	1555	120	60	0	742	137	0	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1976	1900	1976	1976	1900	1900	1900	1976	1900	1900	1900
Adj Flow Rate, veh/h	6	3302	11	789	1637	126	63	0	413	144	0	7
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	14	2947	10	608	3573	275	648	266	505	648	0	225
Arrive On Green	0.02	1.00	1.00	0.32	1.00	1.00	0.36	0.00	0.28	0.36	0.00	0.28
Sat Flow, veh/h	1810	5905	20	3764	5435	418	3619	1900	1675	3619	0	1610
Grp Volume(v), veh/h	6	2209	1104	789	1190	573	63	0	413	144	0	7
Grp Sat Flow(s),veh/h/ln	1810	1976	1972	1882	1976	1901	1810	1900	1675	1810	0	1610
Q Serve(g_s), s	0.4	59.9	59.9	19.4	0.0	0.0	1.4	0.0	3.8	3.3	0.0	0.4
Cycle Q Clear(g_c), s	0.4	59.9	59.9	19.4	0.0	0.0	1.4	0.0	3.8	3.3	0.0	0.4
Prop In Lane	1.00		0.01	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	14	1973	985	608	2598	1250	648	266	505	648	0	225
V/C Ratio(X)	0.44	1.12	1.12	1.30	0.46	0.46	0.10	0.00	0.82	0.22	0.00	0.03
Avail Cap(c_a), veh/h	75	1973	985	608	2598	1250	648	266	505	648	0	225
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.8	0.1	0.1	40.6	0.0	0.0	32.0	0.0	30.9	32.7	0.0	37.3
Incr Delay (d2), s/veh	0.7	54.6	56.2	145.4	0.1	0.3	0.0	0.0	13.7	0.1	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	15.0	15.4	19.4	0.0	0.1	0.6	0.0	10.8	1.4	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.6	54.7	56.3	186.0	0.1	0.3	32.1	0.0	44.6	32.7	0.0	37.5
LnGrp LOS	E	F	F	F	A	A	C		D	C		D
Approach Vol, veh/h		3319			2552			476			151	
Approach Delay, s/veh		55.2			57.6			42.9			33.0	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.5	65.0	26.6	21.4	5.5	84.0	26.6	21.4
Change Period (Y+Rc), s	5.1	* 5.1	4.6	4.6	4.6	5.1	4.6	4.6
Max Green Setting (Gmax), s	19.4	* 60	5.0	16.8	5.0	74.3	5.0	16.8
Max Q Clear Time (g_c+I1), s	21.4	61.9	3.4	2.4	2.4	2.0	5.3	5.8
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	20.2	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	54.8
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	509	3	90	905	5	63
Future Vol, veh/h	509	3	90	905	5	63
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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	585	3	103	1040	6	72

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	589	0	1834	587
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	1247	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	997	-	85	513
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	273	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	997	-	64	513
Mov Cap-2 Maneuver	-	-	-	-	64	-
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	206	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.82	18.82
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	338	-	-	163	-
HCM Lane V/C Ratio	0.231	-	-	0.104	-
HCM Control Delay (s/veh)	18.8	-	-	9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.3	-

Intersection	
Int Delay, s/veh	159.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	470	102	240	371	0	0	0	0	396	3	623
Future Vol, veh/h	0	470	102	240	371	0	0	0	0	396	3	623
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	500	109	255	395	0	0	0	0	421	3	663

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	609	0	0	1405	1514	395
Stage 1	-	-	-	-	-	-	905	905	-
Stage 2	-	-	-	-	-	-	500	609	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	980	-	0	~ 155	121	~ 659
Stage 1	0	-	-	-	-	0	~ 398	358	-
Stage 2	0	-	-	-	-	0	613	489	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	980	-	-	~ 115	0	~ 659
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 164	0	-
Stage 1	-	-	-	-	-	-	~ 398	0	-
Stage 2	-	-	-	-	-	-	454	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	3.91	$ 341.52
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	980	-	164	659
HCM Lane V/C Ratio	-	-	0.261	-	2.594	1.006
HCM Control Delay (s/veh)	-	-	10	-	$ 778.7	61.6
HCM Lane LOS	-	-	A	-	F	F
HCM 95th %tile Q(veh)	-	-	1	-	36.9	16

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

Intersection	
Int Delay, s/veh	23.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	335	532	0	0	475	314	136	1	216	0	0	0
Future Vol, veh/h	335	532	0	0	475	314	136	1	216	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	356	566	0	0	505	334	145	1	230	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	839	0	-	-	-	0	1784	2118	566
Stage 1	-	-	-	-	-	-	1279	1279	-
Stage 2	-	-	-	-	-	-	505	839	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	804	-	0	0	-	-	~ 91	51	528
Stage 1	-	-	0	0	-	-	264	239	-
Stage 2	-	-	0	0	-	-	610	384	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	804	-	-	-	-	-	~ 51	0	528
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 106	0	-
Stage 1	-	-	-	-	-	-	147	0	-
Stage 2	-	-	-	-	-	-	610	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	5.02	0	123.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	106	528	804	-	-	-
HCM Lane V/C Ratio	1.377	0.436	0.443	-	-	-
HCM Control Delay (s/veh)	292	17	13	-	-	-
HCM Lane LOS	F	C	B	-	-	-
HCM 95th %tile Q(veh)	10.3	2.2	2.3	-	-	-

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

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	3928	2385	8	0	1
Future Vol, veh/h	0	3928	2385	8	0	1
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	5381	3267	11	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1634
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	204
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	204
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	22.8
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	204
HCM Lane V/C Ratio	-	-	-	0.007
HCM Control Delay (s/veh)	-	-	-	22.8
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Intersection Delay, s/veh	1346.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2319	1736	316	1544	0	0	0	0	243	7	923
Future Vol, veh/h	0	2319	1736	316	1544	0	0	0	0	243	7	923
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2441	1827	333	1625	0	0	0	0	256	7	972
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	1591.8	1277.6	609.8
HCM LOS	F	F	F

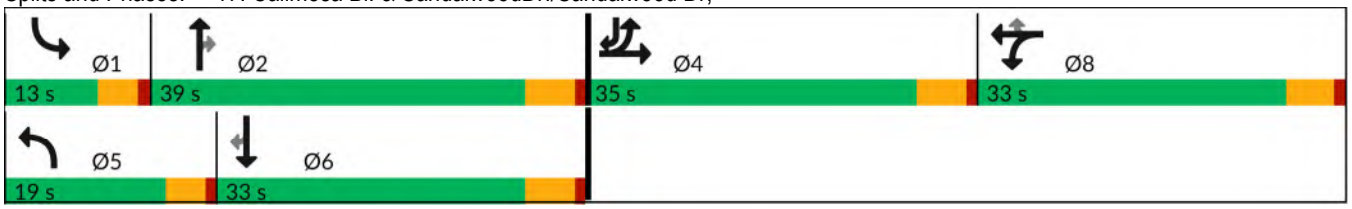
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	17%	21%
Vol Thru, %	100%	0%	83%	1%
Vol Right, %	0%	100%	0%	79%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2319	1736	1860	1173
LT Vol	0	0	316	243
Through Vol	2319	0	1544	7
RT Vol	0	1736	0	923
Lane Flow Rate	2441	1827	1958	1235
Geometry Grp	5	5	4a	2
Degree of Util (X)	5.151	3.501	-	2.252
Departure Headway (Hd)	17.423	16.637	-	15.999
Convergence, Y/N	Yes	Yes	-	Yes
Cap	244	238	-	247
Service Time	15.123	14.337	-	13.999
HCM Lane V/C Ratio	10.004	7.676	-	5
HCM Control Delay, s/veh	1909.4	1167.6	+	609.8
HCM Lane LOS	F	F	-	F
HCM 95th-tile Q	110.8	71.6	-	40

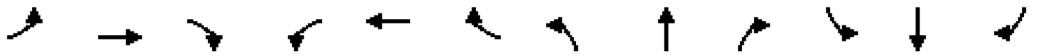
Notes
HCM 7th Edition AWSC methodology error - negative departure headway

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	614	174	74	169	26	1087	312	136	29	284	602
Future Volume (vph)	614	174	74	169	26	1087	312	136	29	284	602
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0	35.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%	29.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	29.8	29.8	15.0	15.0	15.0	14.5	33.0	33.0	6.3	20.5	50.4
Actuated g/C Ratio	0.30	0.30	0.15	0.15	0.15	0.14	0.33	0.33	0.06	0.20	0.50
v/c Ratio	1.20	2.20dr	0.29	0.63	0.07	4.42	0.28	0.23	0.27	0.77	0.67
Control Delay (s/veh)	140.8	315.9	42.0	51.6	0.4	Error	27.6	6.0	54.0	52.5	12.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	140.8	315.9	42.0	51.6	0.4	Error	27.6	6.0	54.0	52.5	12.3
LOS	F	F	D	D	A	F	C	A	D	D	B
Approach Delay (s/veh)		277.9		44.1			1108.5			26.1	
Approach LOS		F		D			F			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 100.8	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 4.42	
Intersection Signal Delay (s/veh): 464.3	Intersection LOS: F
Intersection Capacity Utilization 155.0%	ICU Level of Service H
Analysis Period (min) 15	
dr Defacto Right Lane. Recode with 1 though lane as a right lane.	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	614	174	1755	74	169	26	1087	312	136	29	284	602
Future Volume (veh/h)	614	174	1755	74	169	26	1087	312	136	29	284	602
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	646	183	1830	78	178	18	1144	328	116	31	299	562
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	509	534	453	222	233	193	247	1338	595	51	498	874
Arrive On Green	0.28	0.28	0.28	0.12	0.12	0.12	0.14	0.37	0.37	0.03	0.26	0.26
Sat Flow, veh/h	1810	1900	1610	1810	1900	1577	1810	3610	1606	1810	1900	1607
Grp Volume(v), veh/h	646	183	1830	78	178	18	1144	328	116	31	299	562
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1577	1810	1805	1606	1810	1900	1607
Q Serve(g_s), s	29.6	8.1	29.6	4.2	9.6	1.1	14.4	6.6	5.2	1.8	14.5	25.9
Cycle Q Clear(g_c), s	29.6	8.1	29.6	4.2	9.6	1.1	14.4	6.6	5.2	1.8	14.5	25.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	509	534	453	222	233	193	247	1338	595	51	498	874
V/C Ratio(X)	1.27	0.34	4.04	0.35	0.76	0.09	4.62	0.25	0.19	0.61	0.60	0.64
Avail Cap(c_a), veh/h	509	534	453	474	498	413	247	1338	595	144	498	874
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.8	30.1	37.8	42.4	44.7	41.0	45.4	22.9	22.5	50.6	34.0	16.9
Incr Delay (d2), s/veh	136.3	0.4	1374.6	1.0	5.2	0.2	1639.5	0.1	0.2	4.2	2.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	31.8	3.6	184.0	1.9	4.7	0.4	119.0	2.7	1.9	0.9	6.7	14.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	174.2	30.5	1412.4	43.3	49.9	41.2	1684.9	23.0	22.6	54.8	36.0	18.5
LnGrp LOS	F	C	F	D	D	D	F	C	C	D	D	B
Approach Vol, veh/h		2659			274			1588			892	
Approach Delay, s/veh		1016.5			47.5			1220.3			25.6	
Approach LOS		F			D			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	44.4		35.0	19.0	33.0		18.3				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6				
Max Q Clear Time (g_c+I1), s	3.8	8.6		31.6	16.4	27.9		11.6				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	0.0		1.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	863.9
HCM 7th LOS	F

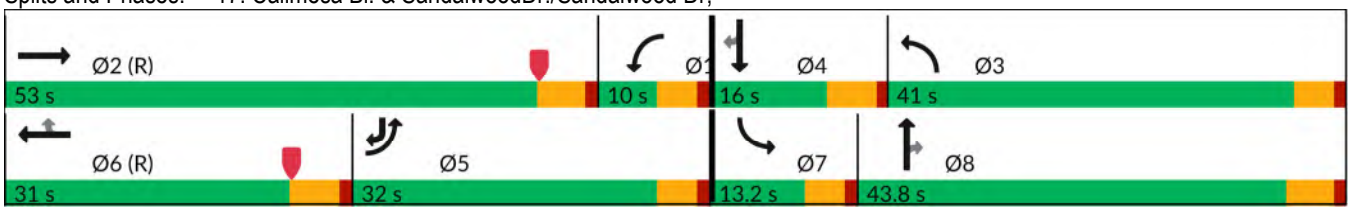
Notes

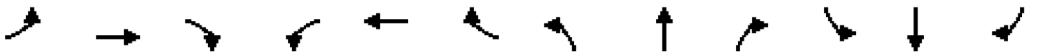
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	614	174	1755	74	169	26	1087	312	136	29	284	602
Future Volume (vph)	614	174	1755	74	169	26	1087	312	136	29	284	602
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.0	30.4		10.0	29.4	29.4	10.0	27.4	27.4	9.6	15.4	10.0
Total Split (s)	32.0	53.0		10.0	31.0	31.0	41.0	43.8	43.8	13.2	16.0	32.0
Total Split (%)	26.7%	44.2%		8.3%	25.8%	25.8%	34.2%	36.5%	36.5%	11.0%	13.3%	26.7%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	27.4	47.9	120.0	5.4	25.9	25.9	36.1	44.0	44.0	6.6	10.6	38.8
Actuated g/C Ratio	0.23	0.40	1.00	0.05	0.22	0.22	0.30	0.37	0.37	0.06	0.09	0.32
v/c Ratio	0.72	0.24	0.94	0.92	0.22	0.05	0.97	0.23	0.18	0.30	0.89	0.89
Control Delay (s/veh)	42.1	17.6	26.4	134.3	39.7	0.2	58.9	31.9	10.3	61.4	82.6	41.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.1	17.6	26.4	134.3	39.7	0.2	58.9	31.9	10.3	61.4	82.6	41.9
LOS	D	B	C	F	D	A	E	C	B	E	F	D
Approach Delay (s/veh)		29.6			62.0			49.1			55.2	
Approach LOS		C			E			D			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay (s/veh): 41.4	Intersection LOS: D
Intersection Capacity Utilization 100.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	614	174	1755	74	169	26	1087	312	136	29	284	602
Future Volume (veh/h)	614	174	1755	74	169	26	1087	312	136	29	284	602
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	646	183	0	78	178	18	1144	328	116	31	299	457
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1687	754		480	811	338	1142	1468	596	49	336	864
Arrive On Green	0.15	0.13	0.00	0.27	0.21	0.21	0.30	0.37	0.37	0.03	0.09	0.09
Sat Flow, veh/h	3764	1900	1675	1810	3800	1583	3764	3952	1604	1810	3800	1605
Grp Volume(v), veh/h	646	183	0	78	178	18	1144	328	116	31	299	457
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1583	1882	1976	1604	1810	1900	1605
Q Serve(g_s), s	18.6	10.4	0.0	4.0	4.6	1.2	36.4	6.8	4.7	2.0	9.3	0.0
Cycle Q Clear(g_c), s	18.6	10.4	0.0	4.0	4.6	1.2	36.4	6.8	4.7	2.0	9.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1687	754		480	811	338	1142	1468	596	49	336	864
V/C Ratio(X)	0.38	0.24		0.16	0.22	0.05	1.00	0.22	0.19	0.64	0.89	0.53
Avail Cap(c_a), veh/h	1687	754		480	811	338	1142	1468	596	130	336	864
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.78	0.78	0.78	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	36.0	0.0	33.9	39.0	49.5	41.8	25.8	16.6	57.8	54.1	18.0
Incr Delay (d2), s/veh	0.1	0.8	0.0	0.1	0.6	0.3	24.0	0.1	0.1	5.1	24.3	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	5.3	0.0	1.7	2.2	0.4	20.1	3.2	2.2	1.0	5.5	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.2	36.7	0.0	33.9	39.6	49.8	65.8	25.9	16.7	62.9	78.4	18.6
LnGrp LOS	D	D		C	D	D	F	C	B	E	E	B
Approach Vol, veh/h		829			274			1588			787	
Approach Delay, s/veh		36.3			38.6			54.0			43.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.2	53.0	41.8	16.0	59.2	31.0	7.8	50.0
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.4	47.6	36.4	* 11	27.4	25.6	8.6	38.4
Max Q Clear Time (g_c+I1), s	6.0	12.4	38.4	11.3	20.6	6.6	4.0	8.8
Green Ext Time (p_c), s	0.0	1.0	0.0	0.0	0.9	0.9	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	46.1
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	925.6
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	307	1805	26	185	1351	1
Future Vol, veh/h	307	1805	26	185	1351	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	316	1861	27	191	1393	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	1150.7	29.6	713.8
HCM LOS	F	D	F

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	12%
Vol Thru, %	0%	15%	88%
Vol Right, %	0%	85%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	1352	2112	211
LT Vol	1351	0	26
Through Vol	0	307	185
RT Vol	1	1805	0
Lane Flow Rate	1394	2177	218
Geometry Grp	1	1	1
Degree of Util (X)	2.517	3.502	0.424
Departure Headway (Hd)	10.764	9.131	15.572
Convergence, Y/N	Yes	Yes	Yes
Cap	348	435	235
Service Time	8.764	7.131	13.572
HCM Lane V/C Ratio	4.006	5.005	0.928
HCM Control Delay, s/veh	713.8	1150.7	29.6
HCM Lane LOS	F	F	D
HCM 95th-tile Q	68.1	127.4	2

Intersection	
Intersection Delay, s/veh	7
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	1	0	14	3	1
Future Vol, veh/h	18	1	0	14	3	1
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	30	2	0	23	5	2
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.3	6.5	7.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	95%	75%
Vol Thru, %	0%	0%	25%
Vol Right, %	100%	5%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	14	19	4
LT Vol	0	18	3
Through Vol	0	0	1
RT Vol	14	1	0
Lane Flow Rate	23	32	7
Geometry Grp	1	1	1
Degree of Util (X)	0.022	0.036	0.008
Departure Headway (Hd)	3.36	4.111	4.123
Convergence, Y/N	Yes	Yes	Yes
Cap	1066	875	870
Service Time	1.377	2.116	2.14
HCM Lane V/C Ratio	0.022	0.037	0.008
HCM Control Delay, s/veh	6.5	7.3	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.1	0

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	17	0	235	19	0	0	0	0	0	0	0
Future Vol, veh/h	0	17	0	235	19	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	18	0	253	20	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	18	0	0	544	544	20
Stage 1	-	-	-	-	-	-	526	526	-
Stage 2	-	-	-	-	-	-	18	18	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1612	-	0	503	449	1063
Stage 1	0	-	-	-	-	0	597	532	-
Stage 2	0	-	-	-	-	0	1010	884	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1612	-	-	424	0	1063
Mov Cap-2 Maneuver	-	-	-	-	-	-	424	0	-
Stage 1	-	-	-	-	-	-	597	0	-
Stage 2	-	-	-	-	-	-	850	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	7.08	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1593	-	-
HCM Lane V/C Ratio	-	-	0.157	-	-
HCM Control Delay (s/veh)	-	-	7.6	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.6	-	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	17	0	0	253	0	1	0	340	0	0	0
Future Vol, veh/h	0	17	0	0	253	0	1	0	340	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	19	0	0	278	0	1	0	374	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	278	0	-	-	-	0	297	297	19
Stage 1	-	-	-	-	-	-	19	19	-
Stage 2	-	-	-	-	-	-	278	278	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1296	-	0	0	-	-	699	618	1065
Stage 1	-	-	0	0	-	-	1009	884	-
Stage 2	-	-	0	0	-	-	774	684	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1296	-	-	-	-	-	699	0	1065
Mov Cap-2 Maneuver	-	-	-	-	-	-	699	0	-
Stage 1	-	-	-	-	-	-	1009	0	-
Stage 2	-	-	-	-	-	-	774	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	10.21
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1064	1296	-	-	-
HCM Lane V/C Ratio	0.352	-	-	-	-
HCM Control Delay (s/veh)	10.2	0	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	1.6	0	-	-	-

Intersection	
Intersection Delay, s/veh	24.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	338	2	58	228	104	0	73	70	159	107	25
Future Vol, veh/h	17	338	2	58	228	104	0	73	70	159	107	25
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	371	2	64	251	114	0	80	77	175	118	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	25.9	28.5	13.9	21.7
HCM LOS	D	D	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	5%	15%	55%
Vol Thru, %	51%	95%	58%	37%
Vol Right, %	49%	1%	27%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	143	357	390	291
LT Vol	0	17	58	159
Through Vol	73	338	228	107
RT Vol	70	2	104	25
Lane Flow Rate	157	392	429	320
Geometry Grp	1	1	1	1
Degree of Util (X)	0.322	0.73	0.774	0.632
Departure Headway (Hd)	7.369	6.701	6.5	7.117
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	487	537	557	505
Service Time	5.437	4.753	4.55	5.171
HCM Lane V/C Ratio	0.322	0.73	0.77	0.634
HCM Control Delay, s/veh	13.9	25.9	28.5	21.7
HCM Lane LOS	B	D	D	C
HCM 95th-tile Q	1.4	6.1	7.1	4.3

APPENDIX 5.6: E+P (PHASE 1) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 1)	
				CALC	CS	DATE	10/07/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/07/24
Major Street:	Street A			Critical Approach Speed (Major)		35	mph
Minor Street:	Street E			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **463** vpd Minor Street Future ADT = **463** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **463**	*1* **463**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **463**	*1* **463**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 6% **B** 4%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 1)	
				CALC	CS	DATE	10/07/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/07/24
Major Street:	Street B			Critical Approach Speed (Major)		35	mph
Minor Street:	Street E			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **170** vpd Minor Street Future ADT = **170** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **170**	*1* **170**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **170**	*1* **170**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more …..		2 CONDITIONS 80%		2 CONDITIONS 80%	
A	**B**				
2%	1%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 1)	
				CALC	CS	DATE	10/07/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/07/24
Major Street:	Street A			Critical Approach Speed (Major)		35	mph
Minor Street:	Street D			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **3,137** vpd Minor Street Future ADT = **670** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **3,137**	*1* **670**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **3,137**	*1* **670**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 28%	**B** 26%			

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 1)	
				CALC	CS	DATE	10/07/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/07/24
Major Street:	Street D			Critical Approach Speed (Major)		35	mph
Minor Street:	Street C			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **2,521** vpd Minor Street Future ADT = **807** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **2,521**	*1* **807**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **2,521**	*1* **807**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 32%	**B** 21%			

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 1)	
				CALC	CS	DATE	10/07/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/07/24
Major Street:	Street B			Critical Approach Speed (Major)		35	mph
Minor Street:	Street D			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **2,007** vpd Minor Street Future ADT = **1,285** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **2,007**	*1* **1,285**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **2,007**	*1* **1,285**	12,000	8,400	1,200 *	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 25% **B** 17%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

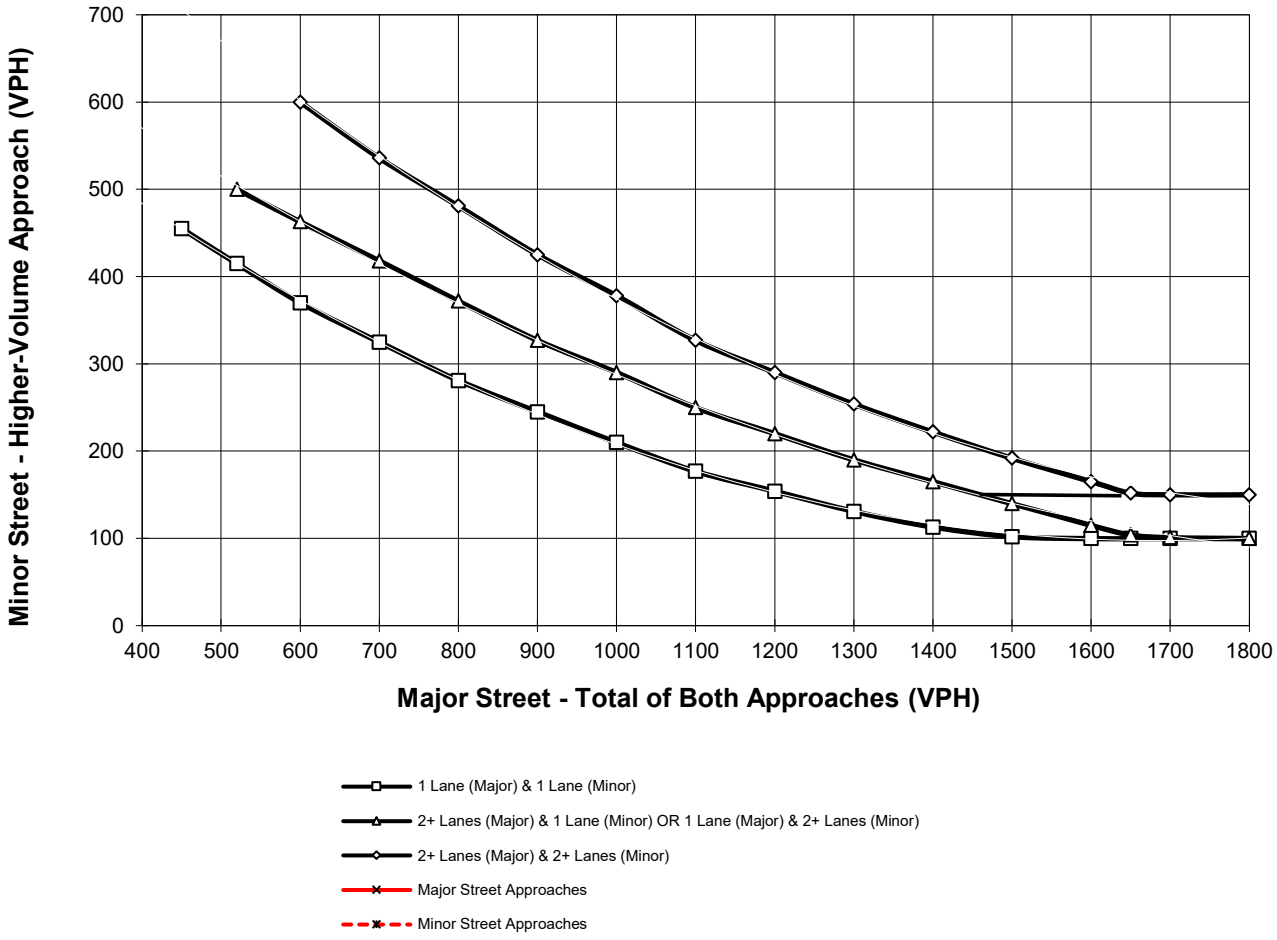
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 1) Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Ln.**
Total of Both Approaches (VPH) = **347**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **County Line Rd.**
High Volume Approach (VPH) = **18**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 1)	
				CALC	CS	DATE	10/07/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/07/24
Major Street:	Sandalwood Dr.			Critical Approach Speed (Major)		40	mph
Minor Street:	Street B			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **3,098** vpd Minor Street Future ADT = **3,098** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN: XX RURAL:

CONDITION A - Minimum Vehicular Volume

Satisfied: XX Not Satisfied:

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **3,098**	1 **3,098**	8,000	5,600	2,400 *	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied: Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **3,098**	1 **3,098**	12,000	8,400	1,200 *	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied: Not Satisfied: XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 39% B: 26%

2 CONDITIONS 80% 2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 1)	
				CALC	CS	DATE	10/07/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/07/24
Major Street:	Sandalwood Dr.			Critical Approach Speed (Major)		40	mph
Minor Street:	Street K			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **7,855** vpd Minor Street Future ADT = **1,737** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
XX Satisfied / XX Not Satisfied				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **7,855** / 1 **1,737**	8,000	5,600	2,400	1,680
2 + / 1	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / XX Not Satisfied				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **7,855** / 1 **1,737**	12,000	8,400	1,200 *	850
2 + / 1	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / XX Not Satisfied				
No one condition satisfied, but following conditions fulfilled 80% of more ….. A **72%** B **65%**	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 1)	
				CALC	CS	DATE	10/07/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/07/24
Major Street:	Sandalwood Dr.			Critical Approach Speed (Major)		40	mph
Minor Street:	Street J			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **11,173** vpd Minor Street Future ADT = **1,737** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
XX Satisfied / XX Not Satisfied				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **11,173** / 1 **1,737**	8,000 *	5,600	2,400	1,680
2 + / 1	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / XX Not Satisfied	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **11,173** / 1 **1,737**	12,000	8,400	1,200 *	850
2 + / 1	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / XX Not Satisfied	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 72% B: 93%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 1)	
				CALC	CS	DATE	10/07/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/07/24
Major Street:	Sandalwood Dr.			Critical Approach Speed (Major)		40	mph
Minor Street:	Roberts Rd.			Critical Approach Speed (Minor)		40	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **12,887** vpd Minor Street Future ADT = **799** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume					
Satisfied	Not Satisfied	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **12,887**	*1* **799**	8,000 *	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic					
Satisfied	Not Satisfied	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **12,887**	*1* **799**	12,000 *	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 33% **B** 67%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

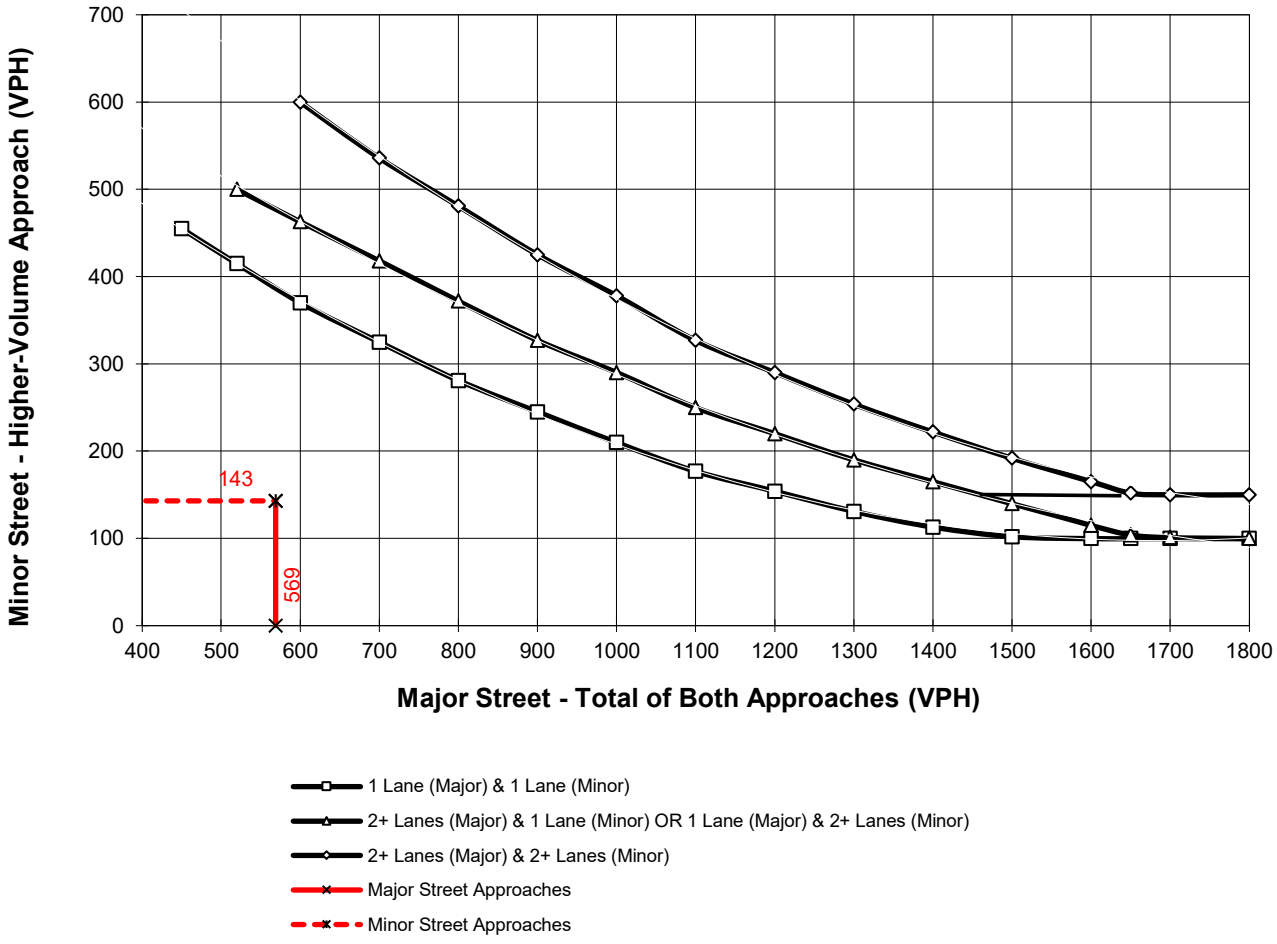
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 1) Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Rd.**
Total of Both Approaches (VPH) = **569**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **7th Pl.**
High Volume Approach (VPH) = **143**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

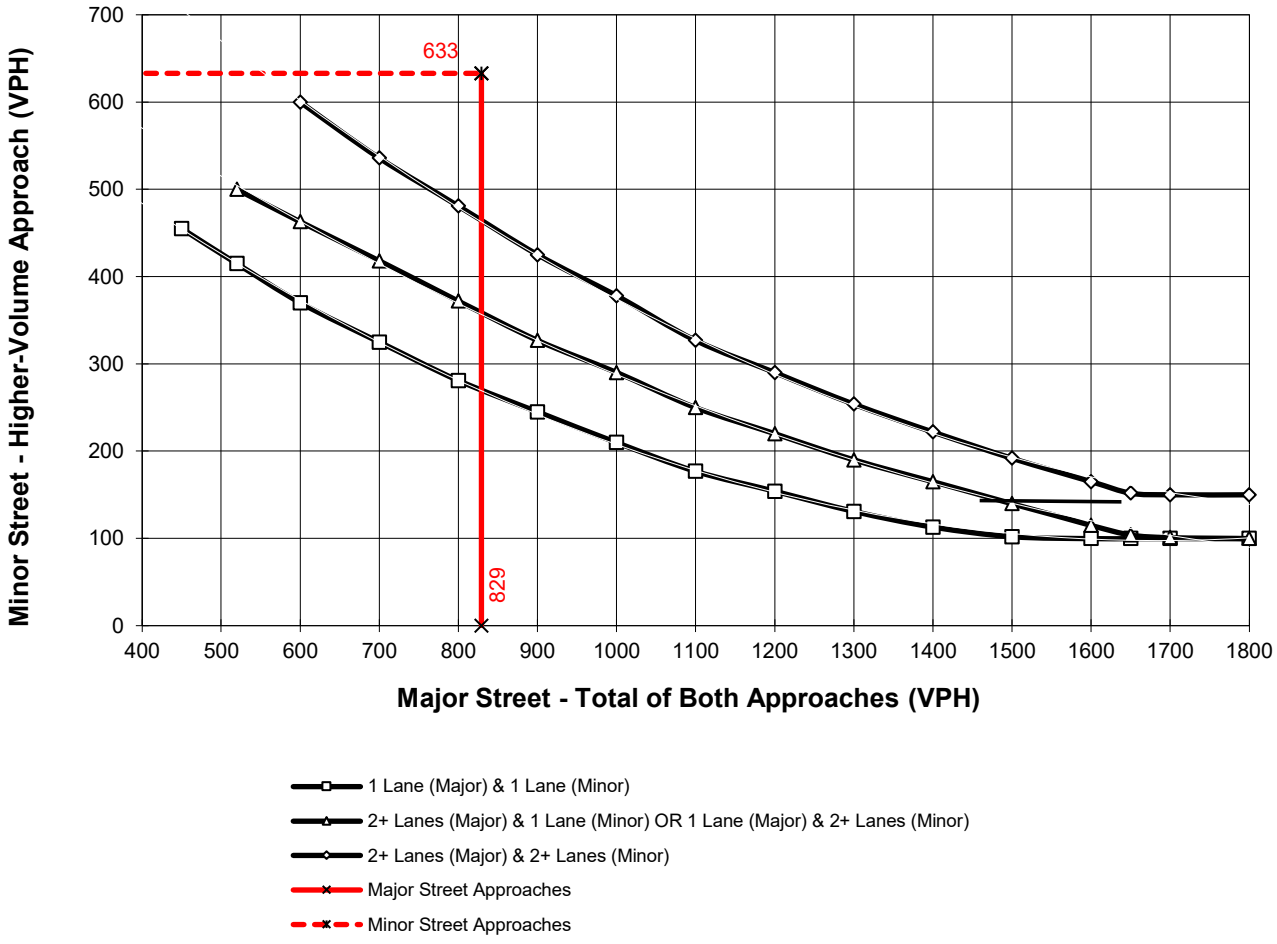
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 1) Conditions - Weekday AM Peak Hour**

Major Street Name = **Calimesa Bl.** Total of Both Approaches (VPH) = **829**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **I-10 Northbound Off-Ramp** High Volume Approach (VPH) = **633**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

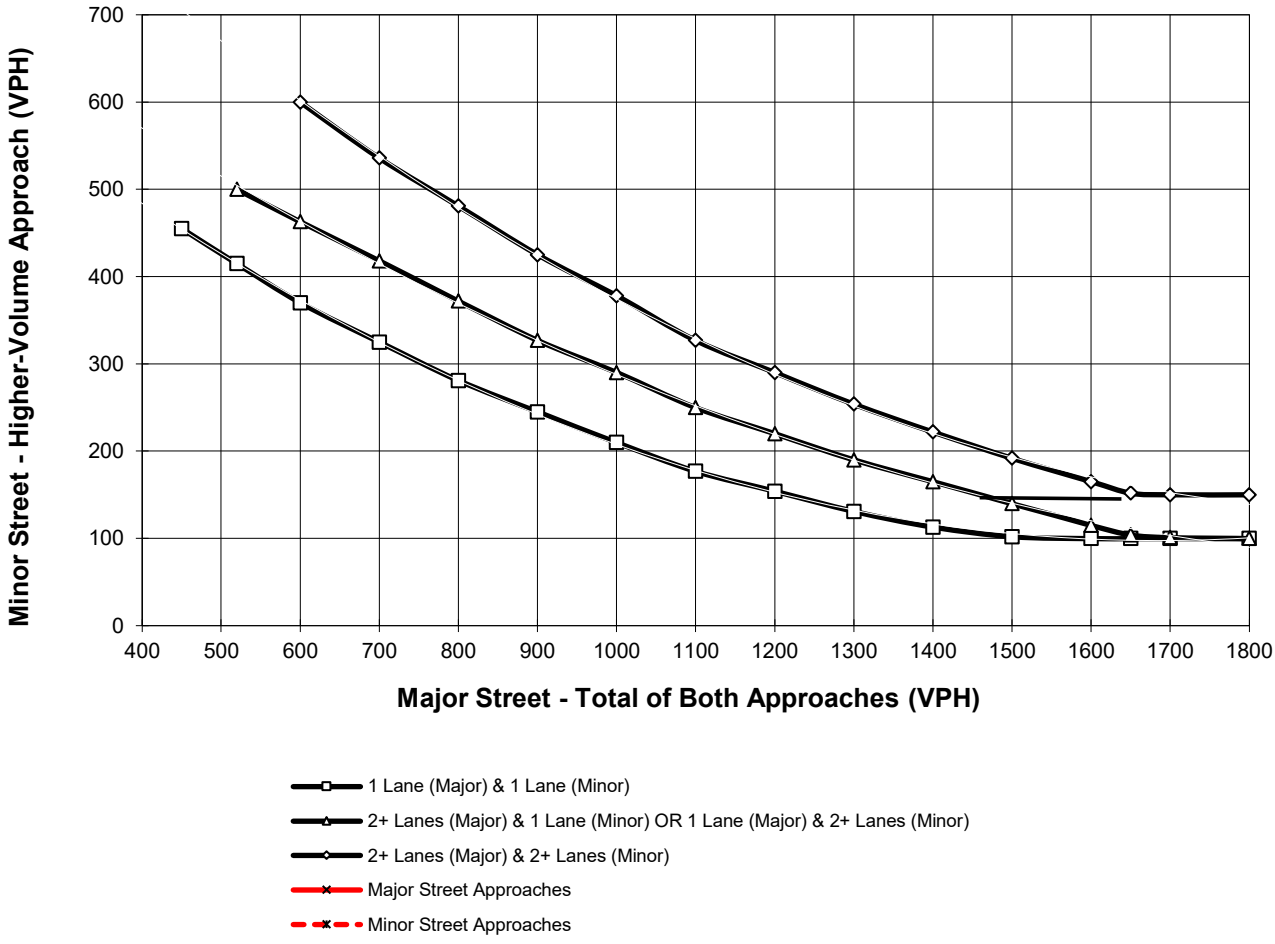
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 1) Conditions - Weekday PM Peak Hour**

Major Street Name = **Singleton Rd.**
Total of Both Approaches (VPH) = **18**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Roberts Rd.**
High Volume Approach (VPH) = **19**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

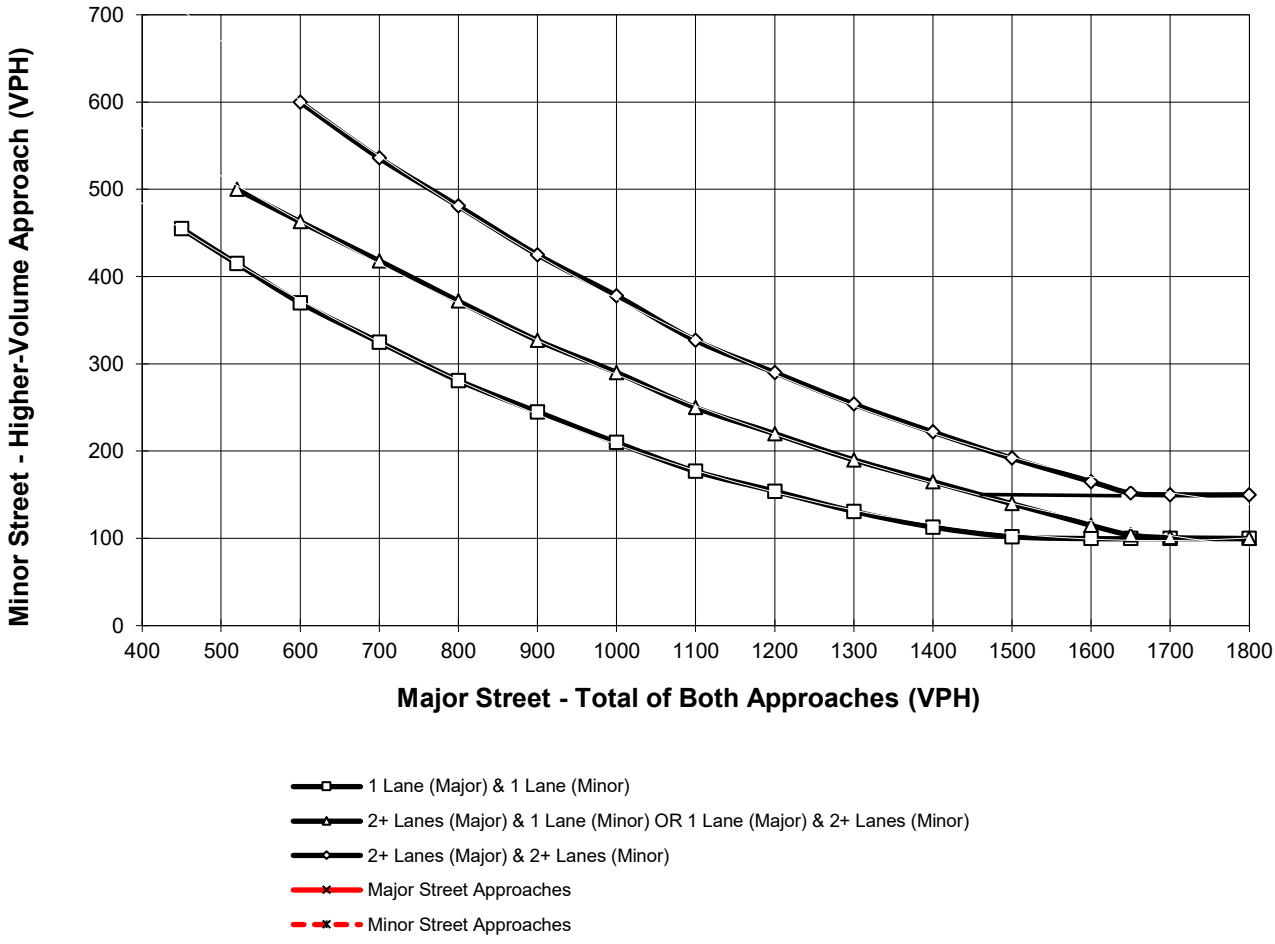
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 1) Conditions - Weekday PM Peak Hour**

Major Street Name = **I-10 Northbound Ramps** Total of Both Approaches (VPH) = **270**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Singleton Rd.** High Volume Approach (VPH) = **341**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 1) Conditions - Weekday AM Peak Hour**

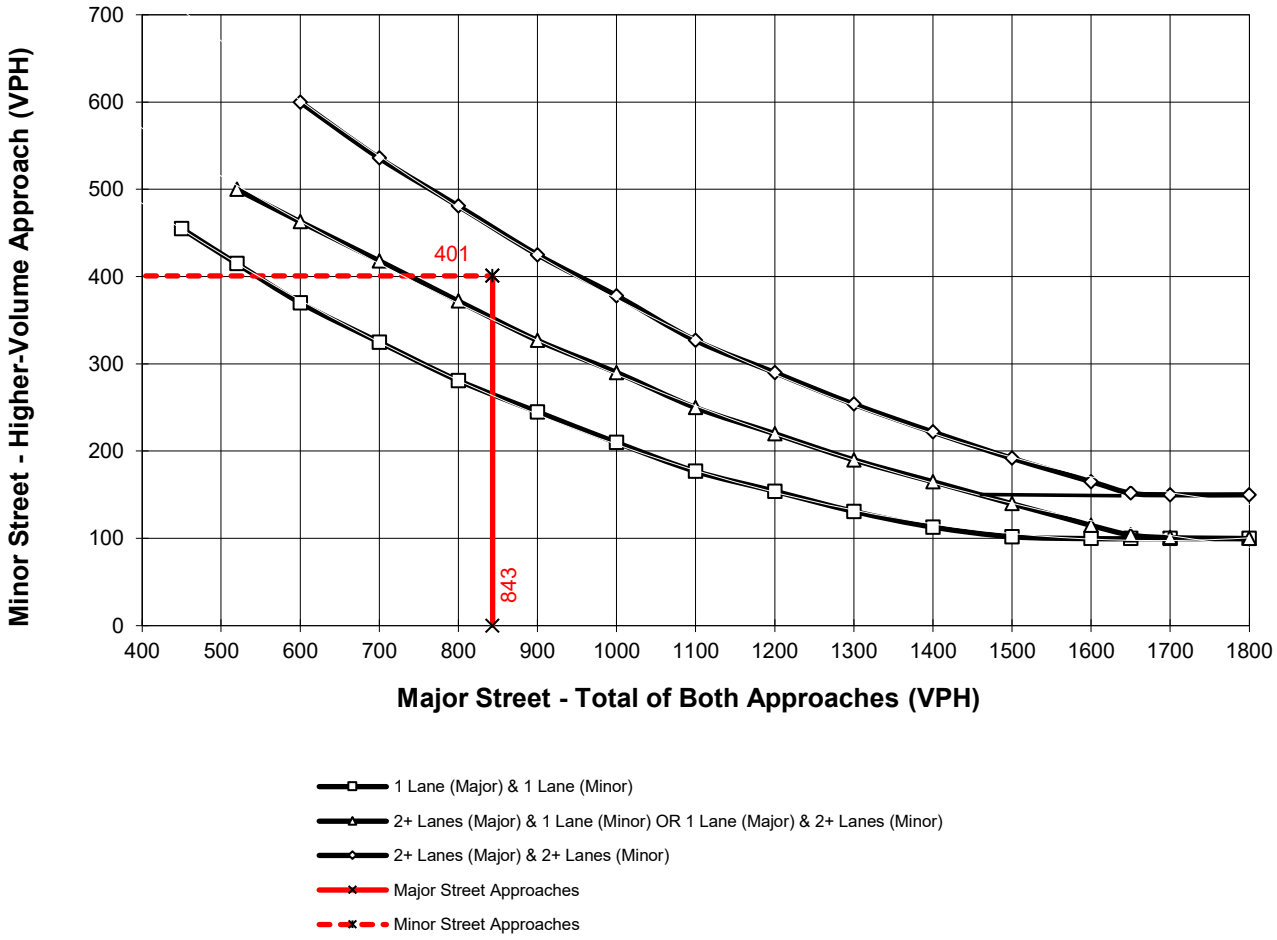
Major Street Name = **Street "B"**

Total of Both Approaches (VPH) = **843**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **School Driveway**

High Volume Approach (VPH) = **401**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 5.7: E+P (PHASE 2) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 2)	
				CALC	CS	DATE	10/10/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/10/24
Major Street:	Street A			Critical Approach Speed (Major)		35	mph
Minor Street:	Street E			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **414** vpd Minor Street Future ADT = **386** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume					
Satisfied	Not Satisfied	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **414**	*1* **386**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic					
Satisfied	Not Satisfied	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **414**	*1* **386**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 5%	**B** 3%			

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 2)	
				CALC	CS	DATE	10/10/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/10/24
Major Street:	Street B			Critical Approach Speed (Major)		35	mph
Minor Street:	Street E			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **1,169** vpd Minor Street Future ADT = **1,169** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **1,169**	*1* **1,169**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **1,169**	*1* **1,169**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 15% **B** 10%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 2)	
				CALC	CS	DATE	10/10/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/10/24
Major Street:	Street A			Critical Approach Speed (Major)		35	mph
Minor Street:	Street D			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **4,468** vpd Minor Street Future ADT = **1,672** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **4,468**	*1* **1,672**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **4,468**	*1* **1,672**	12,000	8,400	1,200 *	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 56% **B** 37%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 2)	
				CALC	CS	DATE	10/10/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/10/24
Major Street:	Street D			Critical Approach Speed (Major)		35	mph
Minor Street:	Street C			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **4,274** vpd Minor Street Future ADT = **958** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **4,274**	*1* **958**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **4,274**	*1* **958**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 40%	**B** 36%			

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 2)	
				CALC	CS	DATE	10/10/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/10/24
Major Street:	Street B			Critical Approach Speed (Major)		35	mph
Minor Street:	Street D			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **5,400** vpd Minor Street Future ADT = **2,006** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **5,400**	*1* **2,006**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **5,400**	*1* **2,006**	12,000	8,400	1,200 *	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	A: 68% B: 45%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

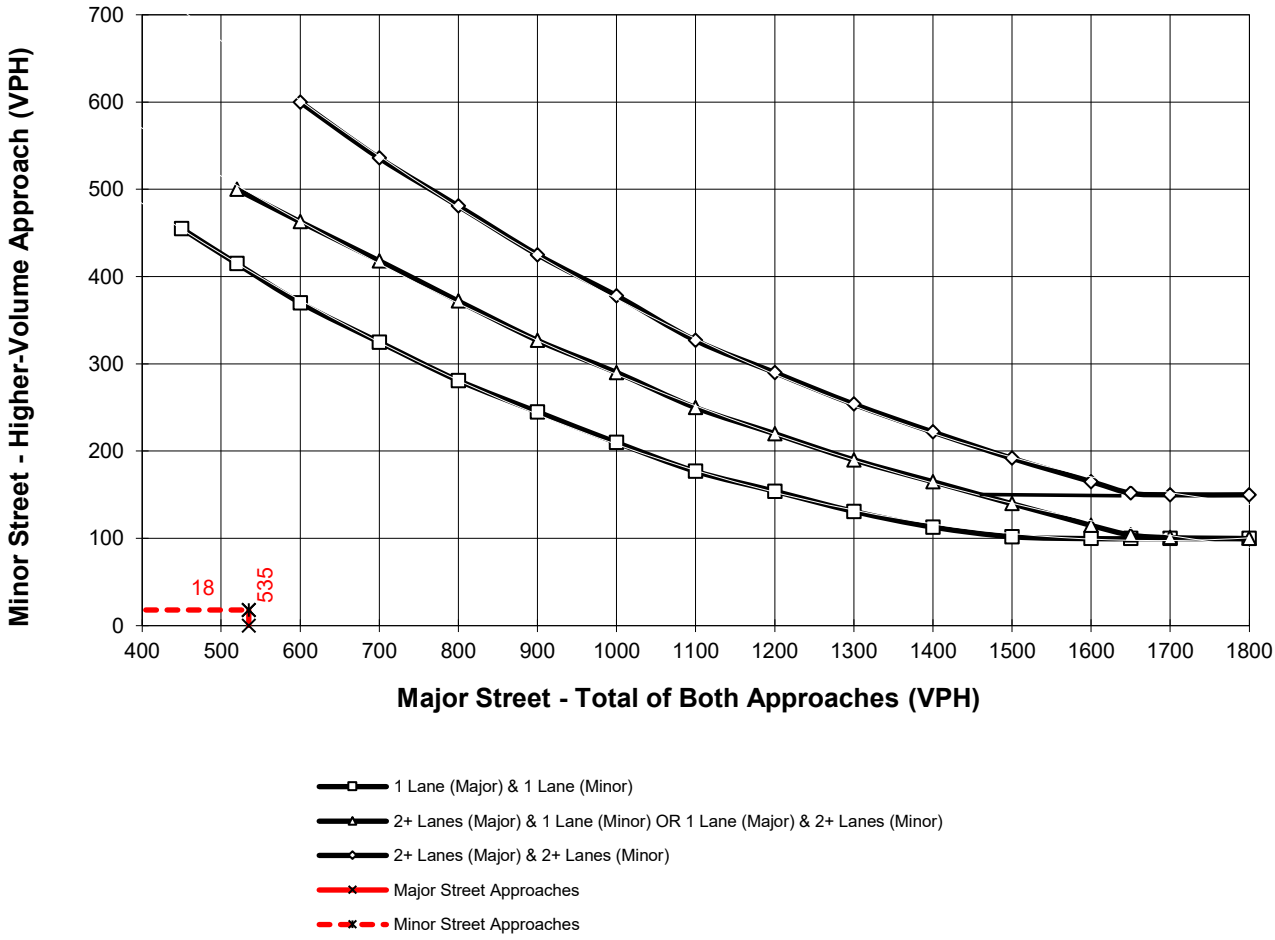
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 2) Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Ln.**
Total of Both Approaches (VPH) = **535**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **County Line Rd.**
High Volume Approach (VPH) = **18**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 2)	
				CALC	CS	DATE	10/10/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/10/24
Major Street:	Sandalwood Dr.			Critical Approach Speed (Major)		40	mph
Minor Street:	Street B			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **4,182** vpd Minor Street Future ADT = **4,182** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume					
Satisfied	Not Satisfied	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **4,182**	*1* **4,182**	9,600	6,720	2,400 *	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic					
Satisfied	Not Satisfied	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **4,182**	*1* **4,182**	14,400	10,080	1,200 *	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 44% **B** 29%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 2)	
				CALC	CS	DATE	10/10/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/10/24
Major Street:	Sandalwood Dr.			Critical Approach Speed (Major)		40	mph
Minor Street:	Street K			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **3** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **11,238** vpd Minor Street Future ADT = **2,996** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume					
Satisfied	Not Satisfied	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
XX					
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **11,238**	*1* **2,996**	9,600 *	6,720	2,400 *	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic					
Satisfied	Not Satisfied	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **11,238**	*1* **2,996**	14,400	10,080	1,200 *	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 100% **B** 78%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (Phase 2)
				CALC CS	DATE 10/10/24
Jurisdiction: City of Calimesa				CHK CS	DATE 10/10/24
Major Street: **Sandalwood Dr.**				Critical Approach Speed (Major)	40 mph
Minor Street: **Street J**				Critical Approach Speed (Minor)	30 mph

Major Street Approach Lanes = **3** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **18,468** vpd Minor Street Future ADT = **4,478** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
XX Satisfied / Not Satisfied				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / *1*	8,000	5,600	2,400	1,680
2 + **18,468** / *1* **4,478**	9,600 *	6,720	2,400 *	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied				
XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / *1*	12,000	8,400	1,200	850
2 + **18,468** / *1* **4,478**	14,400 *	10,080	1,200 *	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied				
XX				
No one condition satisfied, but following conditions fulfilled 80% of more ….. A 100% B 100%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (Phase 2)
				CALC CS	DATE 10/10/24
Jurisdiction: City of Calimesa				CHK CS	DATE 10/10/24
Major Street: Sandalwood Dr.				Critical Approach Speed (Major)	40 mph
Minor Street: Roberts Rd.				Critical Approach Speed (Minor)	40 mph

Major Street Approach Lanes = **3** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **23,853** vpd Minor Street Future ADT = **1,667** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [ ]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population ..... [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
XX					
CONDITION A - Minimum Vehicular Volume					
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **23,853**	*1* **1,667**	9,600 *	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic					
Satisfied	Not Satisfied				
XX					
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **23,853**	*1* **1,667**	14,400 *	10,080	1,200 *	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more	A: 69% B: 100%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

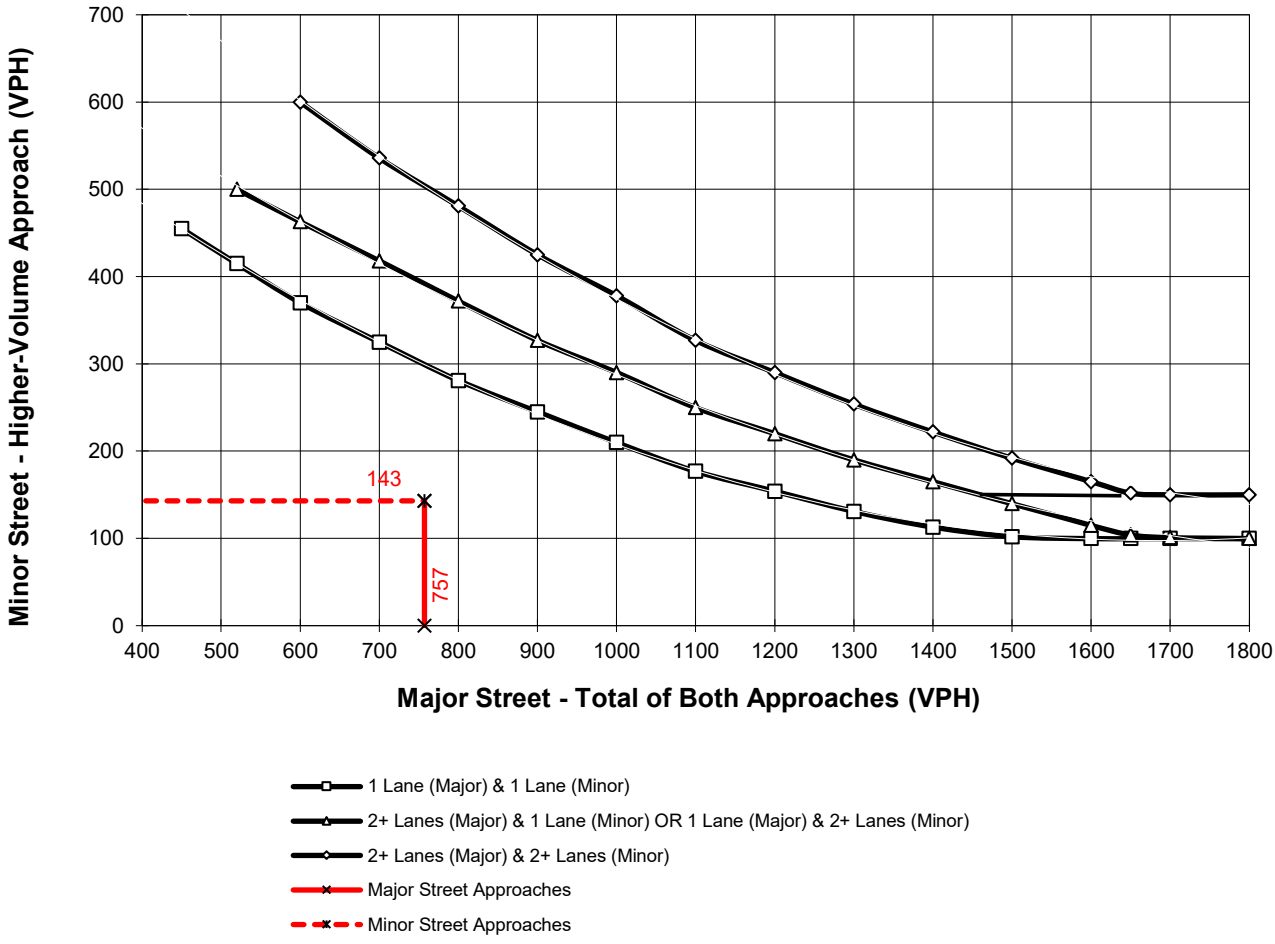
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 2) Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Rd.**
Total of Both Approaches (VPH) = **757**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **7th Pl.**
High Volume Approach (VPH) = **143**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

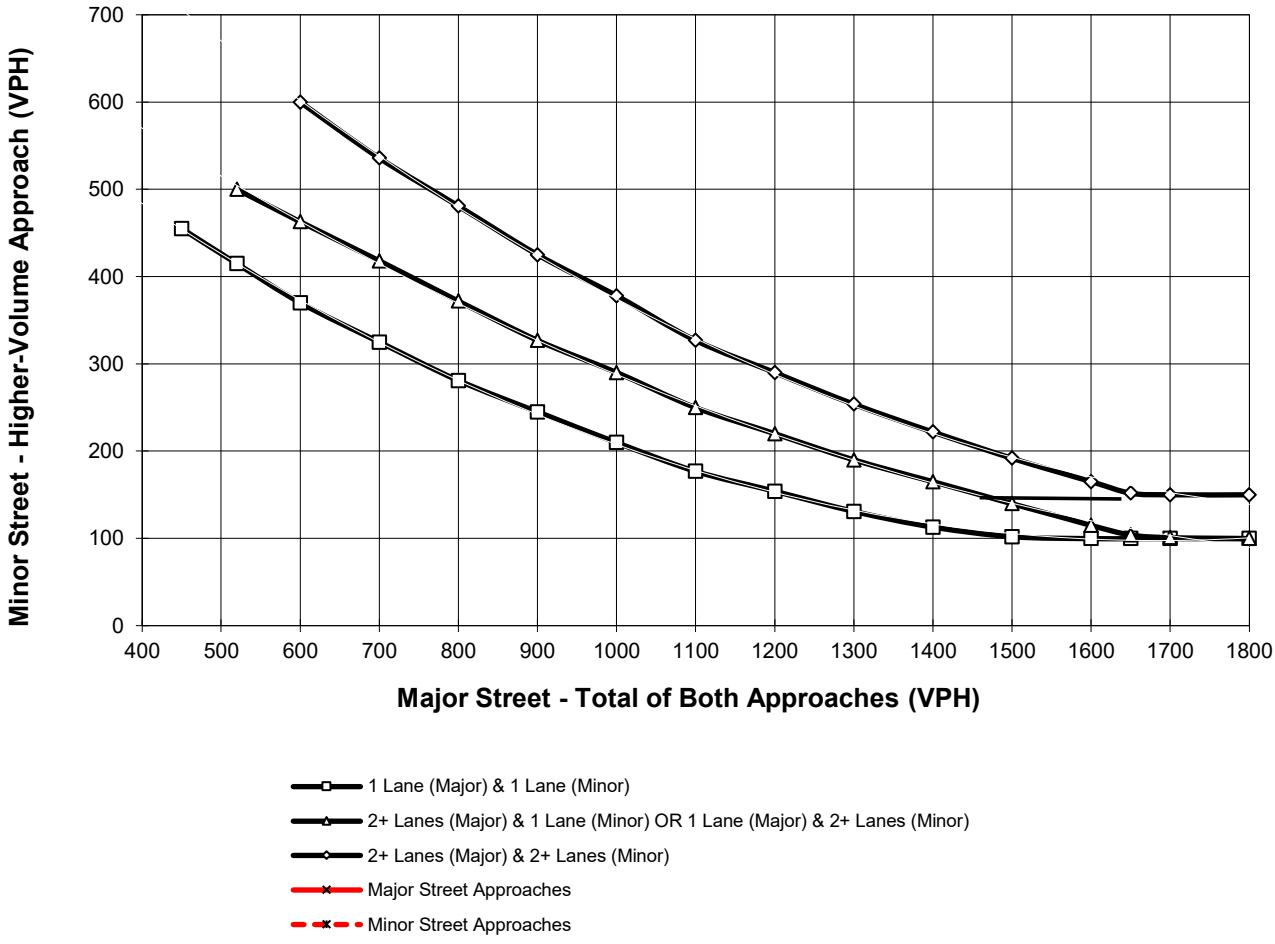
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 2) Conditions - Weekday PM Peak Hour**

Major Street Name = **Singleton Rd.**
Total of Both Approaches (VPH) = **19**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Roberts Rd.**
High Volume Approach (VPH) = **14**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

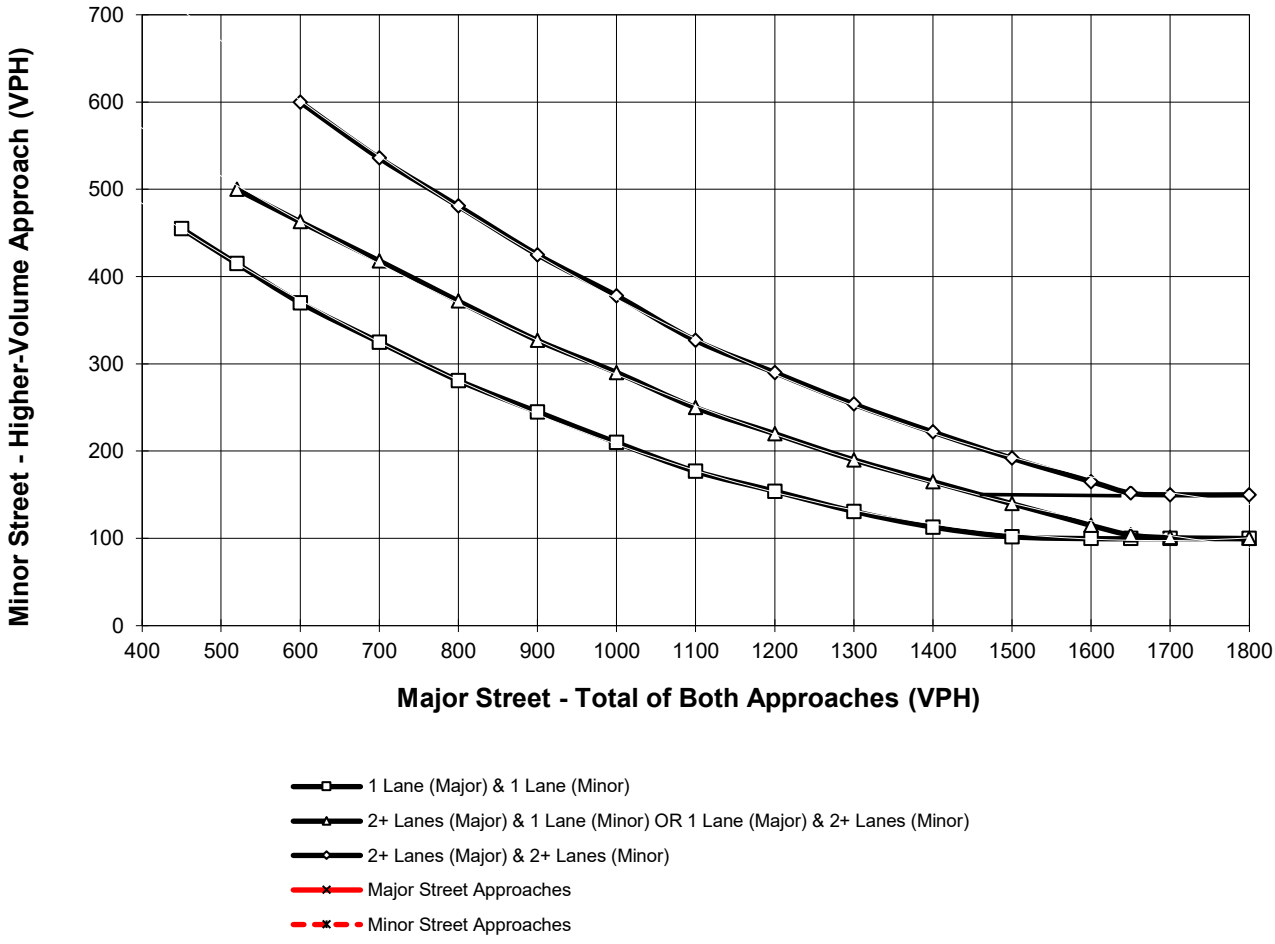
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 2) Conditions - Weekday PM Peak Hour**

Major Street Name = **I-10 Northbound Ramps** Total of Both Approaches (VPH) = **270**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Singleton Rd.** High Volume Approach (VPH) = **341**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 5.8: E+P (PHASE 3) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (Phase 3)
				CALC CS	DATE 10/10/24
Jurisdiction: City of Calimesa				CHK CS	DATE 10/10/24
Major Street: **Street A**				Critical Approach Speed (Major)	35 mph
Minor Street: **Street E**				Critical Approach Speed (Minor)	30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **3,384** vpd Minor Street Future ADT = **702** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied: XX / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street: *1* **3,384** / Minor Street: *1* **702**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: *1* **3,384** / Minor Street: *1* **702**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 29% B: 28%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 3)	
				CALC	CS	DATE	10/10/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/10/24
Major Street:	Street B			Critical Approach Speed (Major)		35	mph
Minor Street:	Street E			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **1,861** vpd Minor Street Future ADT = **589** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **1,861**	*1* **589**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **1,861**	*1* **589**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 23%	**B** 16%			

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (Phase 3)
				CALC CS	DATE 10/10/24
Jurisdiction: **City of Calimesa**				CHK CS	DATE 10/10/24
Major Street: **Street A**				Critical Approach Speed (Major)	35 mph
Minor Street: **Street D**				Critical Approach Speed (Minor)	30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **6,752** vpd Minor Street Future ADT = **1,978** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
XX	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **6,752** / *1* **1,978**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **6,752** / *1* **1,978**	12,000	8,400	1,200 *	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 82% B: 56%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (Phase 3)
				CALC CS	DATE 10/10/24
Jurisdiction: City of Calimesa				CHK CS	DATE 10/10/24
Major Street: **Street D**				Critical Approach Speed (Major)	35 mph
Minor Street: **Street C**				Critical Approach Speed (Minor)	30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **3,914** vpd Minor Street Future ADT = **1,514** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
XX				
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **3,914** / *1* **1,514**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **3,914** / *1* **1,514**	12,000	8,400	1,200 *	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 49% B: 33%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (Phase 3)
				CALC CS	DATE 10/10/24
Jurisdiction: City of Calimesa				CHK CS	DATE 10/10/24
Major Street: **Street B**				Critical Approach Speed (Major)	35 mph
Minor Street: **Street D**				Critical Approach Speed (Minor)	30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **5,271** vpd Minor Street Future ADT = **1,553** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
XX				
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **5,271** / 1 **1,553**	8,000	5,600	2,400	1,680
2 + / 1	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **5,271** / 1 **1,553**	12,000	8,400	1,200 *	850
2 + / 1	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 65% B: 44%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

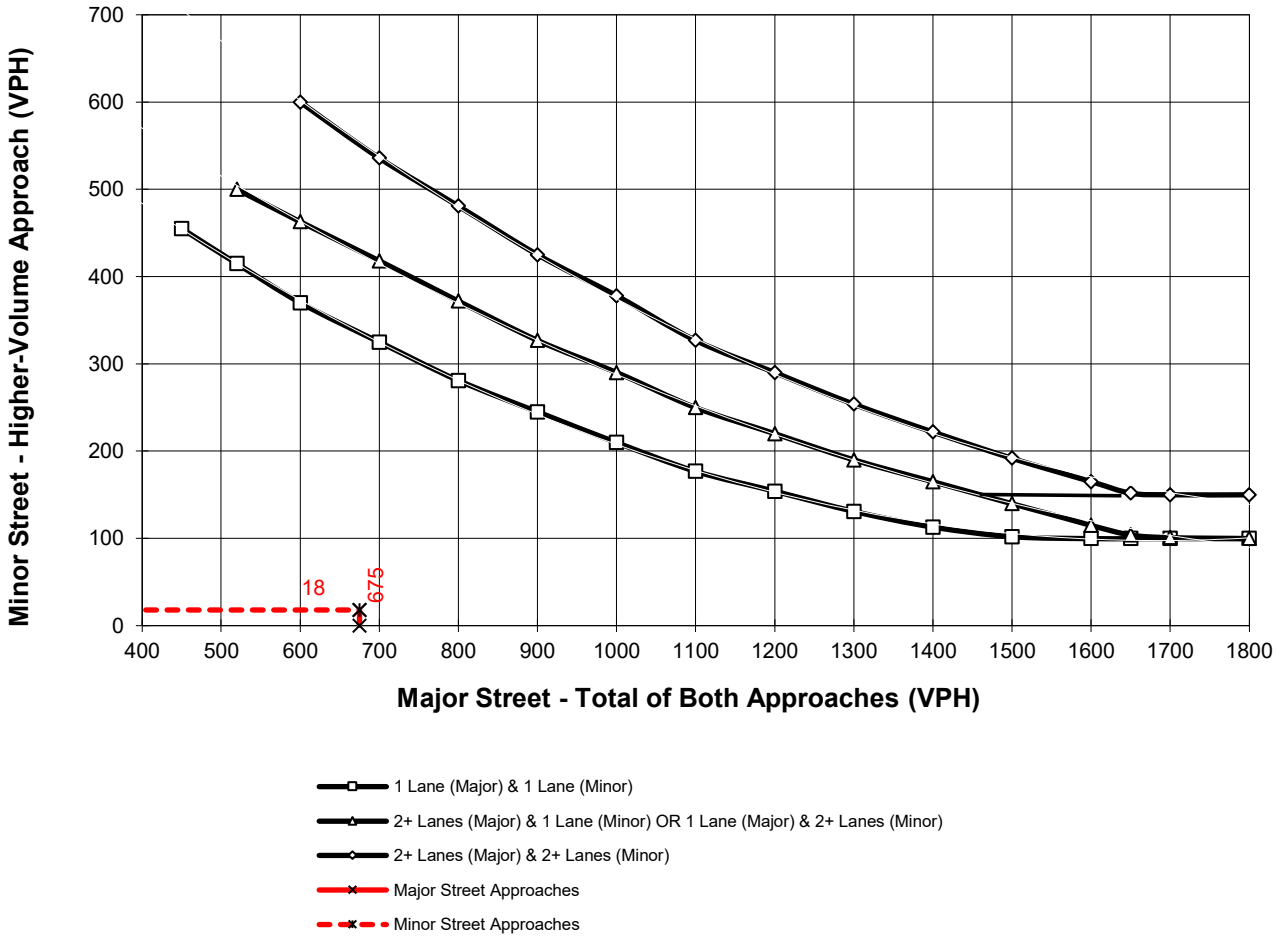
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 3) Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Ln.**
Total of Both Approaches (VPH) = **675**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **County Line Rd.**
High Volume Approach (VPH) = **18**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

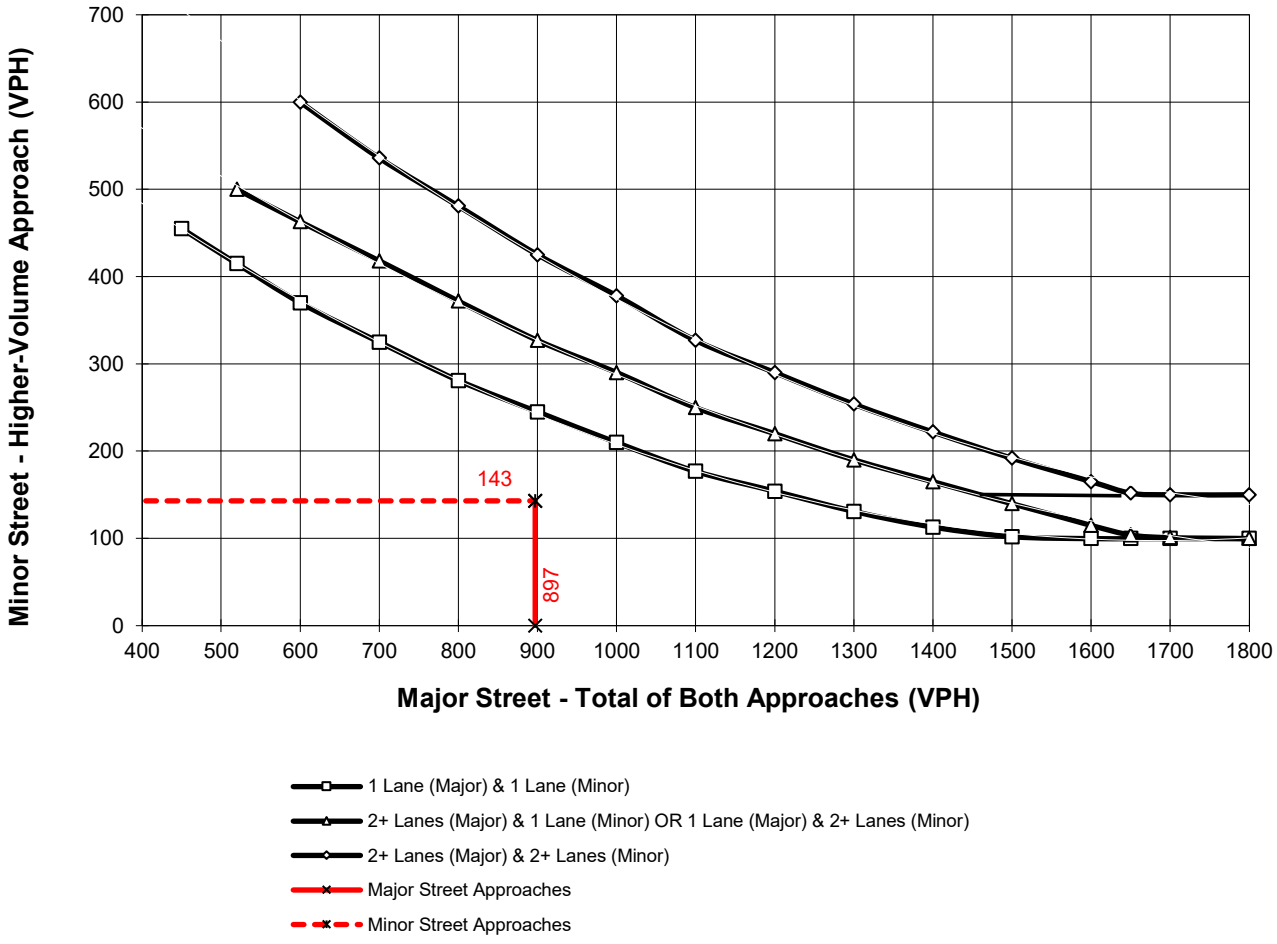
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 3) Conditions - Weekday AM Peak Hour**

Major Street Name = **7th Pl.**
Total of Both Approaches (VPH) = **897**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **County Line Rd.**
High Volume Approach (VPH) = **143**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

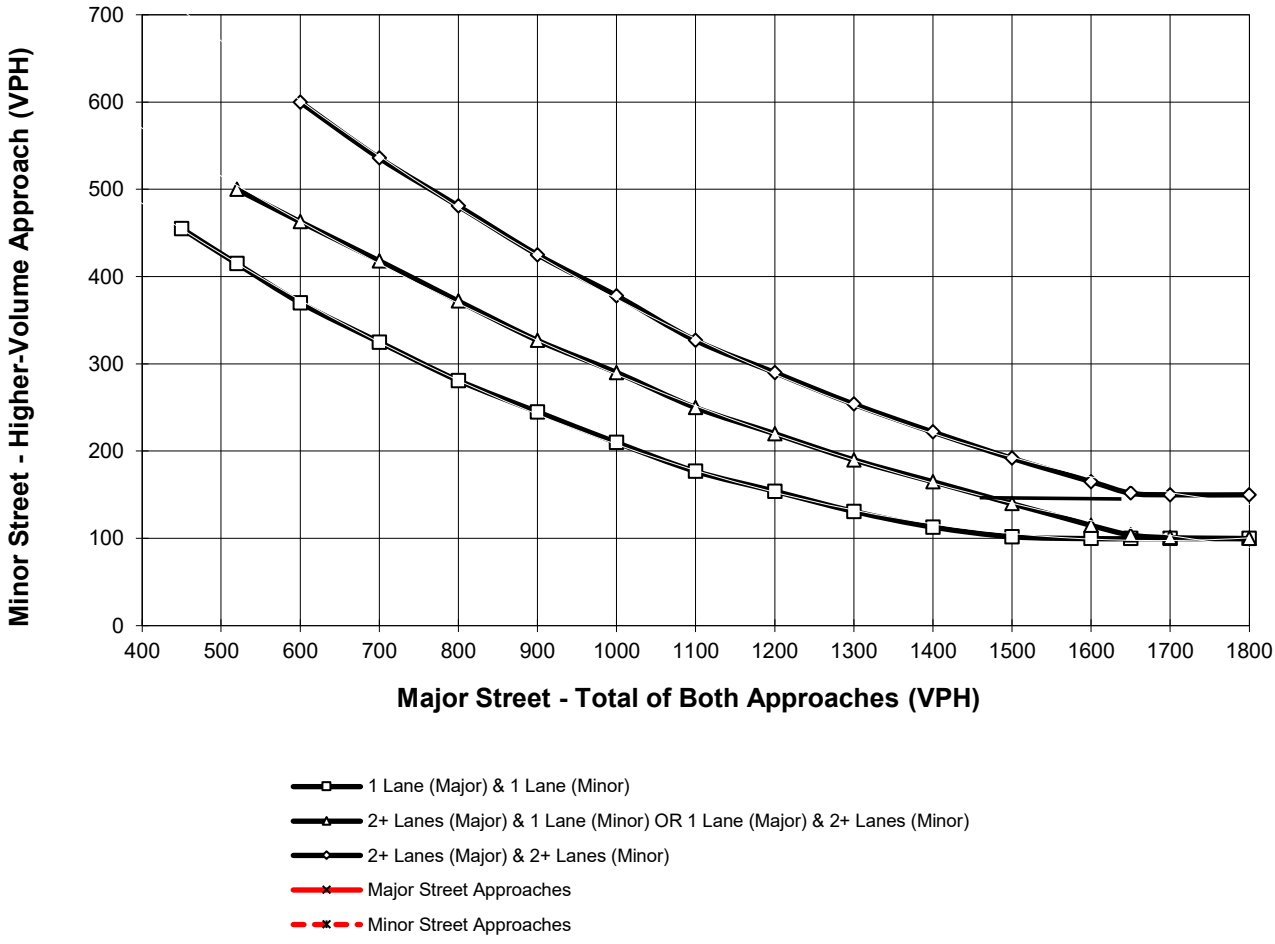
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 3) Conditions - Weekday PM Peak Hour**

Major Street Name = **Singleton Rd.**
Total of Both Approaches (VPH) = **19**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Roberts Rd.**
High Volume Approach (VPH) = **14**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

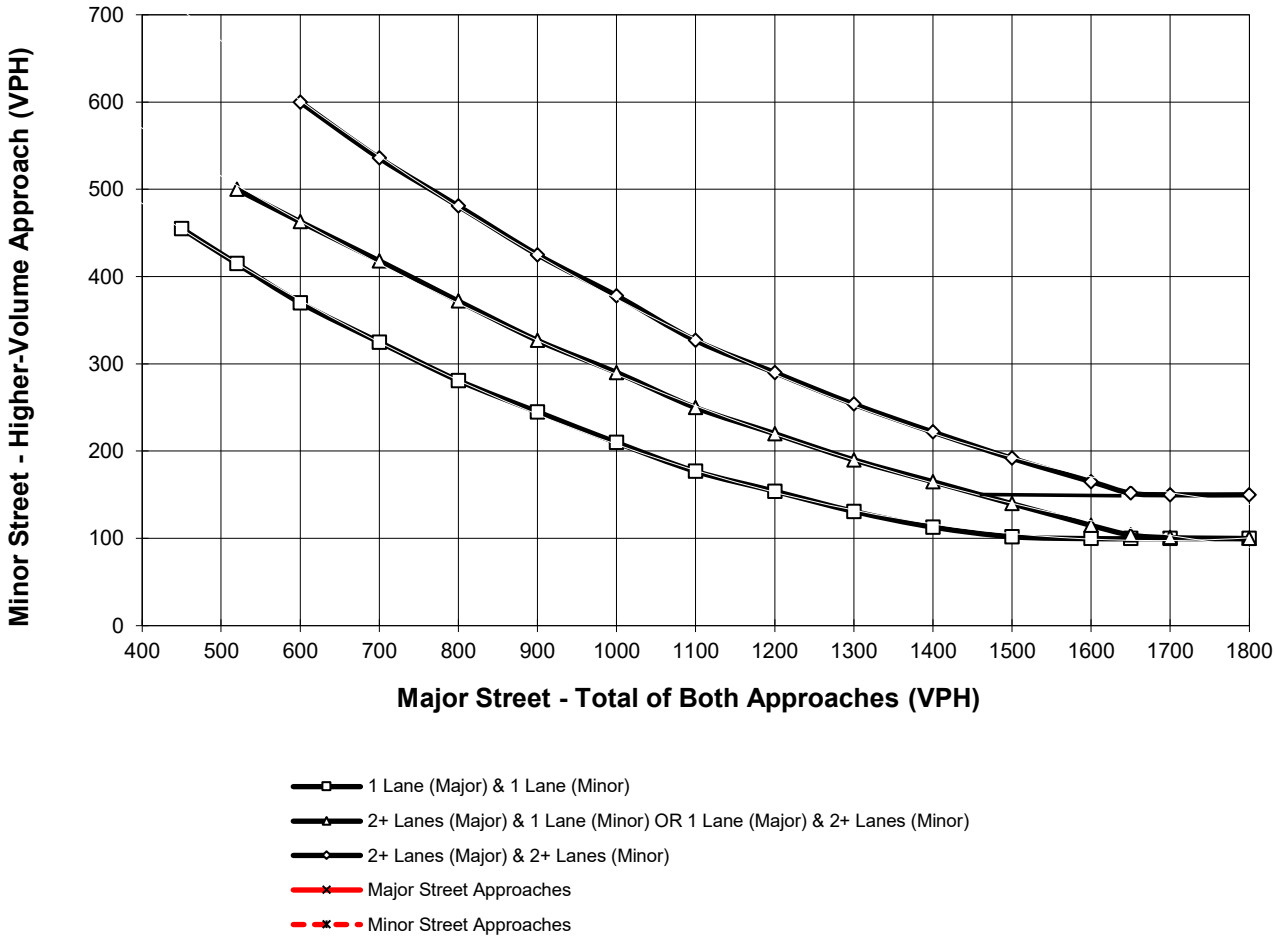
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 3) Conditions - Weekday PM Peak Hour**

Major Street Name = **I-10 Northbound Ramps** Total of Both Approaches (VPH) = **270**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Singleton Rd.** High Volume Approach (VPH) = **341**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 5.9: E+P (PHASE 4) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (Phase 4)
				CALC CS	DATE 10/10/24
Jurisdiction: City of Calimesa				CHK CS	DATE 10/10/24
Major Street: **Street A**				Critical Approach Speed (Major)	35 mph
Minor Street: **Street E**				Critical Approach Speed (Minor)	30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **5,804** vpd Minor Street Future ADT = **558** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied: XX / XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **5,804** / *1* **558**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **5,804** / *1* **558**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 23% B: 47%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 4)	
				CALC	CS	DATE	10/10/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/10/24
Major Street:	Street B			Critical Approach Speed (Major)		35	mph
Minor Street:	Street E			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **5,049** vpd Minor Street Future ADT = **735** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **5,049**	*1* **735**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **5,049**	*1* **735**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 31%	**B** 42%			

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Phase 4)	
				CALC	CS	DATE	10/10/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/10/24
Major Street:	Street A			Critical Approach Speed (Major)		35	mph
Minor Street:	Street D			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **8,759** vpd Minor Street Future ADT = **2,187** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population ..... [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **8,759**	*1* **2,187**	8,000 *	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **8,759**	*1* **2,187**	12,000	8,400	1,200 *	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more		2 CONDITIONS 80%		2 CONDITIONS 80%	
A	**B**				
91%	**73%**				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (Phase 4)
				CALC CS	DATE 10/10/24
Jurisdiction: City of Calimesa				CHK CS	DATE 10/10/24
Major Street: **Street D**				Critical Approach Speed (Major)	35 mph
Minor Street: **Street C**				Critical Approach Speed (Minor)	30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **6,118** vpd Minor Street Future ADT = **1,183** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
XX	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **6,118** / *1* **1,183**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **6,118** / *1* **1,183**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 49% B: 51%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (Phase 4)
				CALC CS	DATE 10/10/24
Jurisdiction: City of Calimesa				CHK CS	DATE 10/10/24
Major Street: **Street B**				Critical Approach Speed (Major)	35 mph
Minor Street: **Street D**				Critical Approach Speed (Minor)	30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **8,971** vpd Minor Street Future ADT = **3,511** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied	Urban	Rural	Urban	Rural
XX					
Number of lanes for moving traffic on each approach					
Major Street	Minor Street				
1 **8,971**	*1* **3,511**	8,000 *	5,600	2,400 *	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied	Urban	Rural	Urban	Rural
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street				
1 **8,971**	*1* **3,511**	12,000	8,400	1,200 *	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 100% **B** 75%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

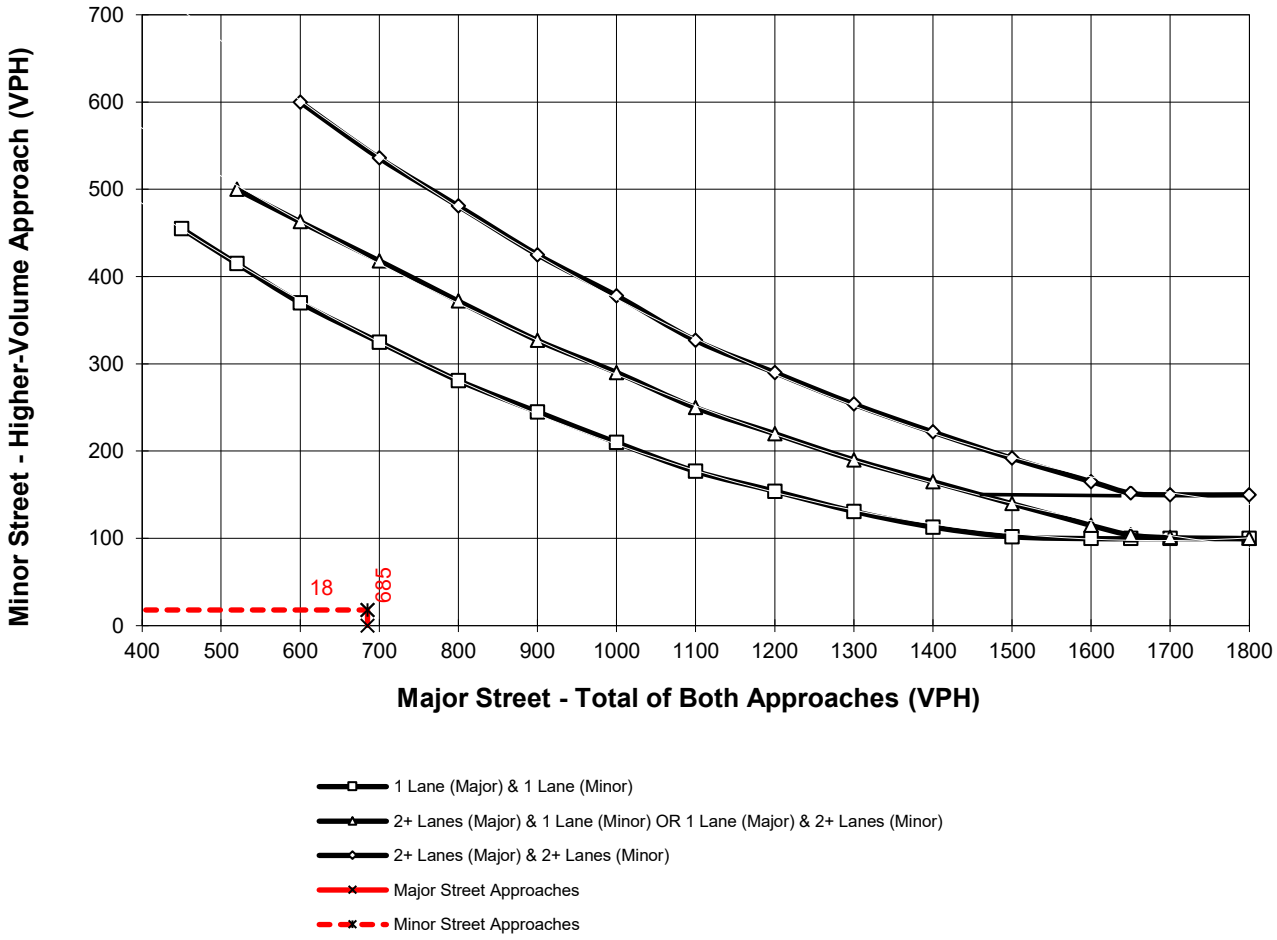
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 4) Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Ln.**
Total of Both Approaches (VPH) = **685**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **County Line Rd.**
High Volume Approach (VPH) = **18**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

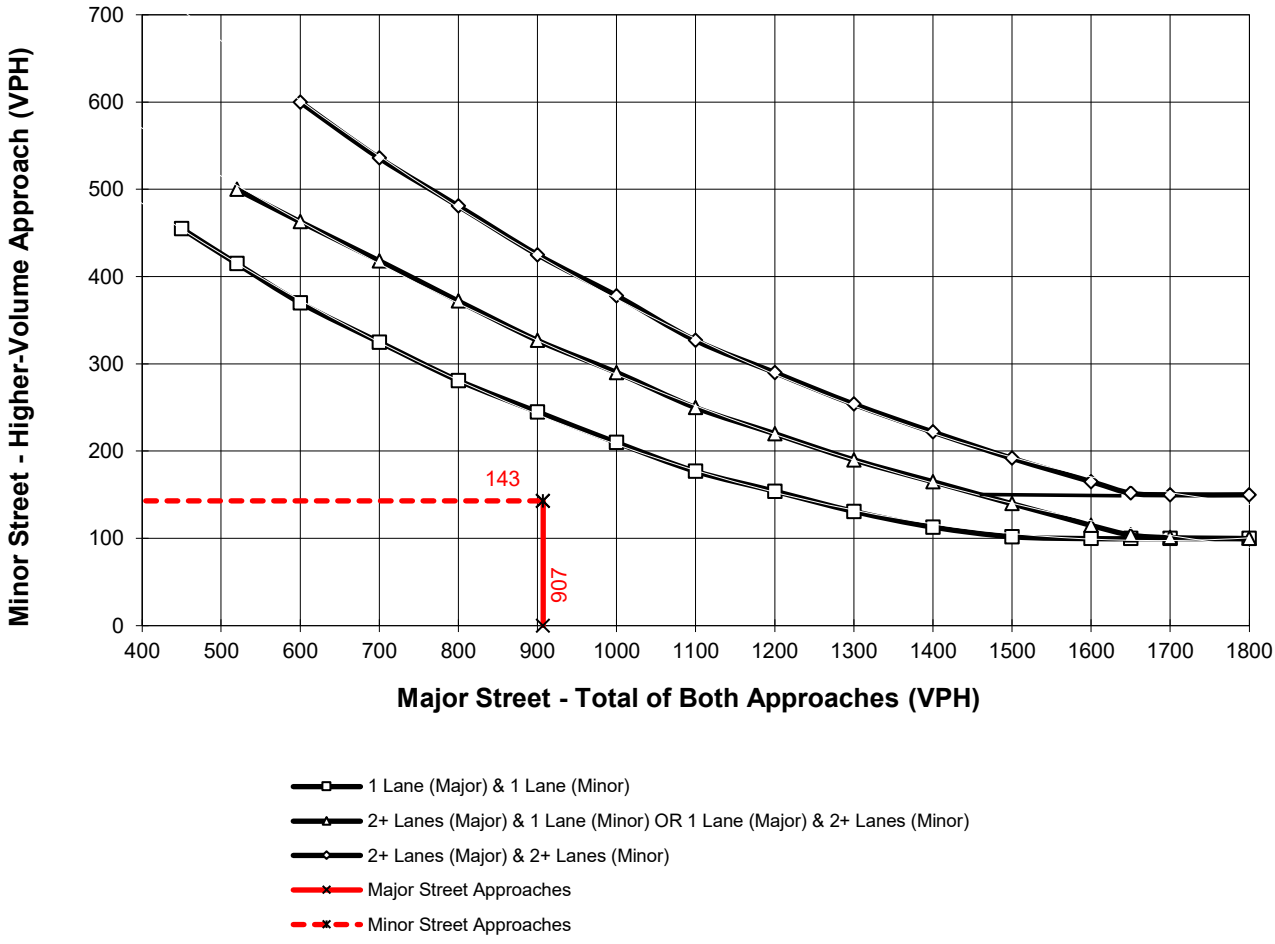
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 4) Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Rd.**
Total of Both Approaches (VPH) = **907**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **7th Pl.**
High Volume Approach (VPH) = **143**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

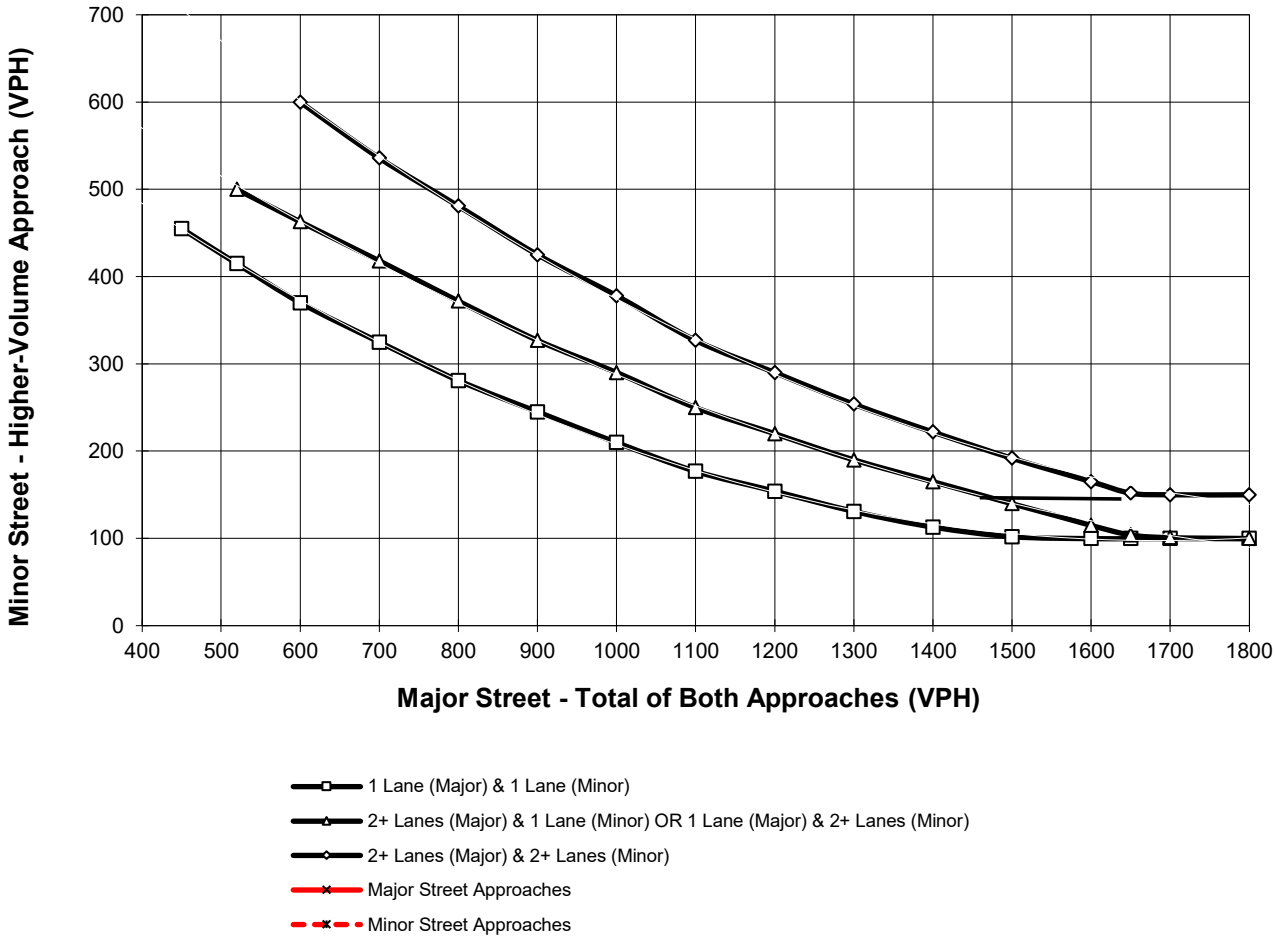
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 4) Conditions - Weekday PM Peak Hour**

Major Street Name = **Singleton Rd.**
Total of Both Approaches (VPH) = **19**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Roberts Rd.**
High Volume Approach (VPH) = **14**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

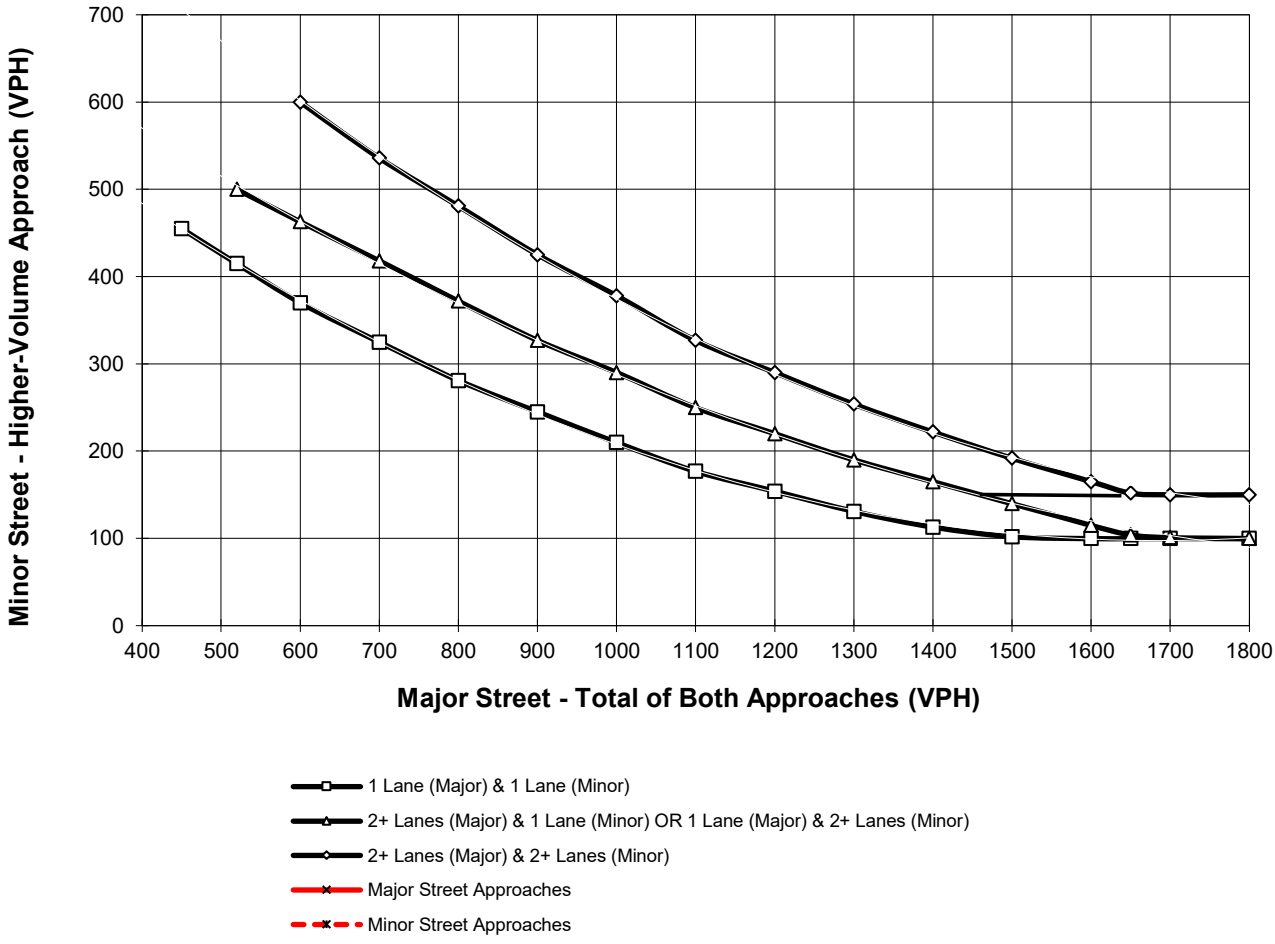
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Phase 4) Conditions - Weekday PM Peak Hour**

Major Street Name = **I-10 Northbound Ramps** Total of Both Approaches (VPH) = **270**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Singleton Rd.** High Volume Approach (VPH) = **341**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 5.10: E+P (PROJECT BUILDOUT) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Buildout)	
				CALC	CS	DATE	10/10/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/10/24
Major Street:	Street A			Critical Approach Speed (Major)		35	mph
Minor Street:	Street E			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **8,970** vpd Minor Street Future ADT = **276** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **8,970** / 1 **276**	8,000 *	5,600	2,400	1,680
2 + / 1	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **8,970** / 1 **276**	12,000	8,400	1,200	850
2 + / 1	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 12% B: 23%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Buildout)
				CALC CS	DATE	10/10/24
Jurisdiction: City of Calimesa				CHK CS	DATE	10/10/24
Major Street: **Street B**				Critical Approach Speed (Major)		35 mph
Minor Street: **Street E**				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **10,773** vpd Minor Street Future ADT = **763** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **10,773**	*1* **763**	8,000 *	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **10,773**	*1* **763**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 32%	**B** 64%			

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Buildout)	
				CALC	CS	DATE	10/10/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/10/24
Major Street:	Street A			Critical Approach Speed (Major)		35	mph
Minor Street:	Street D			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **8,944** vpd Minor Street Future ADT = **1,694** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **8,944**	*1* **1,694**	8,000 *	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **8,944**	*1* **1,694**	12,000	8,400	1,200 *	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 71%	**B** 75%			

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (Buildout)	
				CALC	CS	DATE	10/10/24
Jurisdiction:	City of Calimesa			CHK	CS	DATE	10/10/24
Major Street:	Street D			Critical Approach Speed (Major)		35	mph
Minor Street:	Street C			Critical Approach Speed (Minor)		30	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **4,737** vpd Minor Street Future ADT = **1,190** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
XX Satisfied / XX Not Satisfied				
Number of lanes for moving traffic on each approach				
Major Street: 1 **4,737** / Minor Street: 1 **1,190**	8,000	5,600	2,400	1,680
Major Street: 2 + / Minor Street: 1	9,600	6,720	2,400	1,680
Major Street: 2 + / Minor Street: 2 +	9,600	6,720	3,200	2,240
Major Street: 1 / Minor Street: 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / XX Not Satisfied				
Number of lanes for moving traffic on each approach	Urban	Rural	Urban	Rural
Major Street: 1 **4,737** / Minor Street: 1 **1,190**	12,000	8,400	1,200	850
Major Street: 2 + / Minor Street: 1	14,400	10,080	1,200	850
Major Street: 2 + / Minor Street: 2 +	14,400	10,080	1,600	1,120
Major Street: 1 / Minor Street: 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / XX Not Satisfied	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 50% **B** 39%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

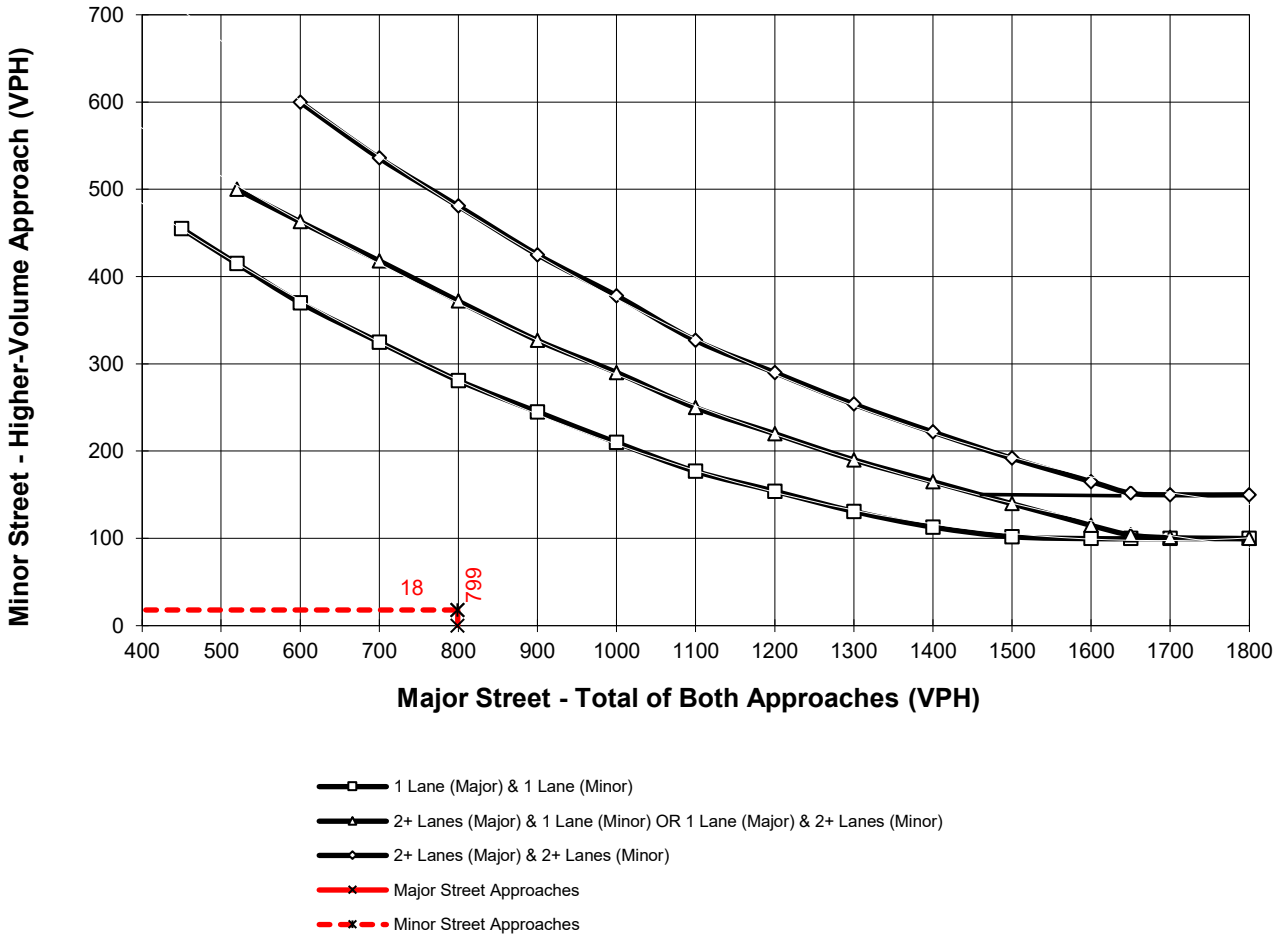
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Buildout) Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Ln.**
Total of Both Approaches (VPH) = **799**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **County Line Rd.**
High Volume Approach (VPH) = **18**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

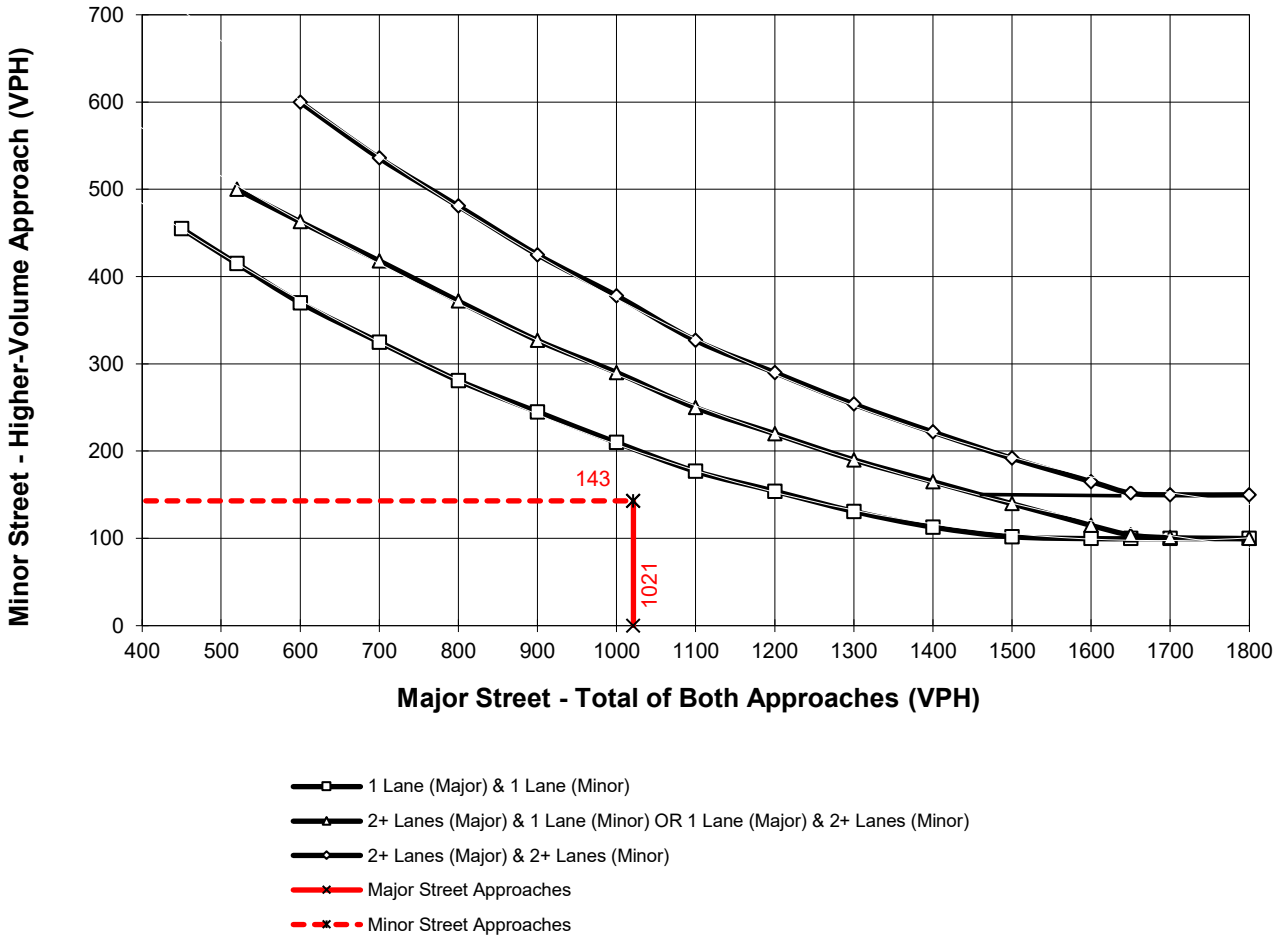
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Buildout) Conditions - Weekday AM Peak Hour**

Major Street Name = **7th Pl.**
Total of Both Approaches (VPH) = **1021**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **County Line Rd.**
High Volume Approach (VPH) = **143**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

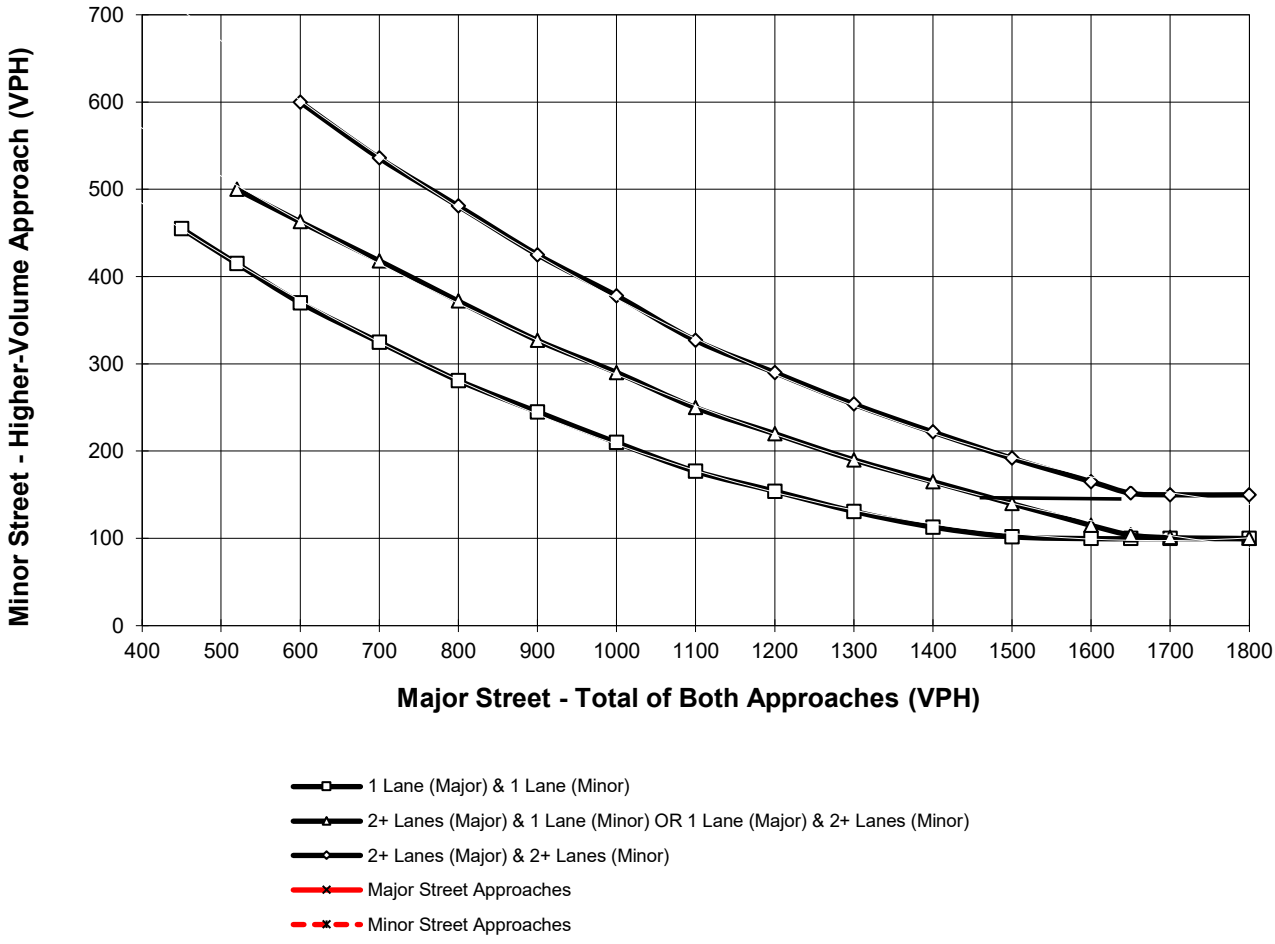
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Buildout) Conditions - Weekday AM Peak Hour**

Major Street Name = **Singleton Rd.**
Total of Both Approaches (VPH) = **19**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Roberts Rd.**
High Volume Approach (VPH) = **14**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

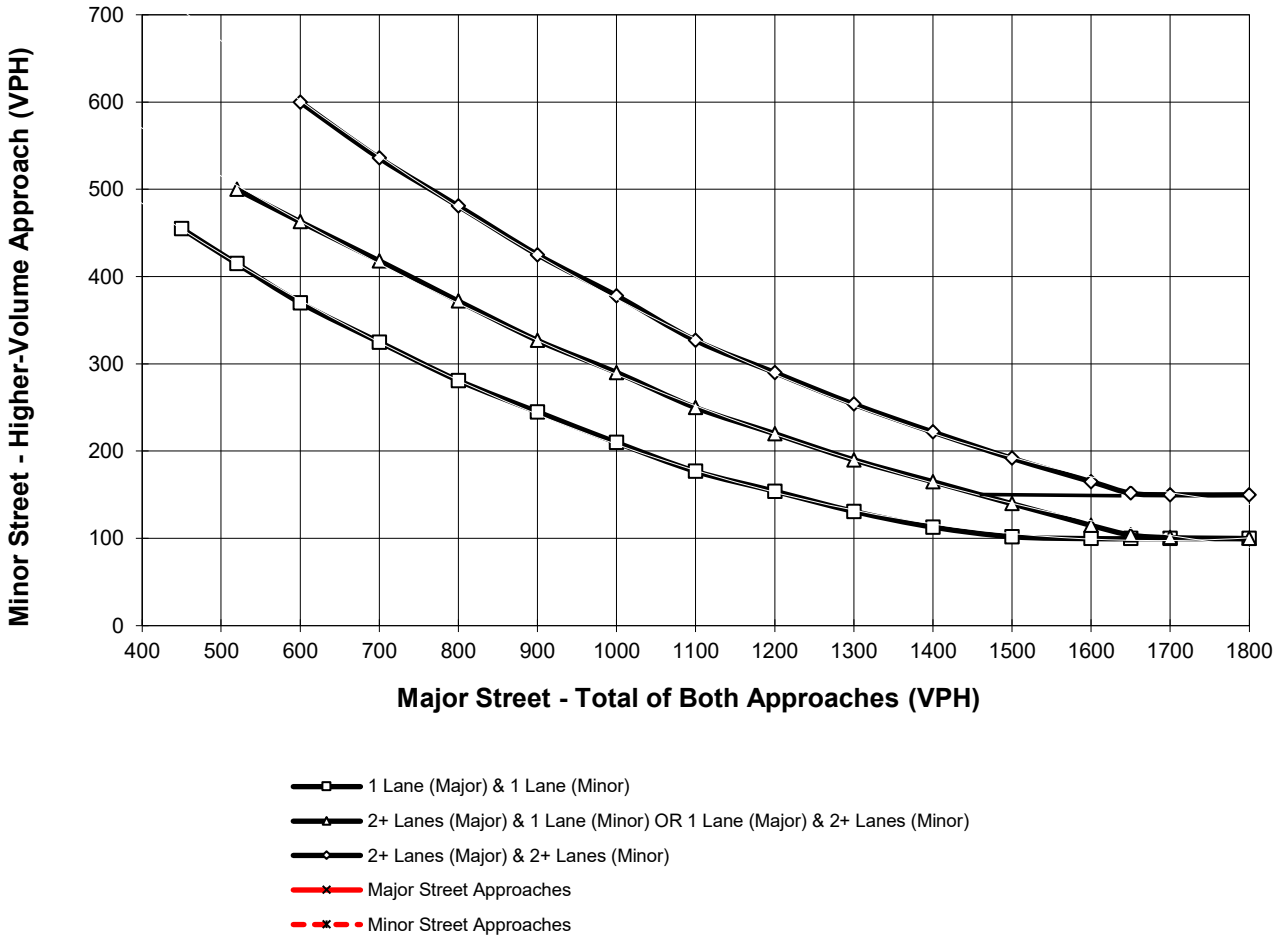
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (Buildout) Conditions - Weekday AM Peak Hour**

Major Street Name = **I-10 Northbound Ramps** Total of Both Approaches (VPH) = **270**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Singleton Rd.** High Volume Approach (VPH) = **341**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 5.11: E+P (PHASE 1) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	81	151	54	755	100
Average Queue (ft)	5	63	2	697	93
95th Queue (ft)	40	119	38	912	133
Link Distance (ft)	135		374	740	
Upstream Blk Time (%)	0			67	
Queuing Penalty (veh)	1			0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		0		98	3
Queuing Penalty (veh)		1		144	8

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	210	367	54	161	575	100
Average Queue (ft)	144	81	2	9	201	43
95th Queue (ft)	231	304	24	70	589	106
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		2			5	
Queuing Penalty (veh)		12			0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	25	0			67	3
Queuing Penalty (veh)	100	1			69	1

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	323	285	463	703
Average Queue (ft)	294	71	449	703
95th Queue (ft)	360	199	471	703
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	31	0	5	100
Queuing Penalty (veh)	151	2	64	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	T	T	LR
Maximum Queue (ft)	118	830	538
Average Queue (ft)	45	830	538
95th Queue (ft)	82	830	538
Link Distance (ft)	581	815	523
Upstream Blk Time (%)		100	100
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	WB
Directions Served	LT
Maximum Queue (ft)	39
Average Queue (ft)	5
95th Queue (ft)	22
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	NB
Directions Served	LTR
Maximum Queue (ft)	94
Average Queue (ft)	48
95th Queue (ft)	76
Link Distance (ft)	712
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 555

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	SB	SB
Directions Served	TR	L	LT	R
Maximum Queue (ft)	8	82	756	100
Average Queue (ft)	0	39	628	98
95th Queue (ft)	5	70	974	114
Link Distance (ft)	119		740	
Upstream Blk Time (%)			56	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)		160		50
Storage Blk Time (%)			93	6
Queuing Penalty (veh)			198	26

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	WB	WB	NB	NB
Directions Served	L	T	R	LT	R
Maximum Queue (ft)	70	3	14	94	95
Average Queue (ft)	38	0	1	31	53
95th Queue (ft)	63	2	8	66	86
Link Distance (ft)		560	560	764	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	160				50
Storage Blk Time (%)				4	10
Queuing Penalty (veh)				10	5

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	316	327	464	341
Average Queue (ft)	306	124	451	146
95th Queue (ft)	312	271	488	344
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	36	2	12	
Queuing Penalty (veh)	261	14	87	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	T	T	LR
Maximum Queue (ft)	136	608	539
Average Queue (ft)	72	279	474
95th Queue (ft)	118	706	725
Link Distance (ft)	589	815	524
Upstream Blk Time (%)		8	80
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	WB
Directions Served	LT
Maximum Queue (ft)	18
Average Queue (ft)	2
95th Queue (ft)	13
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	NB
Directions Served	LTR
Maximum Queue (ft)	110
Average Queue (ft)	56
95th Queue (ft)	85
Link Distance (ft)	712
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 602

APPENDIX 5.12: E+P (PHASE 2) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	156	195	140	755	100
Average Queue (ft)	63	85	10	752	50
95th Queue (ft)	177	167	89	764	132
Link Distance (ft)	135		374	740	
Upstream Blk Time (%)	15			100	
Queuing Penalty (veh)	95			0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		3		99	2
Queuing Penalty (veh)		6		184	7

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	210	389	52	240	779	100
Average Queue (ft)	181	235	2	13	560	30
95th Queue (ft)	258	511	19	106	996	102
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		18		0	50	
Queuing Penalty (veh)		155		0	0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	60	1			95	3
Queuing Penalty (veh)	255	2			99	1

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	314	293	461	703
Average Queue (ft)	279	162	453	703
95th Queue (ft)	331	275	462	703
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	3	0	7	100
Queuing Penalty (veh)	11	1	129	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	218	830	539
Average Queue (ft)	98	830	539
95th Queue (ft)	169	830	539
Link Distance (ft)	569	815	524
Upstream Blk Time (%)		100	100
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	WB
Directions Served	LT
Maximum Queue (ft)	33
Average Queue (ft)	5
95th Queue (ft)	21
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	NB
Directions Served	LTR
Maximum Queue (ft)	93
Average Queue (ft)	48
95th Queue (ft)	75
Link Distance (ft)	712
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 946

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	SB	SB
Directions Served	TR	L	LT	R
Maximum Queue (ft)	4	74	756	100
Average Queue (ft)	0	39	756	100
95th Queue (ft)	2	65	756	100
Link Distance (ft)	119		740	
Upstream Blk Time (%)			97	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)		160		50
Storage Blk Time (%)			96	14
Queuing Penalty (veh)			318	60

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	WB	WB	NB	NB
Directions Served	L	T	R	LT	R
Maximum Queue (ft)	90	3	11	136	98
Average Queue (ft)	49	0	1	41	55
95th Queue (ft)	77	2	7	89	92
Link Distance (ft)		560	560	764	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	160				50
Storage Blk Time (%)				11	8
Queuing Penalty (veh)				24	6

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	311	330	463	701
Average Queue (ft)	306	153	456	494
95th Queue (ft)	311	316	460	836
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	25	3	17	28
Queuing Penalty (veh)	353	37	201	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	436	830	539
Average Queue (ft)	209	742	537
95th Queue (ft)	403	1045	546
Link Distance (ft)	577	815	524
Upstream Blk Time (%)	0	72	100
Queuing Penalty (veh)	0	0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	WB
Directions Served	LT
Maximum Queue (ft)	22
Average Queue (ft)	2
95th Queue (ft)	14
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	NB
Directions Served	LTR
Maximum Queue (ft)	113
Average Queue (ft)	56
95th Queue (ft)	89
Link Distance (ft)	712
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 999

APPENDIX 5.13: E+P (PHASE 3) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	160	208	305	755	100
Average Queue (ft)	131	103	34	742	16
95th Queue (ft)	201	197	187	759	76
Link Distance (ft)	135		374	740	
Upstream Blk Time (%)	35		0	100	
Queuing Penalty (veh)	273		2	0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		7	0	100	0
Queuing Penalty (veh)		16	1	201	1

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	210	394	112	142	779	100
Average Queue (ft)	208	360	5	9	749	17
95th Queue (ft)	221	485	65	81	872	80
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		39			87	
Queuing Penalty (veh)		375			0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	89	1			100	1
Queuing Penalty (veh)	399	4			104	1

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	332	333	463	703
Average Queue (ft)	307	239	455	703
95th Queue (ft)	323	357	461	703
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	13	2	13	100
Queuing Penalty (veh)	77	13	347	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	204	830	539
Average Queue (ft)	97	830	539
95th Queue (ft)	162	833	539
Link Distance (ft)	569	815	524
Upstream Blk Time (%)		100	100
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	WB
Directions Served	LT
Maximum Queue (ft)	35
Average Queue (ft)	6
95th Queue (ft)	25
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	NB
Directions Served	LTR
Maximum Queue (ft)	113
Average Queue (ft)	50
95th Queue (ft)	85
Link Distance (ft)	712
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 1814

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	SB	SB
Directions Served	TR	L	LT	R
Maximum Queue (ft)	7	76	756	100
Average Queue (ft)	0	42	756	100
95th Queue (ft)	4	68	756	100
Link Distance (ft)	119		740	
Upstream Blk Time (%)			98	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)		160		50
Storage Blk Time (%)			95	20
Queuing Penalty (veh)			401	84

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	WB	NB	NB
Directions Served	L	R	LT	R
Maximum Queue (ft)	115	11	346	100
Average Queue (ft)	55	1	90	65
95th Queue (ft)	94	6	250	111
Link Distance (ft)		560	764	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	160			50
Storage Blk Time (%)			35	9
Queuing Penalty (veh)			80	9

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	339	366	462	703
Average Queue (ft)	316	330	456	703
95th Queue (ft)	332	376	460	703
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	29	24	18	100
Queuing Penalty (veh)	689	566	327	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	429	830	539
Average Queue (ft)	210	813	537
95th Queue (ft)	416	901	547
Link Distance (ft)	577	815	524
Upstream Blk Time (%)	0	90	100
Queuing Penalty (veh)	2	0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	WB
Directions Served	LT
Maximum Queue (ft)	22
Average Queue (ft)	2
95th Queue (ft)	13
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	NB
Directions Served	LTR
Maximum Queue (ft)	152
Average Queue (ft)	58
95th Queue (ft)	111
Link Distance (ft)	712
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 2157

APPENDIX 5.14: E+P (PHASE 4) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	160	208	305	755	100
Average Queue (ft)	131	103	34	742	16
95th Queue (ft)	201	197	187	759	76
Link Distance (ft)	135		374	740	
Upstream Blk Time (%)	35		0	100	
Queuing Penalty (veh)	273		2	0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		7	0	100	0
Queuing Penalty (veh)		16	1	201	1

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	210	394	112	142	779	100
Average Queue (ft)	208	360	5	9	749	17
95th Queue (ft)	221	485	65	81	872	80
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		39			87	
Queuing Penalty (veh)		375			0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	89	1			100	1
Queuing Penalty (veh)	399	4			104	1

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	332	333	463	703
Average Queue (ft)	307	239	455	703
95th Queue (ft)	323	357	461	703
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	13	2	13	100
Queuing Penalty (veh)	77	13	347	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	204	830	539
Average Queue (ft)	97	830	539
95th Queue (ft)	162	833	539
Link Distance (ft)	569	815	524
Upstream Blk Time (%)		100	100
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	WB
Directions Served	LT
Maximum Queue (ft)	35
Average Queue (ft)	6
95th Queue (ft)	25
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	NB
Directions Served	LTR
Maximum Queue (ft)	113
Average Queue (ft)	50
95th Queue (ft)	85
Link Distance (ft)	712
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 1814

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	SB	SB
Directions Served	TR	L	LT	R
Maximum Queue (ft)	8	104	756	100
Average Queue (ft)	0	44	756	99
95th Queue (ft)	4	79	756	109
Link Distance (ft)	119		740	
Upstream Blk Time (%)			98	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)		160		50
Storage Blk Time (%)			92	29
Queuing Penalty (veh)			502	125

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	WB	WB	NB	NB
Directions Served	L	T	R	LT	R
Maximum Queue (ft)	129	32	80	371	100
Average Queue (ft)	61	1	5	106	70
95th Queue (ft)	107	19	42	290	112
Link Distance (ft)		560	560	764	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	160				50
Storage Blk Time (%)	0			40	10
Queuing Penalty (veh)	1			92	11

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	340	368	463	703
Average Queue (ft)	316	321	456	703
95th Queue (ft)	332	388	461	703
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	28	20	17	100
Queuing Penalty (veh)	748	524	337	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	428	830	539
Average Queue (ft)	210	824	537
95th Queue (ft)	418	859	547
Link Distance (ft)	577	815	524
Upstream Blk Time (%)		95	100
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	WB
Directions Served	LT
Maximum Queue (ft)	26
Average Queue (ft)	3
95th Queue (ft)	16
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	NB
Directions Served	LTR
Maximum Queue (ft)	99
Average Queue (ft)	54
95th Queue (ft)	81
Link Distance (ft)	712
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 2339

APPENDIX 5.15: E+P (PROJECT BUILDOUT) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	166	208	279	755	80
Average Queue (ft)	145	95	34	745	9
95th Queue (ft)	180	198	198	759	55
Link Distance (ft)	135		374	740	
Upstream Blk Time (%)	48		1	100	
Queuing Penalty (veh)	476		5	0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		8	0	100	0
Queuing Penalty (veh)		19	1	116	0

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	210	392	136	94	779	100
Average Queue (ft)	208	374	9	8	738	15
95th Queue (ft)	223	462	89	48	921	73
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		47			87	
Queuing Penalty (veh)		545			0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	95	0			100	2
Queuing Penalty (veh)	479	1			104	1

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	335	361	464	703
Average Queue (ft)	314	305	455	703
95th Queue (ft)	331	374	461	703
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	21	11	13	100
Queuing Penalty (veh)	151	77	369	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	170	830	539
Average Queue (ft)	93	830	539
95th Queue (ft)	147	832	539
Link Distance (ft)	569	815	524
Upstream Blk Time (%)		100	100
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	WB
Directions Served	LT
Maximum Queue (ft)	35
Average Queue (ft)	4
95th Queue (ft)	20
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	NB
Directions Served	LTR
Maximum Queue (ft)	88
Average Queue (ft)	47
95th Queue (ft)	71
Link Distance (ft)	712
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 2343

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	11	110	38	756	100
Average Queue (ft)	1	50	2	756	100
95th Queue (ft)	5	89	22	756	101
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)				99	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		0		93	33
Queuing Penalty (veh)		0		615	142

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	167	47	17	39	779	100
Average Queue (ft)	72	2	1	3	598	90
95th Queue (ft)	127	33	9	19	997	135
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)					47	
Queuing Penalty (veh)					0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	1				90	24
Queuing Penalty (veh)	4				207	35

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	335	364	461	703
Average Queue (ft)	316	325	456	703
95th Queue (ft)	332	384	461	703
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	29	21	16	100
Queuing Penalty (veh)	793	553	346	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	359	830	539
Average Queue (ft)	179	826	536
95th Queue (ft)	336	853	547
Link Distance (ft)	577	815	524
Upstream Blk Time (%)		96	100
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	WB
Directions Served	LT
Maximum Queue (ft)	22
Average Queue (ft)	2
95th Queue (ft)	13
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	NB
Directions Served	LTR
Maximum Queue (ft)	87
Average Queue (ft)	53
95th Queue (ft)	78
Link Distance (ft)	712
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 2695

APPENDIX 5.16: E+P (PHASE 1) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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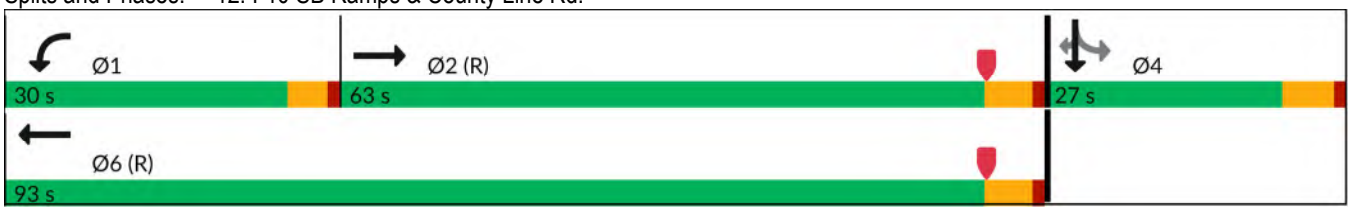
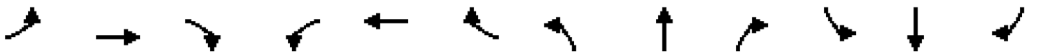
Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	346	314	166	6	125
Future Volume (vph)	346	314	166	6	125
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	9.6	22.4	22.8	22.8
Total Split (s)	63.0	30.0	93.0	27.0	27.0
Total Split (%)	52.5%	25.0%	77.5%	22.5%	22.5%
Yellow Time (s)	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	57.6	25.4	87.6	21.2	21.2
Actuated g/C Ratio	0.48	0.21	0.73	0.18	0.18
v/c Ratio	0.54	0.97	0.14	0.95	0.36
Control Delay (s/veh)	24.1	103.2	4.0	87.8	9.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.1	103.2	4.0	87.8	9.5
LOS	C	F	A	F	A
Approach Delay (s/veh)	24.1		68.9	62.2	
Approach LOS	C		E	E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 87.2 (73%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay (s/veh): 52.4	Intersection LOS: D
Intersection Capacity Utilization 74.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	346	65	314	166	0	0	0	0	251	6	125
Future Volume (veh/h)	0	346	65	314	166	0	0	0	0	251	6	125
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	407	76	369	195	0				295	7	147
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85				0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	744	139	383	1387	0				313	7	284
Arrive On Green	0.00	0.48	0.48	0.35	1.00	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	1550	290	1810	1900	0				1770	42	1610
Grp Volume(v), veh/h	0	0	483	369	195	0				302	0	147
Grp Sat Flow(s),veh/h/ln	0	0	1840	1810	1900	0				1812	0	1610
Q Serve(g_s), s	0.0	0.0	22.2	24.0	0.0	0.0				19.8	0.0	9.9
Cycle Q Clear(g_c), s	0.0	0.0	22.2	24.0	0.0	0.0				19.8	0.0	9.9
Prop In Lane	0.00		0.16	1.00		0.00				0.98		1.00
Lane Grp Cap(c), veh/h	0	0	883	383	1387	0				320	0	284
V/C Ratio(X)	0.00	0.00	0.55	0.96	0.14	0.00				0.94	0.00	0.52
Avail Cap(c_a), veh/h	0	0	883	383	1387	0				320	0	284
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.88	0.88	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	22.0	38.3	0.0	0.0				48.8	0.0	44.8
Incr Delay (d2), s/veh	0.0	0.0	2.4	33.5	0.2	0.0				37.8	0.0	6.6
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	0.0	10.1	12.9	0.1	0.0				12.0	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	24.4	71.8	0.2	0.0				86.6	0.0	51.3
LnGrp LOS			C	E	A					F		D
Approach Vol, veh/h		483			564						449	
Approach Delay, s/veh		24.4			47.1						75.1	
Approach LOS		C			D						E	

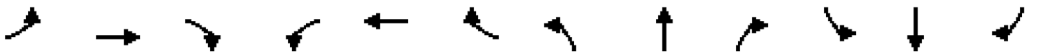
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	30.0	63.0		27.0		93.0						
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4						
Max Green Setting (Gmax), s	25.4	57.6		21.2		87.6						
Max Q Clear Time (g_c+I1), s	26.0	24.2		21.8		2.0						
Green Ext Time (p_c), s	0.0	3.5		0.0		1.2						

Intersection Summary												
HCM 7th Control Delay, s/veh			48.2									
HCM 7th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	534	188	185	886	16	610
Future Volume (vph)	534	188	185	886	16	610
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2				4
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8	22.8
Total Split (s)	49.8	49.8	20.2	70.0	50.0	50.0
Total Split (%)	41.5%	41.5%	16.8%	58.3%	41.7%	41.7%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	None	None
Act Effct Green (s)	44.4	44.4	15.6	64.6	44.2	44.2
Actuated g/C Ratio	0.37	0.37	0.13	0.54	0.37	0.37
v/c Ratio	0.94	0.32	0.97	1.07	0.26	1.18
Control Delay (s/veh)	58.8	5.4	93.7	83.9	27.7	127.1
Queue Delay	0.0	0.0	0.0	12.5	0.0	0.0
Total Delay (s/veh)	58.8	5.4	93.7	96.4	27.7	127.1
LOS	E	A	F	F	C	F
Approach Delay (s/veh)	44.9			95.9	108.7	
Approach LOS	D			F	F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 40.4 (34%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay (s/veh): 85.2	Intersection LOS: F
Intersection Capacity Utilization 93.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	534	188	185	886	0	0	0	0	122	16	610
Future Volume (veh/h)	0	534	188	185	886	0	0	0	0	122	16	610
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	659	133	228	1094	0				151	20	506
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	768	651	235	1088	0				537	71	538
Arrive On Green	0.00	0.40	0.40	0.26	1.00	0.00				0.33	0.33	0.33
Sat Flow, veh/h	0	1900	1610	1810	1900	0				1607	213	1610
Grp Volume(v), veh/h	0	659	133	228	1094	0				171	0	506
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1810	1900	0				1820	0	1610
Q Serve(g_s), s	0.0	38.0	6.4	15.0	68.7	0.0				8.3	0.0	36.6
Cycle Q Clear(g_c), s	0.0	38.0	6.4	15.0	68.7	0.0				8.3	0.0	36.6
Prop In Lane	0.00		1.00	1.00		0.00				0.88		1.00
Lane Grp Cap(c), veh/h	0	768	651	235	1088	0				608	0	538
V/C Ratio(X)	0.00	0.86	0.20	0.97	1.01	0.00				0.28	0.00	0.94
Avail Cap(c_a), veh/h	0	768	651	235	1088	0				670	0	593
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	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	32.6	23.2	44.2	0.0	0.0				29.4	0.0	38.8
Incr Delay (d2), s/veh	0.0	11.9	0.7	49.6	28.6	0.0				0.3	0.0	22.3
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	19.2	2.5	8.8	8.6	0.0				3.6	0.0	17.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	44.5	23.9	93.8	28.6	0.0				29.6	0.0	61.1
LnGrp LOS		D	C	F	F					C		E
Approach Vol, veh/h		792			1322						677	
Approach Delay, s/veh		41.1			39.9						53.2	
Approach LOS		D			D						D	

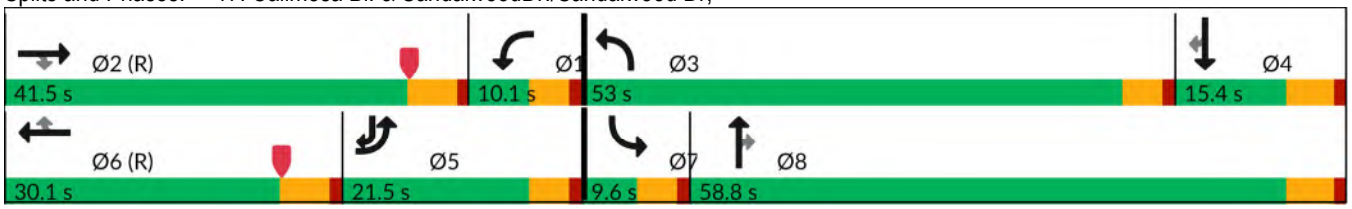
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.2	53.9		45.9		74.1
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	15.6	44.4		44.2		64.6
Max Q Clear Time (g_c+I1), s	17.0	40.0		38.6		70.7
Green Ext Time (p_c), s	0.0	1.9		1.5		0.0

Intersection Summary		
HCM 7th Control Delay, s/veh		43.4
HCM 7th LOS		D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	202	186	52	20	318	32	702	544	99	14	46	457
Future Volume (vph)	202	186	52	20	318	32	702	544	99	14	46	457
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	30.4	30.4	9.6	29.4	29.4	9.6	27.4	27.4	9.6	15.4	9.6
Total Split (s)	21.5	41.5	41.5	10.1	30.1	30.1	53.0	58.8	58.8	9.6	15.4	21.5
Total Split (%)	17.9%	34.6%	34.6%	8.4%	25.1%	25.1%	44.2%	49.0%	49.0%	8.0%	12.8%	17.9%
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	16.9	40.1	40.1	5.3	24.7	24.7	48.4	59.2	59.2	5.0	10.0	27.7
Actuated g/C Ratio	0.14	0.33	0.33	0.04	0.21	0.21	0.40	0.49	0.49	0.04	0.08	0.23
v/c Ratio	0.83	0.33	0.08	0.27	0.92	0.07	1.01	0.32	0.11	0.20	0.33	1.00
Control Delay (s/veh)	84.4	57.5	7.5	63.8	77.0	0.3	67.9	22.4	5.9	61.8	58.0	66.2
Queue Delay	0.0	0.0	0.0	0.0	54.9	0.0	23.1	0.0	0.0	0.0	0.0	37.3
Total Delay (s/veh)	84.4	57.5	7.5	63.8	131.9	0.3	91.1	22.4	5.9	61.8	58.0	103.5
LOS	F	E	A	E	F	A	F	C	A	E	E	F
Approach Delay (s/veh)		64.0			116.9			57.0			98.3	
Approach LOS		E			F			E			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay (s/veh): 74.4	Intersection LOS: E
Intersection Capacity Utilization 96.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	186	52	20	318	32	702	544	99	14	46	457
Future Volume (veh/h)	202	186	52	20	318	32	702	544	99	14	46	457
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	230	211	41	23	361	26	798	618	48	16	52	214
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	265	572	504	83	391	327	759	1855	754	31	158	361
Arrive On Green	0.24	0.50	0.50	0.05	0.21	0.21	0.40	0.47	0.47	0.02	0.08	0.08
Sat Flow, veh/h	1882	1900	1675	1810	1900	1587	1882	3952	1607	1810	1900	1610
Grp Volume(v), veh/h	230	211	41	23	361	26	798	618	48	16	52	214
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1587	1882	1976	1607	1810	1900	1610
Q Serve(g_s), s	14.1	8.1	0.5	1.5	22.4	1.4	48.4	11.8	1.5	1.1	3.1	8.1
Cycle Q Clear(g_c), s	14.1	8.1	0.5	1.5	22.4	1.4	48.4	11.8	1.5	1.1	3.1	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	572	504	83	391	327	759	1855	754	31	158	361
V/C Ratio(X)	0.87	0.37	0.08	0.28	0.92	0.08	1.05	0.33	0.06	0.51	0.33	0.59
Avail Cap(c_a), veh/h	265	572	504	83	391	327	759	1855	754	75	158	361
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	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	0.68	0.68	0.68	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.8	22.9	2.0	55.3	46.7	29.3	35.8	20.0	10.0	58.5	51.8	17.9
Incr Delay (d2), s/veh	24.0	1.8	0.3	0.7	29.7	0.5	41.5	0.1	0.0	4.8	1.2	2.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	3.5	0.6	0.7	13.5	0.7	29.8	5.3	0.7	0.5	1.5	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.8	24.7	2.3	56.0	76.4	29.8	77.3	20.1	10.0	63.3	53.0	20.4
LnGrp LOS	E	C	A	E	E	C	F	C	A	E	D	C
Approach Vol, veh/h		482			410			1464			282	
Approach Delay, s/veh		43.9			72.3			50.9			28.9	
Approach LOS		D			E			D			C	

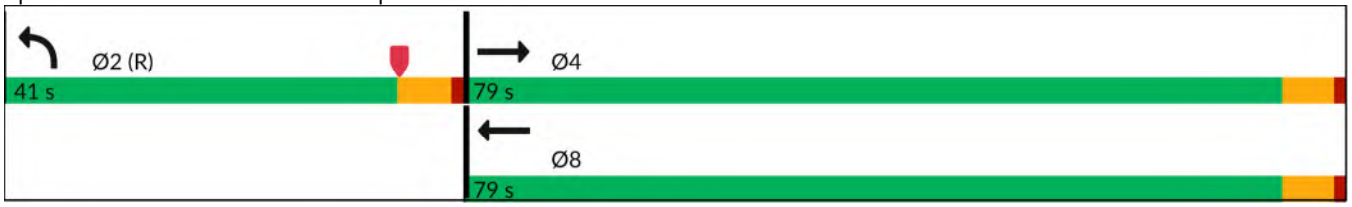
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	41.5	53.0	15.4	21.5	30.1	6.7	61.7
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.5	36.1	48.4	10.0	16.9	24.7	5.0	53.4
Max Q Clear Time (g_c+I1), s	3.5	10.1	50.4	10.1	16.1	24.4	3.1	13.8
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.0	0.1	0.0	4.5

Intersection Summary	
HCM 7th Control Delay, s/veh	50.6
HCM 7th LOS	D

Lane Group	EBT	WBT	NBL
Lane Configurations			
Traffic Volume (vph)	117	712	633
Future Volume (vph)	117	712	633
Turn Type	NA	NA	Prot
Protected Phases	4	8	2
Permitted Phases			
Detector Phase	4	8	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	22.8	22.8	22.8
Total Split (s)	79.0	79.0	41.0
Total Split (%)	65.8%	65.8%	34.2%
Yellow Time (s)	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	63.6	63.6	44.8
Actuated g/C Ratio	0.53	0.53	0.37
v/c Ratio	0.14	0.81	0.52
Control Delay (s/veh)	20.9	29.2	32.7
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	20.9	29.2	32.7
LOS	C	C	C
Approach Delay (s/veh)	20.9	29.2	32.7
Approach LOS	C	C	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay (s/veh): 30.0	Intersection LOS: C
Intersection Capacity Utilization 65.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	117	0	0	712	633	1
Future Volume (veh/h)	117	0	0	712	633	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.04	1.00
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	1900	0	0	1976	1976	1900
Adj Flow Rate, veh/h	138	0	0	838	746	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	858		0	892	1700	727
Arrive On Green	0.45	0.00	0.00	0.45	0.45	0.00
Sat Flow, veh/h	1900	0	0	1976	3764	1610
Grp Volume(v), veh/h	138	0	0	838	746	0
Grp Sat Flow(s),veh/h/ln	1900	0	0	1976	1882	1610
Q Serve(g_s), s	5.2	0.0	0.0	48.5	16.3	0.0
Cycle Q Clear(g_c), s	5.2	0.0	0.0	48.5	16.3	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	858		0	892	1700	727
V/C Ratio(X)	0.16		0.00	0.94	0.44	0.00
Avail Cap(c_a), veh/h	1159		0	1205	1700	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.5	0.0	0.0	31.3	22.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	10.0	0.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.0	24.2	7.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	19.5	0.0	0.0	41.3	23.3	0.0
LnGrp LOS	B			D	C	
Approach Vol, veh/h	138			838	746	
Approach Delay, s/veh	19.5			41.3	23.3	
Approach LOS	B			D	C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	60.0	60.0	60.0
Change Period (Y+Rc), s	5.8	5.8	5.8
Max Green Setting (Gmax), s	35.2	73.2	73.2
Max Q Clear Time (g_c+I1), s	18.3	7.2	50.5
Green Ext Time (p_c), s	1.3	0.5	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	31.8
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	96.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	206	2	29	361	158	2	481	210	66	39	31
Future Vol, veh/h	52	206	2	29	361	158	2	481	210	66	39	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	219	2	31	384	168	2	512	223	70	41	33
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

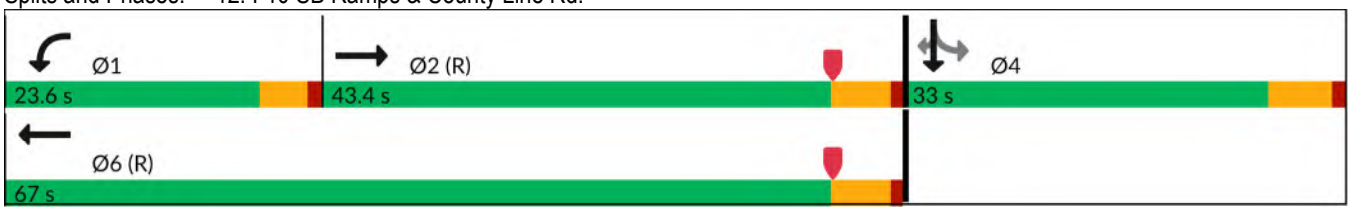
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	22.9	154.1	93.5	16.3
HCM LOS	C	F	F	C

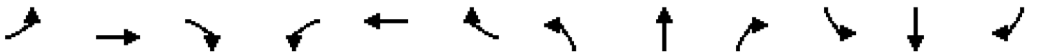
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	99%	0%	70%	0%	56%
Vol Right, %	0%	0%	100%	0%	1%	0%	30%	0%	44%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	481	210	52	208	29	519	66	70
LT Vol	2	0	0	52	0	29	0	66	0
Through Vol	0	481	0	0	206	0	361	0	39
RT Vol	0	0	210	0	2	0	158	0	31
Lane Flow Rate	2	512	223	55	221	31	552	70	74
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.005	1.166	0.466	0.148	0.561	0.077	1.262	0.199	0.194
Departure Headway (Hd)	9.437	8.918	8.193	10.548	10.02	9.407	8.675	11.371	10.51
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	382	409	442	342	363	383	425	317	343
Service Time	7.137	6.618	5.893	8.248	7.72	7.107	6.375	9.071	8.21
HCM Lane V/C Ratio	0.005	1.252	0.505	0.161	0.609	0.081	1.299	0.221	0.216
HCM Control Delay, s/veh	12.2	126.9	17.8	15.1	24.8	12.9	162	16.9	15.7
HCM Lane LOS	B	F	C	C	C	B	F	C	C
HCM 95th-tile Q	0	18.1	2.4	0.5	3.3	0.2	22.4	0.7	0.7

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	226	240	170	3	200
Future Volume (vph)	226	240	170	3	200
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	9.6	22.4	22.8	22.8
Total Split (s)	43.4	23.6	67.0	33.0	33.0
Total Split (%)	43.4%	23.6%	67.0%	33.0%	33.0%
Yellow Time (s)	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	40.0	17.0	61.6	27.2	27.2
Actuated g/C Ratio	0.40	0.17	0.62	0.27	0.27
v/c Ratio	0.41	0.83	0.15	0.86	0.36
Control Delay (s/veh)	23.1	58.2	4.1	53.5	5.9
Queue Delay	0.0	0.0	0.0	0.5	0.0
Total Delay (s/veh)	23.1	58.2	4.1	54.0	5.9
LOS	C	E	A	D	A
Approach Delay (s/veh)	23.1		35.8	37.9	
Approach LOS	C		D	D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 84.2 (84%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 33.9	Intersection LOS: C
Intersection Capacity Utilization 73.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	226	62	240	170	0	0	0	0	396	3	200
Future Volume (veh/h)	0	226	62	240	170	0	0	0	0	396	3	200
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	240	66	255	181	0				421	3	213
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	585	161	290	1170	0				489	3	438
Arrive On Green	0.00	0.41	0.41	0.11	0.41	0.00				0.27	0.27	0.27
Sat Flow, veh/h	0	1427	392	1810	1900	0				1797	13	1610
Grp Volume(v), veh/h	0	0	306	255	181	0				424	0	213
Grp Sat Flow(s),veh/h/ln	0	0	1819	1810	1900	0				1810	0	1610
Q Serve(g_s), s	0.0	0.0	11.9	13.9	6.0	0.0				22.3	0.0	11.1
Cycle Q Clear(g_c), s	0.0	0.0	11.9	13.9	6.0	0.0				22.3	0.0	11.1
Prop In Lane	0.00		0.22	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	0	746	290	1170	0				492	0	438
V/C Ratio(X)	0.00	0.00	0.41	0.88	0.15	0.00				0.86	0.00	0.49
Avail Cap(c_a), veh/h	0	0	746	344	1170	0				492	0	438
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.93	0.93	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	20.9	43.7	13.0	0.0				34.6	0.0	30.5
Incr Delay (d2), s/veh	0.0	0.0	1.7	17.0	0.3	0.0				17.7	0.0	3.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	5.3	7.8	2.6	0.0				11.6	0.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	22.6	60.7	13.3	0.0				52.3	0.0	34.4
LnGrp LOS			C	E	B					D		C
Approach Vol, veh/h		306			436						637	
Approach Delay, s/veh		22.6			41.0						46.3	
Approach LOS		C			D						D	

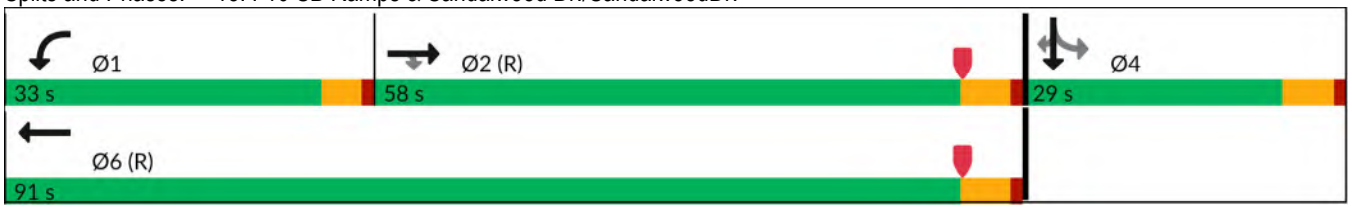
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.6	46.4		33.0		67.0
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	19.0	38.0		27.2		61.6
Max Q Clear Time (g_c+I1), s	15.9	13.9		24.3		8.0
Green Ext Time (p_c), s	0.1	1.9		1.0		1.1

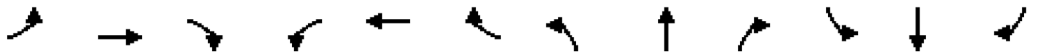
Intersection Summary		
HCM 7th Control Delay, s/veh		39.4
HCM 7th LOS		D

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	621	447	316	291	7	168
Future Volume (vph)	621	447	316	291	7	168
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2				4
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8	22.8
Total Split (s)	58.0	58.0	33.0	91.0	29.0	29.0
Total Split (%)	48.3%	48.3%	27.5%	75.8%	24.2%	24.2%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	None	None
Act Effct Green (s)	58.1	58.1	25.2	87.8	21.0	21.0
Actuated g/C Ratio	0.48	0.48	0.21	0.73	0.18	0.18
v/c Ratio	0.71	0.46	0.88	0.22	0.83	0.41
Control Delay (s/veh)	31.3	3.4	83.4	4.5	69.7	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.3	3.4	83.4	4.5	69.7	9.0
LOS	C	A	F	A	E	A
Approach Delay (s/veh)	19.6			45.6	45.3	
Approach LOS	B			D	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay (s/veh): 32.3	Intersection LOS: C
Intersection Capacity Utilization 77.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	621	447	316	291	0	0	0	0	243	7	168
Future Volume (veh/h)	0	621	447	316	291	0	0	0	0	243	7	168
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	654	471	333	306	0				256	7	177
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	0	0	0	0	0				0	0	0
Cap, veh/h	0	962	815	356	1409	0				291	8	266
Arrive On Green	0.00	0.51	0.51	0.33	1.00	0.00				0.17	0.17	0.17
Sat Flow, veh/h	0	1900	1610	1810	1900	0				1764	48	1610
Grp Volume(v), veh/h	0	654	471	333	306	0				263	0	177
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1810	1900	0				1812	0	1610
Q Serve(g_s), s	0.0	31.1	24.5	21.4	0.0	0.0				17.0	0.0	12.4
Cycle Q Clear(g_c), s	0.0	31.1	24.5	21.4	0.0	0.0				17.0	0.0	12.4
Prop In Lane	0.00		1.00	1.00		0.00				0.97		1.00
Lane Grp Cap(c), veh/h	0	962	815	356	1409	0				299	0	266
V/C Ratio(X)	0.00	0.68	0.58	0.93	0.22	0.00				0.88	0.00	0.67
Avail Cap(c_a), veh/h	0	962	815	428	1409	0				350	0	311
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.3	20.7	39.5	0.0	0.0				48.9	0.0	47.0
Incr Delay (d2), s/veh	0.0	3.9	3.0	23.6	0.4	0.0				19.6	0.0	4.2
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	14.1	9.4	10.4	0.1	0.0				9.1	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	26.2	23.6	63.1	0.4	0.0				68.6	0.0	51.2
LnGrp LOS		C	C	E	A					E		D
Approach Vol, veh/h		1125			639						440	
Approach Delay, s/veh		25.1			33.0						61.6	
Approach LOS		C			C						E	

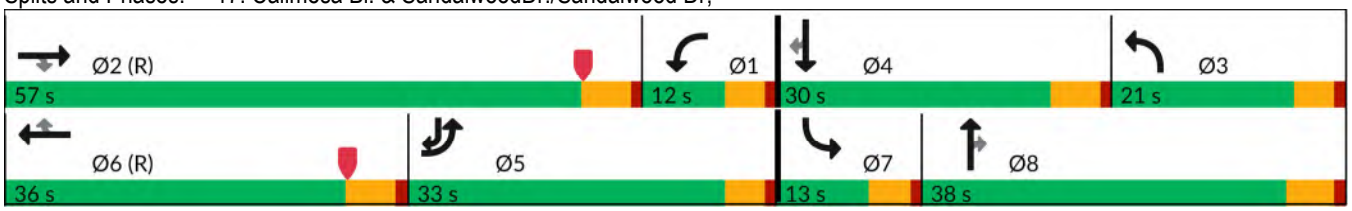
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	28.2	66.2		25.6		94.4
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	28.4	52.6		23.2		85.6
Max Q Clear Time (g_c+I1), s	23.4	33.1		19.0		2.0
Green Ext Time (p_c), s	0.2	5.9		0.8		1.8

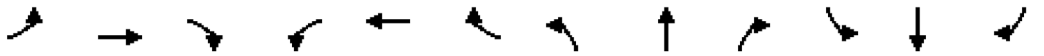
Intersection Summary		
HCM 7th Control Delay, s/veh		34.7
HCM 7th LOS		C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	119	99	22	166	26	240	312	136	29	168	393
Future Volume (vph)	219	119	99	22	166	26	240	312	136	29	168	393
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.0	30.4	30.4	10.0	29.4	29.4	10.0	27.4	27.4	9.6	15.4	10.0
Total Split (s)	33.0	57.0	57.0	12.0	36.0	36.0	21.0	38.0	38.0	13.0	30.0	33.0
Total Split (%)	27.5%	47.5%	47.5%	10.0%	30.0%	30.0%	17.5%	31.7%	31.7%	10.8%	25.0%	27.5%
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	23.2	61.3	61.3	6.0	40.3	40.3	20.1	34.0	34.0	6.5	16.4	40.4
Actuated g/C Ratio	0.19	0.51	0.51	0.05	0.34	0.34	0.17	0.28	0.28	0.05	0.14	0.34
v/c Ratio	0.61	0.13	0.10	0.24	0.27	0.04	0.77	0.30	0.23	0.30	0.68	0.49
Control Delay (s/veh)	43.0	15.7	1.3	60.6	33.9	0.1	56.0	26.9	2.9	61.6	62.2	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.0	15.7	1.3	60.6	33.9	0.1	56.0	26.9	2.9	61.6	62.2	7.2
LOS	D	B	A	E	C	A	E	C	A	E	E	A
Approach Delay (s/veh)		26.1			32.6			32.3			25.6	
Approach LOS		C			C			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay (s/veh): 28.9	Intersection LOS: C
Intersection Capacity Utilization 70.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	119	99	22	166	26	240	312	136	29	168	393
Future Volume (veh/h)	219	119	99	22	166	26	240	312	136	29	168	393
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	231	125	87	23	175	18	253	328	116	31	177	237
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	596	817	720	256	485	404	257	928	376	49	225	700
Arrive On Green	0.10	0.14	0.14	0.14	0.25	0.25	0.14	0.23	0.23	0.03	0.12	0.12
Sat Flow, veh/h	1882	1900	1675	1810	1900	1584	1882	3952	1600	1810	1900	1606
Grp Volume(v), veh/h	231	125	87	23	175	18	253	328	116	31	177	237
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1584	1882	1976	1600	1810	1900	1606
Q Serve(g_s), s	13.7	6.9	5.4	1.3	9.1	0.9	16.1	8.3	5.1	2.0	10.9	0.0
Cycle Q Clear(g_c), s	13.7	6.9	5.4	1.3	9.1	0.9	16.1	8.3	5.1	2.0	10.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	596	817	720	256	485	404	257	928	376	49	225	700
V/C Ratio(X)	0.39	0.15	0.12	0.09	0.36	0.04	0.98	0.35	0.31	0.64	0.79	0.34
Avail Cap(c_a), veh/h	596	817	720	256	485	404	257	1074	435	127	390	839
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	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	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	32.3	31.7	44.8	36.7	24.5	51.7	38.3	18.9	57.8	51.4	22.5
Incr Delay (d2), s/veh	0.2	0.4	0.3	0.1	2.1	0.2	50.4	0.2	0.4	5.1	6.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	3.4	2.3	0.6	4.4	0.4	11.0	4.0	2.8	1.0	5.5	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.0	32.7	32.0	44.8	38.8	24.7	102.1	38.5	19.3	62.9	57.4	22.7
LnGrp LOS	D	C	C	D	D	C	F	D	B	E	E	C
Approach Vol, veh/h		443			216			697			445	
Approach Delay, s/veh		38.0			38.2			58.4			39.3	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	57.0	21.8	19.6	42.6	36.0	7.8	33.6
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	7.4	51.6	16.4	* 25	28.4	30.6	8.4	32.6
Max Q Clear Time (g_c+I1), s	3.3	8.9	18.1	12.9	15.7	11.1	4.0	10.3
Green Ext Time (p_c), s	0.0	0.9	0.0	1.3	0.2	0.8	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	46.2
HCM 7th LOS	D

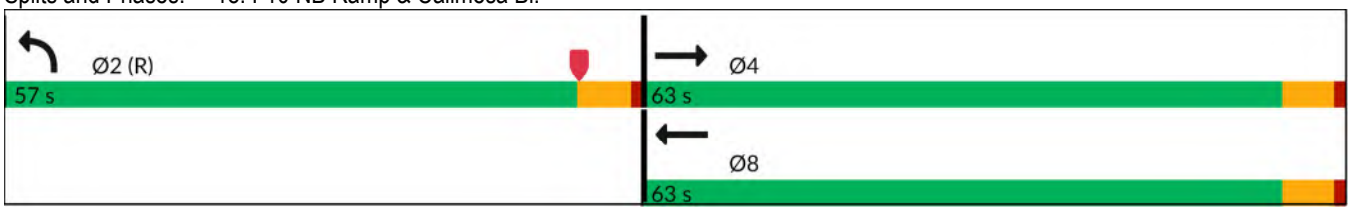
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL
Lane Configurations			
Traffic Volume (vph)	288	180	508
Future Volume (vph)	288	180	508
Turn Type	NA	NA	Prot
Protected Phases	4	8	2
Permitted Phases			
Detector Phase	4	8	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	22.8	22.8	22.8
Total Split (s)	63.0	63.0	57.0
Total Split (%)	52.5%	52.5%	47.5%
Yellow Time (s)	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	24.1	24.1	84.3
Actuated g/C Ratio	0.20	0.20	0.70
v/c Ratio	0.78	0.49	0.21
Control Delay (s/veh)	84.1	45.7	7.2
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	84.1	45.7	7.2
LOS	F	D	A
Approach Delay (s/veh)	84.1	45.7	7.2
Approach LOS	F	D	A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 36.9	Intersection LOS: D
Intersection Capacity Utilization 39.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	288	0	0	180	508	1
Future Volume (veh/h)	288	0	0	180	508	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	0	0	1900	1900	1900
Adj Flow Rate, veh/h	297	0	0	186	525	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	337		0	337	2626	1169
Arrive On Green	0.18	0.00	0.00	0.18	0.73	0.00
Sat Flow, veh/h	1900	0	0	1900	3619	1610
Grp Volume(v), veh/h	297	0	0	186	525	0
Grp Sat Flow(s),veh/h/ln	1900	0	0	1900	1810	1610
Q Serve(g_s), s	18.3	0.0	0.0	10.7	5.6	0.0
Cycle Q Clear(g_c), s	18.3	0.0	0.0	10.7	5.6	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	337		0	337	2626	1169
V/C Ratio(X)	0.88		0.00	0.55	0.20	0.00
Avail Cap(c_a), veh/h	906		0	906	2626	1169
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.1	0.0	0.0	45.0	5.3	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.0	0.5	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	0.0	5.0	1.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	50.8	0.0	0.0	45.5	5.5	0.0
LnGrp LOS	D			D	A	
Approach Vol, veh/h	297			186	525	
Approach Delay, s/veh	50.8			45.5	5.5	
Approach LOS	D			D	A	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	92.9	27.1	27.1
Change Period (Y+Rc), s	5.8	5.8	5.8
Max Green Setting (Gmax), s	51.2	57.2	57.2
Max Q Clear Time (g_c+I1), s	7.6	20.3	12.7
Green Ext Time (p_c), s	0.9	1.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	26.2
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	23.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	338	2	58	228	92	0	55	70	154	95	25
Future Vol, veh/h	17	338	2	58	228	92	0	55	70	154	95	25
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	371	2	64	251	101	0	60	77	169	104	27
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	32.5	25.2	12.7	15.7
HCM LOS	D	D	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	99%	0%	71%	0%	79%
Vol Right, %	0%	0%	100%	0%	1%	0%	29%	0%	21%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	55	70	17	340	58	320	154	120
LT Vol	0	0	0	17	0	58	0	154	0
Through Vol	0	55	0	0	338	0	228	0	95
RT Vol	0	0	70	0	2	0	92	0	25
Lane Flow Rate	0	60	77	19	374	64	352	169	132
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0	0.147	0.172	0.042	0.79	0.144	0.724	0.404	0.29
Departure Headway (Hd)	8.783	8.783	8.058	8.124	7.608	8.129	7.411	8.586	7.922
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	411	448	439	475	439	485	418	451
Service Time	6.483	6.483	5.758	5.913	5.397	5.919	5.2	6.382	5.717
HCM Lane V/C Ratio	0	0.146	0.172	0.043	0.787	0.146	0.726	0.404	0.293
HCM Control Delay, s/veh	11.5	13	12.4	11.3	33.6	12.3	27.5	17.1	14
HCM Lane LOS	N	B	B	B	D	B	D	C	B
HCM 95th-tile Q	0	0.5	0.6	0.1	7.1	0.5	5.8	1.9	1.2

APPENDIX 5.17: E+P (PHASE 2) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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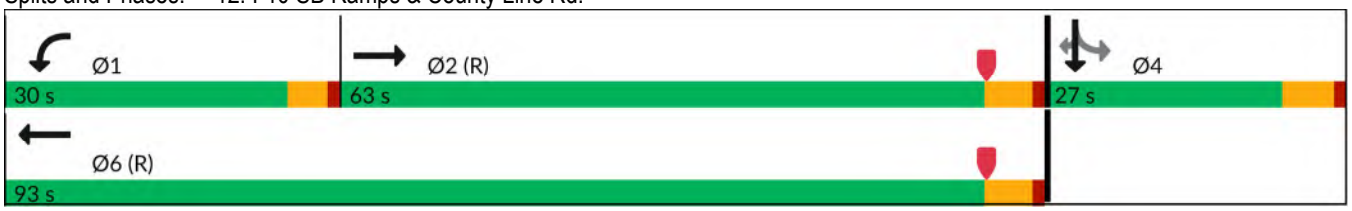
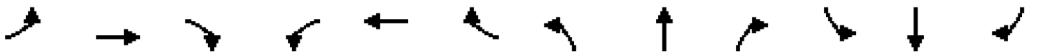
Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	469	314	180	6	157
Future Volume (vph)	469	314	180	6	157
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	9.6	22.4	22.8	22.8
Total Split (s)	63.0	30.0	93.0	27.0	27.0
Total Split (%)	52.5%	25.0%	77.5%	22.5%	22.5%
Yellow Time (s)	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	57.6	25.4	87.6	21.2	21.2
Actuated g/C Ratio	0.48	0.21	0.73	0.18	0.18
v/c Ratio	0.73	0.97	0.15	0.95	0.42
Control Delay (s/veh)	30.4	103.8	3.4	87.8	9.3
Queue Delay	1.5	0.0	0.0	22.9	0.0
Total Delay (s/veh)	31.9	103.8	3.4	110.7	9.3
LOS	C	F	A	F	A
Approach Delay (s/veh)	31.9		67.2	72.2	
Approach LOS	C		E	E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100.8 (84%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay (s/veh): 55.2	Intersection LOS: E
Intersection Capacity Utilization 80.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	469	84	314	180	0	0	0	0	251	6	157
Future Volume (veh/h)	0	469	84	314	180	0	0	0	0	251	6	157
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	552	99	369	212	0				295	7	185
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85				0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	750	134	383	1387	0				313	7	284
Arrive On Green	0.00	0.48	0.48	0.28	0.97	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	1562	280	1810	1900	0				1770	42	1610
Grp Volume(v), veh/h	0	0	651	369	212	0				302	0	185
Grp Sat Flow(s),veh/h/ln	0	0	1842	1810	1900	0				1812	0	1610
Q Serve(g_s), s	0.0	0.0	34.1	24.1	0.5	0.0				19.8	0.0	12.8
Cycle Q Clear(g_c), s	0.0	0.0	34.1	24.1	0.5	0.0				19.8	0.0	12.8
Prop In Lane	0.00		0.15	1.00		0.00				0.98		1.00
Lane Grp Cap(c), veh/h	0	0	884	383	1387	0				320	0	284
V/C Ratio(X)	0.00	0.00	0.74	0.96	0.15	0.00				0.94	0.00	0.65
Avail Cap(c_a), veh/h	0	0	884	383	1387	0				320	0	284
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.84	0.84	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	25.1	42.7	0.5	0.0				48.8	0.0	46.0
Incr Delay (d2), s/veh	0.0	0.0	5.4	32.6	0.2	0.0				37.8	0.0	11.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	15.9	13.6	0.2	0.0				12.0	0.0	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	30.5	75.2	0.7	0.0				86.6	0.0	57.0
LnGrp LOS			C	E	A					F		E
Approach Vol, veh/h		651			581						487	
Approach Delay, s/veh		30.5			48.0						75.3	
Approach LOS		C			D						E	

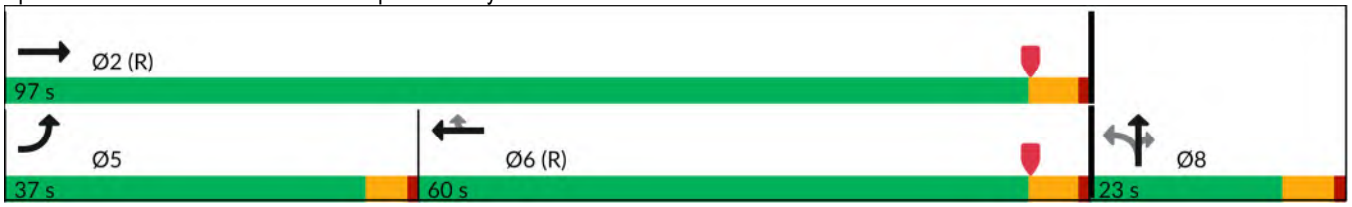
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	30.0	63.0		27.0		93.0						
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4						
Max Green Setting (Gmax), s	25.4	57.6		21.2		87.6						
Max Q Clear Time (g_c+I1), s	26.1	36.1		21.8		2.5						
Green Ext Time (p_c), s	0.0	4.7		0.0		1.4						

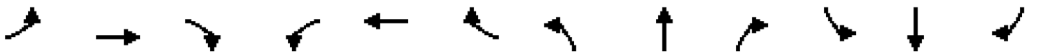
Intersection Summary												
HCM 7th Control Delay, s/veh			49.1									
HCM 7th LOS			D									

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Traffic Volume (vph)	326	394	462	659	4	97
Future Volume (vph)	326	394	462	659	4	97
Turn Type	Prot	NA	NA	Perm	NA	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8
Total Split (s)	37.0	97.0	60.0	60.0	23.0	23.0
Total Split (%)	30.8%	80.8%	50.0%	50.0%	19.2%	19.2%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	26.9	91.6	60.1	60.1	17.2	17.2
Actuated g/C Ratio	0.22	0.76	0.50	0.50	0.14	0.14
v/c Ratio	0.87	0.29	0.52	0.67	0.14	0.33
Control Delay (s/veh)	61.9	5.3	23.8	10.3	46.6	11.6
Queue Delay	2.0	1.0	0.2	0.0	0.5	0.0
Total Delay (s/veh)	63.9	6.3	24.0	10.3	47.1	11.6
LOS	E	A	C	B	D	B
Approach Delay (s/veh)		32.4	15.9		20.9	
Approach LOS		C	B		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100.8 (84%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay (s/veh): 22.3	Intersection LOS: C
Intersection Capacity Utilization 80.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 13: I-10 NB Ramps & County Line Rd.



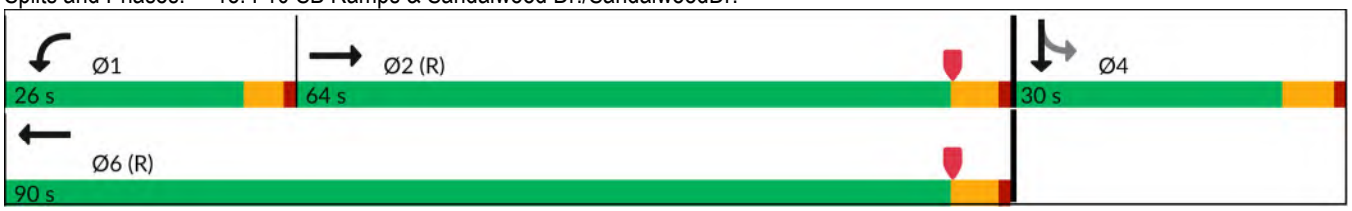


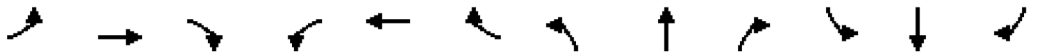
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	326	394	0	0	462	659	31	4	97	0	0	0
Future Volume (veh/h)	326	394	0	0	462	659	31	4	97	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	351	424	0	0	497	709	33	4	104			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	373	1450	0	0	986	836	233	28	231			
Arrive On Green	0.41	1.00	0.00	0.00	0.52	0.52	0.14	0.14	0.14			
Sat Flow, veh/h	1810	1900	0	0	1900	1610	1622	197	1610			
Grp Volume(v), veh/h	351	424	0	0	497	709	37	0	104			
Grp Sat Flow(s),veh/h/ln	1810	1900	0	0	1900	1610	1819	0	1610			
Q Serve(g_s), s	22.4	0.0	0.0	0.0	20.4	45.4	2.1	0.0	7.1			
Cycle Q Clear(g_c), s	22.4	0.0	0.0	0.0	20.4	45.4	2.1	0.0	7.1			
Prop In Lane	1.00		0.00	0.00		1.00	0.89		1.00			
Lane Grp Cap(c), veh/h	373	1450	0	0	986	836	261	0	231			
V/C Ratio(X)	0.94	0.29	0.00	0.00	0.50	0.85	0.14	0.00	0.45			
Avail Cap(c_a), veh/h	489	1450	0	0	986	836	261	0	231			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.61	0.61	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	34.6	0.0	0.0	0.0	18.8	24.8	44.9	0.0	47.1			
Incr Delay (d2), s/veh	14.7	0.3	0.0	0.0	1.8	10.5	1.1	0.0	6.2			
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	9.4	0.1	0.0	0.0	9.4	19.1	1.0	0.0	3.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.2	0.3	0.0	0.0	20.6	35.3	46.1	0.0	53.3			
LnGrp LOS	D	A			C	D	D		D			
Approach Vol, veh/h		775			1206			141				
Approach Delay, s/veh		22.5			29.2			51.4				
Approach LOS		C			C			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		97.0			29.3	67.7		23.0				
Change Period (Y+Rc), s		5.4			4.6	5.4		5.8				
Max Green Setting (Gmax), s		91.6			32.4	54.6		17.2				
Max Q Clear Time (g_c+I1), s		2.0			24.4	47.4		9.1				
Green Ext Time (p_c), s		3.0			0.4	3.6		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			28.2									
HCM 7th LOS			C									

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	729	339	185	1484	122	16	1076
Future Volume (vph)	729	339	185	1484	122	16	1076
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	64.0		26.0	90.0	30.0	30.0	
Total Split (%)	53.3%		21.7%	75.0%	25.0%	25.0%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	None	None	
Act Effct Green (s)	80.0	120.0	12.2	96.8	12.0	12.0	120.0
Actuated g/C Ratio	0.67	1.00	0.10	0.81	0.10	0.10	1.00
v/c Ratio	0.26	0.26	0.64	0.44	0.50	0.49	0.82
Control Delay (s/veh)	8.8	0.4	44.1	9.1	60.7	60.5	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.8	0.4	44.1	9.1	60.7	60.5	4.9
LOS	A	A	D	A	E	E	A
Approach Delay (s/veh)	6.1			13.0		11.2	
Approach LOS	A			B		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 40.4 (34%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay (s/veh): 10.6	Intersection LOS: B
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↰	↱
Traffic Volume (veh/h)	0	729	339	185	1484	0	0	0	0	122	16	1076
Future Volume (veh/h)	0	729	339	185	1484	0	0	0	0	122	16	1076
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	900	0	228	1832	0				165	0	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	3650		287	4272	0				300	0	
Arrive On Green	0.00	0.70	0.00	0.16	1.00	0.00				0.08	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	900	0	228	1832	0				165	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	7.5	0.0	7.5	0.0	0.0				5.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.5	0.0	7.5	0.0	0.0				5.3	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3650		287	4272	0				300	0	
V/C Ratio(X)	0.00	0.25		0.80	0.43	0.00				0.55	0.00	
Avail Cap(c_a), veh/h	0	3650		626	4272	0				730	0	
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	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.4	0.0	49.2	0.0	0.0				52.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	1.9	0.3	0.0				1.6	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	0.0	3.1	0.1	0.0				2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	6.5	0.0	51.2	0.3	0.0				54.4	0.0	0.0
LnGrp LOS		A		D	A					D		
Approach Vol, veh/h		900			2060						165	
Approach Delay, s/veh		6.5			5.9						54.4	
Approach LOS		A			A						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	14.4	89.8		15.8		104.2
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	21.4	58.6		24.2		84.6
Max Q Clear Time (g_c+I1), s	9.5	9.5		7.3		2.0
Green Ext Time (p_c), s	0.3	7.1		0.4		24.2

Intersection Summary	
HCM 7th Control Delay, s/veh	8.7
HCM 7th LOS	A

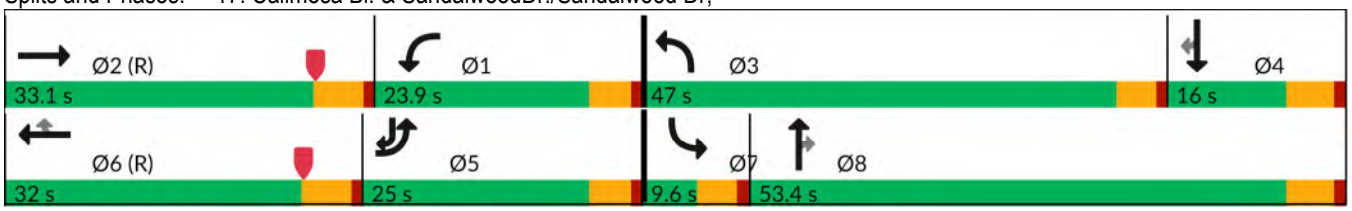
Notes

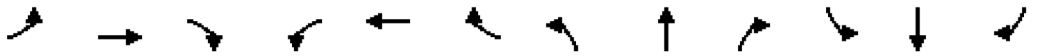
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	252	194	329	154	197	32	1065	544	99	14	205	409
Future Volume (vph)	252	194	329	154	197	32	1065	544	99	14	205	409
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	30.4		9.6	29.4	29.4	9.6	27.4	27.4	9.6	15.4	9.6
Total Split (s)	25.0	33.1		23.9	32.0	32.0	47.0	53.4	53.4	9.6	16.0	25.0
Total Split (%)	20.8%	27.6%		19.9%	26.7%	26.7%	39.2%	44.5%	44.5%	8.0%	13.3%	20.8%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	16.6	33.2	120.0	15.5	32.1	32.1	40.3	52.1	52.1	5.1	11.0	28.4
Actuated g/C Ratio	0.14	0.28	1.00	0.13	0.27	0.27	0.34	0.43	0.43	0.04	0.09	0.24
v/c Ratio	0.53	0.42	0.19	0.72	0.44	0.06	0.92	0.36	0.13	0.20	0.67	0.85
Control Delay (s/veh)	47.8	35.3	0.2	66.2	41.8	0.2	52.5	31.7	11.1	61.3	62.7	34.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.8	35.3	0.2	66.2	41.8	0.2	52.5	31.7	11.1	61.3	62.7	34.2
LOS	D	D	A	E	D	A	D	C	B	E	E	C
Approach Delay (s/veh)		24.5			48.2			43.5			44.1	
Approach LOS		C			D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 39.9	Intersection LOS: D
Intersection Capacity Utilization 78.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	194	329	154	197	32	1065	544	99	14	205	409
Future Volume (veh/h)	252	194	329	154	197	32	1065	544	99	14	205	409
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	286	220	0	175	224	26	1210	618	48	16	233	160
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	714	439		327	421	352	1274	1599	650	31	317	440
Arrive On Green	0.32	0.39	0.00	0.18	0.22	0.22	0.34	0.40	0.40	0.02	0.08	0.08
Sat Flow, veh/h	3764	1900	1675	1810	1900	1588	3764	3952	1606	1810	3800	1610
Grp Volume(v), veh/h	286	220	0	175	224	26	1210	618	48	16	233	160
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1588	1882	1976	1606	1810	1900	1610
Q Serve(g_s), s	7.1	10.6	0.0	10.5	12.5	1.4	37.6	13.2	1.2	1.1	7.2	5.0
Cycle Q Clear(g_c), s	7.1	10.6	0.0	10.5	12.5	1.4	37.6	13.2	1.2	1.1	7.2	5.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	714	439		327	421	352	1274	1599	650	31	317	440
V/C Ratio(X)	0.40	0.50		0.54	0.53	0.07	0.95	0.39	0.07	0.51	0.74	0.36
Avail Cap(c_a), veh/h	714	439		327	421	352	1330	1599	650	75	336	448
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.56	0.56	0.56	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	31.6	0.0	44.6	41.2	28.0	38.7	25.2	6.8	58.5	53.7	14.2
Incr Delay (d2), s/veh	0.1	4.1	0.0	0.9	4.7	0.4	8.9	0.1	0.0	4.8	7.7	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	4.8	0.0	4.7	6.3	0.6	18.3	6.1	0.8	0.5	3.7	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.8	35.7	0.0	45.5	46.0	28.4	47.6	25.3	6.8	63.3	61.4	14.7
LnGrp LOS	D	D		D	D	C	D	C	A	E	E	B
Approach Vol, veh/h		506			425			1876			409	
Approach Delay, s/veh		35.7			44.7			39.2			43.2	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.3	33.1	45.2	15.4	27.4	32.0	6.7	54.0
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	19.3	27.7	42.4	10.6	20.4	26.6	5.0	48.0
Max Q Clear Time (g_c+I1), s	12.5	12.6	39.6	9.2	9.1	14.5	3.1	15.2
Green Ext Time (p_c), s	0.1	0.9	1.0	0.3	0.4	0.9	0.0	4.5

Intersection Summary	
HCM 7th Control Delay, s/veh	39.9
HCM 7th LOS	D

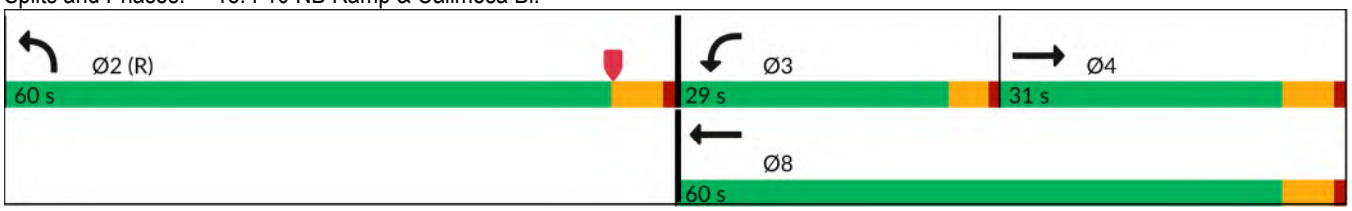
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	122	564	113	604	1105
Future Volume (vph)	122	564	113	604	1105
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.8		9.6	22.8	22.8
Total Split (s)	31.0		29.0	60.0	60.0
Total Split (%)	25.8%		24.2%	50.0%	50.0%
Yellow Time (s)	4.8		3.6	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	30.5	120.0	13.2	48.3	60.1
Actuated g/C Ratio	0.25	1.00	0.11	0.40	0.50
v/c Ratio	0.30	0.41	0.67	0.90	0.68
Control Delay (s/veh)	35.6	2.2	67.2	48.8	26.0
Queue Delay	0.0	0.0	0.0	1.2	0.0
Total Delay (s/veh)	35.6	2.2	67.2	49.9	26.0
LOS	D	A	E	D	C
Approach Delay (s/veh)	8.1			52.6	26.0
Approach LOS	A			D	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay (s/veh): 28.7	Intersection LOS: C
Intersection Capacity Utilization 73.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	122	564	113	604	1105	1
Future Volume (veh/h)	122	564	113	604	1105	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.04	1.00
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	1900	1900	1900	1976	1976	1900
Adj Flow Rate, veh/h	144	0	133	711	1301	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	485		161	756	1960	839
Arrive On Green	0.26	0.00	0.09	0.38	0.52	0.00
Sat Flow, veh/h	1900	1610	1810	1976	3764	1610
Grp Volume(v), veh/h	144	0	133	711	1301	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1976	1882	1610
Q Serve(g_s), s	7.3	0.0	8.7	41.6	30.4	0.0
Cycle Q Clear(g_c), s	7.3	0.0	8.7	41.6	30.4	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	485		161	756	1960	839
V/C Ratio(X)	0.30		0.83	0.94	0.66	0.00
Avail Cap(c_a), veh/h	485		368	892	1960	839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.24	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.0	0.0	53.8	35.7	21.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	4.1	15.1	1.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	4.1	22.3	12.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	36.0	0.0	57.8	50.8	22.9	0.0
LnGrp LOS	D		E	D	C	
Approach Vol, veh/h	144			844	1301	
Approach Delay, s/veh	36.0			51.9	22.9	
Approach LOS	D			D	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		68.3	15.3	36.4		51.7
Change Period (Y+Rc), s		5.8	4.6	5.8		5.8
Max Green Setting (Gmax), s		54.2	24.4	25.2		54.2
Max Q Clear Time (g_c+I1), s		32.4	10.7	9.3		43.6
Green Ext Time (p_c), s		2.8	0.1	0.3		2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	34.4
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	97.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	206	2	29	361	158	2	482	210	69	42	31
Future Vol, veh/h	52	206	2	29	361	158	2	482	210	69	42	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	219	2	31	384	168	2	513	223	73	45	33
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

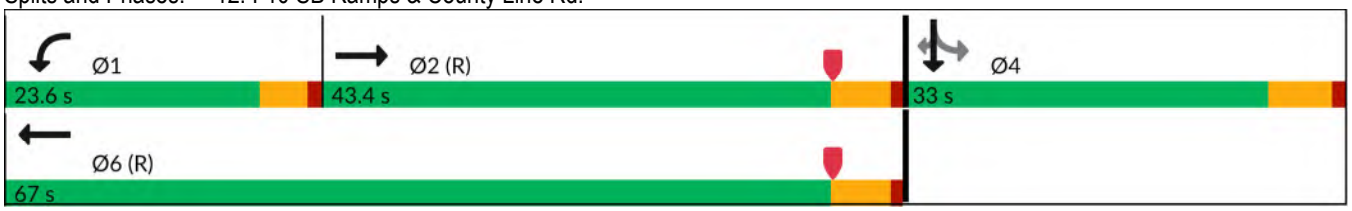
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	23	156.1	95.5	16.5
HCM LOS	C	F	F	C

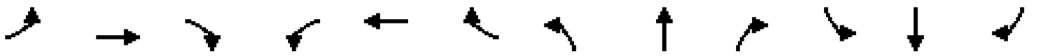
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	99%	0%	70%	0%	58%
Vol Right, %	0%	0%	100%	0%	1%	0%	30%	0%	42%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	482	210	52	208	29	519	69	73
LT Vol	2	0	0	52	0	29	0	69	0
Through Vol	0	482	0	0	206	0	361	0	42
RT Vol	0	0	210	0	2	0	158	0	31
Lane Flow Rate	2	513	223	55	221	31	552	73	78
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.005	1.173	0.468	0.148	0.563	0.077	1.267	0.208	0.203
Departure Headway (Hd)	9.481	8.963	8.236	10.607	10.078	9.453	8.72	11.398	10.55
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	380	410	440	340	361	381	420	317	342
Service Time	7.181	6.663	5.936	8.307	7.778	7.153	6.42	9.098	8.25
HCM Lane V/C Ratio	0.005	1.251	0.507	0.162	0.612	0.081	1.314	0.23	0.228
HCM Control Delay, s/veh	12.2	129.6	18	15.1	25	12.9	164.1	17.1	15.9
HCM Lane LOS	B	F	C	C	C	B	F	C	C
HCM 95th-tile Q	0	18.3	2.4	0.5	3.3	0.2	22.5	0.8	0.7

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	301	240	216	3	310
Future Volume (vph)	301	240	216	3	310
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	9.6	22.4	22.8	22.8
Total Split (s)	43.4	23.6	67.0	33.0	33.0
Total Split (%)	43.4%	23.6%	67.0%	33.0%	33.0%
Yellow Time (s)	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	40.0	17.0	61.6	27.2	27.2
Actuated g/C Ratio	0.40	0.17	0.62	0.27	0.27
v/c Ratio	0.54	0.83	0.20	0.86	0.49
Control Delay (s/veh)	25.9	78.5	7.0	53.5	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.9	78.5	7.0	53.5	6.0
LOS	C	E	A	D	A
Approach Delay (s/veh)	25.9		44.6	32.7	
Approach LOS	C		D	C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 69.8 (70%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 34.6	Intersection LOS: C
Intersection Capacity Utilization 79.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	301	74	240	216	0	0	0	0	396	3	310
Future Volume (veh/h)	0	301	74	240	216	0	0	0	0	396	3	310
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	320	79	255	230	0				421	3	330
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	604	149	284	1170	0				489	3	438
Arrive On Green	0.00	0.41	0.41	0.26	1.00	0.00				0.27	0.27	0.27
Sat Flow, veh/h	0	1464	361	1810	1900	0				1797	13	1610
Grp Volume(v), veh/h	0	0	399	255	230	0				424	0	330
Grp Sat Flow(s),veh/h/ln	0	0	1825	1810	1900	0				1810	0	1610
Q Serve(g_s), s	0.0	0.0	16.4	13.6	0.0	0.0				22.3	0.0	18.8
Cycle Q Clear(g_c), s	0.0	0.0	16.4	13.6	0.0	0.0				22.3	0.0	18.8
Prop In Lane	0.00		0.20	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	0	754	284	1170	0				492	0	438
V/C Ratio(X)	0.00	0.00	0.53	0.90	0.20	0.00				0.86	0.00	0.75
Avail Cap(c_a), veh/h	0	0	754	344	1170	0				492	0	438
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.90	0.90	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	22.1	36.1	0.0	0.0				34.6	0.0	33.3
Incr Delay (d2), s/veh	0.0	0.0	2.7	18.6	0.3	0.0				17.7	0.0	11.4
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	0.0	7.4	6.7	0.1	0.0				11.6	0.0	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	24.7	54.7	0.3	0.0				52.3	0.0	44.7
LnGrp LOS			C	D	A					D		D
Approach Vol, veh/h		399			485						754	
Approach Delay, s/veh		24.7			28.9						49.0	
Approach LOS		C			C						D	

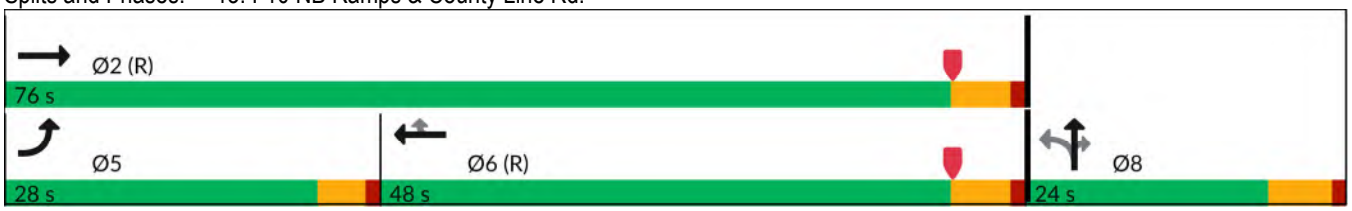
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	20.3	46.7		33.0		67.0						
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4						
Max Green Setting (Gmax), s	19.0	38.0		27.2		61.6						
Max Q Clear Time (g_c+I1), s	15.6	18.4		24.3		2.0						
Green Ext Time (p_c), s	0.1	2.4		1.1		1.5						

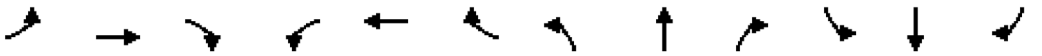
Intersection Summary												
HCM 7th Control Delay, s/veh			37.1									
HCM 7th LOS			D									

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Traffic Volume (vph)	207	491	387	314	1	216
Future Volume (vph)	207	491	387	314	1	216
Turn Type	Prot	NA	NA	Perm	NA	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8
Total Split (s)	28.0	76.0	48.0	48.0	24.0	24.0
Total Split (%)	28.0%	76.0%	48.0%	48.0%	24.0%	24.0%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	16.5	70.6	49.5	49.5	18.2	18.2
Actuated g/C Ratio	0.17	0.71	0.50	0.50	0.18	0.18
v/c Ratio	0.74	0.39	0.44	0.35	0.23	0.48
Control Delay (s/veh)	43.4	10.5	19.2	3.0	37.1	8.5
Queue Delay	0.0	0.9	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.4	11.5	19.2	3.0	37.1	8.5
LOS	D	B	B	A	D	A
Approach Delay (s/veh)		20.9	11.9		15.5	
Approach LOS		C	B		B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 74.8 (75%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay (s/veh): 16.3	Intersection LOS: B
Intersection Capacity Utilization 79.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 13: I-10 NB Ramps & County Line Rd.



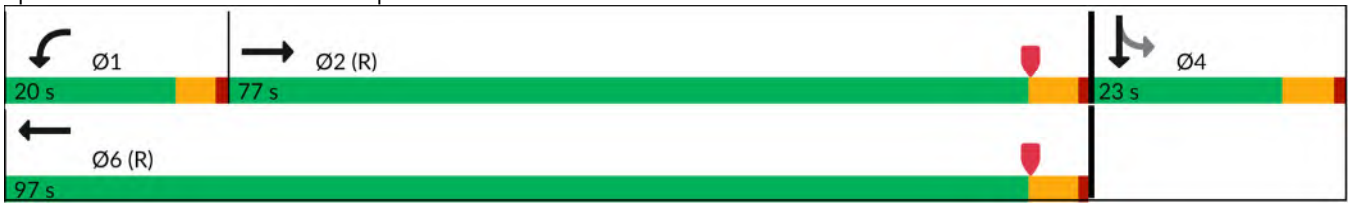


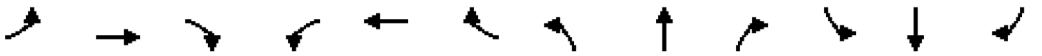
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	491	0	0	387	314	70	1	216	0	0	0
Future Volume (veh/h)	207	491	0	0	387	314	70	1	216	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	220	522	0	0	412	334	74	1	230			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	250	1341	0	0	992	840	325	4	293			
Arrive On Green	0.28	1.00	0.00	0.00	0.52	0.52	0.18	0.18	0.18			
Sat Flow, veh/h	1810	1900	0	0	1900	1610	1787	24	1610			
Grp Volume(v), veh/h	220	522	0	0	412	334	75	0	230			
Grp Sat Flow(s),veh/h/ln	1810	1900	0	0	1900	1610	1811	0	1610			
Q Serve(g_s), s	11.6	0.0	0.0	0.0	13.2	12.5	3.5	0.0	13.6			
Cycle Q Clear(g_c), s	11.6	0.0	0.0	0.0	13.2	12.5	3.5	0.0	13.6			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	250	1341	0	0	992	840	330	0	293			
V/C Ratio(X)	0.88	0.39	0.00	0.00	0.42	0.40	0.23	0.00	0.78			
Avail Cap(c_a), veh/h	423	1341	0	0	992	840	330	0	293			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.83	0.83	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	35.4	0.0	0.0	0.0	14.6	14.4	34.9	0.0	39.0			
Incr Delay (d2), s/veh	4.7	0.7	0.0	0.0	1.3	1.4	1.6	0.0	18.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.7	0.3	0.0	0.0	5.8	4.7	1.6	0.0	6.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.1	0.7	0.0	0.0	15.9	15.8	36.5	0.0	57.8			
LnGrp LOS	D	A			B	B	D		E			
Approach Vol, veh/h		742			746			305				
Approach Delay, s/veh		12.4			15.9			52.6				
Approach LOS		B			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.0			18.4	57.6		24.0				
Change Period (Y+Rc), s		5.4			4.6	5.4		5.8				
Max Green Setting (Gmax), s		70.6			23.4	42.6		18.2				
Max Q Clear Time (g_c+I1), s		2.0			13.6	15.2		15.6				
Green Ext Time (p_c), s		3.9			0.2	4.0		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			20.7									
HCM 7th LOS			C									

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1257	943	316	707	243	7	432
Future Volume (vph)	1257	943	316	707	243	7	432
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	77.0		20.0	97.0	23.0	23.0	
Total Split (%)	64.2%		16.7%	80.8%	19.2%	19.2%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	None	None	
Act Effct Green (s)	75.6	120.0	14.5	94.7	14.1	14.1	120.0
Actuated g/C Ratio	0.63	1.00	0.12	0.79	0.12	0.12	1.00
v/c Ratio	0.41	0.61	0.79	0.18	0.65	0.65	0.28
Control Delay (s/veh)	11.9	1.8	68.5	2.2	65.6	65.6	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.9	1.8	68.5	2.2	65.6	65.6	0.4
LOS	B	A	E	A	E	E	A
Approach Delay (s/veh)	7.6			22.7		24.3	
Approach LOS	A			C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 14.5	Intersection LOS: B
Intersection Capacity Utilization 54.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↰	↱
Traffic Volume (veh/h)	0	1257	943	316	707	0	0	0	0	243	7	432
Future Volume (veh/h)	0	1257	943	316	707	0	0	0	0	243	7	432
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	1323	0	333	744	0				261	0	0
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	0	0	0	0	0				0	0	0
Cap, veh/h	0	3463		385	4230	0				330	0	
Arrive On Green	0.00	0.67	0.00	0.22	1.00	0.00				0.09	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	1323	0	333	744	0				261	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	13.7	0.0	11.0	0.0	0.0				8.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	13.7	0.0	11.0	0.0	0.0				8.5	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3463		385	4230	0				330	0	
V/C Ratio(X)	0.00	0.38		0.87	0.18	0.00				0.79	0.00	
Avail Cap(c_a), veh/h	0	3463		451	4230	0				519	0	
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	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.9	0.0	46.0	0.0	0.0				53.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	12.9	0.1	0.0				4.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.7	0.0	4.9	0.0	0.0				4.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	9.2	0.0	58.9	0.1	0.0				57.8	0.0	0.0
LnGrp LOS		A		E	A					E		
Approach Vol, veh/h		1323			1077						261	
Approach Delay, s/veh		9.2			18.3						57.8	
Approach LOS		A			B						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.7	85.5		16.7		103.3
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	15.4	71.6		17.2		91.6
Max Q Clear Time (g_c+I1), s	13.0	15.7		10.5		2.0
Green Ext Time (p_c), s	0.2	12.6		0.5		5.7

Intersection Summary		
HCM 7th Control Delay, s/veh		17.7
HCM 7th LOS		B

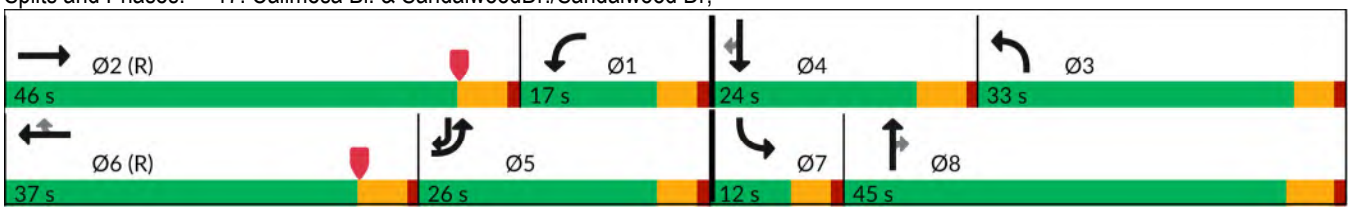
Notes

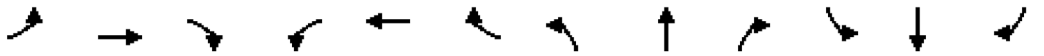
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	357	134	990	74	127	26	514	312	136	29	284	380
Future Volume (vph)	357	134	990	74	127	26	514	312	136	29	284	380
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.0	30.4		10.0	29.4	29.4	10.0	27.4	27.4	9.6	15.4	10.0
Total Split (s)	26.0	46.0		17.0	37.0	37.0	33.0	45.0	45.0	12.0	24.0	26.0
Total Split (%)	21.7%	38.3%		14.2%	30.8%	30.8%	27.5%	37.5%	37.5%	10.0%	20.0%	21.7%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	17.6	57.3	120.0	9.1	46.9	46.9	20.9	33.1	33.1	6.3	14.7	33.1
Actuated g/C Ratio	0.15	0.48	1.00	0.08	0.39	0.39	0.17	0.28	0.28	0.05	0.12	0.28
v/c Ratio	0.65	0.16	0.53	0.54	0.18	0.03	0.79	0.30	0.23	0.31	0.64	0.53
Control Delay (s/veh)	54.8	16.9	4.2	66.6	27.8	0.1	60.4	42.5	14.1	62.6	56.6	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.8	16.9	4.2	66.6	27.8	0.1	60.4	42.5	14.1	62.6	56.6	9.1
LOS	D	B	A	E	C	A	E	D	B	E	E	A
Approach Delay (s/veh)		17.6			37.3			48.1			30.8	
Approach LOS		B			D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 30.3	Intersection LOS: C
Intersection Capacity Utilization 70.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	357	134	990	74	127	26	514	312	136	29	284	380
Future Volume (veh/h)	357	134	990	74	127	26	514	312	136	29	284	380
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	376	141	0	78	134	18	541	328	116	31	299	223
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1105	643		396	500	417	616	986	399	49	402	643
Arrive On Green	0.10	0.11	0.00	0.22	0.26	0.26	0.16	0.25	0.25	0.03	0.11	0.11
Sat Flow, veh/h	3764	1900	1675	1810	1900	1585	3764	3952	1600	1810	3800	1606
Grp Volume(v), veh/h	376	141	0	78	134	18	541	328	116	31	299	223
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1585	1882	1976	1600	1810	1900	1606
Q Serve(g_s), s	11.2	8.1	0.0	4.2	6.7	0.9	16.8	8.2	4.2	2.0	9.2	0.0
Cycle Q Clear(g_c), s	11.2	8.1	0.0	4.2	6.7	0.9	16.8	8.2	4.2	2.0	9.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1105	643		396	500	417	616	986	399	49	402	643
V/C Ratio(X)	0.34	0.22		0.20	0.27	0.04	0.88	0.33	0.29	0.64	0.74	0.35
Avail Cap(c_a), veh/h	1105	643		396	500	417	891	1304	528	112	589	722
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.94	0.94	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	38.9	0.0	38.3	35.0	23.8	49.0	36.9	13.0	57.8	52.1	25.1
Incr Delay (d2), s/veh	0.1	0.8	0.0	0.1	1.3	0.2	5.0	0.2	0.4	5.1	2.9	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	4.1	0.0	1.9	3.2	0.4	8.2	3.9	2.7	1.0	4.5	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.4	39.7	0.0	38.4	36.3	24.0	54.0	37.0	13.4	62.9	54.9	25.4
LnGrp LOS	D	D		D	D	C	D	D	B	E	D	C
Approach Vol, veh/h		517			230			985			553	
Approach Delay, s/veh		42.4			36.1			43.6			43.5	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.8	46.0	25.1	18.1	39.8	37.0	7.8	35.3
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	12.4	40.6	28.4	* 19	21.4	31.6	7.4	39.6
Max Q Clear Time (g_c+I1), s	6.2	10.1	18.8	11.2	13.2	8.7	4.0	10.2
Green Ext Time (p_c), s	0.0	0.7	0.8	1.5	0.5	0.7	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	42.5
HCM 7th LOS	D

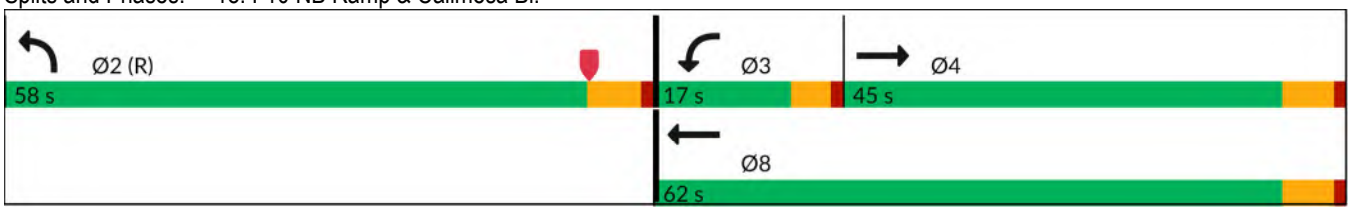
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	294	1053	26	163	800
Future Volume (vph)	294	1053	26	163	800
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.8		9.6	22.8	22.8
Total Split (s)	45.0		17.0	62.0	58.0
Total Split (%)	37.5%		14.2%	51.7%	48.3%
Yellow Time (s)	4.8		3.6	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	23.8	120.0	6.4	30.9	77.5
Actuated g/C Ratio	0.20	1.00	0.05	0.26	0.65
v/c Ratio	0.81	0.67	0.28	0.34	0.36
Control Delay (s/veh)	53.5	3.8	61.2	35.7	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.5	3.8	61.2	35.7	12.1
LOS	D	A	E	D	B
Approach Delay (s/veh)	14.7			39.2	12.1
Approach LOS	B			D	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay (s/veh): 15.8	Intersection LOS: B
Intersection Capacity Utilization 54.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	294	1053	26	163	800	1
Future Volume (veh/h)	294	1053	26	163	800	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	303	0	27	168	826	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	342		45	462	2389	1063
Arrive On Green	0.18	0.00	0.02	0.24	0.66	0.00
Sat Flow, veh/h	1900	1610	1810	1900	3619	1610
Grp Volume(v), veh/h	303	0	27	168	826	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1810	1610
Q Serve(g_s), s	18.7	0.0	1.8	8.8	12.1	0.0
Cycle Q Clear(g_c), s	18.7	0.0	1.8	8.8	12.1	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	342		45	462	2389	1063
V/C Ratio(X)	0.89		0.60	0.36	0.35	0.00
Avail Cap(c_a), veh/h	621		187	890	2389	1063
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.0	0.0	57.9	37.7	9.0	0.0
Incr Delay (d2), s/veh	2.5	0.0	4.8	0.2	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	0.0	0.9	4.1	4.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	50.5	0.0	62.7	37.9	9.4	0.0
LnGrp LOS	D		E	D	A	
Approach Vol, veh/h	303			195	826	
Approach Delay, s/veh	50.5			41.3	9.4	
Approach LOS	D			D	A	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		85.0	7.6	27.4		35.0
Change Period (Y+Rc), s		5.8	4.6	5.8		5.8
Max Green Setting (Gmax), s		52.2	12.4	39.2		56.2
Max Q Clear Time (g_c+I1), s		14.1	3.8	20.7		10.8
Green Ext Time (p_c), s		1.6	0.0	0.9		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	23.5
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	24.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	338	2	58	228	95	0	59	70	155	98	25
Future Vol, veh/h	17	338	2	58	228	95	0	59	70	155	98	25
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	371	2	64	251	104	0	65	77	170	108	27
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	13.4	26	12.8	16
HCM LOS	D	D	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	99%	0%	71%	0%	80%
Vol Right, %	0%	0%	100%	0%	1%	0%	29%	0%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	59	70	17	340	58	323	155	123
LT Vol	0	0	0	17	0	58	0	155	0
Through Vol	0	59	0	0	338	0	228	0	98
RT Vol	0	0	70	0	2	0	95	0	25
Lane Flow Rate	0	65	77	19	374	64	355	170	135
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0	0.159	0.173	0.042	0.796	0.145	0.735	0.413	0.303
Departure Headway (Hd)	8.835	8.835	8.109	8.291	7.774	8.289	7.565	8.735	8.073
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	408	445	435	467	435	483	414	447
Service Time	6.549	6.549	5.823	5.991	5.474	5.989	5.265	6.435	5.773
HCM Lane V/C Ratio	0	0.159	0.173	0.044	0.801	0.147	0.735	0.411	0.302
HCM Control Delay, s/veh	11.5	13.2	12.5	11.4	34.5	12.4	28.5	17.4	14.2
HCM Lane LOS	N	B	B	B	D	B	D	C	B
HCM 95th-tile Q	0	0.6	0.6	0.1	7.3	0.5	6	2	1.3

APPENDIX 5.18: E+P (PHASE 3) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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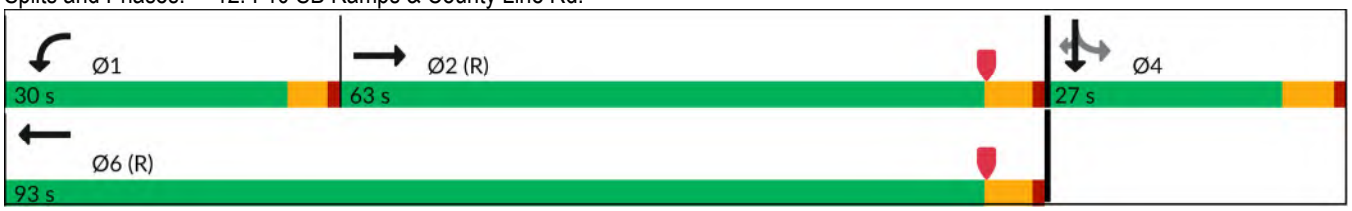
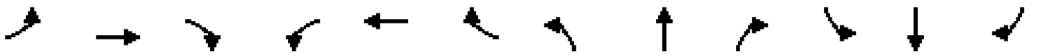
Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	571	314	186	6	171
Future Volume (vph)	571	314	186	6	171
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	9.6	22.4	22.8	22.8
Total Split (s)	63.0	30.0	93.0	27.0	27.0
Total Split (%)	52.5%	25.0%	77.5%	22.5%	22.5%
Yellow Time (s)	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	57.6	25.4	87.6	21.2	21.2
Actuated g/C Ratio	0.48	0.21	0.73	0.18	0.18
v/c Ratio	0.88	0.97	0.16	0.95	0.45
Control Delay (s/veh)	41.0	87.9	5.5	87.8	9.3
Queue Delay	10.0	0.0	0.0	44.6	0.0
Total Delay (s/veh)	51.0	87.9	5.5	132.4	9.3
LOS	D	F	A	F	A
Approach Delay (s/veh)	51.0		57.2	83.2	
Approach LOS	D		E	F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 103.8 (87%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay (s/veh): 61.5	Intersection LOS: E
Intersection Capacity Utilization 84.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	571	101	314	186	0	0	0	0	251	6	171
Future Volume (veh/h)	0	571	101	314	186	0	0	0	0	251	6	171
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	672	119	369	219	0				295	7	201
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85				0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	751	133	383	1387	0				313	7	284
Arrive On Green	0.00	0.48	0.48	0.35	1.00	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	1565	277	1810	1900	0				1770	42	1610
Grp Volume(v), veh/h	0	0	791	369	219	0				302	0	201
Grp Sat Flow(s),veh/h/ln	0	0	1843	1810	1900	0				1812	0	1610
Q Serve(g_s), s	0.0	0.0	46.9	24.0	0.0	0.0				19.8	0.0	14.1
Cycle Q Clear(g_c), s	0.0	0.0	46.9	24.0	0.0	0.0				19.8	0.0	14.1
Prop In Lane	0.00		0.15	1.00		0.00				0.98		1.00
Lane Grp Cap(c), veh/h	0	0	884	383	1387	0				320	0	284
V/C Ratio(X)	0.00	0.00	0.89	0.96	0.16	0.00				0.94	0.00	0.71
Avail Cap(c_a), veh/h	0	0	884	383	1387	0				320	0	284
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.80	0.80	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	28.4	38.3	0.0	0.0				48.8	0.0	46.5
Incr Delay (d2), s/veh	0.0	0.0	13.4	31.6	0.2	0.0				37.8	0.0	13.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	23.3	12.7	0.1	0.0				12.0	0.0	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	41.9	70.0	0.2	0.0				86.6	0.0	60.3
LnGrp LOS			D	E	A					F		E
Approach Vol, veh/h		791			588						503	
Approach Delay, s/veh		41.9			44.0						76.1	
Approach LOS		D			D						E	

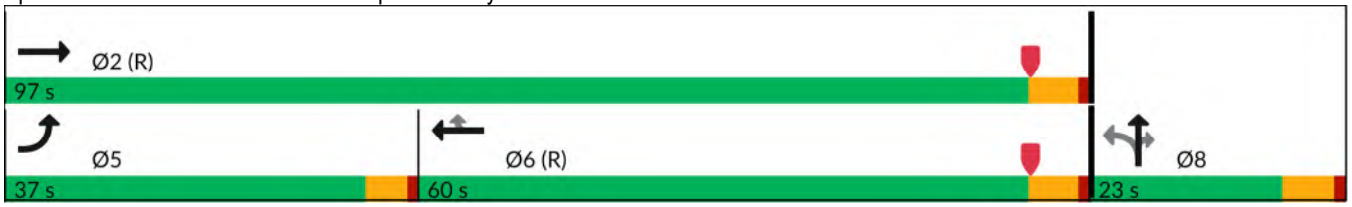
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	30.0	63.0		27.0		93.0						
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4						
Max Green Setting (Gmax), s	25.4	57.6		21.2		87.6						
Max Q Clear Time (g_c+I1), s	26.0	48.9		21.8		2.0						
Green Ext Time (p_c), s	0.0	3.7		0.0		1.4						

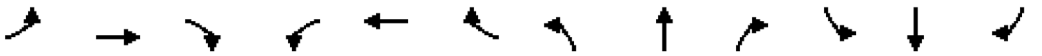
Intersection Summary												
HCM 7th Control Delay, s/veh			51.7									
HCM 7th LOS			D									

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Traffic Volume (vph)	407	415	466	659	4	97
Future Volume (vph)	407	415	466	659	4	97
Turn Type	Prot	NA	NA	Perm	NA	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8
Total Split (s)	37.0	97.0	60.0	60.0	23.0	23.0
Total Split (%)	30.8%	80.8%	50.0%	50.0%	19.2%	19.2%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	31.0	91.6	56.0	56.0	17.2	17.2
Actuated g/C Ratio	0.26	0.76	0.47	0.47	0.14	0.14
v/c Ratio	0.94	0.31	0.56	0.71	0.15	0.33
Control Delay (s/veh)	75.9	7.0	26.7	13.5	46.8	11.6
Queue Delay	26.9	0.9	0.4	0.0	0.5	0.0
Total Delay (s/veh)	102.7	7.9	27.1	13.5	47.3	11.6
LOS	F	A	C	B	D	B
Approach Delay (s/veh)		54.9	19.1		21.3	
Approach LOS		D	B		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay (s/veh): 33.4	Intersection LOS: C
Intersection Capacity Utilization 84.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 13: I-10 NB Ramps & County Line Rd.



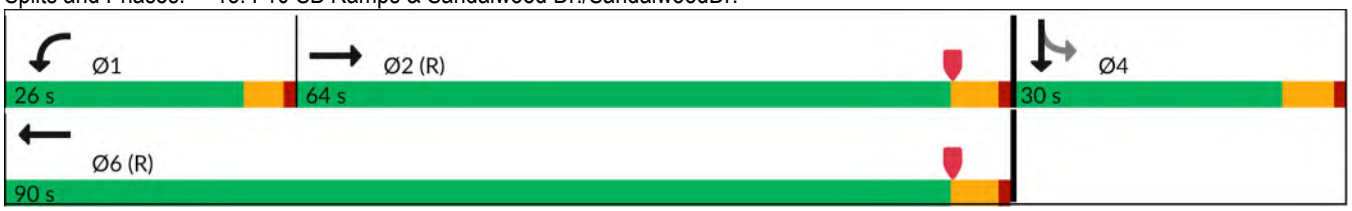


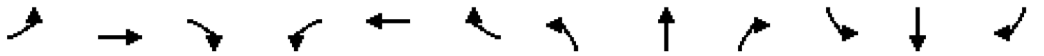
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	407	415	0	0	466	659	33	4	97	0	0	0
Future Volume (veh/h)	407	415	0	0	466	659	33	4	97	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	438	446	0	0	501	709	35	4	104			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	455	1450	0	0	899	762	234	27	231			
Arrive On Green	0.50	1.00	0.00	0.00	0.47	0.47	0.14	0.14	0.14			
Sat Flow, veh/h	1810	1900	0	0	1900	1610	1632	187	1610			
Grp Volume(v), veh/h	438	446	0	0	501	709	39	0	104			
Grp Sat Flow(s),veh/h/ln	1810	1900	0	0	1900	1610	1818	0	1610			
Q Serve(g_s), s	28.0	0.0	0.0	0.0	22.6	49.7	2.3	0.0	7.1			
Cycle Q Clear(g_c), s	28.0	0.0	0.0	0.0	22.6	49.7	2.3	0.0	7.1			
Prop In Lane	1.00		0.00	0.00		1.00	0.90		1.00			
Lane Grp Cap(c), veh/h	455	1450	0	0	899	762	261	0	231			
V/C Ratio(X)	0.96	0.31	0.00	0.00	0.56	0.93	0.15	0.00	0.45			
Avail Cap(c_a), veh/h	489	1450	0	0	899	762	261	0	231			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.35	0.35	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	29.3	0.0	0.0	0.0	22.6	29.7	45.0	0.0	47.1			
Incr Delay (d2), s/veh	15.1	0.2	0.0	0.0	2.5	19.4	1.2	0.0	6.2			
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	11.1	0.1	0.0	0.0	10.6	22.7	1.1	0.0	3.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.3	0.2	0.0	0.0	25.1	49.2	46.2	0.0	53.3			
LnGrp LOS	D	A			C	D	D		D			
Approach Vol, veh/h		884			1210			143				
Approach Delay, s/veh		22.1			39.2			51.4				
Approach LOS		C			D			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		97.0			34.8	62.2		23.0				
Change Period (Y+Rc), s		5.4			4.6	5.4		5.8				
Max Green Setting (Gmax), s		91.6			32.4	54.6		17.2				
Max Q Clear Time (g_c+I1), s		2.0			30.0	51.7		9.1				
Green Ext Time (p_c), s		3.2			0.2	1.7		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			33.2									
HCM 7th LOS			C									

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	945	496	185	2105	122	16	1560
Future Volume (vph)	945	496	185	2105	122	16	1560
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	64.0		26.0	90.0	30.0	30.0	
Total Split (%)	53.3%		21.7%	75.0%	25.0%	25.0%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	None	None	
Act Effct Green (s)	80.0	120.0	12.2	96.8	12.0	12.0	120.0
Actuated g/C Ratio	0.67	1.00	0.10	0.81	0.10	0.10	1.00
v/c Ratio	0.34	0.38	0.64	0.62	0.50	0.49	1.19
Control Delay (s/veh)	9.4	0.7	60.0	5.5	60.7	60.5	101.2
Queue Delay	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Total Delay (s/veh)	9.4	0.7	60.0	5.9	60.7	60.5	101.2
LOS	A	A	E	A	E	E	F
Approach Delay (s/veh)	6.4			10.3		97.9	
Approach LOS	A			B		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 40.4 (34%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.19	
Intersection Signal Delay (s/veh): 36.7	Intersection LOS: D
Intersection Capacity Utilization 58.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↰	↱
Traffic Volume (veh/h)	0	945	496	185	2105	0	0	0	0	122	16	1560
Future Volume (veh/h)	0	945	496	185	2105	0	0	0	0	122	16	1560
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	1167	0	228	2599	0				165	0	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	3644		291	4272	0				300	0	
Arrive On Green	0.00	0.70	0.00	0.08	0.82	0.00				0.08	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	1167	0	228	2599	0				165	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	10.4	0.0	7.6	21.2	0.0				5.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.4	0.0	7.6	21.2	0.0				5.3	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3644		291	4272	0				300	0	
V/C Ratio(X)	0.00	0.32		0.78	0.61	0.00				0.55	0.00	
Avail Cap(c_a), veh/h	0	3644		626	4272	0				730	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.9	0.0	54.0	3.7	0.0				52.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	1.8	0.7	0.0				1.6	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.4	0.0	3.4	4.7	0.0				2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	7.1	0.0	55.7	4.4	0.0				54.4	0.0	0.0
LnGrp LOS		A		E	A					D		
Approach Vol, veh/h		1167			2827						165	
Approach Delay, s/veh		7.1			8.5						54.4	
Approach LOS		A			A						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	14.5	89.7		15.8		104.2
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	21.4	58.6		24.2		84.6
Max Q Clear Time (g_c+I1), s	9.6	12.4		7.3		23.2
Green Ext Time (p_c), s	0.3	10.2		0.4		42.2

Intersection Summary	
HCM 7th Control Delay, s/veh	9.9
HCM 7th LOS	A

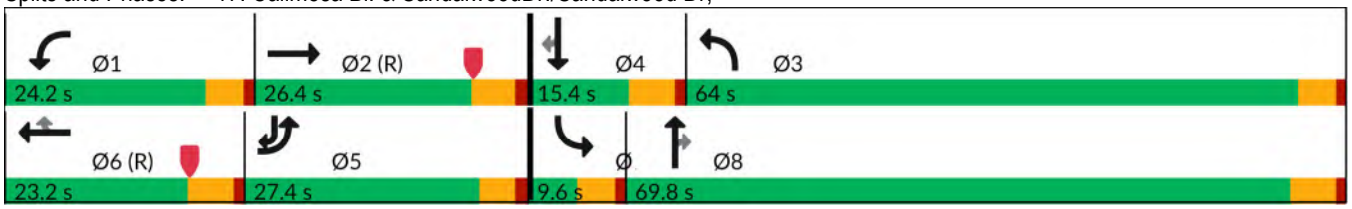
Notes

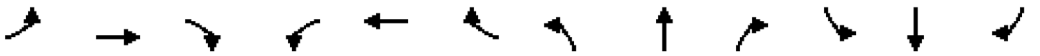
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	305	203	483	154	210	32	1553	544	99	14	205	528
Future Volume (vph)	305	203	483	154	210	32	1553	544	99	14	205	528
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	22.4		9.6	22.4	22.4	9.6	22.4	22.4	9.6	15.4	9.6
Total Split (s)	27.4	26.4		24.2	23.2	23.2	64.0	69.8	69.8	9.6	15.4	27.4
Total Split (%)	21.1%	20.3%		18.6%	17.8%	17.8%	49.2%	53.7%	53.7%	7.4%	11.8%	21.1%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	22.8	25.2	130.0	15.5	17.9	17.9	59.3	70.1	70.1	5.0	10.0	38.2
Actuated g/C Ratio	0.18	0.19	1.00	0.12	0.14	0.14	0.46	0.54	0.54	0.04	0.08	0.29
v/c Ratio	0.50	0.30	0.28	0.75	0.44	0.09	0.98	0.29	0.10	0.21	0.77	0.96
Control Delay (s/veh)	51.4	47.2	0.4	74.6	54.4	0.5	53.0	17.4	3.3	67.4	76.3	68.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	40.1	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.4	47.2	0.4	74.6	54.4	0.5	93.1	17.4	3.3	67.4	76.3	68.9
LOS	D	D	A	E	D	A	F	B	A	E	E	E
Approach Delay (s/veh)		25.7			58.0			70.3			70.9	
Approach LOS		C			E			E			E	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay (s/veh): 59.1	Intersection LOS: E
Intersection Capacity Utilization 97.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	305	203	483	154	210	32	1553	544	99	14	205	528
Future Volume (veh/h)	305	203	483	154	210	32	1553	544	99	14	205	528
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976
Adj Flow Rate, veh/h	347	231	0	175	239	26	1765	618	48	16	233	182
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	614	790		200	541	226	1720	2067	875	32	304	402
Arrive On Green	0.33	0.40	0.00	0.21	0.27	0.27	0.91	1.00	1.00	0.03	0.15	0.15
Sat Flow, veh/h	3764	3952	1675	1882	3952	1649	3764	3952	1673	1882	3952	1675
Grp Volume(v), veh/h	347	231	0	175	239	26	1765	618	48	16	233	182
Grp Sat Flow(s),veh/h/ln	1882	1976	1675	1882	1976	1649	1882	1976	1673	1882	1976	1675
Q Serve(g_s), s	9.9	5.2	0.0	11.7	6.5	1.4	59.4	0.0	0.0	1.1	7.4	0.0
Cycle Q Clear(g_c), s	9.9	5.2	0.0	11.7	6.5	1.4	59.4	0.0	0.0	1.1	7.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	614	790		200	541	226	1720	2067	875	32	304	402
V/C Ratio(X)	0.57	0.29		0.88	0.44	0.12	1.03	0.30	0.05	0.50	0.77	0.45
Avail Cap(c_a), veh/h	660	790		284	541	226	1720	2067	875	72	304	402
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.18	0.18	0.18	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	32.8	0.0	50.4	43.1	32.8	5.6	0.0	0.0	62.3	53.9	38.2
Incr Delay (d2), s/veh	0.5	0.9	0.0	14.8	2.6	1.0	17.0	0.0	0.0	4.5	11.1	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	2.4	0.0	5.7	3.1	0.7	6.4	0.0	0.0	0.5	3.9	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.5	33.7	0.0	65.2	45.7	33.8	22.6	0.0	0.0	66.8	65.0	39.0
LnGrp LOS	D	C		E	D	C	F	A	A	E	E	D
Approach Vol, veh/h		578			440			2431			431	
Approach Delay, s/veh		37.8			52.7			16.4			54.1	
Approach LOS		D			D			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	31.4	64.8	15.4	26.6	23.2	6.8	73.4
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	5.4	* 5.4	4.6	5.4
Max Green Setting (Gmax), s	19.6	21.0	59.4	* 10	22.8	* 18	5.0	64.4
Max Q Clear Time (g_c+I1), s	13.7	7.2	61.4	9.4	11.9	8.5	3.1	2.0
Green Ext Time (p_c), s	0.1	1.0	0.0	0.1	0.5	0.9	0.0	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	27.9
HCM 7th LOS	C

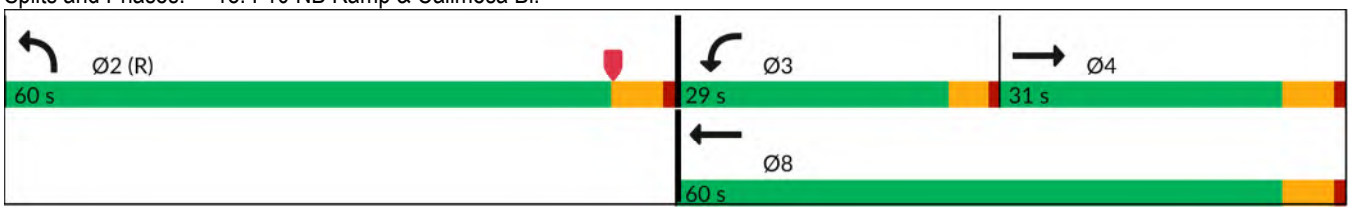
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	128	712	113	606	1591
Future Volume (vph)	128	712	113	606	1591
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.8		9.6	22.8	22.8
Total Split (s)	31.0		29.0	60.0	60.0
Total Split (%)	25.8%		24.2%	50.0%	50.0%
Yellow Time (s)	4.8		3.6	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	30.6	120.0	13.2	48.4	60.0
Actuated g/C Ratio	0.26	1.00	0.11	0.40	0.50
v/c Ratio	0.31	0.52	0.67	0.90	0.98
Control Delay (s/veh)	37.8	1.2	67.2	48.7	47.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.8	1.2	67.2	48.7	47.7
LOS	D	A	E	D	D
Approach Delay (s/veh)	6.8			51.6	47.7
Approach LOS	A			D	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay (s/veh): 37.7	Intersection LOS: D
Intersection Capacity Utilization 87.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	128	712	113	606	1591	1
Future Volume (veh/h)	128	712	113	606	1591	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.04	1.00
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	1900	1900	1900	1976	1976	1900
Adj Flow Rate, veh/h	151	0	133	713	1873	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	487		161	758	1956	837
Arrive On Green	0.26	0.00	0.09	0.38	0.52	0.00
Sat Flow, veh/h	1900	1610	1810	1976	3764	1610
Grp Volume(v), veh/h	151	0	133	713	1873	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1976	1882	1610
Q Serve(g_s), s	7.7	0.0	8.7	41.8	57.1	0.0
Cycle Q Clear(g_c), s	7.7	0.0	8.7	41.8	57.1	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	487		161	758	1956	837
V/C Ratio(X)	0.31		0.83	0.94	0.96	0.00
Avail Cap(c_a), veh/h	487		368	892	1956	837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.1	0.0	53.8	35.7	27.5	0.0
Incr Delay (d2), s/veh	0.1	0.0	4.1	15.2	12.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	4.1	22.4	26.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	36.2	0.0	57.8	50.8	40.0	0.0
LnGrp LOS	D		E	D	D	
Approach Vol, veh/h	151			846	1873	
Approach Delay, s/veh	36.2			51.9	40.0	
Approach LOS	D			D	D	

Timer - Assigned Phs	2	3	4	8
Phs Duration (G+Y+Rc), s	68.2	15.3	36.6	51.8
Change Period (Y+Rc), s	5.8	4.6	5.8	5.8
Max Green Setting (Gmax), s	54.2	24.4	25.2	54.2
Max Q Clear Time (g_c+I1), s	59.1	10.7	9.7	43.8
Green Ext Time (p_c), s	0.0	0.1	0.4	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	43.3
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	99.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	206	2	29	361	159	2	484	210	71	45	31
Future Vol, veh/h	52	206	2	29	361	159	2	484	210	71	45	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	219	2	31	384	169	2	515	223	76	48	33
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

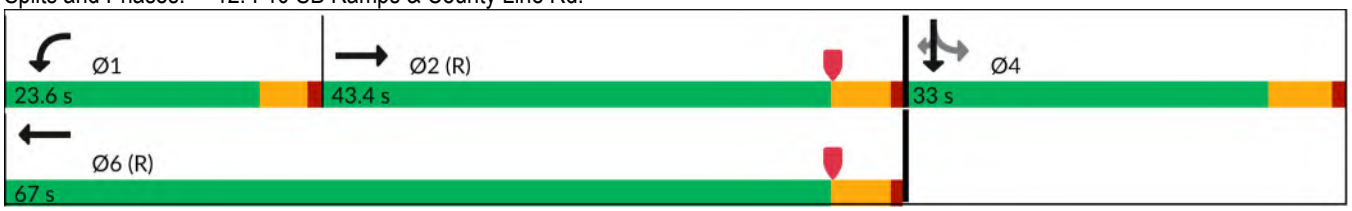
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	23.2	158.9	98.1	16.6
HCM LOS	C	F	F	C

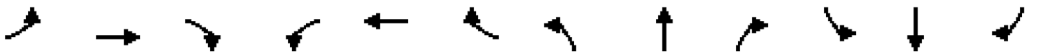
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	99%	0%	69%	0%	59%
Vol Right, %	0%	0%	100%	0%	1%	0%	31%	0%	41%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	484	210	52	208	29	520	71	76
LT Vol	2	0	0	52	0	29	0	71	0
Through Vol	0	484	0	0	206	0	361	0	45
RT Vol	0	0	210	0	2	0	159	0	31
Lane Flow Rate	2	515	223	55	221	31	553	76	81
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.005	1.182	0.47	0.149	0.564	0.077	1.274	0.214	0.212
Departure Headway (Hd)	9.524	9.005	8.278	10.666	10.137	9.496	8.762	11.431	10.596
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	378	407	438	339	358	379	420	316	341
Service Time	7.224	6.705	5.978	8.366	7.837	7.196	6.462	9.131	8.296
HCM Lane V/C Ratio	0.005	1.265	0.509	0.162	0.617	0.082	1.317	0.241	0.238
HCM Control Delay, s/veh	12.3	133.1	18.1	15.2	25.2	13	167	17.2	16.1
HCM Lane LOS	B	F	C	C	D	B	F	C	C
HCM 95th-tile Q	0	18.6	2.5	0.5	3.3	0.2	22.7	0.8	0.8

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	351	240	258	3	397
Future Volume (vph)	351	240	258	3	397
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	9.6	22.4	22.8	22.8
Total Split (s)	43.4	23.6	67.0	33.0	33.0
Total Split (%)	43.4%	23.6%	67.0%	33.0%	33.0%
Yellow Time (s)	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	40.0	17.0	61.6	27.2	27.2
Actuated g/C Ratio	0.40	0.17	0.62	0.27	0.27
v/c Ratio	0.62	0.83	0.23	0.86	0.57
Control Delay (s/veh)	28.2	75.8	7.5	53.5	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.2	75.8	7.5	53.5	6.2
LOS	C	E	A	D	A
Approach Delay (s/veh)	28.2		40.4	29.9	
Approach LOS	C		D	C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 71.8 (72%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 32.5	Intersection LOS: C
Intersection Capacity Utilization 85.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	351	82	240	258	0	0	0	0	396	3	397
Future Volume (veh/h)	0	351	82	240	258	0	0	0	0	396	3	397
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	373	87	255	274	0				421	3	422
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	614	143	283	1170	0				489	3	438
Arrive On Green	0.00	0.41	0.41	0.31	1.00	0.00				0.27	0.27	0.27
Sat Flow, veh/h	0	1483	346	1810	1900	0				1797	13	1610
Grp Volume(v), veh/h	0	0	460	255	274	0				424	0	422
Grp Sat Flow(s),veh/h/ln	0	0	1829	1810	1900	0				1810	0	1610
Q Serve(g_s), s	0.0	0.0	19.7	13.5	0.0	0.0				22.3	0.0	25.9
Cycle Q Clear(g_c), s	0.0	0.0	19.7	13.5	0.0	0.0				22.3	0.0	25.9
Prop In Lane	0.00		0.19	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	0	757	283	1170	0				492	0	438
V/C Ratio(X)	0.00	0.00	0.61	0.90	0.23	0.00				0.86	0.00	0.96
Avail Cap(c_a), veh/h	0	0	757	344	1170	0				492	0	438
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	0.00	1.00	0.87	0.87	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	23.0	33.7	0.0	0.0				34.6	0.0	35.9
Incr Delay (d2), s/veh	0.0	0.0	3.6	18.8	0.4	0.0				17.7	0.0	34.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	9.0	6.3	0.1	0.0				11.6	0.0	13.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	26.6	52.5	0.4	0.0				52.3	0.0	70.7
LnGrp LOS			C	D	A					D		E
Approach Vol, veh/h		460			529						846	
Approach Delay, s/veh		26.6			25.5						61.5	
Approach LOS		C			C						E	

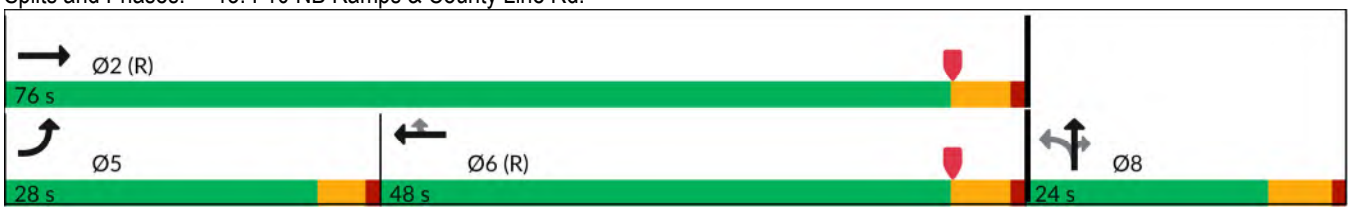
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	20.2	46.8		33.0		67.0						
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4						
Max Green Setting (Gmax), s	19.0	38.0		27.2		61.6						
Max Q Clear Time (g_c+I1), s	15.5	21.7		27.9		2.0						
Green Ext Time (p_c), s	0.1	2.7		0.0		1.8						

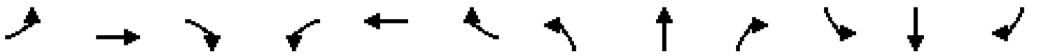
Intersection Summary												
HCM 7th Control Delay, s/veh			42.4									
HCM 7th LOS			D									

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Traffic Volume (vph)	246	502	410	314	1	216
Future Volume (vph)	246	502	410	314	1	216
Turn Type	Prot	NA	NA	Perm	NA	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8
Total Split (s)	28.0	76.0	48.0	48.0	24.0	24.0
Total Split (%)	28.0%	76.0%	48.0%	48.0%	24.0%	24.0%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	18.3	70.6	47.7	47.7	18.2	18.2
Actuated g/C Ratio	0.18	0.71	0.48	0.48	0.18	0.18
v/c Ratio	0.79	0.40	0.48	0.35	0.29	0.48
Control Delay (s/veh)	47.0	9.8	21.0	3.2	38.1	8.5
Queue Delay	0.0	1.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.0	10.8	21.0	3.2	38.1	8.5
LOS	D	B	C	A	D	A
Approach Delay (s/veh)		22.7	13.3		17.2	
Approach LOS		C	B		B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 76.8 (77%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 17.9	Intersection LOS: B
Intersection Capacity Utilization 85.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 13: I-10 NB Ramps & County Line Rd.



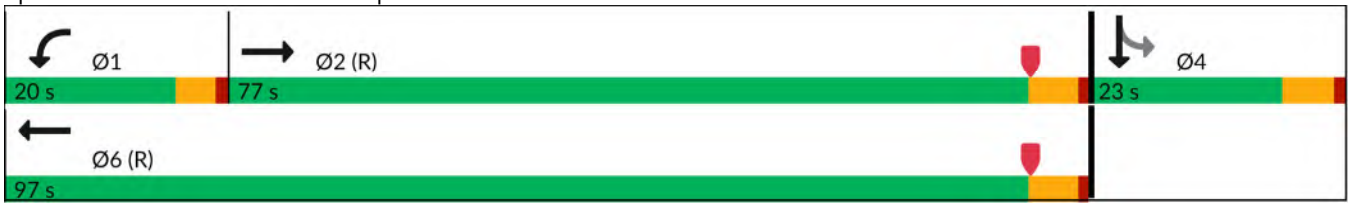


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	246	502	0	0	410	314	88	1	216	0	0	0
Future Volume (veh/h)	246	502	0	0	410	314	88	1	216	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	262	534	0	0	436	334	94	1	230			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	291	1341	0	0	949	804	326	3	293			
Arrive On Green	0.32	1.00	0.00	0.00	0.50	0.50	0.18	0.18	0.18			
Sat Flow, veh/h	1810	1900	0	0	1900	1610	1791	19	1610			
Grp Volume(v), veh/h	262	534	0	0	436	334	95	0	230			
Grp Sat Flow(s),veh/h/ln	1810	1900	0	0	1900	1610	1810	0	1610			
Q Serve(g_s), s	13.8	0.0	0.0	0.0	14.9	13.1	4.5	0.0	13.6			
Cycle Q Clear(g_c), s	13.8	0.0	0.0	0.0	14.9	13.1	4.5	0.0	13.6			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	291	1341	0	0	949	804	329	0	293			
V/C Ratio(X)	0.90	0.40	0.00	0.00	0.46	0.42	0.29	0.00	0.78			
Avail Cap(c_a), veh/h	423	1341	0	0	949	804	329	0	293			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.75	0.75	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	33.2	0.0	0.0	0.0	16.3	15.8	35.3	0.0	39.0			
Incr Delay (d2), s/veh	10.3	0.7	0.0	0.0	1.6	1.6	2.2	0.0	18.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.7	0.2	0.0	0.0	6.7	5.0	2.1	0.0	6.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.5	0.7	0.0	0.0	17.9	17.4	37.5	0.0	57.8			
LnGrp LOS	D	A			B	B	D		E			
Approach Vol, veh/h		796			770			325				
Approach Delay, s/veh		14.8			17.7			51.9				
Approach LOS		B			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.0			20.7	55.3		24.0				
Change Period (Y+Rc), s		5.4			4.6	5.4		5.8				
Max Green Setting (Gmax), s		70.6			23.4	42.6		18.2				
Max Q Clear Time (g_c+I1), s		2.0			15.8	16.9		15.6				
Green Ext Time (p_c), s		4.0			0.2	4.2		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			22.3									
HCM 7th LOS			C									

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	2064	1543	316	1266	243	7	785
Future Volume (vph)	2064	1543	316	1266	243	7	785
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	77.0		20.0	97.0	23.0	23.0	
Total Split (%)	64.2%		16.7%	80.8%	19.2%	19.2%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	None	None	
Act Effct Green (s)	75.6	120.0	14.5	94.7	14.1	14.1	120.0
Actuated g/C Ratio	0.63	1.00	0.12	0.79	0.12	0.12	1.00
v/c Ratio	0.67	1.01	0.79	0.33	0.65	0.65	0.51
Control Delay (s/veh)	16.0	26.9	64.0	1.8	65.6	65.6	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.0	26.9	64.0	1.8	65.6	65.6	1.2
LOS	B	C	E	A	E	E	A
Approach Delay (s/veh)	20.6			14.2		16.7	
Approach LOS	C			B		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay (s/veh): 18.4	Intersection LOS: B
Intersection Capacity Utilization 70.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↰	↱
Traffic Volume (veh/h)	0	2064	1543	316	1266	0	0	0	0	243	7	785
Future Volume (veh/h)	0	2064	1543	316	1266	0	0	0	0	243	7	785
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	2173	0	333	1333	0				261	0	0
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	0	0	0	0	0				0	0	0
Cap, veh/h	0	3463		385	4230	0				330	0	
Arrive On Green	0.00	0.67	0.00	0.22	1.00	0.00				0.09	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	2173	0	333	1333	0				261	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	28.8	0.0	11.0	0.0	0.0				8.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	28.8	0.0	11.0	0.0	0.0				8.5	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3463		385	4230	0				330	0	
V/C Ratio(X)	0.00	0.63		0.87	0.32	0.00				0.79	0.00	
Avail Cap(c_a), veh/h	0	3463		451	4230	0				519	0	
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	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	11.4	0.0	46.0	0.0	0.0				53.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	12.9	0.2	0.0				4.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.9	0.0	4.9	0.1	0.0				4.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	12.3	0.0	58.9	0.2	0.0				57.8	0.0	0.0
LnGrp LOS		B		E	A					E		
Approach Vol, veh/h		2173			1666						261	
Approach Delay, s/veh		12.3			11.9						57.8	
Approach LOS		B			B						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.7	85.5		16.7		103.3
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	15.4	71.6		17.2		91.6
Max Q Clear Time (g_c+I1), s	13.0	30.8		10.5		2.0
Green Ext Time (p_c), s	0.2	25.1		0.5		13.2

Intersection Summary		
HCM 7th Control Delay, s/veh		15.0
HCM 7th LOS		B

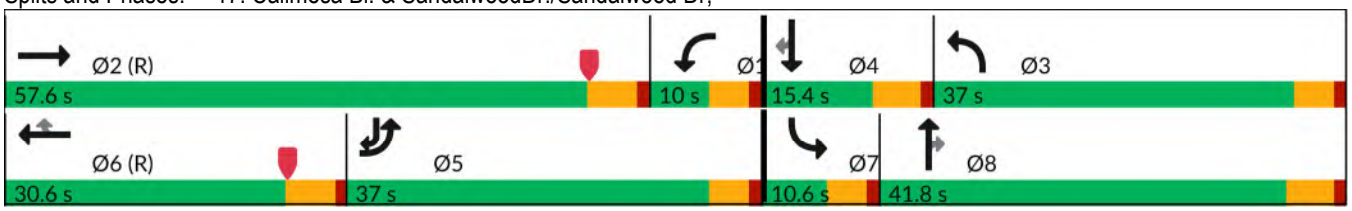
Notes

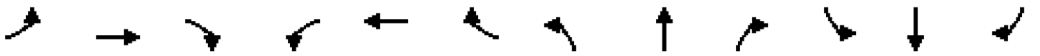
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	559	153	1576	74	143	26	901	312	136	29	284	535
Future Volume (vph)	559	153	1576	74	143	26	901	312	136	29	284	535
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.0	30.4		10.0	29.4	29.4	10.0	27.4	27.4	9.6	15.4	10.0
Total Split (s)	37.0	57.6		10.0	30.6	30.6	37.0	41.8	41.8	10.6	15.4	37.0
Total Split (%)	30.8%	48.0%		8.3%	25.5%	25.5%	30.8%	34.8%	34.8%	8.8%	12.8%	30.8%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	32.4	53.4	120.0	5.4	26.4	26.4	31.2	39.4	39.4	5.7	10.0	43.2
Actuated g/C Ratio	0.27	0.45	1.00	0.05	0.22	0.22	0.26	0.33	0.33	0.05	0.08	0.36
v/c Ratio	0.55	0.10	0.85	0.92	0.18	0.05	0.93	0.25	0.20	0.34	0.95	0.70
Control Delay (s/veh)	38.7	13.6	18.0	134.3	39.2	0.2	54.7	31.6	8.9	65.9	93.6	24.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.7	13.6	18.0	134.3	39.2	0.2	54.7	31.6	8.9	65.9	93.6	24.1
LOS	D	B	B	F	D	A	D	C	A	E	F	C
Approach Delay (s/veh)		22.8			64.1			44.7			48.8	
Approach LOS		C			E			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay (s/veh): 35.8	Intersection LOS: D
Intersection Capacity Utilization 91.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	559	153	1576	74	143	26	901	312	136	29	284	535
Future Volume (veh/h)	559	153	1576	74	143	26	901	312	136	29	284	535
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	588	161	0	78	151	18	948	328	116	31	299	386
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1332	1653		233	798	332	1001	1300	528	49	317	704
Arrive On Green	0.12	0.14	0.00	0.13	0.21	0.21	0.27	0.33	0.33	0.03	0.08	0.08
Sat Flow, veh/h	3764	3800	1675	1810	3800	1583	3764	3952	1606	1810	3800	1604
Grp Volume(v), veh/h	588	161	0	78	151	18	948	328	116	31	299	386
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1583	1882	1976	1606	1810	1900	1604
Q Serve(g_s), s	17.5	4.4	0.0	4.7	3.9	1.1	29.7	7.3	5.1	2.0	9.4	0.0
Cycle Q Clear(g_c), s	17.5	4.4	0.0	4.7	3.9	1.1	29.7	7.3	5.1	2.0	9.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1332	1653		233	798	332	1001	1300	528	49	317	704
V/C Ratio(X)	0.44	0.10		0.33	0.19	0.05	0.95	0.25	0.22	0.64	0.94	0.55
Avail Cap(c_a), veh/h	1332	1653		233	798	332	1016	1300	528	90	317	704
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.84	0.84	0.84	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	30.9	0.0	47.6	39.0	35.6	43.2	29.5	19.2	57.8	54.7	25.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.3	0.5	0.3	14.7	0.1	0.2	5.1	36.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	2.0	0.0	2.1	1.9	0.4	15.4	3.4	2.4	1.0	6.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.0	31.0	0.0	47.9	39.5	35.9	57.9	29.5	19.4	62.9	90.8	25.9
LnGrp LOS	D	C		D	D	D	E	C	B	E	F	C
Approach Vol, veh/h		749			247			1392			716	
Approach Delay, s/veh		39.7			41.9			48.0			54.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.4	57.6	37.3	15.4	47.4	30.6	7.8	44.9
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.4	52.2	32.4	* 10	32.4	25.2	6.0	36.4
Max Q Clear Time (g_c+I1), s	6.7	6.4	31.7	11.4	19.5	5.9	4.0	9.3
Green Ext Time (p_c), s	0.0	1.0	0.2	0.0	1.0	0.8	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	47.0
HCM 7th LOS	D

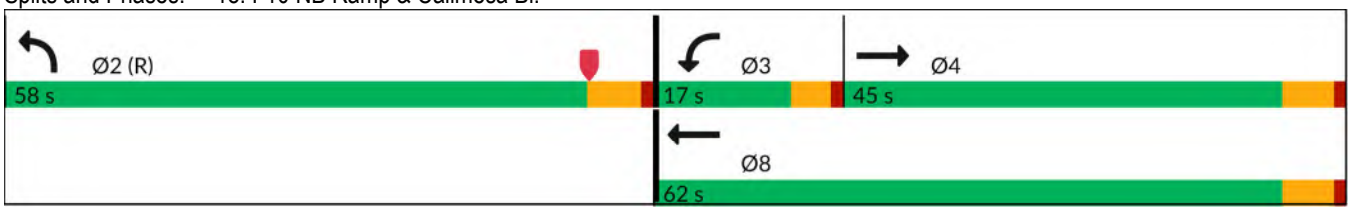
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	302	1631	26	172	1178
Future Volume (vph)	302	1631	26	172	1178
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.8		9.6	22.8	22.8
Total Split (s)	45.0		17.0	62.0	58.0
Total Split (%)	37.5%		14.2%	51.7%	48.3%
Yellow Time (s)	4.8		3.6	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	24.3	120.0	6.4	31.5	76.9
Actuated g/C Ratio	0.20	1.00	0.05	0.26	0.64
v/c Ratio	0.81	1.04	0.28	0.36	0.54
Control Delay (s/veh)	54.2	35.7	61.2	35.6	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.2	35.7	61.2	35.6	15.0
LOS	D	D	E	D	B
Approach Delay (s/veh)	38.6			39.0	15.0
Approach LOS	D			D	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay (s/veh): 30.2	Intersection LOS: C
Intersection Capacity Utilization 64.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	302	1631	26	172	1178	1
Future Volume (veh/h)	302	1631	26	172	1178	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	311	0	27	177	1215	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	350		45	470	2374	1056
Arrive On Green	0.18	0.00	0.02	0.25	0.66	0.00
Sat Flow, veh/h	1900	1610	1810	1900	3619	1610
Grp Volume(v), veh/h	311	0	27	177	1215	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1810	1610
Q Serve(g_s), s	19.2	0.0	1.8	9.3	20.9	0.0
Cycle Q Clear(g_c), s	19.2	0.0	1.8	9.3	20.9	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	350		45	470	2374	1056
V/C Ratio(X)	0.89		0.60	0.38	0.51	0.00
Avail Cap(c_a), veh/h	621		187	890	2374	1056
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.39	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.7	0.0	57.9	37.5	10.7	0.0
Incr Delay (d2), s/veh	1.3	0.0	4.8	0.2	0.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	0.0	0.9	4.3	7.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	49.0	0.0	62.7	37.7	11.5	0.0
LnGrp LOS	D		E	D	B	
Approach Vol, veh/h	311			204	1215	
Approach Delay, s/veh	49.0			41.0	11.5	
Approach LOS	D			D	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		84.5	7.6	27.9		35.5
Change Period (Y+Rc), s		5.8	4.6	5.8		5.8
Max Green Setting (Gmax), s		52.2	12.4	39.2		56.2
Max Q Clear Time (g_c+I1), s		22.9	3.8	21.2		11.3
Green Ext Time (p_c), s		2.6	0.0	1.0		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	21.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	26
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	338	2	58	228	97	0	66	70	157	104	25
Future Vol, veh/h	17	338	2	58	228	97	0	66	70	157	104	25
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	371	2	64	251	107	0	73	77	173	114	27
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	16.2	28.1	13.1	16.5
HCM LOS	E	D	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	99%	0%	70%	0%	81%
Vol Right, %	0%	0%	100%	0%	1%	0%	30%	0%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	66	70	17	340	58	325	157	129
LT Vol	0	0	0	17	0	58	0	157	0
Through Vol	0	66	0	0	338	0	228	0	104
RT Vol	0	0	70	0	2	0	97	0	25
Lane Flow Rate	0	73	77	19	374	64	357	173	142
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0	0.18	0.175	0.044	0.818	0.149	0.76	0.422	0.322
Departure Headway (Hd)	8.925	8.925	8.199	8.394	7.877	8.388	7.66	8.812	8.165
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	402	437	428	460	429	475	409	441
Service Time	6.684	6.684	5.958	6.121	5.604	6.115	5.387	6.562	5.906
HCM Lane V/C Ratio	0	0.182	0.176	0.044	0.813	0.149	0.752	0.423	0.322
HCM Control Delay, s/veh	11.7	13.6	12.7	11.5	37.4	12.6	30.9	17.9	14.8
HCM Lane LOS	N	B	B	B	E	B	D	C	B
HCM 95th-tile Q	0	0.6	0.6	0.1	7.7	0.5	6.5	2	1.4

APPENDIX 5.19: E+P (PHASE 4) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	570	107	8	18	0
Future Vol, veh/h	0	570	107	8	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	781	147	11	25	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	158	0	-	0	927	147
Stage 1	-	-	-	-	147	-
Stage 2	-	-	-	-	781	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1434	-	-	-	300	906
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	455	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1434	-	-	-	300	906
Mov Cap-2 Maneuver	-	-	-	-	386	-
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	455	-

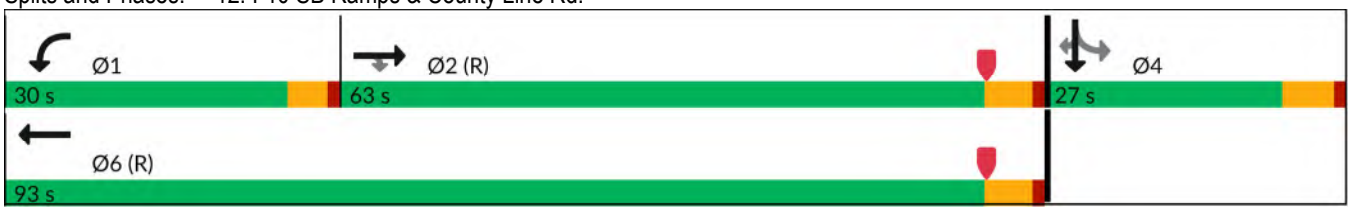
Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	14.97
HCM LOS			B

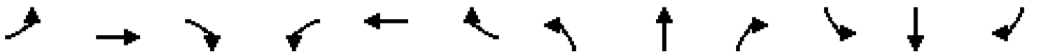
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1434	-	-	-	386
HCM Lane V/C Ratio	-	-	-	-	0.064
HCM Control Delay (s/veh)	0	-	-	-	15
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	646	99	314	165	6	130
Future Volume (vph)	646	99	314	165	6	130
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2				4
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8	22.8
Total Split (s)	63.0	63.0	30.0	93.0	27.0	27.0
Total Split (%)	52.5%	52.5%	25.0%	77.5%	22.5%	22.5%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	57.6	57.6	25.4	87.6	21.2	21.2
Actuated g/C Ratio	0.48	0.48	0.21	0.73	0.18	0.18
v/c Ratio	0.83	0.14	0.97	0.14	0.95	0.37
Control Delay (s/veh)	36.7	5.2	89.9	0.6	87.8	9.5
Queue Delay	1.0	0.0	0.0	0.0	45.0	0.0
Total Delay (s/veh)	37.8	5.2	89.9	0.6	132.8	9.5
LOS	D	A	F	A	F	A
Approach Delay (s/veh)	33.4			59.2	91.3	
Approach LOS	C			E	F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 15.4 (13%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay (s/veh): 55.0	Intersection LOS: D
Intersection Capacity Utilization 88.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	646	99	314	165	0	0	0	0	251	6	130
Future Volume (veh/h)	0	646	99	314	165	0	0	0	0	251	6	130
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	760	116	369	194	0				295	7	153
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85				0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	912	755	383	1387	0				313	7	284
Arrive On Green	0.00	0.48	0.48	0.07	0.24	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	1900	1574	1810	1900	0				1770	42	1610
Grp Volume(v), veh/h	0	760	116	369	194	0				302	0	153
Grp Sat Flow(s),veh/h/ln	0	1900	1574	1810	1900	0				1812	0	1610
Q Serve(g_s), s	0.0	41.6	5.0	24.4	9.6	0.0				19.8	0.0	10.4
Cycle Q Clear(g_c), s	0.0	41.6	5.0	24.4	9.6	0.0				19.8	0.0	10.4
Prop In Lane	0.00		1.00	1.00		0.00				0.98		1.00
Lane Grp Cap(c), veh/h	0	912	755	383	1387	0				320	0	284
V/C Ratio(X)	0.00	0.83	0.15	0.96	0.14	0.00				0.94	0.00	0.54
Avail Cap(c_a), veh/h	0	912	755	383	1387	0				320	0	284
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	0.80	0.80	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	27.0	17.5	55.3	16.0	0.0				48.8	0.0	44.9
Incr Delay (d2), s/veh	0.0	8.8	0.4	31.6	0.2	0.0				37.8	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	0.0	20.5	1.9	15.3	4.7	0.0				12.0	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	35.9	17.9	87.0	16.1	0.0				86.6	0.0	52.1
LnGrp LOS		D	B	F	B					F		D
Approach Vol, veh/h		876			563						455	
Approach Delay, s/veh		33.5			62.6						75.0	
Approach LOS		C			E						E	

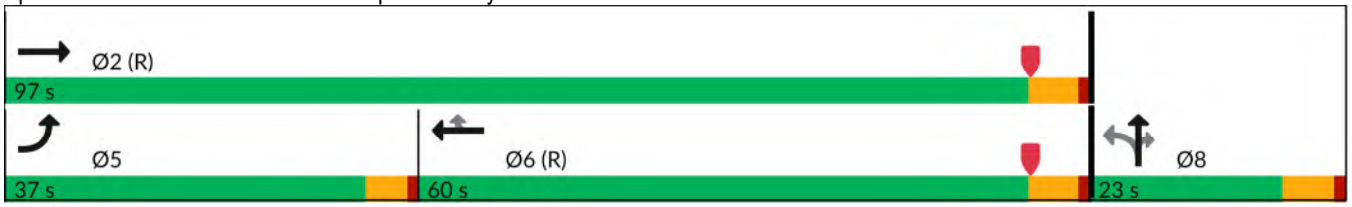
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	30.0	63.0		27.0		93.0
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	25.4	57.6		21.2		87.6
Max Q Clear Time (g_c+I1), s	26.4	43.6		21.8		11.6
Green Ext Time (p_c), s	0.0	5.0		0.0		1.2

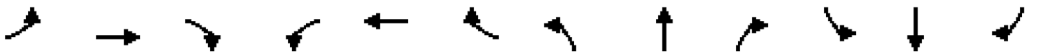
Intersection Summary		
HCM 7th Control Delay, s/veh		52.1
HCM 7th LOS		D

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Traffic Volume (vph)	466	431	455	659	4	97
Future Volume (vph)	466	431	455	659	4	97
Turn Type	Prot	NA	NA	Perm	NA	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8
Total Split (s)	37.0	97.0	60.0	60.0	23.0	23.0
Total Split (%)	30.8%	80.8%	50.0%	50.0%	19.2%	19.2%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	32.4	91.6	54.6	54.6	17.2	17.2
Actuated g/C Ratio	0.27	0.76	0.46	0.46	0.14	0.14
v/c Ratio	1.03	0.32	0.57	0.73	0.11	0.33
Control Delay (s/veh)	67.0	8.3	27.2	15.1	46.1	11.6
Queue Delay	26.0	2.7	0.2	0.0	0.0	0.0
Total Delay (s/veh)	92.9	11.1	27.4	15.1	46.1	11.6
LOS	F	B	C	B	D	B
Approach Delay (s/veh)		53.6	20.1		19.1	
Approach LOS		D	C		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 106.8 (89%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay (s/veh): 34.1	Intersection LOS: C
Intersection Capacity Utilization 88.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 13: I-10 NB Ramps & County Line Rd.



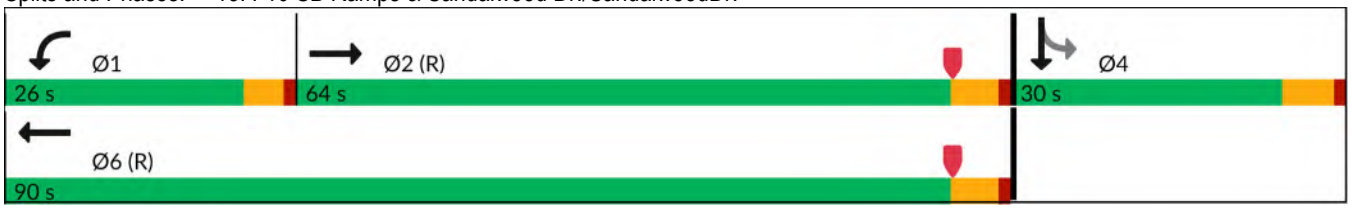


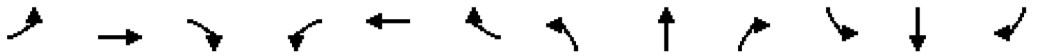
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	466	431	0	0	455	659	23	4	97	0	0	0
Future Volume (veh/h)	466	431	0	0	455	659	23	4	97	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	501	463	0	0	489	709	25	4	104			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	489	1450	0	0	864	733	225	36	231			
Arrive On Green	0.45	1.00	0.00	0.00	0.45	0.45	0.14	0.14	0.14			
Sat Flow, veh/h	1810	1900	0	0	1900	1610	1570	251	1610			
Grp Volume(v), veh/h	501	463	0	0	489	709	29	0	104			
Grp Sat Flow(s),veh/h/ln	1810	1900	0	0	1900	1610	1821	0	1610			
Q Serve(g_s), s	32.4	0.0	0.0	0.0	22.7	51.5	1.7	0.0	7.1			
Cycle Q Clear(g_c), s	32.4	0.0	0.0	0.0	22.7	51.5	1.7	0.0	7.1			
Prop In Lane	1.00		0.00	0.00		1.00	0.86		1.00			
Lane Grp Cap(c), veh/h	489	1450	0	0	864	733	261	0	231			
V/C Ratio(X)	1.03	0.32	0.00	0.00	0.57	0.97	0.11	0.00	0.45			
Avail Cap(c_a), veh/h	489	1450	0	0	865	733	261	0	231			
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.44	0.44	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	32.9	0.0	0.0	0.0	24.0	31.8	44.7	0.0	47.1			
Incr Delay (d2), s/veh	33.7	0.3	0.0	0.0	2.7	26.2	0.9	0.0	6.2			
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	16.5	0.1	0.0	0.0	10.7	24.7	0.8	0.0	3.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.6	0.3	0.0	0.0	26.7	58.1	45.6	0.0	53.3			
LnGrp LOS	F	A			C	E	D		D			
Approach Vol, veh/h		964			1198			133				
Approach Delay, s/veh		34.7			45.3			51.6				
Approach LOS		C			D			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		97.0			37.0	60.0		23.0				
Change Period (Y+Rc), s		5.4			4.6	5.4		5.8				
Max Green Setting (Gmax), s		91.6			32.4	54.6		17.2				
Max Q Clear Time (g_c+I1), s		2.0			34.4	53.5		9.1				
Green Ext Time (p_c), s		3.4			0.0	0.7		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			41.2									
HCM 7th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1043	528	185	2284	122	16	1683
Future Volume (vph)	1043	528	185	2284	122	16	1683
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	64.0		26.0	90.0	30.0	30.0	
Total Split (%)	53.3%		21.7%	75.0%	25.0%	25.0%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	None	None	
Act Effct Green (s)	80.0	120.0	12.2	96.8	12.0	12.0	120.0
Actuated g/C Ratio	0.67	1.00	0.10	0.81	0.10	0.10	1.00
v/c Ratio	0.37	0.40	0.64	0.67	0.50	0.49	1.29
Control Delay (s/veh)	9.7	0.8	60.0	6.2	60.7	60.5	144.2
Queue Delay	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay (s/veh)	9.7	0.8	60.0	6.7	60.7	60.5	144.2
LOS	A	A	E	A	E	E	F
Approach Delay (s/veh)	6.7			10.7		137.9	
Approach LOS	A			B		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 40.4 (34%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.29	
Intersection Signal Delay (s/veh): 49.2	Intersection LOS: D
Intersection Capacity Utilization 61.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↰	↱
Traffic Volume (veh/h)	0	1043	528	185	2284	0	0	0	0	122	16	1683
Future Volume (veh/h)	0	1043	528	185	2284	0	0	0	0	122	16	1683
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	1288	0	228	2820	0				165	0	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	3644		291	4272	0				300	0	
Arrive On Green	0.00	0.70	0.00	0.08	0.82	0.00				0.08	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	1288	0	228	2820	0				165	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	11.8	0.0	7.6	25.2	0.0				5.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.8	0.0	7.6	25.2	0.0				5.3	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3644		291	4272	0				300	0	
V/C Ratio(X)	0.00	0.35		0.78	0.66	0.00				0.55	0.00	
Avail Cap(c_a), veh/h	0	3644		626	4272	0				730	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.1	0.0	54.0	4.1	0.0				52.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	1.8	0.8	0.0				1.6	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.8	0.0	3.4	5.6	0.0				2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	7.3	0.0	55.7	4.9	0.0				54.4	0.0	0.0
LnGrp LOS		A		E	A					D		
Approach Vol, veh/h		1288			3048						165	
Approach Delay, s/veh		7.3			8.7						54.4	
Approach LOS		A			A						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	14.5	89.7		15.8		104.2
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	21.4	58.6		24.2		84.6
Max Q Clear Time (g_c+I1), s	9.6	13.8		7.3		27.2
Green Ext Time (p_c), s	0.3	11.7		0.4		44.9

Intersection Summary		
HCM 7th Control Delay, s/veh		10.0
HCM 7th LOS		A

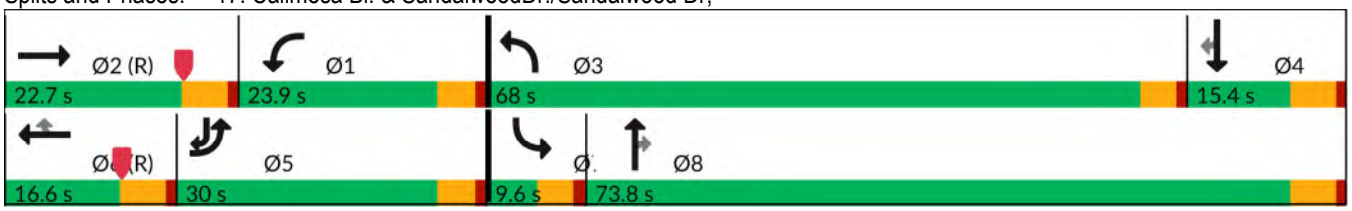
Notes

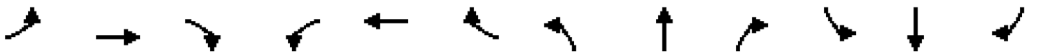
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	324	231	534	154	239	32	1684	544	99	14	205	548
Future Volume (vph)	324	231	534	154	239	32	1684	544	99	14	205	548
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	15.4		9.6	15.4	15.4	9.6	15.4	15.4	9.6	15.4	9.6
Total Split (s)	30.0	22.7		23.9	16.6	16.6	68.0	73.8	73.8	9.6	15.4	30.0
Total Split (%)	23.1%	17.5%		18.4%	12.8%	12.8%	52.3%	56.8%	56.8%	7.4%	11.8%	23.1%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Min	C-Min	Max	Min	Min	None	Min	None
Act Effct Green (s)	25.4	17.3	130.0	19.3	11.2	11.2	63.4	74.2	74.2	5.0	10.0	36.2
Actuated g/C Ratio	0.20	0.13	1.00	0.15	0.09	0.09	0.49	0.57	0.57	0.04	0.08	0.28
v/c Ratio	0.48	0.50	0.31	0.60	0.81	0.11	1.00	0.28	0.10	0.21	0.77	1.01
Control Delay (s/veh)	48.8	56.1	0.4	61.3	77.0	0.7	53.8	15.2	1.3	67.4	76.3	73.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	37.3	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.8	56.1	0.4	61.3	77.0	0.7	91.1	15.2	1.3	67.4	76.3	73.0
LOS	D	E	A	E	E	A	F	B	A	E	E	E
Approach Delay (s/veh)		26.6			65.6			69.5			73.8	
Approach LOS		C			E			E			E	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay (s/veh): 59.7	Intersection LOS: E
Intersection Capacity Utilization 102.5%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	324	231	534	154	239	32	1684	544	99	14	205	548
Future Volume (veh/h)	324	231	534	154	239	32	1684	544	99	14	205	548
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976
Adj Flow Rate, veh/h	368	262	0	175	272	26	1914	618	48	16	233	205
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	748	526		279	327	136	1836	2165	916	32	304	462
Arrive On Green	0.40	0.27	0.00	0.30	0.17	0.17	0.98	1.00	1.00	0.03	0.15	0.15
Sat Flow, veh/h	3764	3952	1675	1882	3952	1645	3764	3952	1673	1882	3952	1675
Grp Volume(v), veh/h	368	262	0	175	272	26	1914	618	48	16	233	205
Grp Sat Flow(s),veh/h/ln	1882	1976	1675	1882	1976	1645	1882	1976	1673	1882	1976	1675
Q Serve(g_s), s	9.5	7.3	0.0	10.4	8.7	1.6	63.4	0.0	0.0	1.1	7.4	10.0
Cycle Q Clear(g_c), s	9.5	7.3	0.0	10.4	8.7	1.6	63.4	0.0	0.0	1.1	7.4	10.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	748	526		279	327	136	1836	2165	916	32	304	462
V/C Ratio(X)	0.49	0.50		0.63	0.83	0.19	1.04	0.29	0.05	0.50	0.77	0.44
Avail Cap(c_a), veh/h	748	526		279	340	142	1836	2165	916	72	304	462
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.12	0.12	0.12	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	44.0	0.0	42.6	53.4	40.7	1.6	0.0	0.0	62.3	53.9	19.9
Incr Delay (d2), s/veh	0.2	3.3	0.0	3.3	21.3	3.1	21.8	0.0	0.0	4.5	11.1	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	3.5	0.0	4.5	4.9	0.8	6.2	0.0	0.0	0.5	3.9	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.4	47.4	0.0	45.9	74.7	43.8	23.4	0.0	0.0	66.8	65.0	20.5
LnGrp LOS	C	D		D	E	D	F	A	A	E	E	C
Approach Vol, veh/h		630			473			2580			454	
Approach Delay, s/veh		39.8			62.3			17.3			45.0	
Approach LOS		D			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.9	22.7	68.0	15.4	30.4	16.2	6.8	76.6
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	19.3	17.3	63.4	10.0	25.4	11.2	5.0	68.4
Max Q Clear Time (g_c+I1), s	12.4	9.3	65.4	12.0	11.5	10.7	3.1	2.0
Green Ext Time (p_c), s	0.1	0.9	0.0	0.0	0.6	0.1	0.0	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	28.9
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	131	760	113	604	1724
Future Volume (vph)	131	760	113	604	1724
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.8		9.6	22.8	22.8
Total Split (s)	28.2		20.8	49.0	71.0
Total Split (%)	23.5%		17.3%	40.8%	59.2%
Yellow Time (s)	4.8		3.6	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	25.9	120.0	12.7	43.2	65.2
Actuated g/C Ratio	0.22	1.00	0.11	0.36	0.54
v/c Ratio	0.38	0.55	0.70	1.01	0.98
Control Delay (s/veh)	44.4	1.4	70.3	74.3	42.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.4	1.4	70.3	74.3	42.9
LOS	D	A	E	E	D
Approach Delay (s/veh)	7.7			73.7	42.9
Approach LOS	A			E	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay (s/veh): 40.1	Intersection LOS: D
Intersection Capacity Utilization 90.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	131	760	113	604	1724	1
Future Volume (veh/h)	131	760	113	604	1724	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.04	1.00
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	1900	1900	1900	1976	1976	1900
Adj Flow Rate, veh/h	154	0	133	711	2029	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	443		160	711	2045	875
Arrive On Green	0.23	0.00	0.09	0.36	0.54	0.00
Sat Flow, veh/h	1900	1610	1810	1976	3764	1610
Grp Volume(v), veh/h	154	0	133	711	2029	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1976	1882	1610
Q Serve(g_s), s	8.1	0.0	8.7	43.2	64.1	0.0
Cycle Q Clear(g_c), s	8.1	0.0	8.7	43.2	64.1	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	443		160	711	2045	875
V/C Ratio(X)	0.35		0.83	1.00	0.99	0.00
Avail Cap(c_a), veh/h	443		244	711	2045	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.4	0.0	53.8	38.4	27.1	0.0
Incr Delay (d2), s/veh	0.2	0.0	8.1	33.6	18.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	4.2	26.6	30.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	38.5	0.0	61.9	72.0	45.3	0.0
LnGrp LOS	D		E	E	D	
Approach Vol, veh/h	154			844	2029	
Approach Delay, s/veh	38.5			70.4	45.3	
Approach LOS	D			E	D	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		71.0	15.2	33.8		49.0
Change Period (Y+Rc), s		5.8	4.6	5.8		5.8
Max Green Setting (Gmax), s		65.2	16.2	22.4		43.2
Max Q Clear Time (g_c+I1), s		66.1	10.7	10.1		45.2
Green Ext Time (p_c), s		0.0	0.1	0.3		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	51.9
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	99.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	206	2	29	361	158	2	483	210	73	47	31
Future Vol, veh/h	52	206	2	29	361	158	2	483	210	73	47	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	219	2	31	384	168	2	514	223	78	50	33
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	23.3	159.3	98.1	16.7
HCM LOS	C	F	F	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	99%	0%	70%	0%	60%
Vol Right, %	0%	0%	100%	0%	1%	0%	30%	0%	40%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	483	210	52	208	29	519	73	78
LT Vol	2	0	0	52	0	29	0	73	0
Through Vol	0	483	0	0	206	0	361	0	47
RT Vol	0	0	210	0	2	0	158	0	31
Lane Flow Rate	2	514	223	55	221	31	552	78	83
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.005	1.182	0.471	0.149	0.566	0.077	1.275	0.22	0.218
Departure Headway (Hd)	9.55	9.031	8.304	10.694	10.165	9.521	8.788	11.438	10.611
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	377	406	438	337	358	379	420	316	340
Service Time	7.25	6.731	6.004	8.394	7.865	7.221	6.488	9.138	8.311
HCM Lane V/C Ratio	0.005	1.266	0.509	0.163	0.617	0.082	1.314	0.247	0.244
HCM Control Delay, s/veh	12.3	133.2	18.2	15.3	25.3	13	167.5	17.3	16.2
HCM Lane LOS	B	F	C	C	D	B	F	C	C
HCM 95th-tile Q	0	18.6	2.5	0.5	3.3	0.2	22.7	0.8	0.8

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	355	676	1	4	0
Future Vol, veh/h	0	355	676	1	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	634	1207	2	7	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1209	0	-	0	1841	1207
Stage 1	-	-	-	-	1207	-
Stage 2	-	-	-	-	634	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	584	-	-	-	84	226
Stage 1	-	-	-	-	286	-
Stage 2	-	-	-	-	532	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	584	-	-	-	84	226
Mov Cap-2 Maneuver	-	-	-	-	204	-
Stage 1	-	-	-	-	286	-
Stage 2	-	-	-	-	532	-

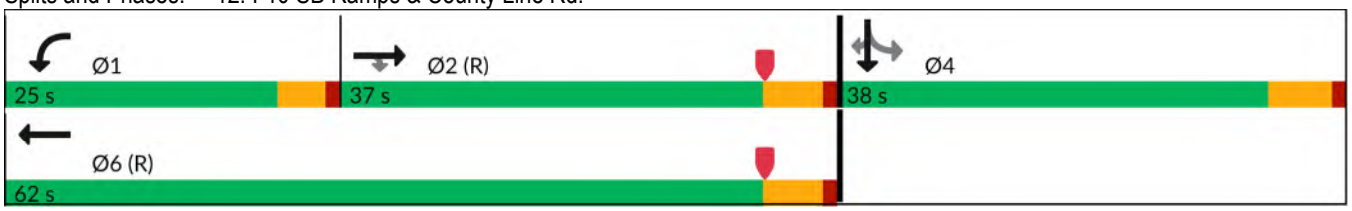
Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	23.32
HCM LOS			C

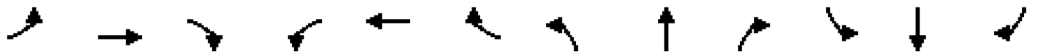
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	584	-	-	-	204
HCM Lane V/C Ratio	-	-	-	-	0.035
HCM Control Delay (s/veh)	0	-	-	-	23.3
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	401	81	240	295	3	514
Future Volume (vph)	401	81	240	295	3	514
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2				4
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8	22.8
Total Split (s)	37.0	37.0	25.0	62.0	38.0	38.0
Total Split (%)	37.0%	37.0%	25.0%	62.0%	38.0%	38.0%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	34.6	34.6	17.4	56.6	32.2	32.2
Actuated g/C Ratio	0.35	0.35	0.17	0.57	0.32	0.32
v/c Ratio	0.65	0.14	0.81	0.29	0.73	0.62
Control Delay (s/veh)	34.1	6.2	77.2	9.3	38.5	6.1
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0
Total Delay (s/veh)	34.1	6.2	77.2	9.6	38.5	6.1
LOS	C	A	E	A	D	A
Approach Delay (s/veh)	29.4			39.9	20.3	
Approach LOS	C			D	C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 73.8 (74%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay (s/veh): 28.0	Intersection LOS: C
Intersection Capacity Utilization 92.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	401	81	240	295	0	0	0	0	396	3	514
Future Volume (veh/h)	0	401	81	240	295	0	0	0	0	396	3	514
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	427	86	255	314	0				421	3	547
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	691	572	283	1075	0				579	4	518
Arrive On Green	0.00	0.36	0.36	0.31	1.00	0.00				0.32	0.32	0.32
Sat Flow, veh/h	0	1900	1575	1810	1900	0				1797	13	1610
Grp Volume(v), veh/h	0	427	86	255	314	0				424	0	547
Grp Sat Flow(s),veh/h/ln	0	1900	1575	1810	1900	0				1810	0	1610
Q Serve(g_s), s	0.0	18.5	3.7	13.5	0.0	0.0				20.7	0.0	32.2
Cycle Q Clear(g_c), s	0.0	18.5	3.7	13.5	0.0	0.0				20.7	0.0	32.2
Prop In Lane	0.00		1.00	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	691	572	283	1075	0				583	0	518
V/C Ratio(X)	0.00	0.62	0.15	0.90	0.29	0.00				0.73	0.00	1.06
Avail Cap(c_a), veh/h	0	691	572	369	1075	0				583	0	518
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	0.83	0.83	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.1	21.4	33.6	0.0	0.0				30.0	0.0	33.9
Incr Delay (d2), s/veh	0.0	4.1	0.6	15.4	0.6	0.0				7.8	0.0	54.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.9	1.4	6.0	0.2	0.0				9.7	0.0	19.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	30.2	22.0	49.0	0.6	0.0				37.8	0.0	88.7
LnGrp LOS		C	C	D	A					D		F
Approach Vol, veh/h		513			569						971	
Approach Delay, s/veh		28.9			22.3						66.5	
Approach LOS		C			C						E	

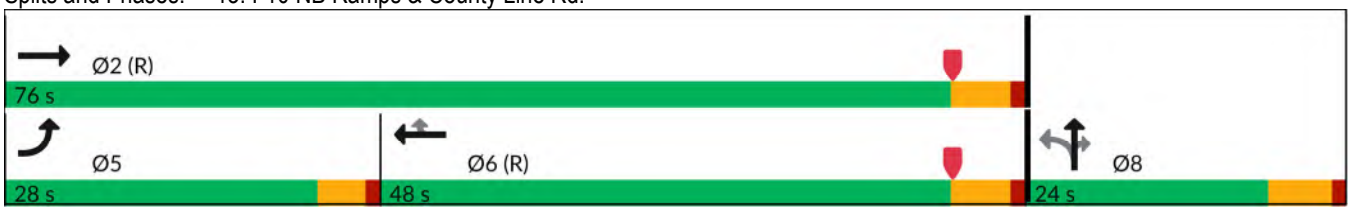
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	20.2	41.8		38.0		62.0						
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4						
Max Green Setting (Gmax), s	20.4	31.6		32.2		56.6						
Max Q Clear Time (g_c+I1), s	15.5	20.5		34.2		2.0						
Green Ext Time (p_c), s	0.2	2.3		0.0		2.1						

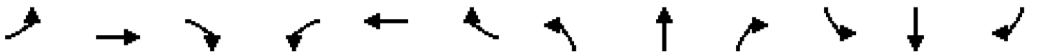
Intersection Summary												
HCM 7th Control Delay, s/veh			44.8									
HCM 7th LOS			D									

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Traffic Volume (vph)	286	512	441	314	1	216
Future Volume (vph)	286	512	441	314	1	216
Turn Type	Prot	NA	NA	Perm	NA	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8
Total Split (s)	28.0	76.0	48.0	48.0	24.0	24.0
Total Split (%)	28.0%	76.0%	48.0%	48.0%	24.0%	24.0%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	20.1	70.6	45.9	45.9	18.2	18.2
Actuated g/C Ratio	0.20	0.71	0.46	0.46	0.18	0.18
v/c Ratio	0.84	0.41	0.54	0.36	0.31	0.48
Control Delay (s/veh)	50.9	9.1	23.1	3.3	38.4	8.5
Queue Delay	0.0	1.1	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.9	10.2	23.1	3.3	38.4	8.5
LOS	D	B	C	A	D	A
Approach Delay (s/veh)		24.8	14.9		17.6	
Approach LOS		C	B		B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 78.8 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay (s/veh): 19.6	Intersection LOS: B
Intersection Capacity Utilization 92.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 13: I-10 NB Ramps & County Line Rd.



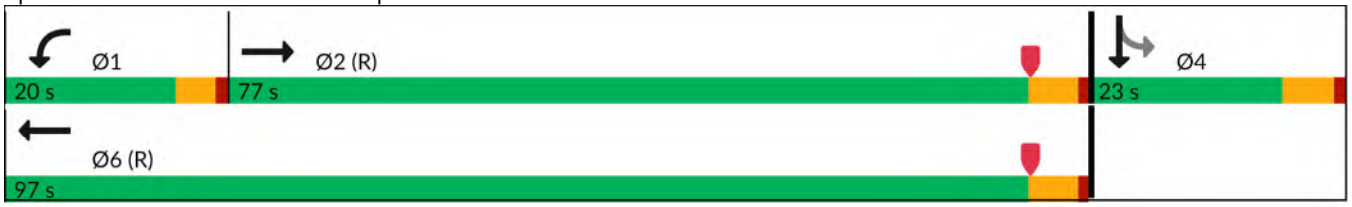


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	286	512	0	0	441	314	94	1	216	0	0	0
Future Volume (veh/h)	286	512	0	0	441	314	94	1	216	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	304	545	0	0	469	334	100	1	230			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	331	1341	0	0	907	768	326	3	293			
Arrive On Green	0.37	1.00	0.00	0.00	0.48	0.48	0.18	0.18	0.18			
Sat Flow, veh/h	1810	1900	0	0	1900	1610	1792	18	1610			
Grp Volume(v), veh/h	304	545	0	0	469	334	101	0	230			
Grp Sat Flow(s),veh/h/ln	1810	1900	0	0	1900	1610	1810	0	1610			
Q Serve(g_s), s	16.0	0.0	0.0	0.0	17.1	13.7	4.8	0.0	13.6			
Cycle Q Clear(g_c), s	16.0	0.0	0.0	0.0	17.1	13.7	4.8	0.0	13.6			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	331	1341	0	0	907	768	329	0	293			
V/C Ratio(X)	0.92	0.41	0.00	0.00	0.52	0.43	0.31	0.00	0.78			
Avail Cap(c_a), veh/h	423	1341	0	0	907	768	329	0	293			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.71	0.71	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	31.0	0.0	0.0	0.0	18.1	17.2	35.4	0.0	39.0			
Incr Delay (d2), s/veh	14.9	0.7	0.0	0.0	2.1	1.8	2.4	0.0	18.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.8	0.2	0.0	0.0	7.8	5.3	2.3	0.0	6.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.9	0.7	0.0	0.0	20.3	19.0	37.8	0.0	57.8			
LnGrp LOS	D	A			C	B	D		E			
Approach Vol, veh/h		849			803			331				
Approach Delay, s/veh		16.9			19.7			51.7				
Approach LOS		B			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.0			22.9	53.1		24.0				
Change Period (Y+Rc), s		5.4			4.6	5.4		5.8				
Max Green Setting (Gmax), s		70.6			23.4	42.6		18.2				
Max Q Clear Time (g_c+I1), s		2.0			18.0	19.1		15.6				
Green Ext Time (p_c), s		4.2			0.2	4.4		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			23.8									
HCM 7th LOS			C									

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	2276	1685	316	1385	243	7	874
Future Volume (vph)	2276	1685	316	1385	243	7	874
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	77.0		20.0	97.0	23.0	23.0	
Total Split (%)	64.2%		16.7%	80.8%	19.2%	19.2%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	None	None	
Act Effct Green (s)	75.6	120.0	14.5	94.7	14.1	14.1	120.0
Actuated g/C Ratio	0.63	1.00	0.12	0.79	0.12	0.12	1.00
v/c Ratio	0.73	1.10	0.79	0.36	0.65	0.65	0.57
Control Delay (s/veh)	17.6	60.2	63.2	1.7	65.6	65.6	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.6	60.2	63.2	1.7	65.6	65.6	1.5
LOS	B	E	E	A	E	E	A
Approach Delay (s/veh)	35.7			13.2		15.7	
Approach LOS	D			B		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay (s/veh): 26.8	Intersection LOS: C
Intersection Capacity Utilization 74.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2276	1685	316	1385	0	0	0	0	243	7	874
Future Volume (veh/h)	0	2276	1685	316	1385	0	0	0	0	243	7	874
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	2396	0	333	1458	0				261	0	0
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	0	0	0	0	0				0	0	0
Cap, veh/h	0	3463		385	4230	0				330	0	
Arrive On Green	0.00	0.67	0.00	0.22	1.00	0.00				0.09	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	2396	0	333	1458	0				261	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	34.2	0.0	11.0	0.0	0.0				8.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	34.2	0.0	11.0	0.0	0.0				8.5	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3463		385	4230	0				330	0	
V/C Ratio(X)	0.00	0.69		0.87	0.34	0.00				0.79	0.00	
Avail Cap(c_a), veh/h	0	3463		451	4230	0				519	0	
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	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	12.3	0.0	46.0	0.0	0.0				53.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	12.9	0.2	0.0				4.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.8	0.0	4.9	0.1	0.0				4.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	13.5	0.0	58.9	0.2	0.0				57.8	0.0	0.0
LnGrp LOS		B		E	A					E		
Approach Vol, veh/h		2396			1791						261	
Approach Delay, s/veh		13.5			11.1						57.8	
Approach LOS		B			B						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.7	85.5		16.7		103.3
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	15.4	71.6		17.2		91.6
Max Q Clear Time (g_c+I1), s	13.0	36.2		10.5		2.0
Green Ext Time (p_c), s	0.2	25.8		0.5		15.5

Intersection Summary		
HCM 7th Control Delay, s/veh		15.1
HCM 7th LOS		B

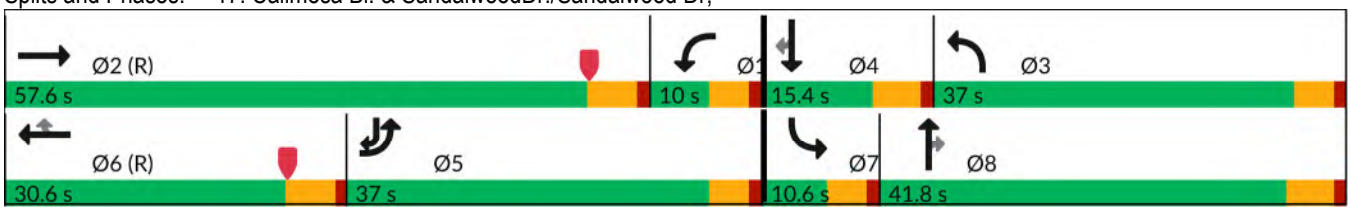
Notes

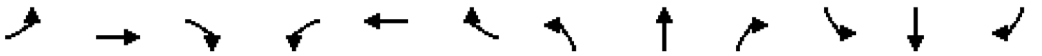
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	599	168	1733	74	159	26	968	312	136	29	284	572
Future Volume (vph)	599	168	1733	74	159	26	968	312	136	29	284	572
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.0	30.4		10.0	29.4	29.4	10.0	27.4	27.4	9.6	15.4	10.0
Total Split (s)	37.0	57.6		10.0	30.6	30.6	37.0	41.8	41.8	10.6	15.4	37.0
Total Split (%)	30.8%	48.0%		8.3%	25.5%	25.5%	30.8%	34.8%	34.8%	8.8%	12.8%	30.8%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	32.4	52.4	120.0	5.4	25.4	25.4	32.2	40.4	40.4	5.7	10.0	43.2
Actuated g/C Ratio	0.27	0.44	1.00	0.05	0.21	0.21	0.27	0.34	0.34	0.05	0.08	0.36
v/c Ratio	0.60	0.11	0.93	0.92	0.21	0.05	0.97	0.25	0.20	0.34	0.95	0.76
Control Delay (s/veh)	38.7	13.0	25.1	134.3	39.9	0.2	60.3	32.0	9.4	65.9	93.6	28.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.7	13.0	25.1	134.3	39.9	0.2	60.3	32.0	9.4	65.9	93.6	28.4
LOS	D	B	C	F	D	A	E	C	A	E	F	C
Approach Delay (s/veh)		27.6			63.0			49.2			50.5	
Approach LOS		C			E			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay (s/veh): 39.4	Intersection LOS: D
Intersection Capacity Utilization 95.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	599	168	1733	74	159	26	968	312	136	29	284	572
Future Volume (veh/h)	599	168	1733	74	159	26	968	312	136	29	284	572
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	631	177	0	78	167	18	1019	328	116	31	299	425
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1844	1653		480	798	332	1016	1317	535	49	317	923
Arrive On Green	0.16	0.14	0.00	0.27	0.21	0.21	0.27	0.33	0.33	0.03	0.08	0.08
Sat Flow, veh/h	3764	3800	1675	1810	3800	1583	3764	3952	1606	1810	3800	1604
Grp Volume(v), veh/h	631	177	0	78	167	18	1019	328	116	31	299	425
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1583	1882	1976	1606	1810	1900	1604
Q Serve(g_s), s	17.9	4.9	0.0	4.0	4.4	1.3	32.4	7.2	5.1	2.0	9.4	0.0
Cycle Q Clear(g_c), s	17.9	4.9	0.0	4.0	4.4	1.3	32.4	7.2	5.1	2.0	9.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1844	1653		480	798	332	1016	1317	535	49	317	923
V/C Ratio(X)	0.34	0.11		0.16	0.21	0.05	1.00	0.25	0.22	0.64	0.94	0.46
Avail Cap(c_a), veh/h	1844	1653		480	798	332	1016	1317	535	90	317	923
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.1	31.1	0.0	33.9	39.2	49.9	43.8	29.1	19.2	57.8	54.7	14.8
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.1	0.6	0.3	26.2	0.1	0.2	5.1	36.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	2.3	0.0	1.7	2.1	0.4	18.3	3.4	2.3	1.0	6.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.2	31.2	0.0	33.9	39.8	50.2	70.0	29.2	19.4	62.9	90.8	15.2
LnGrp LOS	C	C		C	D	D	F	C	B	E	F	B
Approach Vol, veh/h		808			263			1463			755	
Approach Delay, s/veh		32.8			38.7			56.8			47.1	
Approach LOS		C			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.2	57.6	37.8	15.4	64.2	30.6	7.8	45.4
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.4	52.2	32.4	* 10	32.4	25.2	6.0	36.4
Max Q Clear Time (g_c+I1), s	6.0	6.9	34.4	11.4	19.9	6.4	4.0	9.2
Green Ext Time (p_c), s	0.0	1.1	0.0	0.0	1.1	0.9	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	47.2
HCM 7th LOS	D

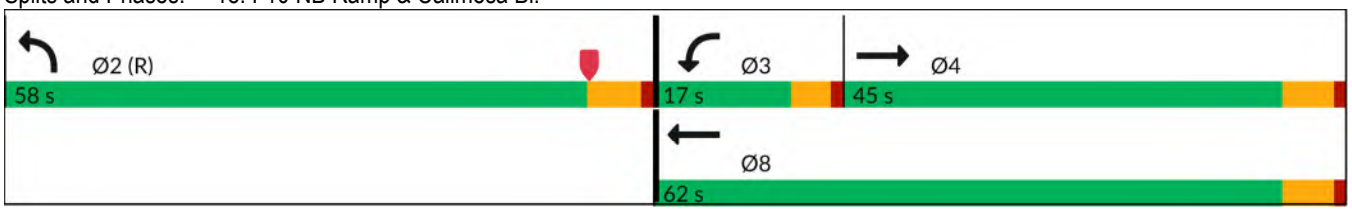
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	304	1786	26	179	1238
Future Volume (vph)	304	1786	26	179	1238
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.8		9.6	22.8	22.8
Total Split (s)	45.0		17.0	62.0	58.0
Total Split (%)	37.5%		14.2%	51.7%	48.3%
Yellow Time (s)	4.8		3.6	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	24.4	120.0	6.4	31.6	76.8
Actuated g/C Ratio	0.20	1.00	0.05	0.26	0.64
v/c Ratio	0.81	1.14	0.28	0.37	0.57
Control Delay (s/veh)	53.8	77.5	61.2	35.8	15.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.8	77.5	61.2	35.8	15.5
LOS	D	E	E	D	B
Approach Delay (s/veh)	74.1			39.1	15.5
Approach LOS	E			D	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.14	
Intersection Signal Delay (s/veh): 51.5	Intersection LOS: D
Intersection Capacity Utilization 66.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	304	1786	26	179	1238	1
Future Volume (veh/h)	304	1786	26	179	1238	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	313	0	27	185	1277	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	352		45	472	2370	1054
Arrive On Green	0.19	0.00	0.02	0.25	0.65	0.00
Sat Flow, veh/h	1900	1610	1810	1900	3619	1610
Grp Volume(v), veh/h	313	0	27	185	1277	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1810	1610
Q Serve(g_s), s	19.3	0.0	1.8	9.7	22.6	0.0
Cycle Q Clear(g_c), s	19.3	0.0	1.8	9.7	22.6	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	352		45	472	2370	1054
V/C Ratio(X)	0.89		0.60	0.39	0.54	0.00
Avail Cap(c_a), veh/h	621		187	890	2370	1054
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.25	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.7	0.0	57.9	37.5	11.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	4.8	0.2	0.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	0.0	0.9	4.5	8.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.6	0.0	62.7	37.7	11.9	0.0
LnGrp LOS	D		E	D	B	
Approach Vol, veh/h	313			212	1277	
Approach Delay, s/veh	48.6			40.9	11.9	
Approach LOS	D			D	B	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	84.4	7.6	28.0		35.6
Change Period (Y+Rc), s	5.8	4.6	5.8		5.8
Max Green Setting (Gmax), s	52.2	12.4	39.2		56.2
Max Q Clear Time (g_c+I1), s	24.6	3.8	21.3		11.7
Green Ext Time (p_c), s	2.7	0.0	1.0		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	21.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	26.6
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	338	2	58	228	100	0	70	70	158	105	25
Future Vol, veh/h	17	338	2	58	228	100	0	70	70	158	105	25
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	371	2	64	251	110	0	77	77	174	115	27
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	37	29.2	13.4	16.7
HCM LOS	E	D	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	99%	0%	70%	0%	81%
Vol Right, %	0%	0%	100%	0%	1%	0%	30%	0%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	70	70	17	340	58	328	158	130
LT Vol	0	0	0	17	0	58	0	158	0
Through Vol	0	70	0	0	338	0	228	0	105
RT Vol	0	0	70	0	2	0	100	0	25
Lane Flow Rate	0	77	77	19	374	64	360	174	143
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0	0.192	0.176	0.044	0.824	0.149	0.772	0.427	0.326
Departure Headway (Hd)	8.966	8.966	8.24	8.458	7.94	8.441	7.708	8.86	8.206
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	400	435	425	460	426	472	406	439
Service Time	6.731	6.731	6.004	6.178	5.661	6.163	5.431	6.615	5.96
HCM Lane V/C Ratio	0	0.193	0.177	0.045	0.813	0.15	0.763	0.429	0.326
HCM Control Delay, s/veh	11.7	13.9	12.8	11.6	38.3	12.6	32.1	18.1	14.9
HCM Lane LOS	N	B	B	B	E	B	D	C	B
HCM 95th-tile Q	0	0.7	0.6	0.1	7.9	0.5	6.7	2.1	1.4

APPENDIX 5.20: E+P (PROJECT BUILDOUT) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	689	102	8	18	0
Future Vol, veh/h	0	689	102	8	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	944	140	11	25	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	151	0	-	0	1084	140
Stage 1	-	-	-	-	140	-
Stage 2	-	-	-	-	944	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1443	-	-	-	242	914
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	382	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1443	-	-	-	242	914
Mov Cap-2 Maneuver	-	-	-	-	326	-
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	382	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	16.95
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1443	-	-	-	326
HCM Lane V/C Ratio	-	-	-	-	0.076
HCM Control Delay (s/veh)	0	-	-	-	17
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Intersection Delay, s/veh	12.0
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	2	1	1	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1016	594	0	418
Demand Flow Rate, veh/h	1016	594	0	418
Vehicles Circulating, veh/h	671	0	1156	594
Vehicles Exiting, veh/h	341	1156	531	0
Ped Vol Crossing Leg, #/h	0	0	1	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	16.8	6.4	0.0	8.3
Approach LOS	C	A	-	A

Lane	Left	Right	Left	Left	Left	Right
Designated Moves	LT	TR	LT	R	LT	R
Assumed Moves	LT	TR	LT	R	LT	R
RT Channelized						
Lane Util	0.470	0.530	1.000	1.000	0.722	0.278
Follow-Up Headway, s	2.667	2.535	2.535	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.328	4.328	4.645	4.328
A (Intercept)	1350	1420	1420	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	8.501e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	478	538	594	0	302	116
Cap Entry Lane, veh/h	728	803	1420	532	782	857
Entry HV Adj Factor	0.999	1.001	1.000	1.000	1.000	1.000
Flow Entry, veh/h	478	538	594	0	302	116
Cap Entry, veh/h	727	803	1420	532	782	857
V/C Ratio	0.656	0.670	0.418	0.000	0.386	0.135
Control Delay, s/veh	17.2	16.4	6.4	6.8	9.4	5.5
LOS	C	C	A	A	A	A
95th %tile Queue, veh	5	5	2	0	2	0

Intersection	
Intersection Delay, s/veh	13.7
Intersection LOS	B

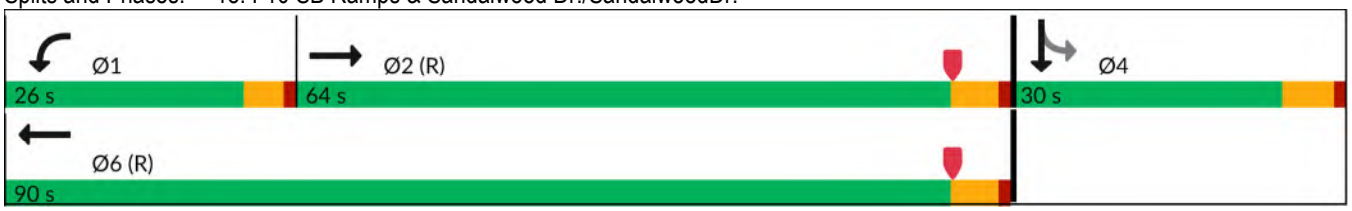
Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1058	1221	138	0
Demand Flow Rate, veh/h	1058	1221	138	0
Vehicles Circulating, veh/h	0	588	1058	542
Vehicles Exiting, veh/h	542	608	0	1267
Ped Vol Crossing Leg, #/h	0	0	2	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.2	20.9	8.3	0.0
Approach LOS	A	C	A	-

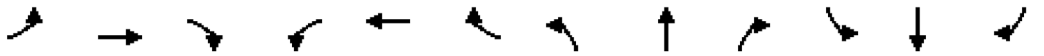
Lane	Left	Right	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	R	LT	R	R
Assumed Moves	L	TR	LT	R	LT	R	R
RT Channelized							
Lane Util	0.524	0.476	0.419	0.581	0.246	0.754	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	554	504	512	709	34	104	0
Cap Entry Lane, veh/h	1350	1420	786	861	510	578	896
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	554	504	512	709	34	104	0
Cap Entry, veh/h	1350	1420	786	861	510	578	896
V/C Ratio	0.410	0.355	0.651	0.823	0.067	0.180	0.000
Control Delay, s/veh	6.6	5.7	16.0	24.5	7.9	8.5	4.0
LOS	A	A	C	C	A	A	A
95th %tile Queue, veh	2	2	5	9	0	1	0

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1084	593	185	2256	122	16	1666
Future Volume (vph)	1084	593	185	2256	122	16	1666
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	64.0		26.0	90.0	30.0	30.0	
Total Split (%)	53.3%		21.7%	75.0%	25.0%	25.0%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	None	None	
Act Effct Green (s)	80.0	120.0	12.2	96.8	12.0	12.0	120.0
Actuated g/C Ratio	0.67	1.00	0.10	0.81	0.10	0.10	1.00
v/c Ratio	0.39	0.45	0.64	0.67	0.50	0.49	1.27
Control Delay (s/veh)	9.9	0.9	60.0	6.0	60.7	60.5	138.3
Queue Delay	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Total Delay (s/veh)	9.9	0.9	60.0	6.6	60.7	60.5	138.3
LOS	A	A	E	A	E	E	F
Approach Delay (s/veh)	6.7			10.6		132.3	
Approach LOS	A			B		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 40.4 (34%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.27	
Intersection Signal Delay (s/veh): 46.6	Intersection LOS: D
Intersection Capacity Utilization 61.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↰	↱
Traffic Volume (veh/h)	0	1084	593	185	2256	0	0	0	0	122	16	1666
Future Volume (veh/h)	0	1084	593	185	2256	0	0	0	0	122	16	1666
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	1338	0	228	2785	0				165	0	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	3644		291	4272	0				300	0	
Arrive On Green	0.00	0.70	0.00	0.08	0.82	0.00				0.08	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	1338	0	228	2785	0				165	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	12.4	0.0	7.6	24.5	0.0				5.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	12.4	0.0	7.6	24.5	0.0				5.3	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3644		291	4272	0				300	0	
V/C Ratio(X)	0.00	0.37		0.78	0.65	0.00				0.55	0.00	
Avail Cap(c_a), veh/h	0	3644		626	4272	0				730	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.2	0.0	54.0	4.0	0.0				52.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	1.8	0.8	0.0				1.6	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.1	0.0	3.4	5.4	0.0				2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	7.4	0.0	55.7	4.8	0.0				54.4	0.0	0.0
LnGrp LOS		A		E	A					D		
Approach Vol, veh/h		1338			3013						165	
Approach Delay, s/veh		7.4			8.7						54.4	
Approach LOS		A			A						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	14.5	89.7		15.8		104.2
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	21.4	58.6		24.2		84.6
Max Q Clear Time (g_c+I1), s	9.6	14.4		7.3		26.5
Green Ext Time (p_c), s	0.3	12.3		0.4		44.6

Intersection Summary		
HCM 7th Control Delay, s/veh		10.0
HCM 7th LOS		A

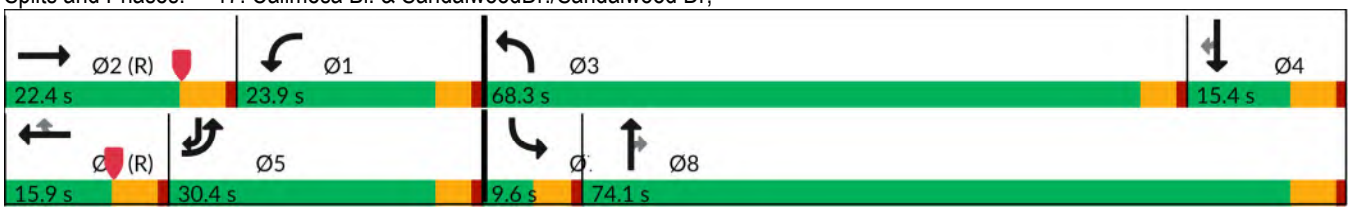
Notes

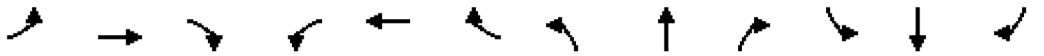
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	233	559	154	236	32	1663	544	99	14	205	543
Future Volume (vph)	337	233	559	154	236	32	1663	544	99	14	205	543
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	15.4		9.6	15.4	15.4	9.6	15.4	15.4	9.6	15.4	9.6
Total Split (s)	30.4	22.4		23.9	15.9	15.9	68.3	74.1	74.1	9.6	15.4	30.4
Total Split (%)	23.4%	17.2%		18.4%	12.2%	12.2%	52.5%	57.0%	57.0%	7.4%	11.8%	23.4%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Min	C-Min	Max	Min	Min	None	Min	None
Act Effct Green (s)	25.8	17.0	130.0	19.3	10.5	10.5	63.7	74.5	74.5	5.0	10.0	36.6
Actuated g/C Ratio	0.20	0.13	1.00	0.15	0.08	0.08	0.49	0.57	0.57	0.04	0.08	0.28
v/c Ratio	0.49	0.52	0.32	0.60	0.85	0.11	0.98	0.27	0.10	0.21	0.77	0.99
Control Delay (s/veh)	48.8	56.7	0.4	61.3	82.3	0.7	49.5	15.0	1.3	67.4	76.3	68.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	40.6	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.8	56.7	0.4	61.3	82.3	0.7	90.1	15.0	1.3	67.4	76.3	68.3
LOS	D	E	A	E	F	A	F	B	A	E	E	E
Approach Delay (s/veh)		26.5			68.5			68.6			70.5	
Approach LOS		C			E			E			E	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay (s/veh): 58.6	Intersection LOS: E
Intersection Capacity Utilization 101.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	337	233	559	154	236	32	1663	544	99	14	205	543
Future Volume (veh/h)	337	233	559	154	236	32	1663	544	99	14	205	543
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976
Adj Flow Rate, veh/h	383	265	0	175	268	26	1890	618	48	16	233	199
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	747	517		279	319	133	1844	2174	920	32	304	461
Arrive On Green	0.40	0.26	0.00	0.30	0.16	0.16	0.98	1.00	1.00	0.03	0.15	0.15
Sat Flow, veh/h	3764	3952	1675	1882	3952	1645	3764	3952	1673	1882	3952	1675
Grp Volume(v), veh/h	383	265	0	175	268	26	1890	618	48	16	233	199
Grp Sat Flow(s),veh/h/ln	1882	1976	1675	1882	1976	1645	1882	1976	1673	1882	1976	1675
Q Serve(g_s), s	10.0	7.4	0.0	10.4	8.6	1.6	63.7	0.0	0.0	1.1	7.4	9.8
Cycle Q Clear(g_c), s	10.0	7.4	0.0	10.4	8.6	1.6	63.7	0.0	0.0	1.1	7.4	9.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	747	517		279	319	133	1844	2174	920	32	304	461
V/C Ratio(X)	0.51	0.51		0.63	0.84	0.20	1.02	0.28	0.05	0.50	0.77	0.43
Avail Cap(c_a), veh/h	747	517		279	319	133	1844	2174	920	72	304	461
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	44.5	0.0	42.6	53.7	41.0	1.3	0.0	0.0	62.3	53.9	19.8
Incr Delay (d2), s/veh	0.3	3.6	0.0	3.3	22.5	3.3	14.0	0.0	0.0	4.5	11.1	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	3.6	0.0	4.5	4.9	0.8	4.2	0.0	0.0	0.5	3.9	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.7	48.1	0.0	45.9	76.2	44.3	15.3	0.0	0.0	66.8	65.0	20.4
LnGrp LOS	C	D		D	E	D	F	A	A	E	E	C
Approach Vol, veh/h		648			469			2556			448	
Approach Delay, s/veh		40.2			63.1			11.3			45.3	
Approach LOS		D			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.9	22.4	68.3	15.4	30.4	15.9	6.8	76.9
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	19.3	17.0	63.7	10.0	25.8	10.5	5.0	68.7
Max Q Clear Time (g_c+I1), s	12.4	9.4	65.7	11.8	12.0	10.6	3.1	2.0
Green Ext Time (p_c), s	0.1	0.8	0.0	0.0	0.6	0.0	0.0	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	25.5
HCM 7th LOS	C

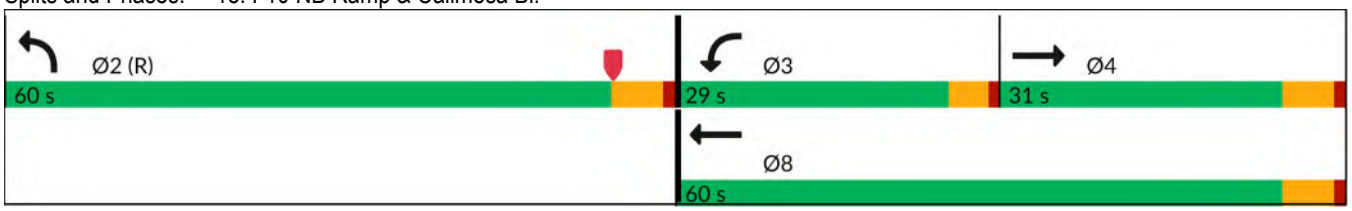
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	134	782	113	601	1706
Future Volume (vph)	134	782	113	601	1706
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.8		9.6	22.8	22.8
Total Split (s)	31.0		29.0	60.0	60.0
Total Split (%)	25.8%		24.2%	50.0%	50.0%
Yellow Time (s)	4.8		3.6	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	30.3	120.0	13.2	48.1	60.3
Actuated g/C Ratio	0.25	1.00	0.11	0.40	0.50
v/c Ratio	0.33	0.57	0.67	0.90	1.05
Control Delay (s/veh)	38.3	1.5	67.2	48.7	65.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.3	1.5	67.2	48.7	65.1
LOS	D	A	E	D	E
Approach Delay (s/veh)	6.9			51.6	65.1
Approach LOS	A			D	E

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay (s/veh): 46.2	Intersection LOS: D
Intersection Capacity Utilization 90.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	134	782	113	601	1706	1
Future Volume (veh/h)	134	782	113	601	1706	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.04	1.00
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	1900	1900	1900	1976	1976	1900
Adj Flow Rate, veh/h	158	0	133	707	2008	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	481		161	752	1967	842
Arrive On Green	0.25	0.00	0.09	0.38	0.52	0.00
Sat Flow, veh/h	1900	1610	1810	1976	3764	1610
Grp Volume(v), veh/h	158	0	133	707	2008	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1976	1882	1610
Q Serve(g_s), s	8.1	0.0	8.7	41.4	62.7	0.0
Cycle Q Clear(g_c), s	8.1	0.0	8.7	41.4	62.7	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	481		161	752	1967	842
V/C Ratio(X)	0.33		0.83	0.94	1.02	0.00
Avail Cap(c_a), veh/h	481		368	892	1967	842
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.5	0.0	53.8	35.8	28.6	0.0
Incr Delay (d2), s/veh	0.1	0.0	4.1	14.9	25.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	4.1	22.2	32.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	36.6	0.0	57.8	50.8	54.3	0.0
LnGrp LOS	D		E	D	F	
Approach Vol, veh/h	158			840	2008	
Approach Delay, s/veh	36.6			51.9	54.3	
Approach LOS	D			D	D	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		68.5	15.3	36.2		51.5
Change Period (Y+Rc), s		5.8	4.6	5.8		5.8
Max Green Setting (Gmax), s		54.2	24.4	25.2		54.2
Max Q Clear Time (g_c+I1), s		64.7	10.7	10.1		43.4
Green Ext Time (p_c), s		0.0	0.1	0.4		2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	52.7
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	98.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	206	2	29	361	157	2	482	210	74	49	31
Future Vol, veh/h	52	206	2	29	361	157	2	482	210	74	49	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	219	2	31	384	167	2	513	223	79	52	33
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	23.4	159	98.1	16.8
HCM LOS	C	F	F	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	99%	0%	70%	0%	61%
Vol Right, %	0%	0%	100%	0%	1%	0%	30%	0%	39%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	482	210	52	208	29	518	74	80
LT Vol	2	0	0	52	0	29	0	74	0
Through Vol	0	482	0	0	206	0	361	0	49
RT Vol	0	0	210	0	2	0	157	0	31
Lane Flow Rate	2	513	223	55	221	31	551	79	85
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.005	1.182	0.472	0.149	0.567	0.077	1.274	0.223	0.223
Departure Headway (Hd)	9.564	9.045	8.318	10.71	10.18	9.537	8.804	11.439	10.619
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	376	405	436	337	356	378	419	316	340
Service Time	7.264	6.745	6.018	8.41	7.88	7.237	6.504	9.139	8.319
HCM Lane V/C Ratio	0.005	1.267	0.511	0.163	0.621	0.082	1.315	0.25	0.25
HCM Control Delay, s/veh	12.3	133.2	18.2	15.3	25.4	13	167.2	17.4	16.3
HCM Lane LOS	B	F	C	C	D	B	F	C	C
HCM 95th-tile Q	0	18.6	2.5	0.5	3.3	0.2	22.6	0.8	0.8

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	444	862	1	4	0
Future Vol, veh/h	0	444	862	1	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	793	1539	2	7	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1541	0	-	0	2332	1539
Stage 1	-	-	-	-	1539	-
Stage 2	-	-	-	-	793	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	437	-	-	-	41	144
Stage 1	-	-	-	-	197	-
Stage 2	-	-	-	-	449	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	437	-	-	-	41	144
Mov Cap-2 Maneuver	-	-	-	-	141	-
Stage 1	-	-	-	-	197	-
Stage 2	-	-	-	-	449	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	31.98
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	437	-	-	-	141
HCM Lane V/C Ratio	-	-	-	-	0.051
HCM Control Delay (s/veh)	0	-	-	-	32
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Intersection Delay, s/veh	13.9
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	2	1	1	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	609	650	0	1087
Demand Flow Rate, veh/h	609	650	0	1087
Vehicles Circulating, veh/h	679	0	921	650
Vehicles Exiting, veh/h	1058	921	367	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.9	6.9	0.0	20.3
Approach LOS	A	A	-	C

Lane	Left	Right	Left	Left	Left	Right
Designated Moves	LT	TR	LT	R	LT	R
Assumed Moves	LT	TR	LT	R	LT	R
RT Channelized						
Lane Util	0.470	0.530	1.000	1.000	0.390	0.610
Follow-Up Headway, s	2.667	2.535	2.535	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.328	4.328	4.645	4.328
A (Intercept)	1350	1420	1420	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	8.501e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	286	323	650	0	424	663
Cap Entry Lane, veh/h	723	797	1420	649	742	817
Entry HV Adj Factor	1.001	0.999	1.000	1.000	1.000	1.000
Flow Entry, veh/h	286	323	650	0	424	663
Cap Entry, veh/h	723	797	1420	649	742	817
V/C Ratio	0.396	0.405	0.458	0.000	0.571	0.811
Control Delay, s/veh	10.2	9.6	6.9	5.5	14.0	24.4
LOS	B	A	A	A	B	C
95th %tile Queue, veh	2	2	2	0	4	9

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

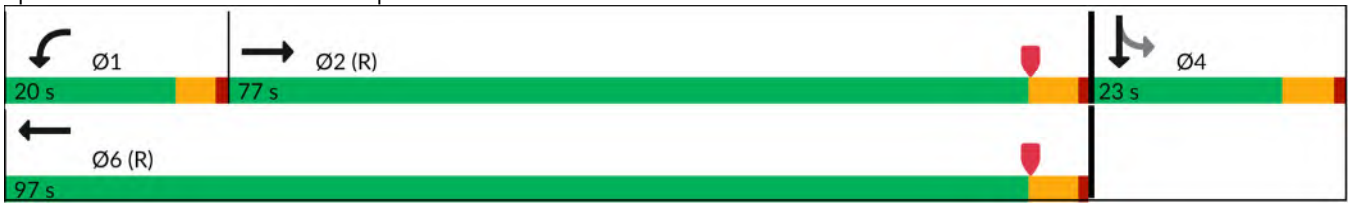
Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	922	839	376	0
Demand Flow Rate, veh/h	922	839	376	0
Vehicles Circulating, veh/h	0	502	922	650
Vehicles Exiting, veh/h	650	796	0	691
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.6	11.1	10.0	0.0
Approach LOS	A	B	B	-

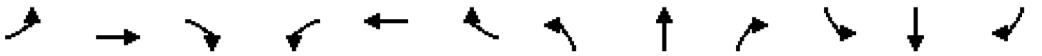
Lane	Left	Right	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	R	LT	R	R
Assumed Moves	LT	TR	LT	R	LT	R	R
RT Channelized							
Lane Util	0.470	0.530	0.602	0.398	0.388	0.612	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	433	489	505	334	146	230	0
Cap Entry Lane, veh/h	1350	1420	851	927	578	649	817
Entry HV Adj Factor	1.001	0.999	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	433	489	505	334	146	230	0
Cap Entry, veh/h	1351	1419	851	927	578	649	817
V/C Ratio	0.321	0.344	0.594	0.360	0.253	0.355	0.000
Control Delay, s/veh	5.5	5.6	13.2	7.9	9.6	10.3	4.4
LOS	A	A	B	A	A	B	A
95th %tile Queue, veh	1	2	4	2	1	2	0

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	2319	1736	316	1544	243	7	923
Future Volume (vph)	2319	1736	316	1544	243	7	923
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	77.0		20.0	97.0	23.0	23.0	
Total Split (%)	64.2%		16.7%	80.8%	19.2%	19.2%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	None	None	
Act Effct Green (s)	75.6	120.0	14.5	94.7	14.1	14.1	120.0
Actuated g/C Ratio	0.63	1.00	0.12	0.79	0.12	0.12	1.00
v/c Ratio	0.75	1.13	0.79	0.40	0.65	0.65	0.60
Control Delay (s/veh)	18.0	74.1	65.2	1.8	65.6	65.6	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.0	74.1	65.2	1.8	65.6	65.6	1.7
LOS	B	E	E	A	E	E	A
Approach Delay (s/veh)	42.0			12.6		15.3	
Approach LOS	D			B		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay (s/veh): 29.9	Intersection LOS: C
Intersection Capacity Utilization 75.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2319	1736	316	1544	0	0	0	0	243	7	923
Future Volume (veh/h)	0	2319	1736	316	1544	0	0	0	0	243	7	923
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	2441	0	333	1625	0				261	0	0
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	0	0	0	0	0				0	0	0
Cap, veh/h	0	3463		385	4230	0				330	0	
Arrive On Green	0.00	0.67	0.00	0.22	1.00	0.00				0.09	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	2441	0	333	1625	0				261	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	35.5	0.0	11.0	0.0	0.0				8.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.5	0.0	11.0	0.0	0.0				8.5	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3463		385	4230	0				330	0	
V/C Ratio(X)	0.00	0.70		0.87	0.38	0.00				0.79	0.00	
Avail Cap(c_a), veh/h	0	3463		451	4230	0				519	0	
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	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	12.5	0.0	46.0	0.0	0.0				53.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	12.9	0.3	0.0				4.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	12.3	0.0	4.9	0.1	0.0				4.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	13.8	0.0	58.9	0.3	0.0				57.8	0.0	0.0
LnGrp LOS		B		E	A					E		
Approach Vol, veh/h		2441			1958						261	
Approach Delay, s/veh		13.8			10.2						57.8	
Approach LOS		B			B						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.7	85.5		16.7		103.3
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	15.4	71.6		17.2		91.6
Max Q Clear Time (g_c+I1), s	13.0	37.5		10.5		2.0
Green Ext Time (p_c), s	0.2	25.6		0.5		19.1

Intersection Summary		
HCM 7th Control Delay, s/veh		14.7
HCM 7th LOS		B

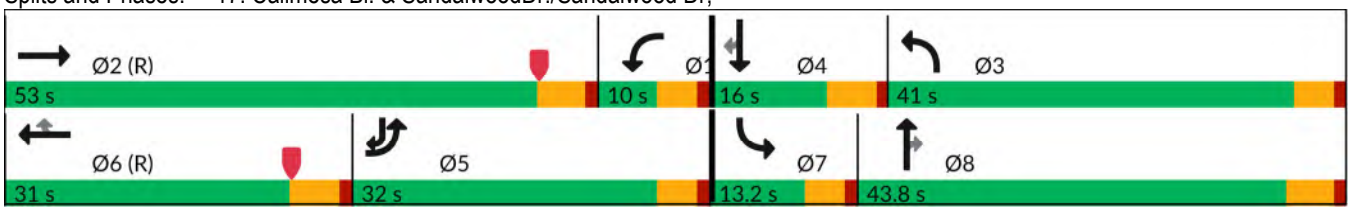
Notes

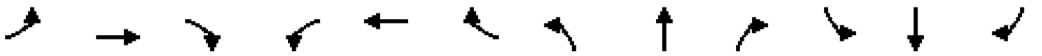
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	614	174	1755	74	169	26	1087	312	136	29	284	602
Future Volume (vph)	614	174	1755	74	169	26	1087	312	136	29	284	602
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.0	30.4		10.0	29.4	29.4	10.0	27.4	27.4	9.6	15.4	10.0
Total Split (s)	32.0	53.0		10.0	31.0	31.0	41.0	43.8	43.8	13.2	16.0	32.0
Total Split (%)	26.7%	44.2%		8.3%	25.8%	25.8%	34.2%	36.5%	36.5%	11.0%	13.3%	26.7%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	27.4	47.9	120.0	5.4	25.9	25.9	36.1	44.0	44.0	6.6	10.6	38.8
Actuated g/C Ratio	0.23	0.40	1.00	0.05	0.22	0.22	0.30	0.37	0.37	0.06	0.09	0.32
v/c Ratio	0.72	0.12	0.94	0.92	0.22	0.05	0.97	0.23	0.18	0.30	0.89	0.89
Control Delay (s/veh)	42.1	15.8	26.4	134.3	39.7	0.2	58.9	31.9	10.3	61.4	82.6	41.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.1	15.8	26.4	134.3	39.7	0.2	58.9	31.9	10.3	61.4	82.6	41.9
LOS	D	B	C	F	D	A	E	C	B	E	F	D
Approach Delay (s/veh)		29.5			62.0			49.1			55.2	
Approach LOS		C			E			D			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay (s/veh): 41.3	Intersection LOS: D
Intersection Capacity Utilization 100.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	614	174	1755	74	169	26	1087	312	136	29	284	602
Future Volume (veh/h)	614	174	1755	74	169	26	1087	312	136	29	284	602
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	646	183	0	78	178	18	1144	328	116	31	299	457
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1687	1507		480	811	338	1142	1468	597	49	336	864
Arrive On Green	0.15	0.13	0.00	0.27	0.21	0.21	0.30	0.37	0.37	0.03	0.09	0.09
Sat Flow, veh/h	3764	3800	1675	1810	3800	1583	3764	3952	1606	1810	3800	1605
Grp Volume(v), veh/h	646	183	0	78	178	18	1144	328	116	31	299	457
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1583	1882	1976	1606	1810	1900	1605
Q Serve(g_s), s	18.6	5.1	0.0	4.0	4.6	1.2	36.4	6.8	4.7	2.0	9.3	0.0
Cycle Q Clear(g_c), s	18.6	5.1	0.0	4.0	4.6	1.2	36.4	6.8	4.7	2.0	9.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1687	1507		480	811	338	1142	1468	597	49	336	864
V/C Ratio(X)	0.38	0.12		0.16	0.22	0.05	1.00	0.22	0.19	0.64	0.89	0.53
Avail Cap(c_a), veh/h	1687	1507		480	811	338	1142	1468	597	130	336	864
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.78	0.78	0.78	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	33.7	0.0	33.9	39.0	49.5	41.8	25.8	16.6	57.8	54.1	18.0
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.1	0.6	0.3	24.0	0.1	0.1	5.1	24.3	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	2.4	0.0	1.7	2.2	0.4	20.1	3.2	2.2	1.0	5.5	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.2	33.8	0.0	33.9	39.6	49.8	65.8	25.9	16.7	62.9	78.4	18.6
LnGrp LOS	D	C		C	D	D	F	C	B	E	E	B
Approach Vol, veh/h		829			274			1588			787	
Approach Delay, s/veh		35.7			38.6			54.0			43.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.2	53.0	41.8	16.0	59.2	31.0	7.8	50.0
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.4	47.6	36.4	* 11	27.4	25.6	8.6	38.4
Max Q Clear Time (g_c+I1), s	6.0	7.1	38.4	11.3	20.6	6.6	4.0	8.8
Green Ext Time (p_c), s	0.0	1.1	0.0	0.0	0.9	0.9	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	45.9
HCM 7th LOS	D

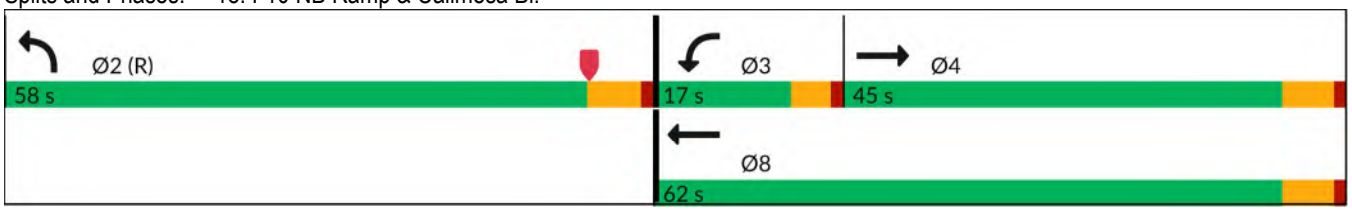
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	307	1805	26	185	1351
Future Volume (vph)	307	1805	26	185	1351
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.8		9.6	22.8	22.8
Total Split (s)	45.0		17.0	62.0	58.0
Total Split (%)	37.5%		14.2%	51.7%	48.3%
Yellow Time (s)	4.8		3.6	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	24.6	120.0	6.4	31.8	76.6
Actuated g/C Ratio	0.21	1.00	0.05	0.27	0.64
v/c Ratio	0.81	1.15	0.28	0.38	0.62
Control Delay (s/veh)	51.5	82.9	61.2	35.9	16.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.5	82.9	61.2	35.9	16.8
LOS	D	F	E	D	B
Approach Delay (s/veh)	78.4			39.1	16.8
Approach LOS	E			D	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.15	
Intersection Signal Delay (s/veh): 53.4	Intersection LOS: D
Intersection Capacity Utilization 69.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	307	1805	26	185	1351	1
Future Volume (veh/h)	307	1805	26	185	1351	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	316	0	27	191	1394	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	355		45	475	2364	1052
Arrive On Green	0.19	0.00	0.02	0.25	0.65	0.00
Sat Flow, veh/h	1900	1610	1810	1900	3619	1610
Grp Volume(v), veh/h	316	0	27	191	1394	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1810	1610
Q Serve(g_s), s	19.5	0.0	1.8	10.1	26.1	0.0
Cycle Q Clear(g_c), s	19.5	0.0	1.8	10.1	26.1	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	355		45	475	2364	1052
V/C Ratio(X)	0.89		0.60	0.40	0.59	0.00
Avail Cap(c_a), veh/h	621		187	890	2364	1052
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.24	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.6	0.0	57.9	37.5	11.7	0.0
Incr Delay (d2), s/veh	0.9	0.0	4.8	0.2	1.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	0.0	0.9	4.6	9.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.5	0.0	62.7	37.7	12.8	0.0
LnGrp LOS	D		E	D	B	
Approach Vol, veh/h	316			218	1394	
Approach Delay, s/veh	48.5			40.8	12.8	
Approach LOS	D			D	B	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	84.2	7.6	28.2		35.8
Change Period (Y+Rc), s	5.8	4.6	5.8		5.8
Max Green Setting (Gmax), s	52.2	12.4	39.2		56.2
Max Q Clear Time (g_c+I1), s	28.1	3.8	21.5		12.1
Green Ext Time (p_c), s	3.1	0.0	1.0		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	21.8
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	27.3
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	338	2	58	228	104	0	73	70	159	107	25
Future Vol, veh/h	17	338	2	58	228	104	0	73	70	159	107	25
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	371	2	64	251	114	0	80	77	175	118	27
Number of Lanes	1	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	38	30.4	13.5	16.8
HCM LOS	E	D	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	99%	0%	69%	0%	81%
Vol Right, %	0%	0%	100%	0%	1%	0%	31%	0%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	73	70	17	340	58	332	159	132
LT Vol	0	0	0	17	0	58	0	159	0
Through Vol	0	73	0	0	338	0	228	0	107
RT Vol	0	0	70	0	2	0	104	0	25
Lane Flow Rate	0	80	77	19	374	64	365	175	145
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0	0.201	0.177	0.044	0.83	0.15	0.786	0.433	0.333
Departure Headway (Hd)	9.021	9.021	8.295	8.518	8.001	8.491	7.752	8.912	8.259
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	397	432	422	456	424	467	404	435
Service Time	6.789	6.789	6.062	6.241	5.723	6.213	5.474	6.668	6.015
HCM Lane V/C Ratio	0	0.202	0.178	0.045	0.82	0.151	0.782	0.433	0.333
HCM Control Delay, s/veh	11.8	14.1	12.9	11.6	39.3	12.7	33.5	18.3	15.1
HCM Lane LOS	N	B	B	B	E	B	D	C	C
HCM 95th-tile Q	0	0.7	0.6	0.1	8	0.5	7	2.1	1.4

APPENDIX 6.1: OPENING YEAR CUMULATIVE (2030) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	19.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	262	281	200	229	0
Future Vol, veh/h	0	262	281	200	229	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	359	385	274	314	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	659	0	-	0	881	522
Stage 1	-	-	-	-	522	-
Stage 2	-	-	-	-	359	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	939	-	-	-	320	559
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	711	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	939	-	-	-	320	559
Mov Cap-2 Maneuver	-	-	-	-	320	-
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	711	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	82.55
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	939	-	-	-	320
HCM Lane V/C Ratio	-	-	-	-	0.981
HCM Ctrl Dly (s/v)	0	-	-	-	82.5
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	10.5

Intersection	
Int Delay, s/veh	4.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	475	16	128	458	23	152
Future Vol, veh/h	475	16	128	458	23	152
Conflicting Peds, #/hr	0	2	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	546	18	147	526	26	175

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	566	0	1378	557
Stage 1	-	-	-	-	557	-
Stage 2	-	-	-	-	821	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1016	-	161	534
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	436	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1014	-	128	533
Mov Cap-2 Maneuver	-	-	-	-	128	-
Stage 1	-	-	-	-	576	-
Stage 2	-	-	-	-	346	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2	25.05
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	376	-	-	393	-
HCM Lane V/C Ratio	0.535	-	-	0.145	-
HCM Control Delay (s/veh)	25	-	-	9.2	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	3	-	-	0.5	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	456	170	366	409	0	0	0	0	287	6	177
Future Vol, veh/h	0	456	170	366	409	0	0	0	0	287	6	177
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	536	200	431	481	0	0	0	0	338	7	208

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	737	0	0	1879	2080	481
Stage 1	-	-	-	-	-	-	1342	1342	-
Stage 2	-	-	-	-	-	-	536	737	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	878	-	0	~ 79	54	589
Stage 1	0	-	-	-	-	0	~ 246	223	-
Stage 2	0	-	-	-	-	0	590	427	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	878	-	-	~ 40	0	589
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ -871	0	-
Stage 1	-	-	-	-	-	-	~ 246	0	-
Stage 2	-	-	-	-	-	-	~ 301	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	6.13	6.7
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	878	-	+	589
HCM Lane V/C Ratio	-	-	0.491	-	-	0.354
HCM Control Delay (s/veh)	-	-	13	-	2	14.4
HCM Lane LOS	-	-	B	-	A	B
HCM 95th %tile Q(veh)	-	-	2.8	-	-	1.6

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

Intersection	
Int Delay, s/veh	25.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	230	514	0	0	623	755	150	5	129	0	0	0
Future Vol, veh/h	230	514	0	0	623	755	150	5	129	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	247	553	0	0	670	812	161	5	139	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1482	0	-	-	-	0	1717	2529	553
Stage 1	-	-	-	-	-	-	1047	1047	-
Stage 2	-	-	-	-	-	-	670	1482	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	460	-	0	0	-	-	~ 100	28	537
Stage 1	-	-	0	0	-	-	341	307	-
Stage 2	-	-	0	0	-	-	512	191	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	460	-	-	-	-	-	~ 46	0	537
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 110	0	-
Stage 1	-	-	-	-	-	-	~ 158	0	-
Stage 2	-	-	-	-	-	-	512	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	6.66	0	194.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	110	537	460	-	-	-
HCM Lane V/C Ratio	1.521	0.258	0.537	-	-	-
HCM Control Delay (s/veh)	$ 345.4	14	21.5	-	-	-
HCM Lane LOS	F	B	C	-	-	-
HCM 95th %tile Q(veh)	12.2	1	3.1	-	-	-

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

Intersection	
Intersection Delay, s/veh	89.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	79	70	450	85	0	72	0	334	0	0	0
Future Vol, veh/h	0	79	70	450	85	0	72	0	334	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, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	108	96	616	116	0	99	0	458	0	0	0
Number of Lanes	1	1	0	1	1	1	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	2
HCM Control Delay, s/veh	17.5	151.6	34.1	0
HCM LOS	C	F	D	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	53%	0%	100%	100%	100%
Vol Right, %	0%	100%	0%	47%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	72	334	0	149	450	85	0	0
LT Vol	72	0	0	0	450	0	0	0
Through Vol	0	0	0	79	0	85	0	0
RT Vol	0	334	0	70	0	0	0	0
Lane Flow Rate	99	458	0	204	616	116	0	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.215	0.847	0	0.44	1.312	0.231	0	0
Departure Headway (Hd)	8.509	7.28	8.693	8.352	7.664	7.154	7.154	9.826
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	424	503	0	435	475	501	0	0
Service Time	6.209	4.98	6.393	6.052	5.427	4.917	4.917	7.526
HCM Lane V/C Ratio	0.233	0.911	0	0.469	1.297	0.232	0	0
HCM Control Delay, s/veh	13.5	38.5	11.4	17.5	178	12.1	9.9	12.5
HCM Lane LOS	B	E	N	C	F	B	N	N
HCM 95th-tile Q	0.8	8.7	0	2.2	26.7	0.9	0	0

Intersection	
Intersection Delay, s/veh	76.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	368	44	185	370	0	0	0	0	137	18	165
Future Vol, veh/h	0	368	44	185	370	0	0	0	0	137	18	165
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	454	54	228	457	0	0	0	0	169	22	204
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, s/veh	41.7	131.9	26.4
HCM LOS	E	F	D

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	33%	43%
Vol Thru, %	89%	67%	6%
Vol Right, %	11%	0%	52%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	412	555	320
LT Vol	0	185	137
Through Vol	368	370	18
RT Vol	44	0	165
Lane Flow Rate	509	685	395
Geometry Grp	1	1	1
Degree of Util (X)	0.887	1.209	0.725
Departure Headway (Hd)	6.645	6.354	7.029
Convergence, Y/N	Yes	Yes	Yes
Cap	549	569	518
Service Time	4.645	4.411	5.029
HCM Lane V/C Ratio	0.927	1.204	0.763
HCM Control Delay, s/veh	41.7	131.9	26.4
HCM Lane LOS	E	F	D
HCM 95th-tile Q	10.1	24.9	5.9

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	86	419	555	406	0	0
Future Vol, veh/h	86	419	555	406	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	98	476	631	461	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1092	0	-	0	-	861
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	647	-	-	-	0	358
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	647	-	-	-	-	358
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

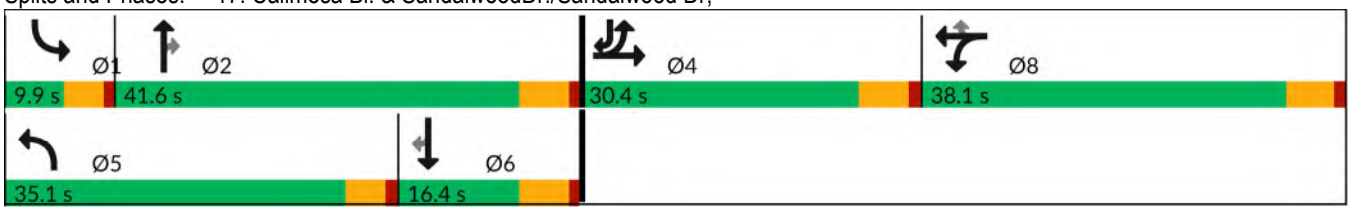
Approach	EB	WB	SB
HCM Control Delay, s/v	1.97	0	0
HCM LOS			A

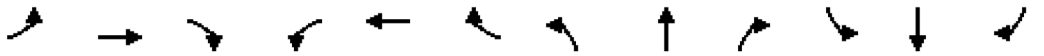
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	307	-	-	-	-
HCM Lane V/C Ratio	0.151	-	-	-	-
HCM Control Delay (s/veh)	11.6	0	-	-	0
HCM Lane LOS	B	A	-	-	A
HCM 95th %tile Q(veh)	0.5	-	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	176	195	23	345	35	255	613	112	15	51	362
Future Volume (vph)	176	195	23	345	35	255	613	112	15	51	362
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4	30.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	17.3	17.3	24.6	24.6	24.6	20.0	32.4	32.4	5.4	10.8	33.8
Actuated g/C Ratio	0.18	0.18	0.26	0.26	0.26	0.21	0.34	0.34	0.06	0.11	0.36
v/c Ratio	0.53	0.51	0.06	0.79	0.08	0.76	0.56	0.20	0.17	0.27	0.58
Control Delay (s/veh)	44.5	37.6	29.8	46.9	0.3	50.3	30.1	6.5	55.0	48.7	17.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.5	37.6	29.8	46.9	0.3	50.3	30.1	6.5	55.0	48.7	17.4
LOS	D	D	C	D	A	D	C	A	D	D	B
Approach Delay (s/veh)		39.9		41.9			32.7			22.5	
Approach LOS		D		D			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 94.5	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 33.7	Intersection LOS: C
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	195	49	23	345	35	255	613	112	15	51	362
Future Volume (veh/h)	176	195	49	23	345	35	255	613	112	15	51	362
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	153	287	38	26	392	30	290	697	97	17	58	334
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	247	450	59	453	475	397	337	1134	505	36	280	458
Arrive On Green	0.14	0.14	0.14	0.25	0.25	0.25	0.19	0.31	0.31	0.02	0.15	0.15
Sat Flow, veh/h	1810	3291	431	1810	1900	1588	1810	3610	1607	1810	1900	1610
Grp Volume(v), veh/h	153	164	161	26	392	30	290	697	97	17	58	334
Grp Sat Flow(s),veh/h/ln	1810	1900	1822	1810	1900	1588	1810	1805	1607	1810	1900	1610
Q Serve(g_s), s	5.9	6.1	6.2	0.8	14.5	1.1	11.6	12.2	3.3	0.7	2.0	11.0
Cycle Q Clear(g_c), s	5.9	6.1	6.2	0.8	14.5	1.1	11.6	12.2	3.3	0.7	2.0	11.0
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	247	260	249	453	475	397	337	1134	505	36	280	458
V/C Ratio(X)	0.62	0.63	0.65	0.06	0.82	0.08	0.86	0.61	0.19	0.47	0.21	0.73
Avail Cap(c_a), veh/h	607	637	611	794	834	697	741	1753	781	129	280	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.3	30.4	30.5	21.3	26.4	21.4	29.4	21.7	18.7	36.1	27.9	23.0
Incr Delay (d2), s/veh	2.5	2.5	2.8	0.1	3.7	0.1	2.5	0.5	0.2	3.5	0.4	5.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.8	2.7	0.3	6.5	0.4	4.9	4.8	1.1	0.3	0.9	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.9	33.0	33.3	21.3	30.1	21.4	31.9	22.3	18.8	39.7	28.3	28.9
LnGrp LOS	C	C	C	C	C	C	C	C	B	D	C	C
Approach Vol, veh/h		478			448			1084			409	
Approach Delay, s/veh		33.0			29.0			24.5			29.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	28.8		15.6	18.5	16.4		24.1				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7				
Max Q Clear Time (g_c+I1), s	2.7	14.2		8.2	13.6	13.0		16.5				
Green Ext Time (p_c), s	0.0	4.9		2.0	0.4	0.0		2.1				

Intersection Summary		
HCM 7th Control Delay, s/veh	27.8	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	113.3
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	123	0	0	798	213	1
Future Vol, veh/h	123	0	0	798	213	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	145	0	0	939	251	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	10.8	155.4	15
HCM LOS	B	F	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	0%
Vol Thru, %	0%	100%	100%
Vol Right, %	0%	0%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	214	123	798
LT Vol	213	0	0
Through Vol	0	123	798
RT Vol	1	0	0
Lane Flow Rate	252	145	939
Geometry Grp	1	1	1
Degree of Util (X)	0.436	0.227	1.284
Departure Headway (Hd)	6.853	6.068	4.922
Convergence, Y/N	Yes	Yes	Yes
Cap	529	595	732
Service Time	4.853	4.068	2.991
HCM Lane V/C Ratio	0.476	0.244	1.283
HCM Control Delay, s/veh	15	10.8	155.4
HCM Lane LOS	B	B	F
HCM 95th-tile Q	2.2	0.9	35.4

Intersection	
Intersection Delay, s/veh	18.2
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	217	36	16	347	55
Future Vol, veh/h	5	217	36	16	347	55
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	306	51	23	489	77
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	11.6	9	23
HCM LOS	B	A	C

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	2%	86%
Vol Thru, %	69%	0%	14%
Vol Right, %	31%	98%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	52	222	402
LT Vol	0	5	347
Through Vol	36	0	55
RT Vol	16	217	0
Lane Flow Rate	73	313	566
Geometry Grp	1	1	1
Degree of Util (X)	0.109	0.425	0.774
Departure Headway (Hd)	5.335	4.889	4.923
Convergence, Y/N	Yes	Yes	Yes
Cap	676	729	725
Service Time	3.335	2.977	3.023
HCM Lane V/C Ratio	0.108	0.429	0.781
HCM Control Delay, s/veh	9	11.6	23
HCM Lane LOS	A	B	C
HCM 95th-tile Q	0.4	2.1	7.5

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	254	269	445	320	0	0	0	0	0	0	0
Future Vol, veh/h	0	254	269	445	320	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	302	320	530	381	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	623	0	0	1743	2063	381
Stage 1	-	-	-	-	-	-	1440	1440	-
Stage 2	-	-	-	-	-	-	302	623	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	968	-	0	96	55	671
Stage 1	0	-	-	-	-	0	220	200	-
Stage 2	0	-	-	-	-	0	754	482	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	968	-	-	29	0	671
Mov Cap-2 Maneuver	-	-	-	-	-	-	29	0	-
Stage 1	-	-	-	-	-	-	220	0	-
Stage 2	-	-	-	-	-	-	231	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	7.63	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	763	-	-
HCM Lane V/C Ratio	-	-	0.547	-	-
HCM Control Delay (s/veh)	-	-	13.1	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	3.4	-	-

Intersection	
Int Delay, s/veh	30.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	254	0	0	591	0	174	0	279	0	0	0
Future Vol, veh/h	0	254	0	0	591	0	174	0	279	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	282	0	0	657	0	193	0	310	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	657	0	-	-	-	0	939	939	282
Stage 1	-	-	-	-	-	-	282	282	-
Stage 2	-	-	-	-	-	-	657	657	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	940	-	0	0	-	-	296	266	761
Stage 1	-	-	0	0	-	-	770	681	-
Stage 2	-	-	0	0	-	-	520	465	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	940	-	-	-	-	-	296	0	761
Mov Cap-2 Maneuver	-	-	-	-	-	-	296	0	-
Stage 1	-	-	-	-	-	-	770	0	-
Stage 2	-	-	-	-	-	-	520	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	88.16
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	474	940	-	-	-
HCM Lane V/C Ratio	1.061	-	-	-	-
HCM Control Delay (s/veh)	88.2	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	15.7	0	-	-	-

Intersection	
Intersection Delay, s/veh	326.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	179	352	2	32	488	176	2	539	236	70	39	101
Future Vol, veh/h	179	352	2	32	488	176	2	539	236	70	39	101
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	190	374	2	34	519	187	2	573	251	74	41	107
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	214.7	365.6	445.4	40.2
HCM LOS	F	F	F	E

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	34%	5%	33%
Vol Thru, %	69%	66%	70%	19%
Vol Right, %	30%	0%	25%	48%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	777	533	696	210
LT Vol	2	179	32	70
Through Vol	539	352	488	39
RT Vol	236	2	176	101
Lane Flow Rate	827	567	740	223
Geometry Grp	1	1	1	1
Degree of Util (X)	1.912	1.351	1.721	0.582
Departure Headway (Hd)	10.683	13.227	11.902	16.481
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	347	284	311	221
Service Time	8.683	11.227	9.902	14.481
HCM Lane V/C Ratio	2.383	1.996	2.379	1.009
HCM Control Delay, s/veh	445.4	214.7	365.6	40.2
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	43.9	19.1	33.1	3.3

Intersection	
Int Delay, s/veh	46.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	297	311	131	163	0
Future Vol, veh/h	0	297	311	131	163	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	530	555	234	291	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	789	0	-	0	1203	672
Stage 1	-	-	-	-	672	-
Stage 2	-	-	-	-	530	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	840	-	-	-	~ 206	459
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	594	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	840	-	-	-	~ 206	459
Mov Cap-2 Maneuver	-	-	-	-	~ 206	-
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	594	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	257
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	840	-	-	-	206
HCM Lane V/C Ratio	-	-	-	-	1.415
HCM Ctrl Dly (s/v)	0	-	-	-	257
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	17.1

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

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	449	11	101	429	14	71
Future Vol, veh/h	449	11	101	429	14	71
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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	516	13	116	493	16	82

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	529	0	1248	522
Stage 1	-	-	-	-	522	-
Stage 2	-	-	-	-	725	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1049	-	193	558
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	483	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1049	-	164	558
Mov Cap-2 Maneuver	-	-	-	-	164	-
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	409	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.69	16.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	400	-	-	343	-
HCM Lane V/C Ratio	0.244	-	-	0.111	-
HCM Control Delay (s/veh)	16.9	-	-	8.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.4	-

Intersection	
Int Delay, s/veh	347.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	342	178	313	358	0	0	0	0	459	3	173
Future Vol, veh/h	0	342	178	313	358	0	0	0	0	459	3	173
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	364	189	333	381	0	0	0	0	488	3	184

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	553	0	0	1411	1600	381
Stage 1	-	-	-	-	-	-	1047	1047	-
Stage 2	-	-	-	-	-	-	364	553	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1027	-	0	~ 154	107	671
Stage 1	0	-	-	-	-	0	~ 341	308	-
Stage 2	0	-	-	-	-	0	708	517	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1027	-	-	~ 104	0	671
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 127	0	-
Stage 1	-	-	-	-	-	-	~ 341	0	-
Stage 2	-	-	-	-	-	-	~ 478	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	4.75	$ 994.55
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	1027	-	127	671
HCM Lane V/C Ratio	-	-	0.324	-	3.871	0.274
HCM Control Delay (s/veh)	-	-	10.2	$ 1362.3	12.4	
HCM Lane LOS	-	-	B	-	F	B
HCM 95th %tile Q(veh)	-	-	1.4	-	49.3	1.1

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

Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	156	645	0	0	455	362	133	1	281	0	0	0
Future Vol, veh/h	156	645	0	0	455	362	133	1	281	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	166	686	0	0	484	385	141	1	299	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	869	0	-	-	-	0	1502	1887	686
Stage 1	-	-	-	-	-	-	1018	1018	-
Stage 2	-	-	-	-	-	-	484	869	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	784	-	0	0	-	-	~ 135	71	451
Stage 1	-	-	0	0	-	-	352	317	-
Stage 2	-	-	0	0	-	-	624	372	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	784	-	-	-	-	-	~ 107	0	451
Mov Cap-2 Maneuver	-	-	-	-	-	-	202	0	-
Stage 1	-	-	-	-	-	-	277	0	-
Stage 2	-	-	-	-	-	-	624	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	2.11	0	36.81
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	202	451	784	-	-	-
HCM Lane V/C Ratio	0.705	0.663	0.212	-	-	-
HCM Control Delay (s/veh)	56.7	27.3	10.8	-	-	-
HCM Lane LOS	F	D	B	-	-	-
HCM 95th %tile Q(veh)	4.5	4.7	0.8	-	-	-

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

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	46	10	30	52	0	6	0	94	0	0	0
Future Vol, veh/h	0	46	10	30	52	0	6	0	94	0	0	0
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	61	13	39	68	0	8	0	124	0	0	0
Number of Lanes	1	1	0	1	1	1	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	2
HCM Control Delay, s/veh	8.2	8.3	7.8	0
HCM LOS	A	A	A	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	82%	0%	100%	100%	100%
Vol Right, %	0%	100%	0%	18%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	94	0	56	30	52	0	0
LT Vol	6	0	0	0	30	0	0	0
Through Vol	0	0	0	46	0	52	0	0
RT Vol	0	94	0	10	0	0	0	0
Lane Flow Rate	8	124	0	74	39	68	0	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.012	0.148	0	0.101	0.06	0.095	0	0
Departure Headway (Hd)	5.517	4.314	5.059	4.934	5.483	4.981	4.981	5.258
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	651	834	0	728	655	721	0	0
Service Time	3.231	2.028	2.778	2.652	3.2	2.698	2.698	2.981
HCM Lane V/C Ratio	0.012	0.149	0	0.102	0.06	0.094	0	0
HCM Control Delay, s/veh	8.3	7.8	7.8	8.2	8.6	8.2	7.7	8
HCM Lane LOS	A	A	N	A	A	A	N	N
HCM 95th-tile Q	0	0.5	0	0.3	0.2	0.3	0	0

Intersection	
Intersection Delay, s/veh	13.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	103	36	323	65	0	0	0	0	274	8	17
Future Vol, veh/h	0	103	36	323	65	0	0	0	0	274	8	17
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	108	38	340	68	0	0	0	0	288	8	18
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, s/veh	9.7	15.6	13.6
HCM LOS	A	C	B

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	83%	92%
Vol Thru, %	74%	17%	3%
Vol Right, %	26%	0%	6%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	139	388	299
LT Vol	0	323	274
Through Vol	103	65	8
RT Vol	36	0	17
Lane Flow Rate	146	408	315
Geometry Grp	1	1	1
Degree of Util (X)	0.214	0.595	0.482
Departure Headway (Hd)	5.274	5.241	5.511
Convergence, Y/N	Yes	Yes	Yes
Cap	680	694	655
Service Time	3.31	3.241	3.544
HCM Lane V/C Ratio	0.215	0.588	0.481
HCM Control Delay, s/veh	9.7	15.6	13.6
HCM Lane LOS	A	C	B
HCM 95th-tile Q	0.8	4	2.6

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	23	354	389	200	0	0
Future Vol, veh/h	23	354	389	200	0	0
Conflicting Peds, #/hr	0	0	0	3	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	26	407	447	230	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	680	0	-	0	-	565
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	922	-	-	-	0	528
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	919	-	-	-	-	527
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

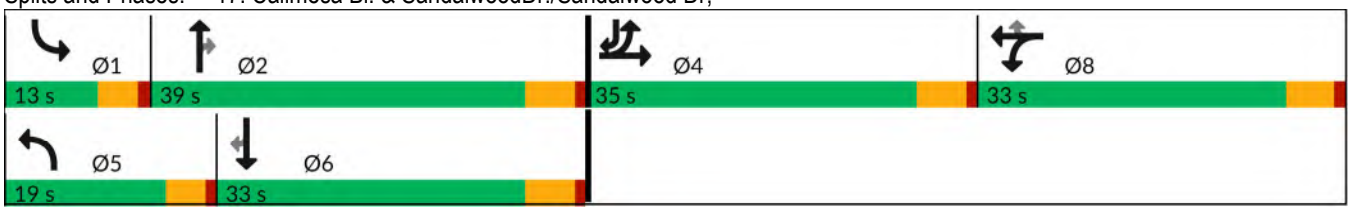
Approach	EB	WB	SB
HCM Control Delay, s/v	0.55	0	0
HCM LOS			A

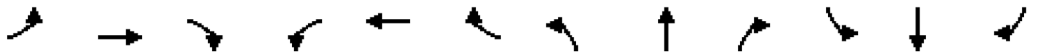
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	110	-	-	-	-
HCM Lane V/C Ratio	0.029	-	-	-	-
HCM Control Delay (s/veh)	9	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	139	111	25	170	29	75	351	157	32	189	344
Future Volume (vph)	139	111	25	170	29	75	351	157	32	189	344
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0	35.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%	29.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	13.7	13.7	13.2	13.2	13.2	7.9	19.9	19.9	6.3	13.8	27.5
Actuated g/C Ratio	0.20	0.20	0.19	0.19	0.19	0.12	0.29	0.29	0.09	0.20	0.41
v/c Ratio	0.38	0.33	0.07	0.49	0.07	0.37	0.35	0.28	0.20	0.52	0.42
Control Delay (s/veh)	30.6	16.2	27.4	32.5	0.3	37.4	22.2	6.2	37.4	32.2	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.6	16.2	27.4	32.5	0.3	37.4	22.2	6.2	37.4	32.2	3.1
LOS	C	B	C	C	A	D	C	A	D	C	A
Approach Delay (s/veh)		21.1		27.7			19.9			14.8	
Approach LOS		C		C			B			B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 67.9	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay (s/veh): 19.5	Intersection LOS: B
Intersection Capacity Utilization 50.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	111	104	25	170	29	75	351	157	32	189	344
Future Volume (veh/h)	139	111	104	25	170	29	75	351	157	32	189	344
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	115	161	82	26	179	16	79	369	142	34	199	279
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	326	436	211	324	340	287	115	820	364	67	381	612
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.06	0.23	0.23	0.04	0.20	0.20
Sat Flow, veh/h	1810	2418	1171	1810	1900	1605	1810	3610	1604	1810	1900	1606
Grp Volume(v), veh/h	115	125	118	26	179	16	79	369	142	34	199	279
Grp Sat Flow(s),veh/h/ln	1810	1900	1689	1810	1900	1605	1810	1805	1604	1810	1900	1606
Q Serve(g_s), s	3.1	3.2	3.4	0.7	4.7	0.5	2.4	4.9	4.1	1.0	5.2	7.2
Cycle Q Clear(g_c), s	3.1	3.2	3.4	0.7	4.7	0.5	2.4	4.9	4.1	1.0	5.2	7.2
Prop In Lane	1.00		0.69	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	326	343	305	324	340	287	115	820	364	67	381	612
V/C Ratio(X)	0.35	0.36	0.39	0.08	0.53	0.06	0.69	0.45	0.39	0.51	0.52	0.46
Avail Cap(c_a), veh/h	970	1019	906	905	950	802	472	2197	976	275	950	1093
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	19.9	19.9	18.9	20.5	18.8	25.3	18.4	18.1	26.1	19.7	12.8
Incr Delay (d2), s/veh	0.6	0.6	0.8	0.1	1.3	0.1	2.7	0.4	0.7	2.2	1.1	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.3	1.2	0.3	1.9	0.2	1.0	1.8	1.4	0.4	2.1	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.5	20.5	20.8	19.0	21.8	18.9	28.0	18.8	18.8	28.3	20.8	13.3
LnGrp LOS	C	C	C	B	C	B	C	B	B	C	C	B
Approach Vol, veh/h		358			221			590			512	
Approach Delay, s/veh		20.6			21.3			20.0			17.3	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	17.9		15.4	8.1	16.5		15.3				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6				
Max Q Clear Time (g_c+I1), s	3.0	6.9		5.4	4.4	9.2		6.7				
Green Ext Time (p_c), s	0.0	2.8		1.6	0.0	1.9		1.0				

Intersection Summary		
HCM 7th Control Delay, s/veh	19.5	
HCM 7th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	15
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	318	0	0	193	400	1
Future Vol, veh/h	318	0	0	193	400	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	328	0	0	199	412	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	13.8	11.3	17.8
HCM LOS	B	B	C

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	0%
Vol Thru, %	0%	100%	100%
Vol Right, %	0%	0%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	401	318	193
LT Vol	400	0	0
Through Vol	0	318	193
RT Vol	1	0	0
Lane Flow Rate	413	328	199
Geometry Grp	1	1	1
Degree of Util (X)	0.636	0.497	0.312
Departure Headway (Hd)	5.539	5.456	5.654
Convergence, Y/N	Yes	Yes	Yes
Cap	653	659	635
Service Time	3.575	3.499	3.703
HCM Lane V/C Ratio	0.632	0.498	0.313
HCM Control Delay, s/veh	17.8	13.8	11.3
HCM Lane LOS	C	B	B
HCM 95th-tile Q	4.5	2.8	1.3

Intersection	
Intersection Delay, s/veh	15.8
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	289	44	16	194	30
Future Vol, veh/h	20	289	44	16	194	30
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	33	482	73	27	323	50
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	16.9	9.8	15.9
HCM LOS	C	A	C

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	6%	87%
Vol Thru, %	73%	0%	13%
Vol Right, %	27%	94%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	60	309	224
LT Vol	0	20	194
Through Vol	44	0	30
RT Vol	16	289	0
Lane Flow Rate	100	515	373
Geometry Grp	1	1	1
Degree of Util (X)	0.157	0.674	0.575
Departure Headway (Hd)	5.656	4.713	5.541
Convergence, Y/N	Yes	Yes	Yes
Cap	632	772	650
Service Time	3.71	2.713	3.581
HCM Lane V/C Ratio	0.158	0.667	0.574
HCM Control Delay, s/veh	9.8	16.9	15.9
HCM Lane LOS	A	C	C
HCM 95th-tile Q	0.6	5.3	3.7

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	151	147	264	442	0	0	0	0	0	0	0
Future Vol, veh/h	0	151	147	264	442	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	162	158	284	475	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	320	0	0	1205	1363	475
Stage 1	-	-	-	-	-	-	1043	1043	-
Stage 2	-	-	-	-	-	-	162	320	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1251	-	0	205	149	594
Stage 1	0	-	-	-	-	0	342	309	-
Stage 2	0	-	-	-	-	0	872	656	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1251	-	-	142	0	594
Mov Cap-2 Maneuver	-	-	-	-	-	-	142	0	-
Stage 1	-	-	-	-	-	-	342	0	-
Stage 2	-	-	-	-	-	-	603	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	3.26	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	673	-	-
HCM Lane V/C Ratio	-	-	0.227	-	-
HCM Control Delay (s/veh)	-	-	8.7	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.9	-	-

Intersection	
Int Delay, s/veh	40.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	151	0	0	483	0	223	0	382	0	0	0
Future Vol, veh/h	0	151	0	0	483	0	223	0	382	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	166	0	0	531	0	245	0	420	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	531	0	-	-	-	0	697	697	166
Stage 1	-	-	-	-	-	-	166	166	-
Stage 2	-	-	-	-	-	-	531	531	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1047	-	0	0	-	-	410	367	884
Stage 1	-	-	0	0	-	-	868	765	-
Stage 2	-	-	0	0	-	-	594	529	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1047	-	-	-	-	-	410	0	884
Mov Cap-2 Maneuver	-	-	-	-	-	-	410	0	-
Stage 1	-	-	-	-	-	-	868	0	-
Stage 2	-	-	-	-	-	-	594	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	82.43
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	620	1047	-	-	-
HCM Lane V/C Ratio	1.072	-	-	-	-
HCM Control Delay (s/veh)	82.4	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	18.8	0	-	-	-

Intersection	
Intersection Delay, s/veh	123.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	85	446	2	65	367	98	0	56	79	170	103	117
Future Vol, veh/h	85	446	2	65	367	98	0	56	79	170	103	117
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	93	490	2	71	403	108	0	62	87	187	113	129
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	164.8	154.3	19.8	60.7
HCM LOS	F	F	C	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	16%	12%	44%
Vol Thru, %	41%	84%	69%	26%
Vol Right, %	59%	0%	18%	30%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	135	533	530	390
LT Vol	0	85	65	170
Through Vol	56	446	367	103
RT Vol	79	2	98	117
Lane Flow Rate	148	586	582	429
Geometry Grp	1	1	1	1
Degree of Util (X)	0.373	1.271	1.245	0.937
Departure Headway (Hd)	10.596	8.422	8.347	8.927
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	343	433	443	411
Service Time	8.596	6.422	6.347	6.927
HCM Lane V/C Ratio	0.431	1.353	1.314	1.044
HCM Control Delay, s/veh	19.8	164.8	154.3	60.7
HCM Lane LOS	C	F	F	F
HCM 95th-tile Q	1.7	23.2	22.3	10.4

APPENDIX 6.2: OPENING YEAR CUMULATIVE (2030) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Intersection Delay, s/veh	2.9
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	0	20	54
Demand Flow Rate, veh/h	0	20	54
Vehicles Circulating, veh/h	20	0	0
Vehicles Exiting, veh/h	0	54	20
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	0.0	2.7	2.9
Approach LOS	-	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	0	20	54
Cap Entry Lane, veh/h	1352	1380	1380
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	0	20	54
Cap Entry, veh/h	1352	1380	1380
V/C Ratio	0.000	0.014	0.039
Control Delay, s/veh	2.7	2.7	2.9
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	2.7
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	0	8	18
Demand Flow Rate, veh/h	0	8	18
Vehicles Circulating, veh/h	18	0	0
Vehicles Exiting, veh/h	0	18	8
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	0.0	2.7	2.7
Approach LOS	-	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	0	8	18
Cap Entry Lane, veh/h	1355	1380	1380
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	0	8	18
Cap Entry, veh/h	1355	1380	1380
V/C Ratio	0.000	0.006	0.013
Control Delay, s/veh	2.7	2.7	2.7
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	3.5
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	165	73	69
Demand Flow Rate, veh/h	165	73	69
Vehicles Circulating, veh/h	18	10	141
Vehicles Exiting, veh/h	65	200	42
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.6	3.1	3.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	165	73	69
Cap Entry Lane, veh/h	1355	1366	1195
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	165	73	69
Cap Entry, veh/h	1355	1366	1195
V/C Ratio	0.122	0.053	0.058
Control Delay, s/veh	3.6	3.1	3.5
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	65	25	32	64	6
Future Vol, veh/h	25	65	25	32	64	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	27	71	27	35	70	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	162	73	76	0	-	0
Stage 1	73	-	-	-	-	-
Stage 2	89	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	834	995	1536	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	819	995	1536	-	-	-
Mov Cap-2 Maneuver	819	-	-	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	939	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.28	3.24	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1536	-	939	-	-
HCM Lane V/C Ratio	0.018	-	0.104	-	-
HCM Control Delay (s/veh)	7.4	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Intersection Delay, s/veh	3.2
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	48	67	140
Demand Flow Rate, veh/h	48	67	140
Vehicles Circulating, veh/h	137	9	15
Vehicles Exiting, veh/h	18	176	61
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.1	2.8	3.5
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.188	0.813	0.224	0.776	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	9	39	15	52	140
Cap Entry Lane, veh/h	1254	1254	1409	1409	1359
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	9	39	15	52	140
Cap Entry, veh/h	1254	1254	1409	1409	1359
V/C Ratio	0.007	0.031	0.011	0.037	0.103
Control Delay, s/veh	2.9	3.1	2.6	2.8	3.5
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0

Intersection	
Int Delay, s/veh	64

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	458	353	200	229	0
Future Vol, veh/h	0	458	353	200	229	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	627	484	274	314	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	758	0	-	0	1248	621
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	627	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	863	-	-	-	~ 193	491
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	536	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	863	-	-	-	~ 193	491
Mov Cap-2 Maneuver	-	-	-	-	~ 193	-
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	536	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	$ 346.71
HCM LOS			F

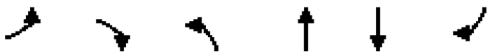
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	863	-	-	-	193
HCM Lane V/C Ratio	-	-	-	-	1.624
HCM Ctrl Dly (s/v)	0	-	-	-	$ 346.7
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	20.7

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

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	635	609		
Future Volume (vph)	635	609		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	40.0	49.0	80.0	31.0
Total Split (%)	33.3%	40.8%	67%	26%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min
Act Effct Green (s)	10.0	13.2		
Actuated g/C Ratio	0.21	0.28		
v/c Ratio	0.33	0.69		
Control Delay (s/veh)	0.4	19.7		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.4	19.7		
LOS	A	B		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 48	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay (s/veh): 9.9	Intersection LOS: A
Intersection Capacity Utilization 26.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	635	609	0	0	0
Future Volume (veh/h)	0	635	609	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	581	662	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	652	1021	1003	508	7	0
Arrive On Green	0.00	0.36	0.29	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	-96900	0
Grp Volume(v), veh/h	0	581	662	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	4.5	4.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.5	4.6	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	652	1021	1003	508	7	0
V/C Ratio(X)	0.00	0.57	0.66	0.00	0.00	0.00
Avail Cap(c_a), veh/h	2304	3608	5685	5191	1795	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.1	8.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.3	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	1.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	7.6	8.9	0.0	0.0	0.0
LnGrp LOS		A	A			
Approach Vol, veh/h	581			662	0	
Approach Delay, s/veh	7.6			8.9	0.0	
Approach LOS	A			A		

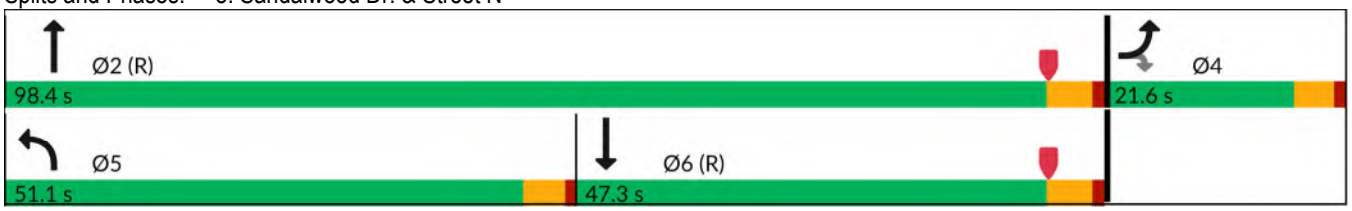
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		12.4		15.0	12.4	0.0
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		74.9		34.9	44.4	25.9
Max Q Clear Time (g_c+I1), s		0.0		6.5	6.6	0.0
Green Ext Time (p_c), s		0.0		2.5	1.3	0.0

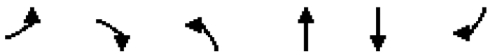
Intersection Summary	
HCM 7th Control Delay, s/veh	8.3
HCM 7th LOS	A

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	2	64	458	649	597
Future Volume (vph)	2	64	458	649	597
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	21.6	21.6	9.6	15.1	22.1
Total Split (s)	21.6	21.6	51.1	98.4	47.3
Total Split (%)	18.0%	18.0%	42.6%	82.0%	39.4%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	10.0	21.9	104.2	76.7
Actuated g/C Ratio	0.08	0.08	0.18	0.87	0.64
v/c Ratio	0.01	0.35	0.78	0.22	0.28
Control Delay (s/veh)	51.0	17.2	53.4	0.8	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.0	17.2	53.4	0.8	11.1
LOS	D	B	D	A	B
Approach Delay (s/veh)	18.2			22.6	11.1
Approach LOS	B			C	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 93.3 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 18.5	Intersection LOS: B
Intersection Capacity Utilization 49.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street N





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	64	458	649	597	4
Future Volume (veh/h)	2	64	458	649	597	4
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	70	498	705	649	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	137	122	560	3045	2374	15
Arrive On Green	0.08	0.08	0.32	1.00	0.65	0.65
Sat Flow, veh/h	1810	1610	3510	3705	3773	23
Grp Volume(v), veh/h	2	70	498	705	318	335
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1896
Q Serve(g_s), s	0.1	5.0	16.2	0.0	9.1	9.1
Cycle Q Clear(g_c), s	0.1	5.0	16.2	0.0	9.1	9.1
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	137	122	560	3045	1165	1224
V/C Ratio(X)	0.01	0.57	0.89	0.23	0.27	0.27
Avail Cap(c_a), veh/h	256	228	1360	3045	1165	1224
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	0.95	0.95
Uniform Delay (d), s/veh	51.3	53.6	39.8	0.0	9.2	9.2
Incr Delay (d2), s/veh	0.0	4.2	1.9	0.2	0.6	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	4.6	6.0	0.1	3.6	3.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.4	57.8	41.8	0.2	9.7	9.7
LnGrp LOS	D	E	D	A	A	A
Approach Vol, veh/h	72			1203	653	
Approach Delay, s/veh	57.6			17.4	9.7	
Approach LOS	E			B	A	

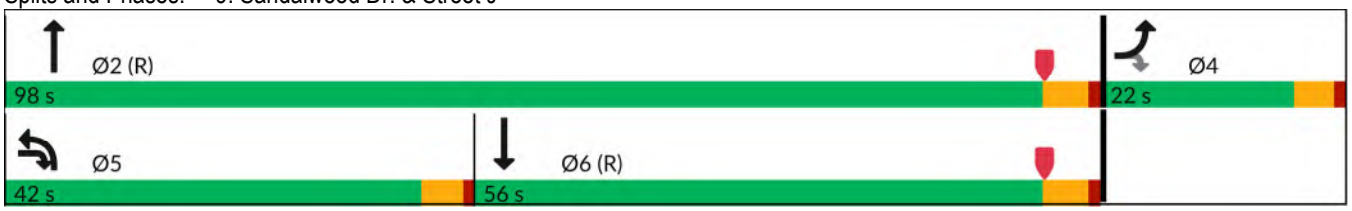
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		106.3		13.7	23.7	82.6
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	46.5	42.2
Max Q Clear Time (g_c+I1), s		2.0		7.0	18.2	11.1
Green Ext Time (p_c), s		5.9		0.1	1.0	4.4

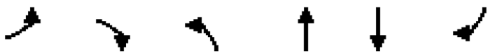
Intersection Summary		
HCM 7th Control Delay, s/veh		16.3
HCM 7th LOS		B

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	2	65	459	1105	657
Future Volume (vph)	2	65	459	1105	657
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	21.6	9.6	9.6	15.1	22.1
Total Split (s)	22.0	42.0	42.0	98.0	56.0
Total Split (%)	18.3%	35.0%	35.0%	81.7%	46.7%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	24.6	21.7	116.1	85.7
Actuated g/C Ratio	0.08	0.21	0.18	0.97	0.71
v/c Ratio	0.01	0.18	0.79	0.34	0.28
Control Delay (s/veh)	51.0	8.1	56.2	0.9	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.0	8.1	56.2	0.9	16.0
LOS	D	A	E	A	B
Approach Delay (s/veh)	9.3			17.2	16.0
Approach LOS	A			B	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 48 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 16.6	Intersection LOS: B
Intersection Capacity Utilization 51.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	65	459	1105	657	4
Future Volume (veh/h)	2	65	459	1105	657	4
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	71	499	1201	714	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	138	384	571	3044	2363	13
Arrive On Green	0.08	0.08	0.16	0.84	1.00	1.00
Sat Flow, veh/h	1810	1610	3510	3705	3776	21
Grp Volume(v), veh/h	2	71	499	1201	350	368
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1896
Q Serve(g_s), s	0.1	4.2	16.6	9.4	0.0	0.0
Cycle Q Clear(g_c), s	0.1	4.2	16.6	9.4	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	138	384	571	3044	1159	1218
V/C Ratio(X)	0.01	0.18	0.87	0.39	0.30	0.30
Avail Cap(c_a), veh/h	262	495	1094	3044	1159	1218
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.82	0.82	0.97	0.97
Uniform Delay (d), s/veh	51.3	36.4	49.0	2.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	1.4	0.3	0.7	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	0.1	4.2	7.2	1.8	0.2	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.3	36.6	50.4	2.5	0.7	0.6
LnGrp LOS	D	D	D	A	A	A
Approach Vol, veh/h	73			1700	718	
Approach Delay, s/veh	37.0			16.6	0.6	
Approach LOS	D			B	A	

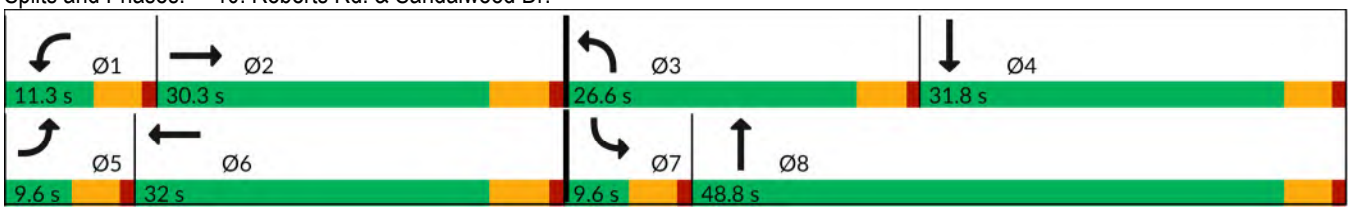
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		106.3		13.7	24.1	82.2
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		92.9		17.4	37.4	50.9
Max Q Clear Time (g_c+I1), s		11.4		6.2	18.6	2.0
Green Ext Time (p_c), s		11.5		0.1	0.9	5.2

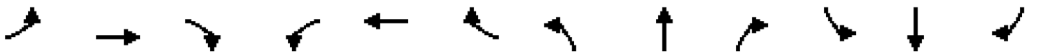
Intersection Summary		
HCM 7th Control Delay, s/veh	12.6	
HCM 7th LOS	B	

Lane Group	EBL	EBT	WBT	SBL	SBT	Ø1	Ø3	Ø8
Lane Configurations								
Traffic Volume (vph)	79	644	1561	119	0			
Future Volume (vph)	79	644	1561	119	0			
Turn Type	Prot	NA	NA	Prot	NA			
Protected Phases	5	2	6	7	4	1	3	8
Permitted Phases								
Detector Phase	5	2	6	7	4			
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	27.4	27.4	9.6	31.6	9.6	26.6	31.6
Total Split (s)	9.6	30.3	32.0	9.6	31.8	11.3	26.6	48.8
Total Split (%)	9.6%	30.3%	32.0%	9.6%	31.8%	11%	27%	49%
Yellow Time (s)	3.6	4.4	4.4	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.6	5.4	5.4	4.6	4.6			
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min
Act Effct Green (s)	5.0	36.5	26.8	5.0	12.9			
Actuated g/C Ratio	0.07	0.53	0.39	0.07	0.19			
v/c Ratio	0.66	0.26	0.85	0.51	0.00			
Control Delay (s/veh)	58.8	10.1	25.7	40.1	0.0			
Queue Delay	0.0	0.0	0.0	0.0	0.0			
Total Delay (s/veh)	58.8	10.1	25.7	40.1	0.0			
LOS	E	B	C	D	A			
Approach Delay (s/veh)		15.4	25.7		39.2			
Approach LOS		B	C		D			

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 69.2	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay (s/veh): 23.3	Intersection LOS: C
Intersection Capacity Utilization 55.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	644	0	0	1561	2	0	0	0	119	0	3
Future Volume (veh/h)	79	644	0	0	1561	2	0	0	0	119	0	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	86	700	0	0	1697	2	0	0	0	129	0	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	128	3240	0	7	2461	3	7	4	0	297	0	275
Arrive On Green	0.07	0.62	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.08	0.00	0.17
Sat Flow, veh/h	1810	5358	0	3510	5351	6	3510	1900	0	3510	0	1610
Grp Volume(v), veh/h	86	700	0	0	1097	602	0	0	0	129	0	3
Grp Sat Flow(s),veh/h/ln	1810	1729	0	1755	1729	1899	1755	1900	0	1755	0	1610
Q Serve(g_s), s	2.3	2.9	0.0	0.0	12.2	12.3	0.0	0.0	0.0	1.7	0.0	0.1
Cycle Q Clear(g_c), s	2.3	2.9	0.0	0.0	12.2	12.3	0.0	0.0	0.0	1.7	0.0	0.1
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	128	3240	0	7	1590	873	7	4	0	297	0	275
V/C Ratio(X)	0.67	0.22	0.00	0.00	0.69	0.69	0.00	0.00	0.00	0.43	0.00	0.01
Avail Cap(c_a), veh/h	185	3240	0	482	1884	1034	1582	1720	0	359	0	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.1	4.0	0.0	0.0	10.4	10.4	0.0	0.0	0.0	21.2	0.0	16.8
Incr Delay (d2), s/veh	2.3	0.0	0.0	0.0	0.9	1.6	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.5	0.0	0.0	3.4	3.9	0.0	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.5	4.0	0.0	0.0	11.3	12.0	0.0	0.0	0.0	21.6	0.0	16.8
LnGrp LOS	C	A			B	B				C		B
Approach Vol, veh/h		786			1699			0			132	
Approach Delay, s/veh		6.2			11.5			0.0			21.5	
Approach LOS		A			B						C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	35.9	0.0	12.9	8.0	27.9	8.7	4.2
Change Period (Y+Rc), s	4.6	5.4	4.6	4.6	4.6	5.4	4.6	4.6
Max Green Setting (Gmax), s	6.7	24.9	22.0	27.2	5.0	26.6	5.0	44.2
Max Q Clear Time (g_c+I1), s	0.0	4.9	0.0	2.1	4.3	14.3	3.7	0.0
Green Ext Time (p_c), s	0.0	4.4	0.0	0.0	0.0	8.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.5
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	671	16	128	530	23	152
Future Vol, veh/h	671	16	128	530	23	152
Conflicting Peds, #/hr	0	2	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	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	771	18	147	609	26	175

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	792	0	1686	782
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	903	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	838	-	104	397
Stage 1	-	-	-	-	454	-
Stage 2	-	-	-	-	399	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	836	-	77	396
Mov Cap-2 Maneuver	-	-	-	-	195	-
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	293	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.99	28.42
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	349	-	-	350	-
HCM Lane V/C Ratio	0.576	-	-	0.176	-
HCM Control Delay (s/veh)	28.4	-	-	10.2	0
HCM Lane LOS	D	-	-	B	A
HCM 95th %tile Q(veh)	3.4	-	-	0.6	-

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	624	198	366	433	0	0	0	0	287	6	225
Future Vol, veh/h	0	624	198	366	433	0	0	0	0	287	6	225
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	734	233	431	509	0	0	0	0	338	7	265

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	968	0	0	2105	2339	509
Stage 1	-	-	-	-	-	-	1371	1371	-
Stage 2	-	-	-	-	-	-	734	968	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	720	-	0	~ 57	37	568
Stage 1	0	-	-	-	-	0	~ 238	216	-
Stage 2	0	-	-	-	-	0	478	335	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	720	-	-	~ 23	0	568
Mov Cap-2 Maneuver	-	-	-	-	-	-	1134	0	-
Stage 1	-	-	-	-	-	-	~ 238	0	-
Stage 2	-	-	-	-	-	-	~ 192	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	7.86	12.68
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	720	-	1134	568
HCM Lane V/C Ratio	-	-	0.598	-	0.304	0.466
HCM Control Delay (s/veh)	-	-	17.2	-	9.6	16.8
HCM Lane LOS	-	-	C	-	A	C
HCM 95th %tile Q(veh)	-	-	4	-	1.3	2.5

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

Intersection	
Int Delay, s/veh	180.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	360	552	0	0	637	755	160	5	129	0	0	0
Future Vol, veh/h	360	552	0	0	637	755	160	5	129	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	387	594	0	0	685	812	172	5	139	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1497	0	-	-	-	0	2053	2865	594
Stage 1	-	-	-	-	-	-	1368	1368	-
Stage 2	-	-	-	-	-	-	685	1497	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	454	-	0	0	-	-	~ 62	17	509
Stage 1	-	-	0	0	-	-	239	217	-
Stage 2	-	-	0	0	-	-	504	188	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	454	-	-	-	-	-	~ 9	0	509
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 28	0	-
Stage 1	-	-	-	-	-	-	~ 35	0	-
Stage 2	-	-	-	-	-	-	504	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	17.41	0	$ 1539.15
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	28	509	454	-	-	-
HCM Lane V/C Ratio	6.443	0.273	0.852	-	-	-
HCM Control Delay (s/veh)	$ 2731	14.7	44.1	-	-	-
HCM Lane LOS	F	B	E	-	-	-
HCM 95th %tile Q(veh)	21.8	1.1	8.6	-	-	-

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

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	763	1492	45	0	71
Future Vol, veh/h	0	763	1492	45	0	71
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1045	2044	62	0	97

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1022
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	490
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	490
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	14.15
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	490
HCM Lane V/C Ratio	-	-	-	0.198
HCM Control Delay (s/veh)	-	-	-	14.1
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.7

Intersection	
Intersection Delay, s/veh	501.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	575	188	185	927	0	0	0	0	137	18	610
Future Vol, veh/h	0	575	188	185	927	0	0	0	0	137	18	610
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	710	232	228	1144	0	0	0	0	169	22	753
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	211.6	800.3	355.6
HCM LOS	F	F	F

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	17%	18%
Vol Thru, %	100%	0%	83%	2%
Vol Right, %	0%	100%	0%	80%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	575	188	1112	765
LT Vol	0	0	185	137
Through Vol	575	0	927	18
RT Vol	0	188	0	610
Lane Flow Rate	710	232	1373	944
Geometry Grp	5	5	4a	2
Degree of Util (X)	1.498	0.445	2.718	1.719
Departure Headway (Hd)	12.78	12.023	9.485	8.935
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	291	304	398	416
Service Time	10.48	9.723	7.485	6.935
HCM Lane V/C Ratio	2.44	0.763	3.45	2.269
HCM Control Delay, s/veh	273	24	800.3	355.6
HCM Lane LOS	F	C	F	F
HCM 95th-tile Q	24.1	2.2	86	42.3

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	226	486	1112	406	0	0
Future Vol, veh/h	226	486	1112	406	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	257	552	1264	461	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1725	0	-	0	-	1494
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	371	-	-	-	0	153
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	371	-	-	-	-	153
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

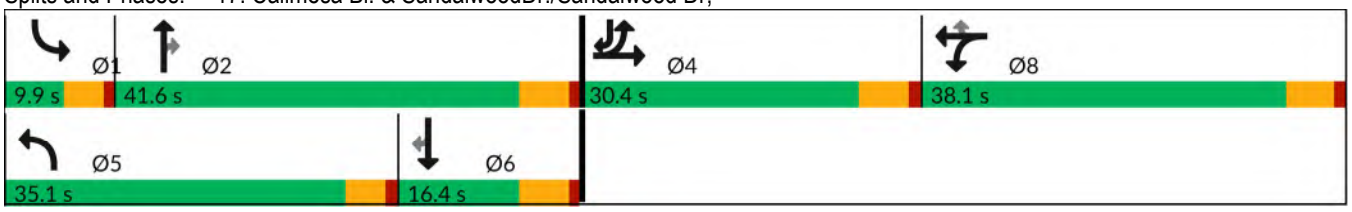
Approach	EB	WB	SB
HCM Control Delay, s/v	10.74	0	0
HCM LOS			A

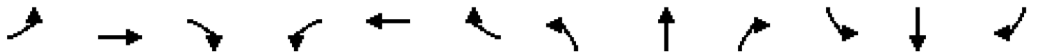
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	257	-	-	-	-
HCM Lane V/C Ratio	0.692	-	-	-	-
HCM Control Delay (s/veh)	33.8	0	-	-	0
HCM Lane LOS	D	A	-	-	A
HCM 95th %tile Q(veh)	5	-	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	222	208	23	360	35	702	613	112	15	51	457
Future Volume (vph)	222	208	23	360	35	702	613	112	15	51	457
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4	30.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	22.1	22.1	27.9	27.9	27.9	30.8	42.1	42.1	5.2	10.4	37.9
Actuated g/C Ratio	0.20	0.20	0.25	0.25	0.25	0.27	0.38	0.38	0.05	0.09	0.34
v/c Ratio	0.57	0.55	0.06	0.86	0.08	1.61	0.51	0.19	0.20	0.33	0.85
Control Delay (s/veh)	49.0	42.2	32.8	59.7	0.3	314.0	31.4	6.1	60.7	56.3	41.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.0	42.2	32.8	59.7	0.3	314.0	31.4	6.1	60.7	56.3	41.7
LOS	D	D	C	E	A	F	C	A	E	E	D
Approach Delay (s/veh)		44.5		53.3			168.5			43.6	
Approach LOS		D		D			F			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 112.1	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.61	
Intersection Signal Delay (s/veh): 107.6	Intersection LOS: F
Intersection Capacity Utilization 99.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	208	57	23	360	35	702	613	112	15	51	457
Future Volume (veh/h)	222	208	57	23	360	35	702	613	112	15	51	457
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	178	339	47	26	409	30	798	697	97	17	58	442
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	256	462	63	442	464	388	544	1410	628	34	206	402
Arrive On Green	0.14	0.14	0.14	0.24	0.24	0.24	0.30	0.39	0.39	0.02	0.11	0.11
Sat Flow, veh/h	1810	3270	449	1810	1900	1588	1810	3610	1608	1810	1900	1610
Grp Volume(v), veh/h	178	196	190	26	409	30	798	697	97	17	58	442
Grp Sat Flow(s),veh/h/ln	1810	1900	1819	1810	1900	1588	1810	1805	1608	1810	1900	1610
Q Serve(g_s), s	9.5	10.0	10.2	1.1	21.0	1.5	30.5	14.8	4.0	0.9	2.8	11.0
Cycle Q Clear(g_c), s	9.5	10.0	10.2	1.1	21.0	1.5	30.5	14.8	4.0	0.9	2.8	11.0
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	268	257	442	464	388	544	1410	628	34	206	402
V/C Ratio(X)	0.70	0.73	0.74	0.06	0.88	0.08	1.47	0.49	0.15	0.50	0.28	1.10
Avail Cap(c_a), veh/h	446	469	449	584	613	512	544	1410	628	95	206	402
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	41.7	41.8	29.4	36.9	29.5	35.4	23.3	20.0	49.3	41.6	32.7
Incr Delay (d2), s/veh	3.4	3.8	4.2	0.1	11.4	0.1	219.6	0.3	0.1	4.2	0.7	74.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	4.8	4.7	0.5	10.8	0.6	45.9	6.0	1.4	0.5	1.3	18.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.9	45.5	45.9	29.4	48.3	29.6	255.0	23.6	20.1	53.5	42.3	107.0
LnGrp LOS	D	D	D	C	D	C	F	C	C	D	D	F
Approach Vol, veh/h		564			465			1592			517	
Approach Delay, s/veh		45.4			46.0			139.4			98.0	
Approach LOS		D			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.5	45.0		19.7	35.1	16.4		30.2				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7				
Max Q Clear Time (g_c+I1), s	2.9	16.8		12.2	32.5	13.0		23.0				
Green Ext Time (p_c), s	0.0	4.7		2.1	0.0	0.0		1.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	101.8
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	266.7
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	131	0	0	801	657	1
Future Vol, veh/h	131	0	0	801	657	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	154	0	0	942	773	1
Number of Lanes	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	16.3	297.5	279.1
HCM LOS	C	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	100%
Vol Right, %	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	657	1	131	801
LT Vol	657	0	0	0
Through Vol	0	0	131	801
RT Vol	0	1	0	0
Lane Flow Rate	773	1	154	942
Geometry Grp	5	5	2	2
Degree of Util (X)	1.548	0.002	0.299	1.597
Departure Headway (Hd)	8.409	7.174	9.365	7.372
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	441	502	387	499
Service Time	6.109	4.874	7.365	5.372
HCM Lane V/C Ratio	1.753	0.002	0.398	1.888
HCM Control Delay, s/veh	279.5	9.9	16.3	297.5
HCM Lane LOS	F	A	C	F
HCM 95th-tile Q	36.2	0	1.2	43.2

Intersection	
Intersection Delay, s/veh	18.2
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	217	36	16	347	55
Future Vol, veh/h	5	217	36	16	347	55
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	306	51	23	489	77
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	11.6	9	23
HCM LOS	B	A	C

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	2%	86%
Vol Thru, %	69%	0%	14%
Vol Right, %	31%	98%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	52	222	402
LT Vol	0	5	347
Through Vol	36	0	55
RT Vol	16	217	0
Lane Flow Rate	73	313	566
Geometry Grp	1	1	1
Degree of Util (X)	0.109	0.425	0.774
Departure Headway (Hd)	5.335	4.889	4.923
Convergence, Y/N	Yes	Yes	Yes
Cap	676	729	725
Service Time	3.335	2.977	3.023
HCM Lane V/C Ratio	0.108	0.429	0.781
HCM Control Delay, s/veh	9	11.6	23
HCM Lane LOS	A	B	C
HCM 95th-tile Q	0.4	2.1	7.5

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	254	269	445	320	0	0	0	0	0	0	0
Future Vol, veh/h	0	254	269	445	320	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	302	320	530	381	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	623	0	0	1743	2063	381
Stage 1	-	-	-	-	-	-	1440	1440	-
Stage 2	-	-	-	-	-	-	302	623	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	968	-	0	96	55	671
Stage 1	0	-	-	-	-	0	220	200	-
Stage 2	0	-	-	-	-	0	754	482	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	968	-	-	29	0	671
Mov Cap-2 Maneuver	-	-	-	-	-	-	29	0	-
Stage 1	-	-	-	-	-	-	220	0	-
Stage 2	-	-	-	-	-	-	231	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	7.63	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	763	-	-
HCM Lane V/C Ratio	-	-	0.547	-	-
HCM Control Delay (s/veh)	-	-	13.1	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	3.4	-	-

Intersection	
Int Delay, s/veh	30.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	254	0	0	591	0	174	0	279	0	0	0
Future Vol, veh/h	0	254	0	0	591	0	174	0	279	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	282	0	0	657	0	193	0	310	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	657	0	-	-	-	0	939	939	282
Stage 1	-	-	-	-	-	-	282	282	-
Stage 2	-	-	-	-	-	-	657	657	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	940	-	0	0	-	-	296	266	761
Stage 1	-	-	0	0	-	-	770	681	-
Stage 2	-	-	0	0	-	-	520	465	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	940	-	-	-	-	-	296	0	761
Mov Cap-2 Maneuver	-	-	-	-	-	-	296	0	-
Stage 1	-	-	-	-	-	-	770	0	-
Stage 2	-	-	-	-	-	-	520	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	88.16
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	474	940	-	-	-
HCM Lane V/C Ratio	1.061	-	-	-	-
HCM Control Delay (s/veh)	88.2	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	15.7	0	-	-	-

Intersection	
Intersection Delay, s/veh	332.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	179	352	2	32	488	178	2	541	236	74	43	101
Future Vol, veh/h	179	352	2	32	488	178	2	541	236	74	43	101
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	190	374	2	34	519	189	2	576	251	79	46	107
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	219.1	373.5	454.2	42.4
HCM LOS	F	F	F	E

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	34%	5%	34%
Vol Thru, %	69%	66%	70%	20%
Vol Right, %	30%	0%	26%	46%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	779	533	698	218
LT Vol	2	179	32	74
Through Vol	541	352	488	43
RT Vol	236	2	178	101
Lane Flow Rate	829	567	743	232
Geometry Grp	1	1	1	1
Degree of Util (X)	1.931	1.36	1.738	0.605
Departure Headway (Hd)	10.837	13.446	12.068	16.694
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	348	278	312	218
Service Time	8.837	11.446	10.068	14.694
HCM Lane V/C Ratio	2.382	2.04	2.381	1.064
HCM Control Delay, s/veh	454.2	219.1	373.5	42.4
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	44.1	19.2	33.3	3.5

Intersection	
Intersection Delay, s/veh	2.9
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	0	61	37
Demand Flow Rate, veh/h	0	61	37
Vehicles Circulating, veh/h	61	0	0
Vehicles Exiting, veh/h	0	37	61
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	0.0	3.0	2.8
Approach LOS	-	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	0	61	37
Cap Entry Lane, veh/h	1297	1380	1380
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	0	61	37
Cap Entry, veh/h	1297	1380	1380
V/C Ratio	0.000	0.044	0.027
Control Delay, s/veh	2.8	3.0	2.8
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	2.7
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	0	22	13
Demand Flow Rate, veh/h	0	22	13
Vehicles Circulating, veh/h	13	0	0
Vehicles Exiting, veh/h	0	13	22
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	0.0	2.7	2.7
Approach LOS	-	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	0	22	13
Cap Entry Lane, veh/h	1362	1380	1380
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	0	22	13
Cap Entry, veh/h	1362	1380	1380
V/C Ratio	0.000	0.016	0.009
Control Delay, s/veh	2.6	2.7	2.7
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	5.2
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	224	446	132
Demand Flow Rate, veh/h	224	446	132
Vehicles Circulating, veh/h	111	54	189
Vehicles Exiting, veh/h	389	267	146
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.5	5.9	4.2
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	224	446	132
Cap Entry Lane, veh/h	1232	1306	1138
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	224	446	132
Cap Entry, veh/h	1232	1306	1138
V/C Ratio	0.182	0.342	0.116
Control Delay, s/veh	4.5	5.9	4.2
LOS	A	A	A
95th %tile Queue, veh	1	2	0

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	45	73	76	53	19
Future Vol, veh/h	17	45	73	76	53	19
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	49	79	83	58	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	309	68	78	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	241	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	687	1001	1533	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	804	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	652	1001	1533	-	-	-
Mov Cap-2 Maneuver	652	-	-	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	804	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.47	3.66	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1533	-	873	-	-
HCM Lane V/C Ratio	0.052	-	0.077	-	-
HCM Control Delay (s/veh)	7.5	-	9.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

Intersection	
Intersection Delay, s/veh	3.3
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	36	201	106
Demand Flow Rate, veh/h	36	201	106
Vehicles Circulating, veh/h	96	7	46
Vehicles Exiting, veh/h	56	125	162
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	2.9	3.3	3.4
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.194	0.806	0.229	0.771	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	7	29	46	155	106
Cap Entry Lane, veh/h	1301	1301	1411	1411	1317
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	7	29	46	155	106
Cap Entry, veh/h	1301	1301	1411	1411	1317
V/C Ratio	0.005	0.022	0.033	0.110	0.081
Control Delay, s/veh	2.8	2.9	2.8	3.4	3.4
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0

Intersection	
Int Delay, s/veh	154.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	428	530	131	163	0
Future Vol, veh/h	0	428	530	131	163	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	764	946	234	291	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1180	0	-	0	1828	1063
Stage 1	-	-	-	-	1063	-
Stage 2	-	-	-	-	764	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	599	-	-	-	~ 85	274
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	463	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	599	-	-	-	~ 85	274
Mov Cap-2 Maneuver	-	-	-	-	~ 85	-
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	463	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	$ 1188.29
HCM LOS			F

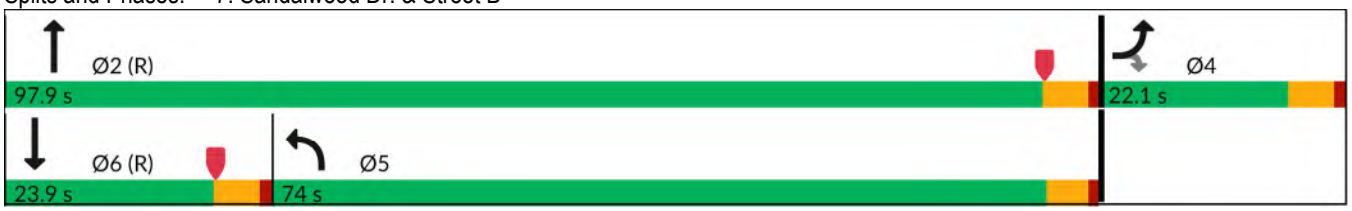
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	599	-	-	-	85
HCM Lane V/C Ratio	-	-	-	-	3.41
HCM Ctrl Dly (s/v)	0	-	-	-	$ 1188.3
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	29.4

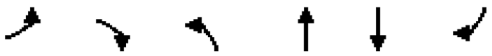
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	250	302		
Future Volume (vph)	250	302		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	22.1	74.0	97.9	23.9
Total Split (%)	18.4%	61.7%	82%	20%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lag		Lead
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	16.1		
Actuated g/C Ratio	0.08	0.13		
v/c Ratio	0.14	0.70		
Control Delay (s/veh)	0.1	55.7		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.1	55.7		
LOS	A	E		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116.9 (97%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay (s/veh): 30.5	Intersection LOS: C
Intersection Capacity Utilization 13.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	250	302	0	0	0
Future Volume (veh/h)	0	250	302	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	169	328	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	150	235	2221	1581	298	0
Arrive On Green	0.00	0.08	0.63	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	1900	0
Grp Volume(v), veh/h	0	169	328	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	7.0	4.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.0	4.5	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	150	235	2221	1581	298	0
V/C Ratio(X)	0.00	0.72	0.15	0.00	0.00	0.00
Avail Cap(c_a), veh/h	256	401	2221	1581	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	53.6	8.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.1	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.5	1.7	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	57.7	8.9	0.0	0.0	0.0
LnGrp LOS		E	A			
Approach Vol, veh/h	169			328	0	
Approach Delay, s/veh	57.7			8.9	0.0	
Approach LOS	E			A		

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		104.9		15.1	81.0	23.9
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	69.4	* 19
Max Q Clear Time (g_c+I1), s		0.0		9.0	6.5	0.0
Green Ext Time (p_c), s		0.0		0.3	0.6	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	25.5
HCM 7th LOS	C

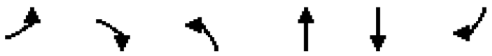
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	5	392	66	305	183
Future Volume (vph)	5	392	66	305	183
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	22.1	9.6	15.1	22.1
Total Split (s)	63.0	63.0	20.0	57.0	37.0
Total Split (%)	52.5%	52.5%	16.7%	47.5%	30.8%
Yellow Time (s)	4.1	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	12.4	12.4	6.9	97.4	87.8
Actuated g/C Ratio	0.10	0.10	0.06	0.81	0.73
v/c Ratio	0.03	0.78	0.36	0.11	0.08
Control Delay (s/veh)	45.6	15.0	58.0	2.3	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.6	15.0	58.0	2.3	5.6
LOS	D	B	E	A	A
Approach Delay (s/veh)	15.4			12.3	5.6
Approach LOS	B			B	A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 24.1 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 12.3	Intersection LOS: B
Intersection Capacity Utilization 41.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street N



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	392	66	305	183	3
Future Volume (veh/h)	5	392	66	305	183	3
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	5	426	72	332	199	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	518	461	133	2269	2011	30
Arrive On Green	0.29	0.29	0.01	0.21	1.00	1.00
Sat Flow, veh/h	1810	1610	3510	3705	3735	55
Grp Volume(v), veh/h	5	426	72	332	99	103
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1890
Q Serve(g_s), s	0.2	30.8	2.4	9.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	30.8	2.4	9.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.03
Lane Grp Cap(c), veh/h	518	461	133	2269	997	1044
V/C Ratio(X)	0.01	0.92	0.54	0.15	0.10	0.10
Avail Cap(c_a), veh/h	873	777	451	2269	997	1044
HCM Platoon Ratio	1.00	1.00	0.33	0.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	41.5	58.2	21.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.5	1.3	0.1	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	25.7	1.1	4.2	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	30.6	52.1	59.5	21.4	0.2	0.2
LnGrp LOS	C	D	E	C	A	A
Approach Vol, veh/h	431			404	202	
Approach Delay, s/veh	51.8			28.2	0.2	
Approach LOS	D			C	A	

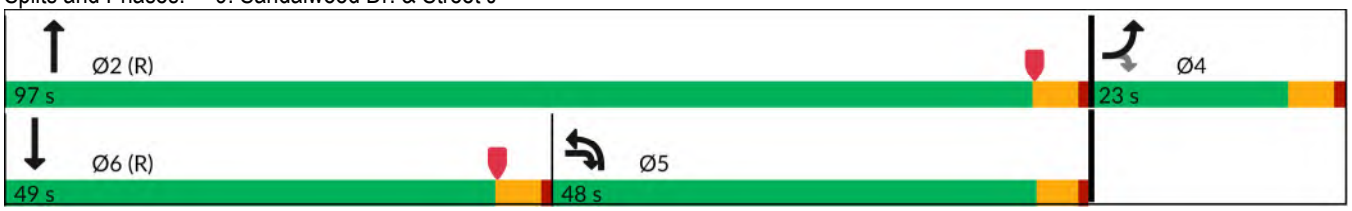
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		80.5		39.5	9.1	71.4
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		51.9		57.9	15.4	31.9
Max Q Clear Time (g_c+I1), s		11.0		32.8	4.4	2.0
Green Ext Time (p_c), s		2.4		1.6	0.1	1.1

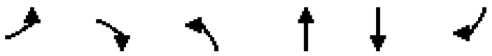
Intersection Summary	
HCM 7th Control Delay, s/veh	32.6
HCM 7th LOS	C

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	5	392	66	366	572
Future Volume (vph)	5	392	66	366	572
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	9.6	15.1	22.1
Total Split (s)	23.0	48.0	48.0	97.0	49.0
Total Split (%)	19.2%	40.0%	40.0%	80.8%	40.8%
Yellow Time (s)	4.1	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.6	4.6	5.1	5.1
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	34.0	31.0	116.0	76.3
Actuated g/C Ratio	0.08	0.28	0.26	0.97	0.64
v/c Ratio	0.03	0.79	0.08	0.11	0.27
Control Delay (s/veh)	51.2	38.0	31.3	0.6	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.2	38.0	31.3	0.6	11.6
LOS	D	D	C	A	B
Approach Delay (s/veh)	38.2			5.3	11.6
Approach LOS	D			A	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74 (62%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 17.2	Intersection LOS: B
Intersection Capacity Utilization 48.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	392	66	366	572	3
Future Volume (veh/h)	5	392	66	366	572	3
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	5	426	72	398	622	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	151	1059	2016	3002	792	4
Arrive On Green	0.08	0.08	0.57	0.83	0.07	0.07
Sat Flow, veh/h	1810	1610	3510	3705	3779	18
Grp Volume(v), veh/h	5	426	72	398	305	320
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1897
Q Serve(g_s), s	0.3	0.0	1.1	2.5	19.9	19.9
Cycle Q Clear(g_c), s	0.3	0.0	1.1	2.5	19.9	19.9
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	151	1059	2016	3002	388	408
V/C Ratio(X)	0.03	0.40	0.04	0.13	0.79	0.79
Avail Cap(c_a), veh/h	270	1165	2016	3002	660	694
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.81	0.81
Uniform Delay (d), s/veh	50.6	9.6	11.1	1.9	53.0	53.0
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.1	12.2	11.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	14.3	0.4	0.5	11.0	11.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	50.6	9.8	11.1	2.0	65.2	64.7
LnGrp LOS	D	A	B	A	E	E
Approach Vol, veh/h	431			470	625	
Approach Delay, s/veh	10.3			3.4	65.0	
Approach LOS	B			A	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		104.9		15.1	74.0	30.9
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		91.9		17.9	43.4	* 44
Max Q Clear Time (g_c+I1), s		4.5		2.3	3.1	21.9
Green Ext Time (p_c), s		2.7		1.4	0.1	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	30.6
HCM 7th LOS	C

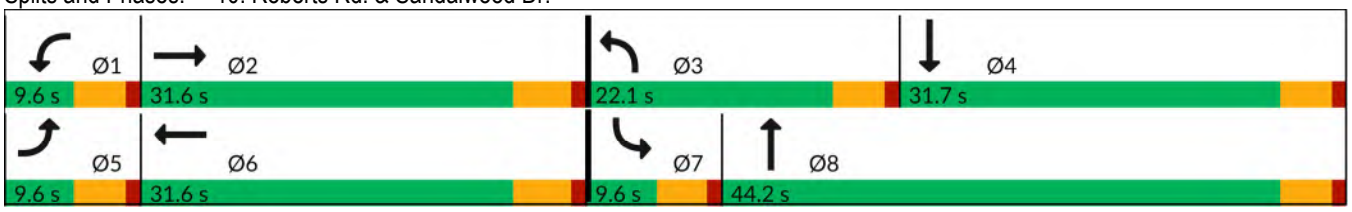
Notes

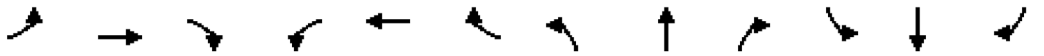
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	SBL	SBT	Ø1	Ø3	Ø8
Lane Configurations								
Traffic Volume (vph)	19	945	427	134	0			
Future Volume (vph)	19	945	427	134	0			
Turn Type	Prot	NA	NA	Prot	NA			
Protected Phases	5	2	6	7	4	1	3	8
Permitted Phases								
Detector Phase	5	2	6	7	4			
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	27.1	27.1	9.6	31.6	9.6	22.1	31.6
Total Split (s)	9.6	31.6	31.6	9.6	31.7	9.6	22.1	44.2
Total Split (%)	10.1%	33.3%	33.3%	10.1%	33.4%	10%	23%	47%
Yellow Time (s)	3.6	4.1	4.1	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.6	5.1	5.1	4.6	4.6			
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	None	None	None
Act Effct Green (s)	5.2	32.6	31.2	9.7	14.3			
Actuated g/C Ratio	0.09	0.57	0.55	0.17	0.25			
v/c Ratio	0.13	0.35	0.16	0.25	0.01			
Control Delay (s/veh)	28.4	8.6	9.7	25.0	0.0			
Queue Delay	0.0	0.0	0.0	0.0	0.0			
Total Delay (s/veh)	28.4	8.6	9.7	25.0	0.0			
LOS	C	A	A	C	A			
Approach Delay (s/veh)		9.0	9.7		24.1			
Approach LOS		A	A		C			

Intersection Summary	
Cycle Length: 95	
Actuated Cycle Length: 57	
Natural Cycle: 95	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay (s/veh): 10.5	Intersection LOS: B
Intersection Capacity Utilization 34.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	945	0	0	427	3	0	0	0	134	0	5
Future Volume (veh/h)	19	945	0	0	427	3	0	0	0	134	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	21	1027	0	0	464	3	0	0	0	146	0	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	46	3078	0	8	2471	16	8	4	0	329	0	305
Arrive On Green	0.03	0.59	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.09	0.00	0.19
Sat Flow, veh/h	1810	5358	0	3510	5317	34	3510	1900	0	3510	0	1610
Grp Volume(v), veh/h	21	1027	0	0	302	165	0	0	0	146	0	5
Grp Sat Flow(s),veh/h/ln	1810	1729	0	1755	1729	1894	1755	1900	0	1755	0	1610
Q Serve(g_s), s	0.5	4.5	0.0	0.0	2.3	2.3	0.0	0.0	0.0	1.8	0.0	0.1
Cycle Q Clear(g_c), s	0.5	4.5	0.0	0.0	2.3	2.3	0.0	0.0	0.0	1.8	0.0	0.1
Prop In Lane	1.00		0.00	1.00		0.02	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	46	3078	0	8	1607	880	8	4	0	329	0	305
V/C Ratio(X)	0.45	0.33	0.00	0.00	0.19	0.19	0.00	0.00	0.00	0.44	0.00	0.02
Avail Cap(c_a), veh/h	203	3078	0	393	2052	1124	1375	1685	0	393	0	977
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.4	4.6	0.0	0.0	7.0	7.0	0.0	0.0	0.0	19.1	0.0	14.7
Incr Delay (d2), s/veh	2.5	0.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.8	0.0	0.0	0.6	0.6	0.0	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.0	4.9	0.0	0.0	7.1	7.1	0.0	0.0	0.0	19.5	0.0	14.7
LnGrp LOS	C	A			A	A				B		B
Approach Vol, veh/h		1048			467			0			151	
Approach Delay, s/veh		5.3			7.1			0.0			19.3	
Approach LOS		A			A						B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	31.6	0.0	13.1	5.7	25.9	8.8	4.3
Change Period (Y+Rc), s	4.6	5.1	4.6	4.6	4.6	5.1	4.6	4.6
Max Green Setting (Gmax), s	5.0	26.5	17.5	27.1	5.0	26.5	5.0	39.6
Max Q Clear Time (g_c+I1), s	0.0	6.5	0.0	2.1	2.5	4.3	3.8	0.0
Green Ext Time (p_c), s	0.0	6.8	0.0	0.0	0.0	2.7	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.1
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	580	11	101	648	14	71
Future Vol, veh/h	580	11	101	648	14	71
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	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	667	13	116	745	16	82

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	679	0	1650	673
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	977	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	922	-	110	459
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	368	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	922	-	86	459
Mov Cap-2 Maneuver	-	-	-	-	204	-
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	289	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.28	17.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	380	-	-	243	-
HCM Lane V/C Ratio	0.257	-	-	0.126	-
HCM Control Delay (s/veh)	17.7	-	-	9.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1	-	-	0.4	-

Intersection	
Int Delay, s/veh	753.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	454	197	313	432	0	0	0	0	459	3	318
Future Vol, veh/h	0	454	197	313	432	0	0	0	0	459	3	318
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	483	210	333	460	0	0	0	0	488	3	338

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	693	0	0	1609	1818	460
Stage 1	-	-	-	-	-	-	1126	1126	-
Stage 2	-	-	-	-	-	-	483	693	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	912	-	0	~ 117	79	606
Stage 1	0	-	-	-	-	0	~ 313	283	-
Stage 2	0	-	-	-	-	0	625	448	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	912	-	-	~ 74	0	606
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 58	0	-
Stage 1	-	-	-	-	-	-	~ 313	0	-
Stage 2	-	-	-	-	-	-	~ 397	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	4.71	$ 2097.02
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	912	-	58	606
HCM Lane V/C Ratio	-	-	0.365	-	8.536	0.558
HCM Control Delay (s/veh)	-	-	11.2	-	$ 3527.9	18.2
HCM Lane LOS	-	-	B	-	F	C
HCM 95th %tile Q(veh)	-	-	1.7	-	57.4	3.4

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

Intersection	
Int Delay, s/veh	23.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	243	670	0	0	497	362	165	1	281	0	0	0
Future Vol, veh/h	243	670	0	0	497	362	165	1	281	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	259	713	0	0	529	385	176	1	299	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	914	0	-	-	-	0	1759	2144	713
Stage 1	-	-	-	-	-	-	1230	1230	-
Stage 2	-	-	-	-	-	-	529	914	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	754	-	0	0	-	-	~ 94	49	435
Stage 1	-	-	0	0	-	-	279	252	-
Stage 2	-	-	0	0	-	-	595	355	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	754	-	-	-	-	-	~ 62	0	435
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 133	0	-
Stage 1	-	-	-	-	-	-	183	0	-
Stage 2	-	-	-	-	-	-	595	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	3.26	0	111.93
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	133	435	754	-	-	-
HCM Lane V/C Ratio	1.325	0.687	0.343	-	-	-
HCM Control Delay (s/veh)	251.4	29.5	12.2	-	-	-
HCM Lane LOS	F	D	B	-	-	-
HCM 95th %tile Q(veh)	11.3	5.1	1.5	-	-	-

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

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	1079	418	48	0	12
Future Vol, veh/h	0	1079	418	48	0	12
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1478	573	66	0	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	286
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	721
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	721
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	10.11
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	721
HCM Lane V/C Ratio	-	-	-	0.023
HCM Control Delay (s/veh)	-	-	-	10.1
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Intersection Delay, s/veh	123.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	632	447	323	298	0	0	0	0	274	8	168
Future Vol, veh/h	0	632	447	323	298	0	0	0	0	274	8	168
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	665	471	340	314	0	0	0	0	288	8	177
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	133.5	160.5	48.4
HCM LOS	F	F	E

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	52%	61%
Vol Thru, %	100%	0%	48%	2%
Vol Right, %	0%	100%	0%	37%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	632	447	621	450
LT Vol	0	0	323	274
Through Vol	632	0	298	8
RT Vol	0	447	0	168
Lane Flow Rate	665	471	654	474
Geometry Grp	5	5	4a	2
Degree of Util (X)	1.362	0.871	1.273	0.907
Departure Headway (Hd)	7.826	7.102	7.195	7.425
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	472	513	510	493
Service Time	5.526	4.802	5.195	5.425
HCM Lane V/C Ratio	1.409	0.918	1.282	0.961
HCM Control Delay, s/veh	198.9	41	160.5	48.4
HCM Lane LOS	F	E	F	E
HCM 95th-tile Q	28.9	9.4	26.2	10.3

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	432	474	622	200	0	0
Future Vol, veh/h	432	474	622	200	0	0
Conflicting Peds, #/hr	0	0	0	3	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	497	545	715	230	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	948	0	-	0	-	833
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	732	-	-	-	0	372
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	730	-	-	-	-	371
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

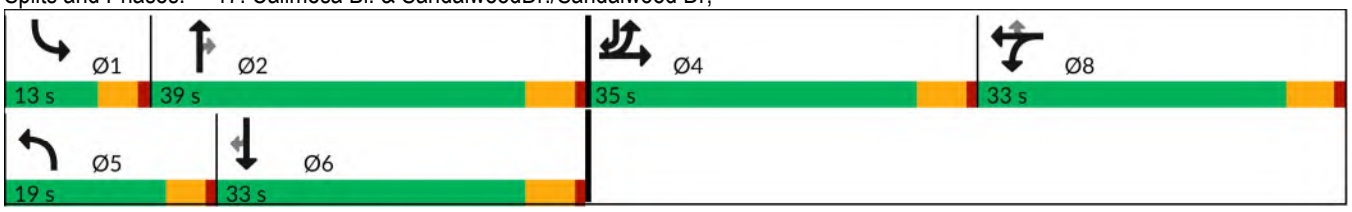
Approach	EB	WB	SB
HCM Control Delay, s/v	9.41	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	509	-	-	-	-
HCM Lane V/C Ratio	0.68	-	-	-	-
HCM Control Delay (s/veh)	19.7	0	-	-	0
HCM Lane LOS	C	A	-	-	A
HCM 95th %tile Q(veh)	5.4	-	-	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	234	131	25	187	29	240	351	157	32	189	395
Future Volume (vph)	234	131	25	187	29	240	351	157	32	189	395
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0	35.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%	29.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	17.0	17.0	14.6	14.6	14.6	14.8	27.9	27.9	6.3	14.7	31.7
Actuated g/C Ratio	0.21	0.21	0.18	0.18	0.18	0.18	0.34	0.34	0.08	0.18	0.38
v/c Ratio	0.50	0.46	0.08	0.59	0.08	0.78	0.30	0.26	0.25	0.59	0.53
Control Delay (s/veh)	35.7	24.9	32.0	40.7	0.4	54.1	24.6	6.0	45.5	40.7	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.7	24.9	32.0	40.7	0.4	54.1	24.6	6.0	45.5	40.7	7.8
LOS	D	C	C	D	A	D	C	A	D	D	A
Approach Delay (s/veh)		28.6		34.9			30.2			19.8	
Approach LOS		C		C			C			B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 82.5	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 27.3	Intersection LOS: C
Intersection Capacity Utilization 61.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	234	131	110	25	187	29	240	351	157	32	189	395
Future Volume (veh/h)	234	131	110	25	187	29	240	351	157	32	189	395
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	161	257	99	26	197	22	253	369	138	34	199	344
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	285	414	155	269	282	234	299	1286	572	63	429	616
Arrive On Green	0.16	0.16	0.16	0.15	0.15	0.15	0.17	0.36	0.36	0.03	0.23	0.23
Sat Flow, veh/h	1810	2635	987	1810	1900	1580	1810	3610	1606	1810	1900	1607
Grp Volume(v), veh/h	161	183	173	26	197	22	253	369	138	34	199	344
Grp Sat Flow(s),veh/h/ln	1810	1900	1722	1810	1900	1580	1810	1805	1606	1810	1900	1607
Q Serve(g_s), s	5.6	6.2	6.4	0.9	6.8	0.8	9.3	5.0	4.1	1.3	6.2	11.5
Cycle Q Clear(g_c), s	5.6	6.2	6.4	0.9	6.8	0.8	9.3	5.0	4.1	1.3	6.2	11.5
Prop In Lane	1.00		0.57	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	285	299	271	269	282	234	299	1286	572	63	429	616
V/C Ratio(X)	0.57	0.61	0.64	0.10	0.70	0.09	0.85	0.29	0.24	0.54	0.46	0.56
Avail Cap(c_a), veh/h	781	820	744	728	765	636	380	1769	787	222	765	900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	26.9	27.1	25.2	27.7	25.2	27.8	15.8	15.5	32.5	23.0	16.6
Incr Delay (d2), s/veh	1.8	2.0	2.5	0.2	3.1	0.2	11.0	0.1	0.2	2.7	0.8	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.7	2.6	0.4	3.1	0.3	4.6	1.9	1.4	0.6	2.6	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	29.0	29.5	25.4	30.9	25.4	38.8	15.9	15.8	35.2	23.7	17.4
LnGrp LOS	C	C	C	C	C	C	D	B	B	D	C	B
Approach Vol, veh/h		517			245			760			577	
Approach Delay, s/veh		29.0			29.8			23.5			20.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	29.8		16.2	15.9	20.9		15.6				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6				
Max Q Clear Time (g_c+I1), s	3.3	7.0		8.4	11.3	13.5		8.8				
Green Ext Time (p_c), s	0.0	2.8		2.3	0.1	1.9		1.0				

Intersection Summary		
HCM 7th Control Delay, s/veh	24.8	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	50.5
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	324	0	0	202	556	1
Future Vol, veh/h	324	0	0	202	556	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	334	0	0	208	573	1
Number of Lanes	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	17.9	13.7	82.9
HCM LOS	C	B	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	100%
Vol Right, %	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	556	1	324	202
LT Vol	556	0	0	0
Through Vol	0	0	324	202
RT Vol	0	1	0	0
Lane Flow Rate	573	1	334	208
Geometry Grp	5	5	2	2
Degree of Util (X)	1.066	0.002	0.577	0.374
Departure Headway (Hd)	6.696	5.479	6.468	6.735
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	545	654	561	537
Service Time	4.426	3.208	4.468	4.735
HCM Lane V/C Ratio	1.051	0.002	0.595	0.387
HCM Control Delay, s/veh	83	8.2	17.9	13.7
HCM Lane LOS	F	A	C	B
HCM 95th-tile Q	17	0	3.6	1.7

Intersection	
Intersection Delay, s/veh	15.8
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	289	44	16	194	30
Future Vol, veh/h	20	289	44	16	194	30
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	33	482	73	27	323	50
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	16.9	9.8	15.9
HCM LOS	C	A	C

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	6%	87%
Vol Thru, %	73%	0%	13%
Vol Right, %	27%	94%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	60	309	224
LT Vol	0	20	194
Through Vol	44	0	30
RT Vol	16	289	0
Lane Flow Rate	100	515	373
Geometry Grp	1	1	1
Degree of Util (X)	0.157	0.674	0.575
Departure Headway (Hd)	5.656	4.713	5.541
Convergence, Y/N	Yes	Yes	Yes
Cap	632	772	650
Service Time	3.71	2.713	3.581
HCM Lane V/C Ratio	0.158	0.667	0.574
HCM Control Delay, s/veh	9.8	16.9	15.9
HCM Lane LOS	A	C	C
HCM 95th-tile Q	0.6	5.3	3.7

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	151	147	264	442	0	0	0	0	0	0	0
Future Vol, veh/h	0	151	147	264	442	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	162	158	284	475	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	320	0	0	1205	1363	475
Stage 1	-	-	-	-	-	-	1043	1043	-
Stage 2	-	-	-	-	-	-	162	320	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1251	-	0	205	149	594
Stage 1	0	-	-	-	-	0	342	309	-
Stage 2	0	-	-	-	-	0	872	656	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1251	-	-	142	0	594
Mov Cap-2 Maneuver	-	-	-	-	-	-	142	0	-
Stage 1	-	-	-	-	-	-	342	0	-
Stage 2	-	-	-	-	-	-	603	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	3.26	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	673	-	-
HCM Lane V/C Ratio	-	-	0.227	-	-
HCM Control Delay (s/veh)	-	-	8.7	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.9	-	-

Intersection	
Int Delay, s/veh	40.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	151	0	0	483	0	223	0	382	0	0	0
Future Vol, veh/h	0	151	0	0	483	0	223	0	382	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	166	0	0	531	0	245	0	420	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	531	0	-	-	-	0	697	697	166
Stage 1	-	-	-	-	-	-	166	166	-
Stage 2	-	-	-	-	-	-	531	531	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1047	-	0	0	-	-	410	367	884
Stage 1	-	-	0	0	-	-	868	765	-
Stage 2	-	-	0	0	-	-	594	529	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1047	-	-	-	-	-	410	0	884
Mov Cap-2 Maneuver	-	-	-	-	-	-	410	0	-
Stage 1	-	-	-	-	-	-	868	0	-
Stage 2	-	-	-	-	-	-	594	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	82.43
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	620	1047	-	-	-
HCM Lane V/C Ratio	1.072	-	-	-	-
HCM Control Delay (s/veh)	82.4	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	18.8	0	-	-	-

Intersection	
Intersection Delay, s/veh	129.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	85	446	2	65	367	103	0	61	79	173	106	117
Future Vol, veh/h	85	446	2	65	367	103	0	61	79	173	106	117
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	93	490	2	71	403	113	0	67	87	190	116	129
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	171.3	165	20.5	65.6
HCM LOS	F	F	C	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	16%	12%	44%
Vol Thru, %	44%	84%	69%	27%
Vol Right, %	56%	0%	19%	30%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	140	533	535	396
LT Vol	0	85	65	173
Through Vol	61	446	367	106
RT Vol	79	2	103	117
Lane Flow Rate	154	586	588	435
Geometry Grp	1	1	1	1
Degree of Util (X)	0.39	1.286	1.271	0.957
Departure Headway (Hd)	10.786	8.573	8.474	9.059
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	335	428	435	405
Service Time	8.786	6.573	6.474	7.059
HCM Lane V/C Ratio	0.46	1.369	1.352	1.074
HCM Control Delay, s/veh	20.5	171.3	165	65.6
HCM Lane LOS	C	F	F	F
HCM 95th-tile Q	1.8	23.6	23.1	10.9

APPENDIX 6.3: OPENING YEAR CUMULATIVE (2030) WITHOUT PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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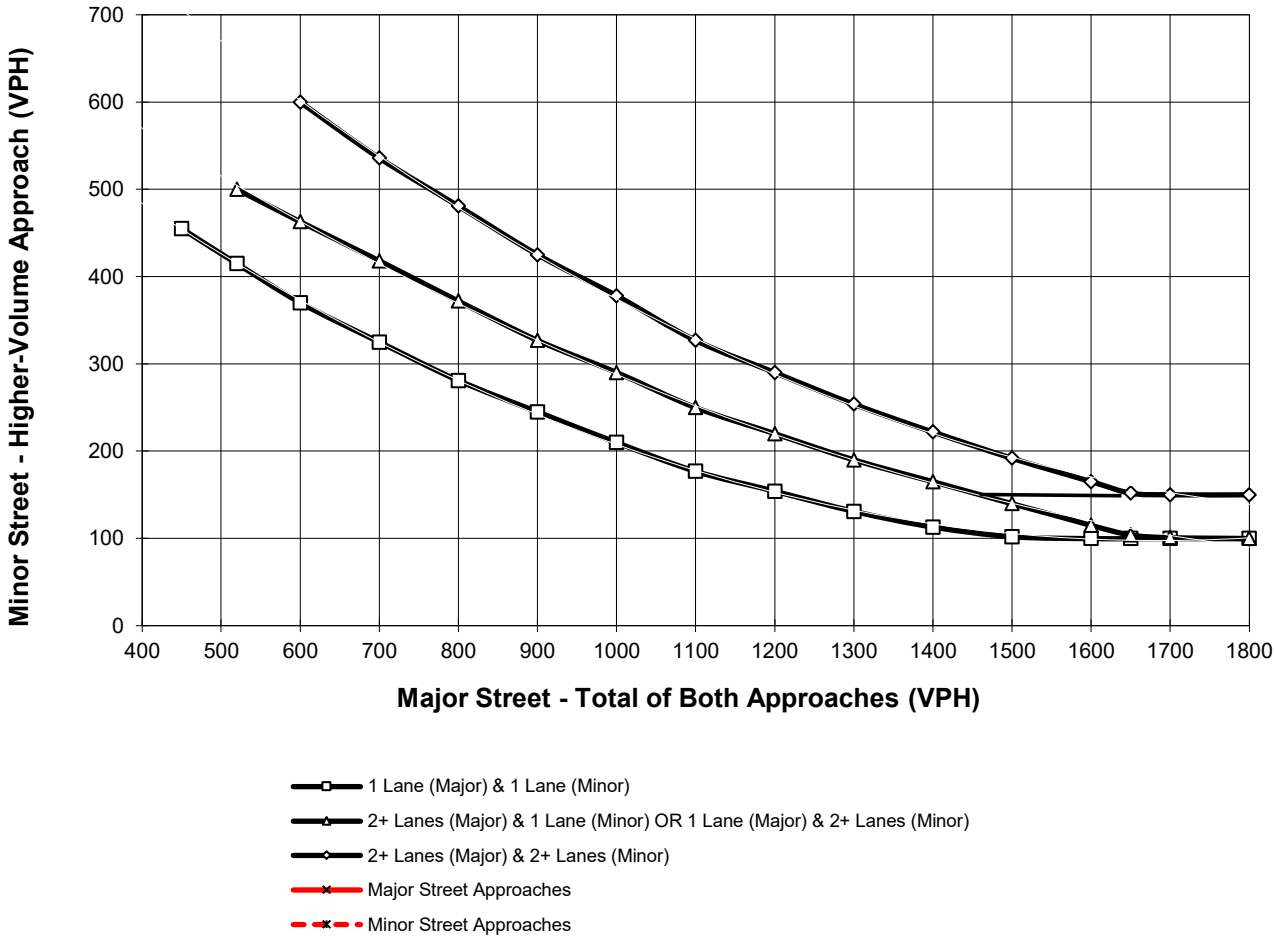
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **OYC (2030) NP Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Ln.**
Total of Both Approaches (VPH) = **292**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **County Line Rd.**
High Volume Approach (VPH) = **419**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

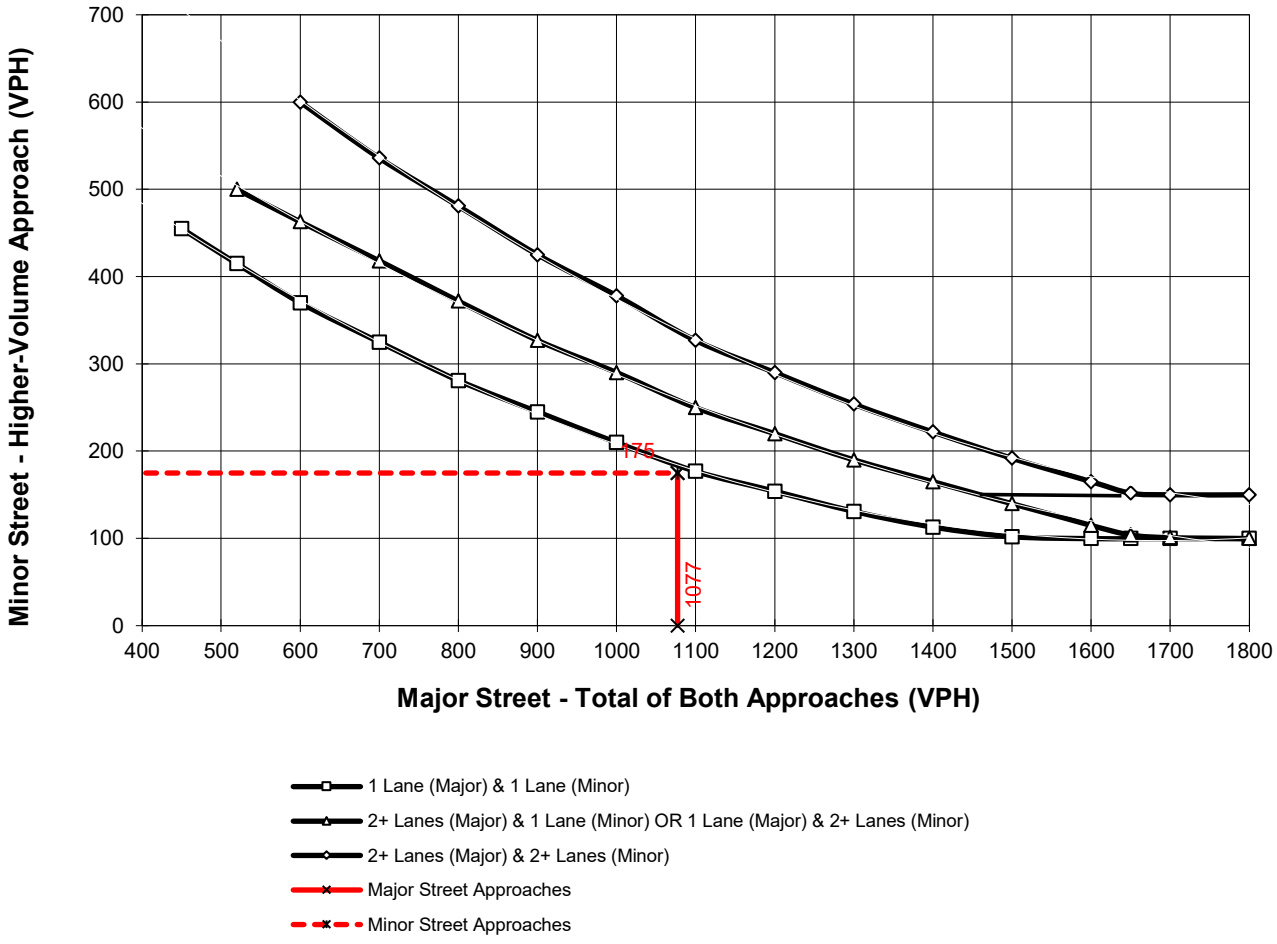
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **OYC 2030 NP Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Rd.**
Total of Both Approaches (VPH) = **1077**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **7th Pl.**
High Volume Approach (VPH) = **175**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

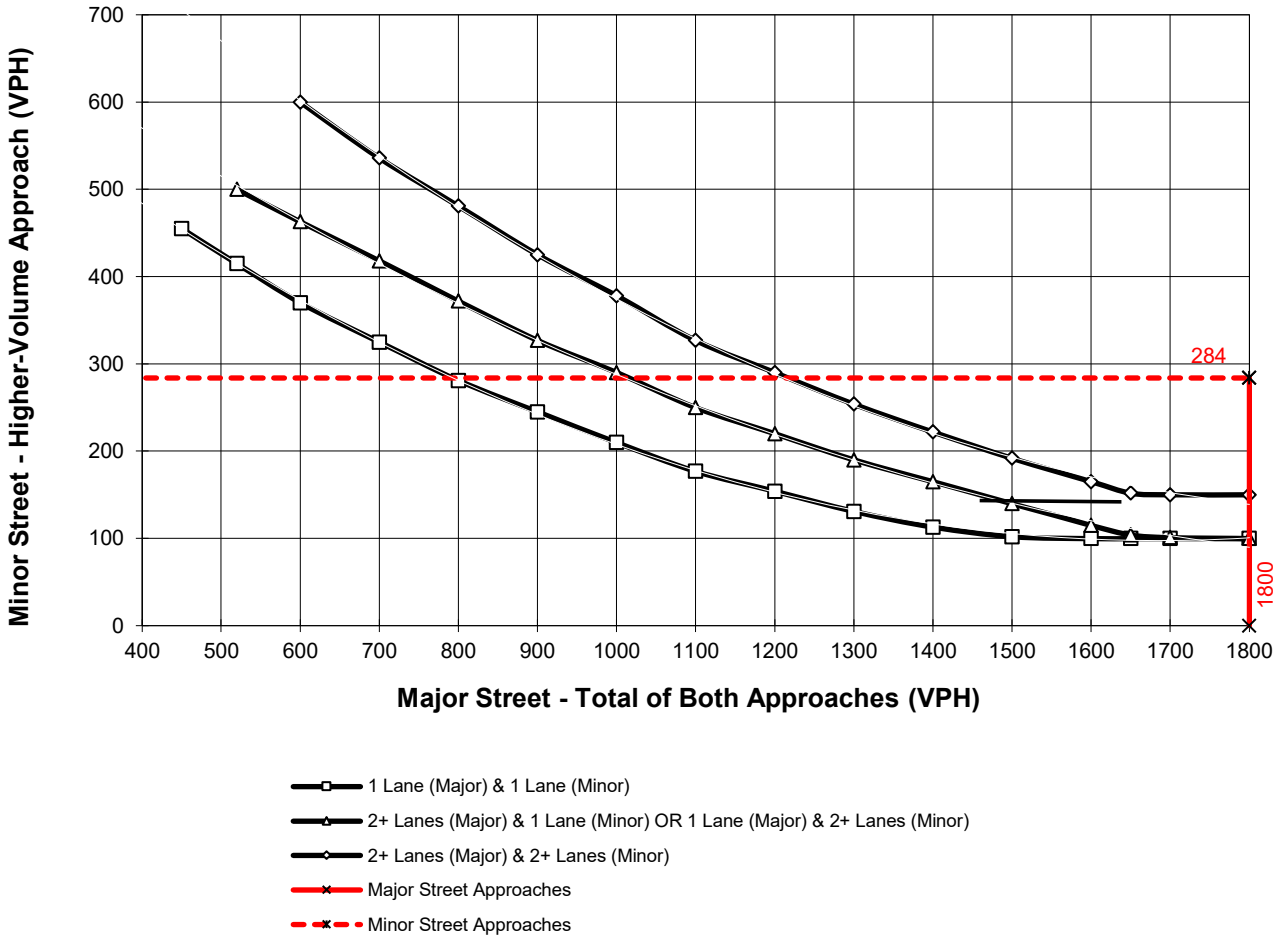
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **OYC 2030 NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Calimesa Bl.** Total of Both Approaches (VPH) = **2122**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **I-10 Northbound Off-Ramp** High Volume Approach (VPH) = **284**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

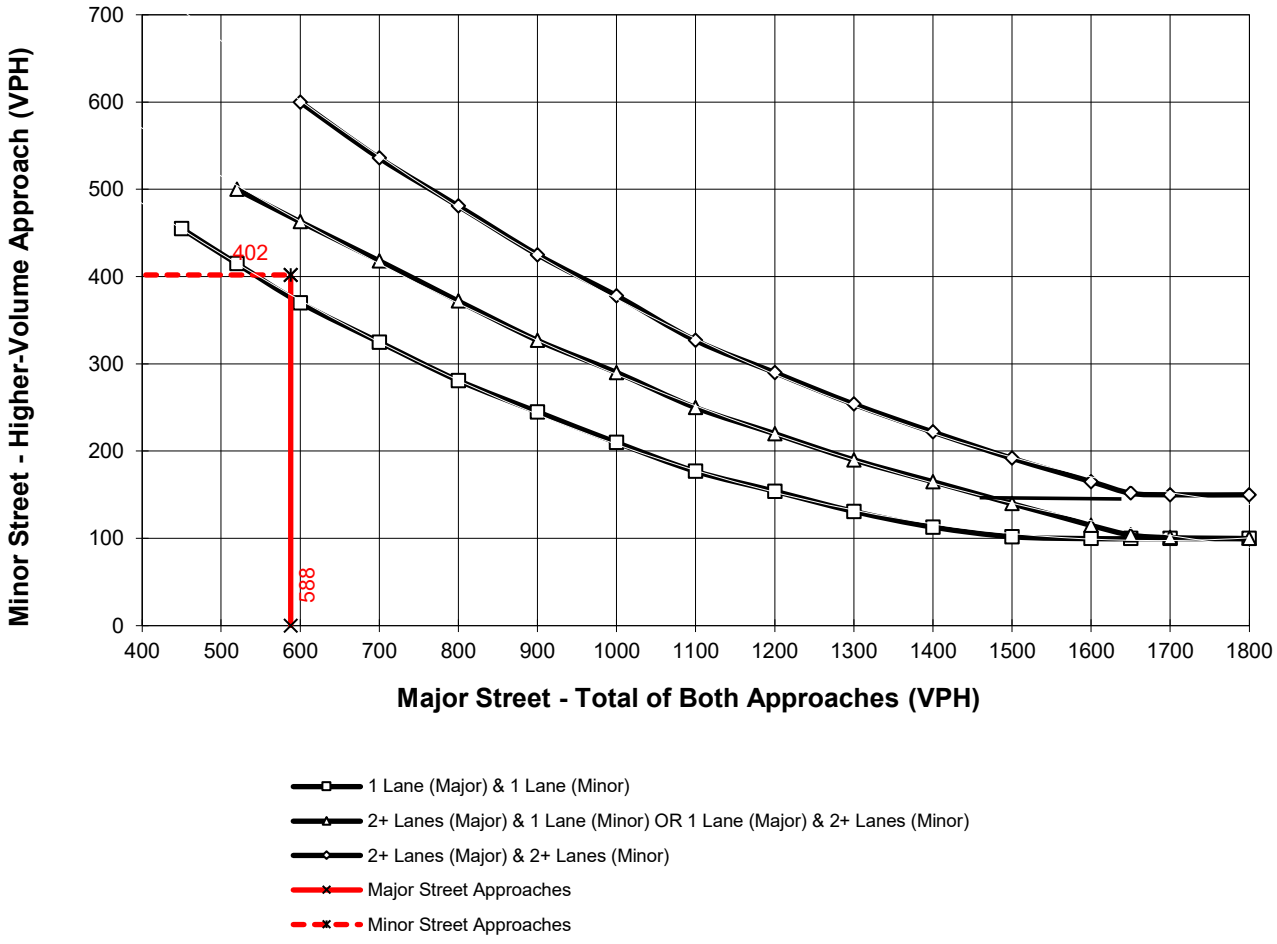
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **OYC 2030 NP Conditions - Weekday PM Peak Hour**

Major Street Name = **Singleton Rd.**
Total of Both Approaches (VPH) = **588**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Roberts Rd.**
High Volume Approach (VPH) = **402**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

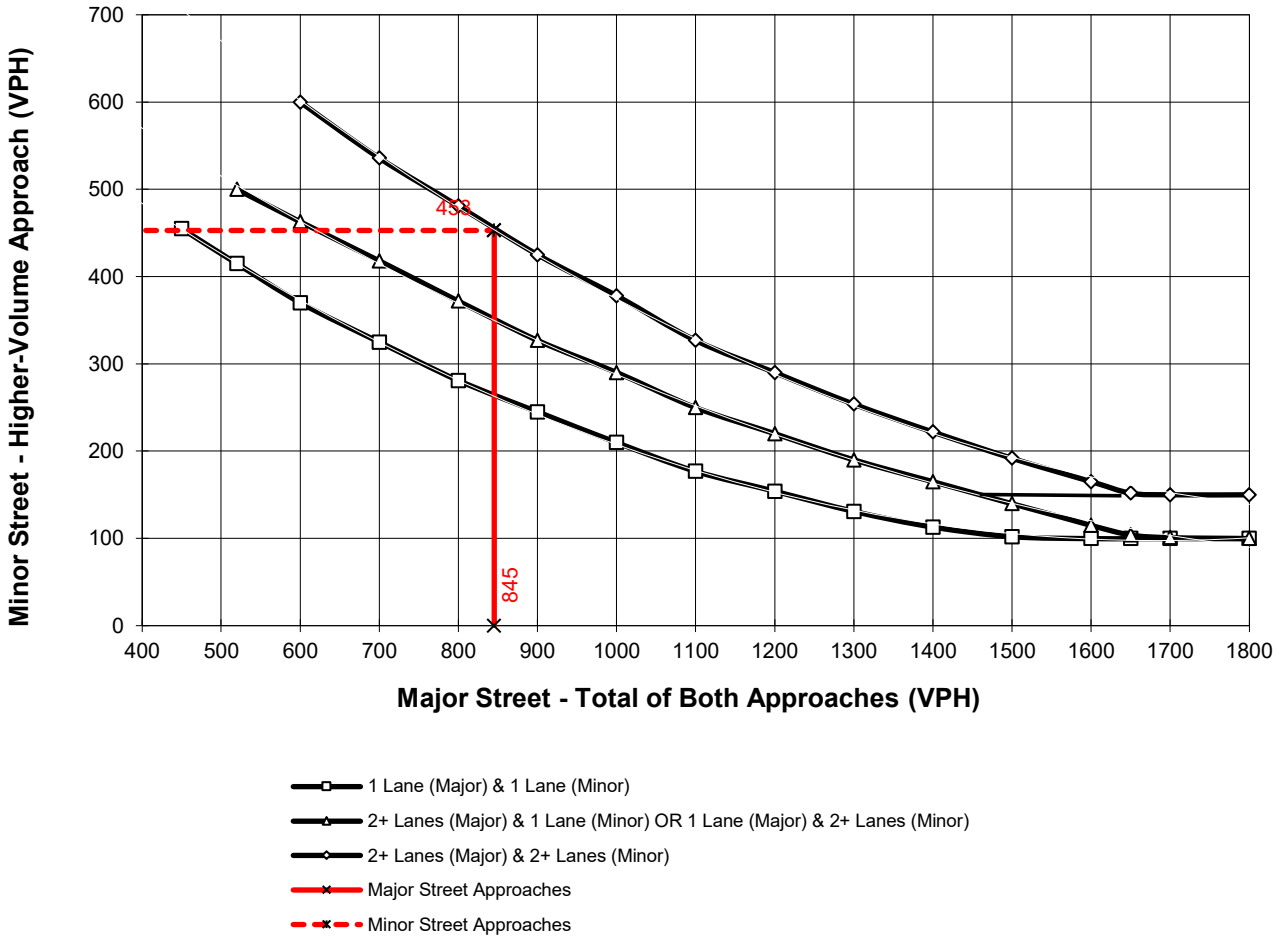
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **OYC 2030 NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Singleton Rd.** Total of Both Approaches (VPH) = **845**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **I-10 Northbound Ramps** High Volume Approach (VPH) = **453**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 6.4: OPENING YEAR CUMULATIVE (2030) WITH PROJECT (PHASE 1) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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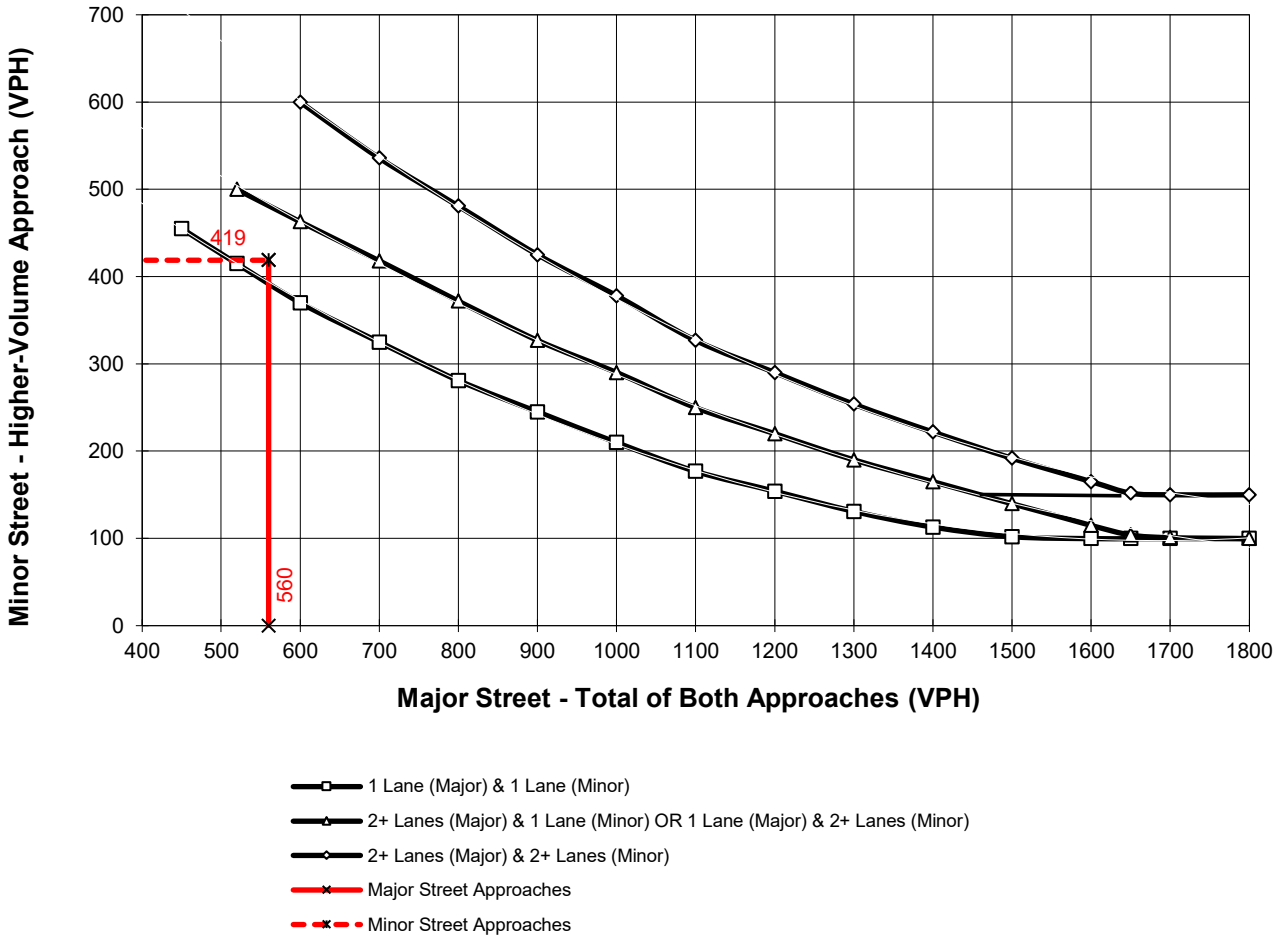
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **OYC (2030) WP Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Ln.**
Total of Both Approaches (VPH) = **560**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **County Line Rd.**
High Volume Approach (VPH) = **419**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		OYC (2030) WP
				CALC CS	DATE	10/07/24
Jurisdiction: City of Calimesa				CHK CS	DATE	10/07/24
Major Street: Street A				Critical Approach Speed (Major)		35 mph
Minor Street: Street E				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **463** vpd Minor Street Future ADT = **463** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
XX Satisfied / XX Not Satisfied				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **463** / *1* **463**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / XX Not Satisfied				
Number of lanes for moving traffic on each approach: Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **463** / *1* **463**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / XX Not Satisfied	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 6% **B** 4%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	**OYC (2030) WP**
				CALC CS	DATE 10/07/24
Jurisdiction: **City of Calimesa**				CHK CS	DATE 10/07/24
Major Street: **Street B**				Critical Approach Speed (Major)	35 mph
Minor Street: **Street E**				Critical Approach Speed (Minor)	30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **170** vpd Minor Street Future ADT = **170** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
XX Satisfied / XX Not Satisfied				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **170** / *1* **170**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / XX Not Satisfied				
Number of lanes for moving traffic on each approach: Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **170** / *1* **170**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / XX Not Satisfied	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 2% **B** 1%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		OYC (2030) WP
				CALC CS	DATE	10/07/24
Jurisdiction: City of Calimesa				CHK CS	DATE	10/07/24
Major Street: Sandalwood Dr.				Critical Approach Speed (Major)		30 mph
Minor Street: Street K				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **8,795** vpd Minor Street Future ADT = **2,996** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / 1	8,000	5,600	2,400	1,680
2 + **8,795** / 1 **2,996**	9,600	6,720	2,400 *	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / 1	12,000	8,400	1,200	850
2 + **8,795** / 1 **2,996**	14,400	10,080	1,200 *	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 92% B: 61%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2030) WP
				CALC CS	DATE 10/07/24
Jurisdiction: City of Calimesa				CHK CS	DATE 10/07/24
Major Street: Sandalwood Dr.				Critical Approach Speed (Major)	30 mph
Minor Street: Street J				Critical Approach Speed (Minor)	30 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **20,422** vpd Minor Street Future ADT = **4,478** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population ..... [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied	Urban	Rural	Urban	Rural
XX					
Number of lanes for moving traffic on each approach					
Major Street	Minor Street				
1	*1*	8,000	5,600	2,400	1,680
2 + **20,422**	*1* **4,478**	9,600 *	6,720	2,400 *	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied	Urban	Rural	Urban	Rural
XX					
Number of lanes for moving traffic on each approach					
Major Street	Minor Street				
1	*1*	12,000	8,400	1,200	850
2 + **20,422**	*1* **4,478**	14,400 *	10,080	1,200 *	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
XX					
No one condition satisfied, but following conditions fulfilled 80% of more	A: 100% B: 100%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		OYC (2030) WP
				CALC CS	DATE	10/07/24
Jurisdiction: City of Calimesa				CHK CS	DATE	10/07/24
Major Street: Sandalwood Dr.				Critical Approach Speed (Major)		30 mph
Minor Street: Roberts Rd.				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **3** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **25,809** vpd

Minor Street Future ADT = **1,667** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **25,809**	*1* **1,667**	9,600 *	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
XX					
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **25,809**	*1* **1,667**	14,400 *	10,080	1,200 *	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 69% **B** 100%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

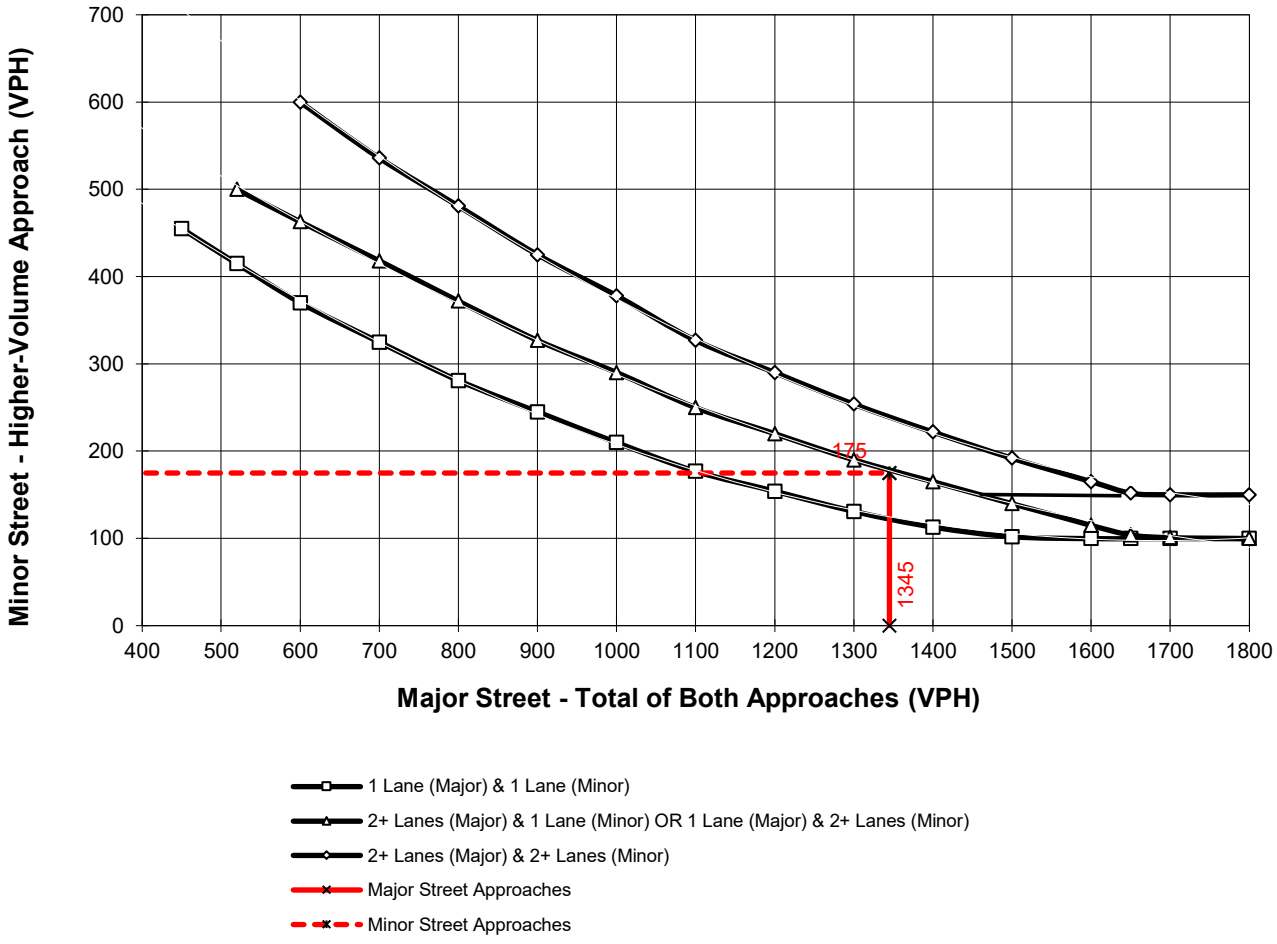
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **OYC 2030 WP Conditions - Weekday AM Peak Hour**

Major Street Name = **County Line Rd.**
Total of Both Approaches (VPH) = **1345**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **7th Pl.**
High Volume Approach (VPH) = **175**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 6.5: OPENING YEAR CUMULATIVE (2030) WITHOUT PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	132	160	89	756	100
Average Queue (ft)	33	75	4	754	71
95th Queue (ft)	119	138	47	763	145
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)	9			100	
Queuing Penalty (veh)	54			0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		1		100	3
Queuing Penalty (veh)		4		177	10

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	210	393	138	77	779	100
Average Queue (ft)	157	161	5	7	771	28
95th Queue (ft)	249	446	82	35	786	101
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		12	0		100	
Queuing Penalty (veh)		87	0		0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	45	1			100	1
Queuing Penalty (veh)	230	2			129	1

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	WB	SB
Directions Served	TR	LT	LTR
Maximum Queue (ft)	143	316	128
Average Queue (ft)	59	124	59
95th Queue (ft)	118	242	102
Link Distance (ft)	247	451	732
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	2		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	T	T	LR
Maximum Queue (ft)	66	502	84
Average Queue (ft)	38	227	45
95th Queue (ft)	60	475	72
Link Distance (ft)	582	815	523
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	17	277
Average Queue (ft)	3	101
95th Queue (ft)	14	208
Link Distance (ft)	530	615
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	97	728
Average Queue (ft)	17	704
95th Queue (ft)	61	848
Link Distance (ft)	615	712
Upstream Blk Time (%)		90
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 696

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	17	137	44	756	100
Average Queue (ft)	1	57	1	755	87
95th Queue (ft)	8	101	31	759	141
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)				100	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		0		100	3
Queuing Penalty (veh)		0		172	13

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	WB	WB	NB	NB
Directions Served	L	T	R	LT	R
Maximum Queue (ft)	89	55	53	269	100
Average Queue (ft)	34	2	2	84	73
95th Queue (ft)	65	39	29	206	112
Link Distance (ft)		560	560	764	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	160				50
Storage Blk Time (%)				31	14
Queuing Penalty (veh)				87	19

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	WB	SB
Directions Served	TR	LT	LTR
Maximum Queue (ft)	52	174	115
Average Queue (ft)	30	67	54
95th Queue (ft)	48	124	92
Link Distance (ft)	247	451	732
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	T	T	LR
Maximum Queue (ft)	141	83	133
Average Queue (ft)	75	41	64
95th Queue (ft)	123	64	103
Link Distance (ft)	576	815	523
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	13	124
Average Queue (ft)	1	47
95th Queue (ft)	6	103
Link Distance (ft)	530	615
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	16	648
Average Queue (ft)	1	516
95th Queue (ft)	7	895
Link Distance (ft)	615	712
Upstream Blk Time (%)		44
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 291

APPENDIX 6.6: OPENING YEAR CUMULATIVE (2030) WITH PROJECT (PHASE 1) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	138	209	360	756	100
Average Queue (ft)	118	93	60	746	10
95th Queue (ft)	173	217	257	760	59
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)	54		1	100	
Queuing Penalty (veh)	510		12	0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		10	1	100	0
Queuing Penalty (veh)		51	6	265	1

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	210	395	254	248	779	100
Average Queue (ft)	207	365	21	20	765	8
95th Queue (ft)	228	476	158	147	781	50
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		54	0	0	100	
Queuing Penalty (veh)		581	0	0	0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	93	4			100	0
Queuing Penalty (veh)	553	14			139	0

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	312	293	460	730
Average Queue (ft)	304	56	445	729
95th Queue (ft)	312	161	484	732
Link Distance (ft)	300	300	454	715
Upstream Blk Time (%)	32	0	6	100
Queuing Penalty (veh)	169	2	70	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB	NB
Directions Served	T	T	L	R
Maximum Queue (ft)	92	818	537	40
Average Queue (ft)	43	818	537	1
95th Queue (ft)	75	818	539	20
Link Distance (ft)	593	803	522	
Upstream Blk Time (%)		100	100	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)				50
Storage Blk Time (%)			100	
Queuing Penalty (veh)			1	

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	17	540
Average Queue (ft)	6	237
95th Queue (ft)	19	467
Link Distance (ft)	530	615
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	90	728
Average Queue (ft)	22	726
95th Queue (ft)	65	746
Link Distance (ft)	615	712
Upstream Blk Time (%)		99
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 2373

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	13	138	33	756	100
Average Queue (ft)	1	61	2	755	85
95th Queue (ft)	6	106	20	759	143
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)				100	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		0		99	8
Queuing Penalty (veh)		0		336	38

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	WB	NB	NB
Directions Served	L	R	LT	R
Maximum Queue (ft)	120	11	639	100
Average Queue (ft)	47	1	387	91
95th Queue (ft)	89	7	846	123
Link Distance (ft)		560	764	
Upstream Blk Time (%)			24	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)	160			50
Storage Blk Time (%)	0		76	24
Queuing Penalty (veh)	1		228	42

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	310	327	463	611
Average Queue (ft)	306	141	444	298
95th Queue (ft)	309	308	509	635
Link Distance (ft)	300	300	454	715
Upstream Blk Time (%)	39	3	13	5
Queuing Penalty (veh)	287	23	94	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB	NB
Directions Served	T	T	L	R
Maximum Queue (ft)	192	612	537	60
Average Queue (ft)	88	349	465	2
95th Queue (ft)	161	833	724	25
Link Distance (ft)	584	803	522	
Upstream Blk Time (%)		15	80	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)				50
Storage Blk Time (%)			89	
Queuing Penalty (veh)			1	

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	16	150
Average Queue (ft)	1	50
95th Queue (ft)	7	103
Link Distance (ft)	530	615
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	37	728
Average Queue (ft)	4	719
95th Queue (ft)	21	803
Link Distance (ft)	615	712
Upstream Blk Time (%)		95
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 1049

APPENDIX 6.7: OPENING YEAR CUMULATIVE (2030) WITH PROJECT (PHASE 1) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Intersection	
Int Delay, s/veh	9.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	458	353	200	229	0
Future Vol, veh/h	0	458	353	200	229	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	627	484	274	314	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	758	0	-	0	1111	484
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	627	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	812	-	-	-	~ 215	645
Stage 1	-	-	-	-	647	-
Stage 2	-	-	-	-	536	-
Platoon blocked, %	0	-	-	-	0	0
Mov Cap-1 Maneuver	812	-	-	-	~ 215	645
Mov Cap-2 Maneuver	-	-	-	-	364	-
Stage 1	-	-	-	-	647	-
Stage 2	-	-	-	-	536	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	52.95
HCM LOS			F

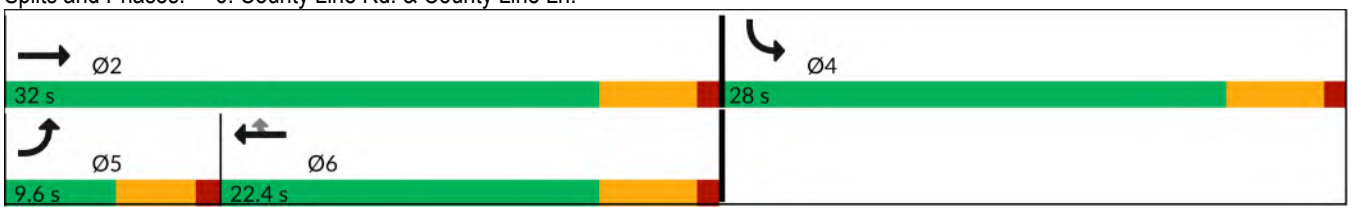
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	812	-	-	-	364
HCM Lane V/C Ratio	-	-	-	-	0.861
HCM Ctrl Dly (s/v)	0	-	-	-	53
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	8.1

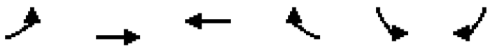
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBT	WBR	SBL	Ø5
Lane Configurations					
Traffic Volume (vph)	458	353	200	229	
Future Volume (vph)	458	353	200	229	
Turn Type	NA	NA	Perm	Prot	
Protected Phases	2	6		4	5
Permitted Phases			6		
Detector Phase	2	6	6	4	
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.4	22.4	22.4	22.4	9.6
Total Split (s)	32.0	22.4	22.4	28.0	9.6
Total Split (%)	53.3%	37.3%	37.3%	46.7%	16%
Yellow Time (s)	4.4	4.4	4.4	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4	5.4	5.4	5.4	
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	Min	None
Act Effct Green (s)	19.9	19.9	19.9	14.0	
Actuated g/C Ratio	0.44	0.44	0.44	0.31	
v/c Ratio	0.75	0.58	0.32	0.56	
Control Delay (s/veh)	17.5	13.0	2.6	18.6	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	17.5	13.0	2.6	18.6	
LOS	B	B	A	B	
Approach Delay (s/veh)	17.5	9.2		18.6	
Approach LOS	B	A		B	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 45.2	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay (s/veh): 14.0	Intersection LOS: B
Intersection Capacity Utilization 45.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: County Line Rd. & County Line Ln.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	458	353	200	229	0
Future Volume (veh/h)	0	458	353	200	229	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	627	484	274	0	0
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	12	1233	1233	1045	0	0
Arrive On Green	0.00	0.65	0.65	0.65	0.00	0.00
Sat Flow, veh/h	1810	1900	1900	1610	0	0
Grp Volume(v), veh/h	0	627	484	274	0	0
Grp Sat Flow(s),veh/h/ln	1810	1900	1900	1610	0	0
Q Serve(g_s), s	0.0	2.7	1.8	1.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.7	1.8	1.1	0.0	0.0
Prop In Lane	1.00			1.00	0.00	0.00
Lane Grp Cap(c), veh/h	12	1233	1233	1045	0	0
V/C Ratio(X)	0.00	0.51	0.39	0.26	0.00	0.00
Avail Cap(c_a), veh/h	589	3288	2101	1781	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	1.4	1.3	1.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.2	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	1.7	1.5	1.3	0.0	0.0
LnGrp LOS		A	A	A		
Approach Vol, veh/h		627	758		0	
Approach Delay, s/veh		1.7	1.4		0.0	
Approach LOS		A	A			

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		15.4		0.0	0.0	15.4
Change Period (Y+Rc), s		5.4		5.4	4.6	5.4
Max Green Setting (Gmax), s		26.6		22.6	5.0	17.0
Max Q Clear Time (g_c+I1), s		4.7		0.0	0.0	3.8
Green Ext Time (p_c), s		4.4		0.0	0.0	3.4

Intersection Summary	
HCM 7th Control Delay, s/veh	1.6
HCM 7th LOS	A

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	624	366	433	6	225
Future Volume (vph)	624	366	433	6	225
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	9.6	22.4	22.8	22.8
Total Split (s)	63.0	30.0	93.0	27.0	27.0
Total Split (%)	52.5%	25.0%	77.5%	22.5%	22.5%
Yellow Time (s)	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	57.6	25.4	87.6	21.2	21.2
Actuated g/C Ratio	0.48	0.21	0.73	0.18	0.18
v/c Ratio	1.09	1.13	0.37	1.08	0.75
Control Delay (s/veh)	89.1	134.2	8.6	120.5	45.9
Queue Delay	3.7	0.0	2.6	0.0	0.0
Total Delay (s/veh)	92.9	134.2	11.1	120.5	45.9
LOS	F	F	B	F	D
Approach Delay (s/veh)	92.9		67.5	88.1	
Approach LOS	F		E	F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 30 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay (s/veh): 82.2	Intersection LOS: F
Intersection Capacity Utilization 121.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	624	198	366	433	0	0	0	0	287	6	225
Future Volume (veh/h)	0	624	198	366	433	0	0	0	0	287	6	225
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	734	115	431	509	0				338	7	147
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85				0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	767	120	781	1818	0				313	6	284
Arrive On Green	0.00	0.48	0.48	0.29	0.64	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	1598	250	1810	1900	0				1775	37	1610
Grp Volume(v), veh/h	0	0	849	431	509	0				345	0	147
Grp Sat Flow(s),veh/h/ln	0	0	1848	1810	1900	0				1811	0	1610
Q Serve(g_s), s	0.0	0.0	53.0	24.2	14.1	0.0				21.2	0.0	9.9
Cycle Q Clear(g_c), s	0.0	0.0	53.0	24.2	14.1	0.0				21.2	0.0	9.9
Prop In Lane	0.00		0.14	1.00		0.00				0.98		1.00
Lane Grp Cap(c), veh/h	0	0	887	781	1818	0				320	0	284
V/C Ratio(X)	0.00	0.00	0.96	0.55	0.28	0.00				1.08	0.00	0.52
Avail Cap(c_a), veh/h	0	0	887	781	1818	0				320	0	284
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.59	0.59	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	30.0	32.8	3.5	0.0				49.4	0.0	44.8
Incr Delay (d2), s/veh	0.0	0.0	21.4	0.3	0.2	0.0				72.7	0.0	6.6
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	0.0	27.9	11.2	1.3	0.0				15.7	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	51.4	33.1	3.7	0.0				122.1	0.0	51.3
LnGrp LOS			D	C	A					F		D
Approach Vol, veh/h		849			940						492	
Approach Delay, s/veh		51.4			17.2						101.0	
Approach LOS		D			B						F	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	58.0	63.0		27.0		121.0
Change Period (Y+Rc), s	5.4	* 5.4		5.8		5.4
Max Green Setting (Gmax), s	25.4	* 58		21.2		87.6
Max Q Clear Time (g_c+I1), s	26.2	55.0		23.2		16.1
Green Ext Time (p_c), s	0.0	1.5		0.0		3.8

Intersection Summary		
HCM 7th Control Delay, s/veh		48.0
HCM 7th LOS		D

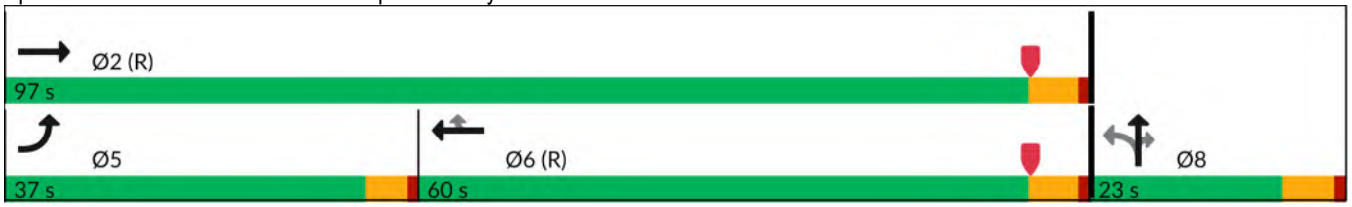
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Traffic Volume (vph)	360	552	637	755	5	129
Future Volume (vph)	360	552	637	755	5	129
Turn Type	Prot	NA	NA	Perm	NA	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8
Total Split (s)	37.0	97.0	60.0	60.0	23.0	23.0
Total Split (%)	30.8%	80.8%	50.0%	50.0%	19.2%	19.2%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	28.8	91.6	58.2	58.2	17.2	17.2
Actuated g/C Ratio	0.24	0.76	0.49	0.49	0.14	0.14
v/c Ratio	0.90	0.41	0.74	0.79	0.68	0.46
Control Delay (s/veh)	49.3	8.4	32.0	17.5	63.2	25.8
Queue Delay	10.8	4.7	0.4	0.0	82.3	0.0
Total Delay (s/veh)	60.0	13.1	32.4	17.5	145.5	25.8
LOS	E	B	C	B	F	C
Approach Delay (s/veh)		31.6	24.3		92.9	
Approach LOS		C	C		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay (s/veh): 34.6	Intersection LOS: C
Intersection Capacity Utilization 121.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 13: I-10 NB Ramps & County Line Rd.

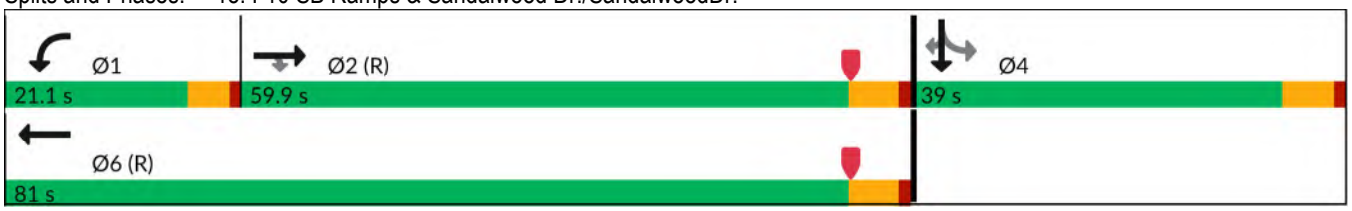


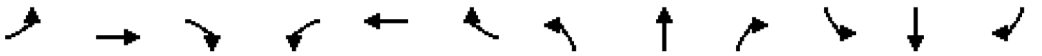
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	552	0	0	637	755	160	5	129	0	0	0
Future Volume (veh/h)	360	552	0	0	637	755	160	5	129	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	387	594	0	0	685	812	172	5	139			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	407	1450	0	0	950	805	252	7	231			
Arrive On Green	0.45	1.00	0.00	0.00	0.50	0.50	0.14	0.14	0.14			
Sat Flow, veh/h	1810	1900	0	0	1900	1610	1761	51	1610			
Grp Volume(v), veh/h	387	594	0	0	685	812	177	0	139			
Grp Sat Flow(s),veh/h/ln	1810	1900	0	0	1900	1610	1812	0	1610			
Q Serve(g_s), s	24.7	0.0	0.0	0.0	33.8	60.0	11.1	0.0	9.7			
Cycle Q Clear(g_c), s	24.7	0.0	0.0	0.0	33.8	60.0	11.1	0.0	9.7			
Prop In Lane	1.00		0.00	0.00		1.00	0.97		1.00			
Lane Grp Cap(c), veh/h	407	1450	0	0	950	805	260	0	231			
V/C Ratio(X)	0.95	0.41	0.00	0.00	0.72	1.01	0.68	0.00	0.60			
Avail Cap(c_a), veh/h	489	1450	0	0	950	805	260	0	231			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	32.3	0.0	0.0	0.0	23.5	30.0	48.8	0.0	48.2			
Incr Delay (d2), s/veh	4.0	0.1	0.0	0.0	4.7	33.9	13.5	0.0	11.1			
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	8.9	0.0	0.0	0.0	16.0	29.8	5.9	0.0	4.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.3	0.1	0.0	0.0	28.2	63.9	62.3	0.0	59.3			
LnGrp LOS	D	A			C	F	E		E			
Approach Vol, veh/h		981			1497			316				
Approach Delay, s/veh		14.4			47.6			61.0				
Approach LOS		B			D			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		97.0			31.6	65.4		23.0				
Change Period (Y+Rc), s		5.4			4.6	5.4		5.8				
Max Green Setting (Gmax), s		91.6			32.4	54.6		17.2				
Max Q Clear Time (g_c+I1), s		2.0			26.7	62.0		13.1				
Green Ext Time (p_c), s		4.7			0.3	0.0		0.5				
Intersection Summary												
HCM 7th Control Delay, s/veh			37.4									
HCM 7th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	575	188	185	927	18	610
Future Volume (vph)	575	188	185	927	18	610
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2				4
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8	22.8
Total Split (s)	59.9	59.9	21.1	81.0	39.0	39.0
Total Split (%)	49.9%	49.9%	17.6%	67.5%	32.5%	32.5%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	None	None
Act Effct Green (s)	54.7	54.7	16.3	75.6	33.2	33.2
Actuated g/C Ratio	0.46	0.46	0.14	0.63	0.28	0.28
v/c Ratio	0.82	0.27	0.93	0.96	0.99	0.93
Control Delay (s/veh)	37.9	5.0	57.4	22.3	75.2	59.7
Queue Delay	0.0	0.0	0.0	43.2	0.0	0.0
Total Delay (s/veh)	37.9	5.0	57.4	65.4	75.2	59.7
LOS	D	A	E	E	E	E
Approach Delay (s/veh)	29.8			64.1	67.7	
Approach LOS	C			E	E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 21 (18%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay (s/veh): 55.2	Intersection LOS: E
Intersection Capacity Utilization 83.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	575	188	185	927	0	0	0	0	137	18	610
Future Volume (veh/h)	0	575	188	185	927	0	0	0	0	137	18	610
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	710	170	228	1144	0				169	258	349
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	909	771	249	1243	0				186	284	406
Arrive On Green	0.00	0.48	0.48	0.18	0.87	0.00				0.25	0.25	0.25
Sat Flow, veh/h	0	1900	1610	1810	1900	0				737	1126	1610
Grp Volume(v), veh/h	0	710	170	228	1144	0				427	0	349
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1810	1900	0				1863	0	1610
Q Serve(g_s), s	0.0	37.3	7.4	14.8	47.0	0.0				26.7	0.0	24.8
Cycle Q Clear(g_c), s	0.0	37.3	7.4	14.8	47.0	0.0				26.7	0.0	24.8
Prop In Lane	0.00		1.00	1.00		0.00				0.40		1.00
Lane Grp Cap(c), veh/h	0	909	771	249	1243	0				470	0	406
V/C Ratio(X)	0.00	0.78	0.22	0.92	0.92	0.00				0.91	0.00	0.86
Avail Cap(c_a), veh/h	0	909	771	249	1243	0				515	0	445
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.0	18.2	48.4	5.7	0.0				43.5	0.0	42.8
Incr Delay (d2), s/veh	0.0	6.6	0.7	34.8	12.4	0.0				19.0	0.0	14.5
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	0.0	17.6	2.8	8.6	8.8	0.0				14.3	0.0	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	32.6	18.9	83.2	18.1	0.0				62.6	0.0	57.4
LnGrp LOS		C	B	F	B					E		E
Approach Vol, veh/h		880			1372						776	
Approach Delay, s/veh		30.0			28.9						60.2	
Approach LOS		C			C						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	21.1	62.8		36.1		83.9
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	16.5	54.5		33.2		75.6
Max Q Clear Time (g_c+I1), s	16.8	39.3		28.7		49.0
Green Ext Time (p_c), s	0.0	4.6		1.6		11.2

Intersection Summary		
HCM 7th Control Delay, s/veh		37.3
HCM 7th LOS		D

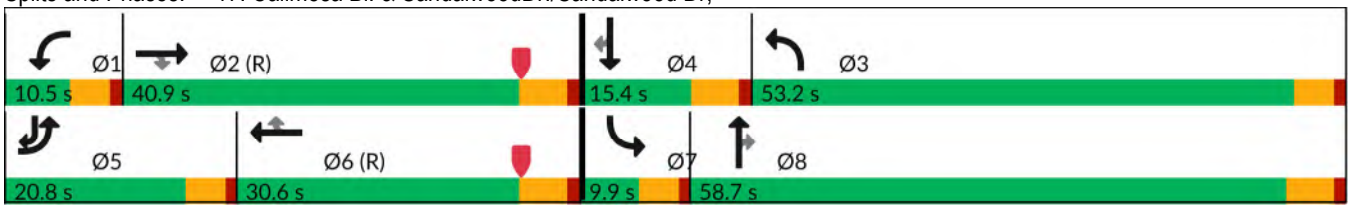
Notes

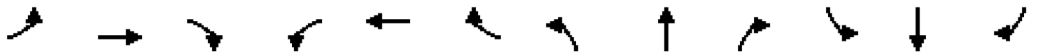
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	222	208	57	23	360	35	702	613	112	15	51	457
Future Volume (vph)	222	208	57	23	360	35	702	613	112	15	51	457
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	30.4	30.4	9.6	29.4	29.4	9.6	27.4	27.4	9.6	15.4	9.6
Total Split (s)	20.8	40.9	40.9	10.5	30.6	30.6	53.2	58.7	58.7	9.9	15.4	20.8
Total Split (%)	17.3%	34.1%	34.1%	8.8%	25.5%	25.5%	44.3%	48.9%	48.9%	8.3%	12.8%	17.3%
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	16.2	39.7	39.7	5.6	25.2	25.2	48.6	59.2	59.2	5.2	10.0	27.0
Actuated g/C Ratio	0.14	0.33	0.33	0.05	0.21	0.21	0.41	0.49	0.49	0.04	0.08	0.23
v/c Ratio	1.04	0.38	0.10	0.31	1.03	0.08	1.09	0.39	0.15	0.22	0.37	1.22
Control Delay (s/veh)	116.1	24.5	0.6	65.2	98.5	0.3	95.1	23.5	6.8	62.3	59.1	142.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	5.0
Total Delay (s/veh)	116.1	24.5	0.6	65.2	98.5	0.3	99.0	23.5	6.8	62.3	59.1	147.3
LOS	F	C	A	E	F	A	F	C	A	E	E	F
Approach Delay (s/veh)		63.4			88.4			59.3			136.3	
Approach LOS		E			F			E			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 15.6 (13%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.22	
Intersection Signal Delay (s/veh): 78.4	Intersection LOS: E
Intersection Capacity Utilization 98.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	208	57	23	360	35	702	613	112	15	51	457
Future Volume (veh/h)	222	208	57	23	360	35	702	613	112	15	51	457
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	252	236	47	26	409	30	798	697	63	17	58	214
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	244	994	843	75	817	683	733	1722	766	33	158	352
Arrive On Green	0.04	0.17	0.17	0.04	0.43	0.43	0.41	0.48	0.48	0.02	0.08	0.08
Sat Flow, veh/h	1810	1900	1610	1810	1900	1589	1810	3610	1607	1810	1900	1610
Grp Volume(v), veh/h	252	236	47	26	409	30	798	697	63	17	58	214
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1589	1810	1805	1607	1810	1900	1610
Q Serve(g_s), s	16.2	12.9	1.3	1.7	18.8	1.3	48.6	15.0	2.6	1.1	3.5	8.7
Cycle Q Clear(g_c), s	16.2	12.9	1.3	1.7	18.8	1.3	48.6	15.0	2.6	1.1	3.5	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	244	994	843	75	817	683	733	1722	766	33	158	352
V/C Ratio(X)	1.03	0.24	0.06	0.34	0.50	0.04	1.09	0.40	0.08	0.52	0.37	0.61
Avail Cap(c_a), veh/h	244	994	843	89	817	683	733	1722	766	80	158	352
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	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	0.60	0.60	0.60	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.3	29.0	4.8	55.9	24.8	19.9	35.7	20.3	17.1	58.4	52.0	29.6
Incr Delay (d2), s/veh	66.0	0.6	0.1	1.0	2.2	0.1	53.5	0.1	0.0	4.7	1.4	3.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.3	6.7	1.1	0.8	8.7	0.5	31.2	6.1	0.9	0.5	1.7	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	123.3	29.5	4.9	56.9	27.0	20.0	89.2	20.4	17.1	63.1	53.4	32.7
LnGrp LOS	F	C	A	E	C	B	F	C	B	E	D	C
Approach Vol, veh/h		535			465			1558			289	
Approach Delay, s/veh		71.6			28.2			55.5			38.6	
Approach LOS		E			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	69.0	54.0	15.4	20.8	57.8	6.8	62.6
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.9	35.5	48.6	* 10	16.2	25.2	5.3	53.3
Max Q Clear Time (g_c+I1), s	3.7	14.9	50.6	10.7	18.2	20.8	3.1	17.0
Green Ext Time (p_c), s	0.0	1.3	0.0	0.0	0.0	1.0	0.0	5.3

Intersection Summary	
HCM 7th Control Delay, s/veh	52.4
HCM 7th LOS	D

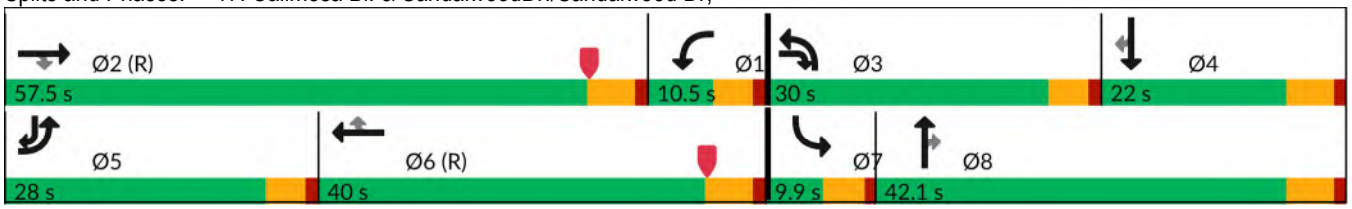
Notes

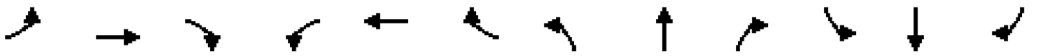
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	222	208	197	173	209	35	608	613	127	15	230	324
Future Volume (vph)	222	208	197	173	209	35	608	613	127	15	230	324
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	30.4	9.6	9.6	29.4	29.4	9.6	27.4	27.4	9.6	15.4	9.6
Total Split (s)	28.0	57.5	30.0	10.5	40.0	40.0	30.0	42.1	42.1	9.9	22.0	28.0
Total Split (%)	23.3%	47.9%	25.0%	8.8%	33.3%	33.3%	25.0%	35.1%	35.1%	8.3%	18.3%	23.3%
Yellow Time (s)	3.6	4.4	3.6	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	4.6	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	20.0	52.1	77.9	5.9	38.0	38.0	25.0	42.6	42.6	5.2	17.0	42.4
Actuated g/C Ratio	0.17	0.43	0.65	0.05	0.32	0.32	0.21	0.36	0.36	0.04	0.14	0.35
v/c Ratio	0.84	0.29	0.21	2.24	0.40	0.07	0.95	0.54	0.22	0.22	0.97	0.51
Control Delay (s/veh)	70.1	12.0	0.8	618.4	35.5	0.2	66.0	34.5	8.9	62.3	100.5	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	45.1	0.0	0.0	0.0	0.0	59.3
Total Delay (s/veh)	70.1	12.0	0.8	618.4	35.5	0.2	111.1	34.5	8.9	62.3	100.5	72.9
LOS	E	B	A	F	D	A	F	C	A	E	F	E
Approach Delay (s/veh)		29.1			274.3			66.6			83.8	
Approach LOS		C			F			E			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 5.1 (4%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.24	
Intersection Signal Delay (s/veh): 91.3	Intersection LOS: F
Intersection Capacity Utilization 69.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	208	197	173	209	35	608	613	127	15	230	324
Future Volume (veh/h)	222	208	197	173	209	35	608	613	127	15	230	324
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	252	236	92	197	238	30	691	697	80	17	261	63
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	280	825	1038	417	982	821	739	1194	531	33	263	472
Arrive On Green	0.15	0.43	0.43	0.23	0.52	0.52	0.21	0.33	0.33	0.02	0.14	0.14
Sat Flow, veh/h	1810	1900	1610	1810	1900	1589	3510	3610	1605	1810	1900	1610
Grp Volume(v), veh/h	252	236	92	197	238	30	691	697	80	17	261	63
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1589	1755	1805	1605	1810	1900	1610
Q Serve(g_s), s	16.4	9.6	1.3	11.3	8.3	1.1	23.2	19.2	3.4	1.1	16.5	3.5
Cycle Q Clear(g_c), s	16.4	9.6	1.3	11.3	8.3	1.1	23.2	19.2	3.4	1.1	16.5	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	280	825	1038	417	982	821	739	1194	531	33	263	472
V/C Ratio(X)	0.90	0.29	0.09	0.47	0.24	0.04	0.94	0.58	0.15	0.52	0.99	0.13
Avail Cap(c_a), veh/h	353	825	1038	417	982	821	743	1194	531	80	263	472
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	0.69	0.69	0.69	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	21.9	7.0	39.9	16.0	14.3	46.6	33.3	18.1	58.4	51.6	31.2
Incr Delay (d2), s/veh	19.2	0.9	0.2	0.3	0.6	0.1	14.2	0.5	0.1	4.7	53.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	4.4	0.6	5.0	3.6	0.4	11.3	8.3	1.6	0.5	11.6	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.0	22.8	7.1	40.2	16.6	14.4	60.8	33.8	18.2	63.1	105.1	31.3
LnGrp LOS	E	C	A	D	B	B	E	C	B	E	F	C
Approach Vol, veh/h		580			465			1468			341	
Approach Delay, s/veh		40.4			26.4			45.6			89.4	
Approach LOS		D			C			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.7	57.5	29.9	22.0	23.2	68.1	6.8	45.1
Change Period (Y+Rc), s	5.4	* 5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.9	* 52	25.4	16.6	23.4	34.6	5.3	36.7
Max Q Clear Time (g_c+I1), s	13.3	11.6	25.2	18.5	18.4	10.3	3.1	21.2
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.2	1.3	0.0	4.2

Intersection Summary	
HCM 7th Control Delay, s/veh	46.7
HCM 7th LOS	D

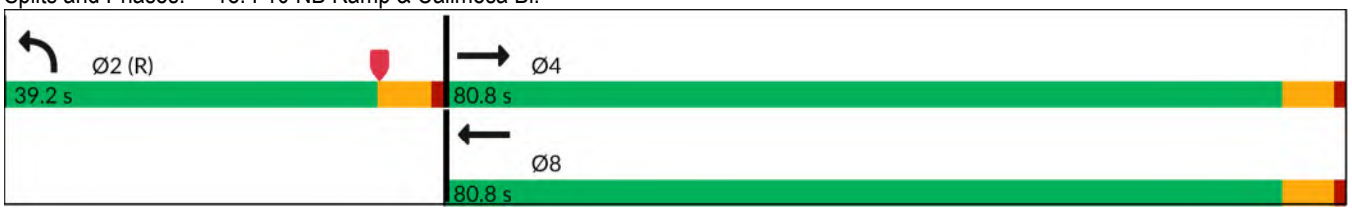
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBT	NBL
Lane Configurations			
Traffic Volume (vph)	131	801	657
Future Volume (vph)	131	801	657
Turn Type	NA	NA	Prot
Protected Phases	4	8	2
Permitted Phases			
Detector Phase	4	8	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	22.8	22.8	22.8
Total Split (s)	80.8	80.8	39.2
Total Split (%)	67.3%	67.3%	32.7%
Yellow Time (s)	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	69.7	69.7	38.7
Actuated g/C Ratio	0.58	0.58	0.32
v/c Ratio	0.14	0.83	0.63
Control Delay (s/veh)	6.6	27.0	38.6
Queue Delay	0.0	8.5	0.0
Total Delay (s/veh)	6.6	35.6	38.6
LOS	A	D	D
Approach Delay (s/veh)	6.6	35.6	38.6
Approach LOS	A	D	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 34.4	Intersection LOS: C
Intersection Capacity Utilization 70.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	131	0	0	801	657	1
Future Volume (veh/h)	131	0	0	801	657	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.04	1.00
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	1900	0	0	1976	1976	1900
Adj Flow Rate, veh/h	154	0	0	942	774	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	958	0	0	996	1502	643
Arrive On Green	0.50	0.00	0.00	0.50	0.40	0.00
Sat Flow, veh/h	1900	0	0	1976	3764	1610
Grp Volume(v), veh/h	154	0	0	942	774	0
Grp Sat Flow(s),veh/h/ln	1900	0	0	1976	1882	1610
Q Serve(g_s), s	5.2	0.0	0.0	54.2	18.7	0.0
Cycle Q Clear(g_c), s	5.2	0.0	0.0	54.2	18.7	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	958	0	0	996	1502	643
V/C Ratio(X)	0.16	0.00	0.00	0.95	0.52	0.00
Avail Cap(c_a), veh/h	1188	0	0	1235	1502	643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.0	0.0	0.0	28.2	27.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	11.9	1.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.0	27.0	8.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.1	0.0	0.0	40.1	28.5	0.0
LnGrp LOS	B			D	C	
Approach Vol, veh/h	154			942	774	
Approach Delay, s/veh	16.1			40.1	28.5	
Approach LOS	B			D	C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	53.7	66.3	66.3
Change Period (Y+Rc), s	5.8	5.8	5.8
Max Green Setting (Gmax), s	33.4	75.0	75.0
Max Q Clear Time (g_c+I1), s	20.7	7.2	56.2
Green Ext Time (p_c), s	1.3	0.5	4.3

Intersection Summary	
HCM 7th Control Delay, s/veh	33.3
HCM 7th LOS	C

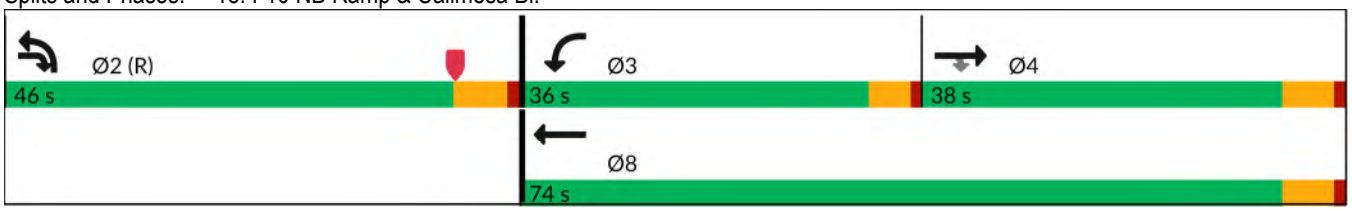
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	130	330	127	688	657
Future Volume (vph)	130	330	127	688	657
Turn Type	NA	pm+ov	Prot	NA	Prot
Protected Phases	4	2	3	8	2
Permitted Phases		4			
Detector Phase	4	2	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.8	22.8	9.6	22.8	22.8
Total Split (s)	38.0	46.0	36.0	74.0	46.0
Total Split (%)	31.7%	38.3%	30.0%	61.7%	38.3%
Yellow Time (s)	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	C-Max	None	None	C-Max
Act Effct Green (s)	40.3	95.3	14.3	59.2	49.2
Actuated g/C Ratio	0.34	0.79	0.12	0.49	0.41
v/c Ratio	0.24	0.29	0.69	0.84	0.50
Control Delay (s/veh)	29.6	1.5	66.6	34.1	29.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.6	1.5	66.6	34.1	29.1
LOS	C	A	E	C	C
Approach Delay (s/veh)	9.5			39.1	29.1
Approach LOS	A			D	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay (s/veh): 28.7	Intersection LOS: C
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	130	330	127	688	657	1
Future Volume (veh/h)	130	330	127	688	657	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.04	1.00
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	1900	1900	1900	1976	1976	1900
Adj Flow Rate, veh/h	153	388	149	809	774	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	569	1235	178	862	1759	752
Arrive On Green	0.50	0.50	0.10	0.44	0.47	0.00
Sat Flow, veh/h	1900	1610	1810	1976	3764	1610
Grp Volume(v), veh/h	153	388	149	809	774	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1976	1882	1610
Q Serve(g_s), s	5.6	8.1	9.7	46.9	16.5	0.0
Cycle Q Clear(g_c), s	5.6	8.1	9.7	46.9	16.5	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	569	1235	178	862	1759	752
V/C Ratio(X)	0.27	0.31	0.84	0.94	0.44	0.00
Avail Cap(c_a), veh/h	569	1235	473	1123	1759	752
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.4	3.0	53.2	32.3	21.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	4.0	11.1	0.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.2	4.5	23.9	7.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.4	3.0	57.1	43.4	22.2	0.0
LnGrp LOS	C	A	E	D	C	
Approach Vol, veh/h	541			958	774	
Approach Delay, s/veh	8.5			45.6	22.2	
Approach LOS	A			D	C	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	61.9	16.4	41.7		58.1
Change Period (Y+Rc), s	5.8	4.6	5.8		5.8
Max Green Setting (Gmax), s	40.2	31.4	32.2		68.2
Max Q Clear Time (g_c+I1), s	18.5	11.7	10.1		48.9
Green Ext Time (p_c), s	1.4	0.2	1.1		3.4

Intersection Summary	
HCM 7th Control Delay, s/veh	28.8
HCM 7th LOS	C

Notes
User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	272.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	179	352	2	32	488	178	2	541	236	74	43	101
Future Vol, veh/h	179	352	2	32	488	178	2	541	236	74	43	101
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	190	374	2	34	519	189	2	576	251	79	46	107
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

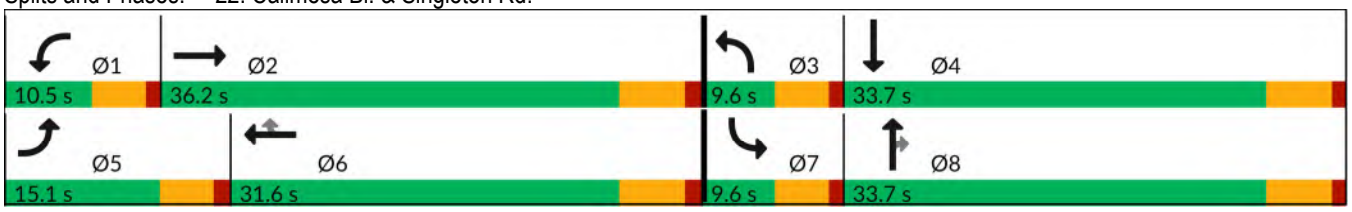
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	55.1	318.6	450.6	22.8
HCM LOS	F	F	F	C

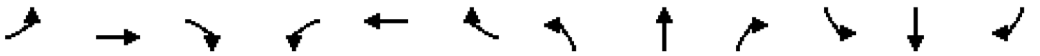
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	70%	0%	99%	0%	73%	0%	30%
Vol Right, %	0%	30%	0%	1%	0%	27%	0%	70%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	777	179	354	32	666	74	144
LT Vol	2	0	179	0	32	0	74	0
Through Vol	0	541	0	352	0	488	0	43
RT Vol	0	236	0	2	0	178	0	101
Lane Flow Rate	2	827	190	377	34	709	79	153
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.005	1.934	0.485	0.906	0.086	1.656	0.22	0.386
Departure Headway (Hd)	10.392	9.64	13.166	12.619	11.345	10.613	14.173	13.091
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	346	388	276	290	318	347	255	277
Service Time	8.092	7.34	10.866	10.319	9.045	8.313	11.873	10.791
HCM Lane V/C Ratio	0.006	2.131	0.688	1.3	0.107	2.043	0.31	0.552
HCM Control Delay, s/veh	13.1	451.7	27.7	68.9	15.1	333.2	20.8	23.8
HCM Lane LOS	B	F	D	F	C	F	C	C
HCM 95th-tile Q	0	49.1	2.5	8.3	0.3	34	0.8	1.7

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	179	352	32	488	178	2	541	236	74	43
Future Volume (vph)	179	352	32	488	178	2	541	236	74	43
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6		3	8		7	4
Permitted Phases					6			8		
Detector Phase	5	2	1	6	6	3	8	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	22.4	9.6	22.4	22.4	9.6	22.4	22.4	9.6	22.4
Total Split (s)	15.1	36.2	10.5	31.6	31.6	9.6	33.7	33.7	9.6	33.7
Total Split (%)	16.8%	40.2%	11.7%	35.1%	35.1%	10.7%	37.4%	37.4%	10.7%	37.4%
Yellow Time (s)	3.6	4.4	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	10.5	34.5	5.6	25.4	25.4	5.0	28.0	28.0	5.0	33.5
Actuated g/C Ratio	0.12	0.40	0.06	0.29	0.29	0.06	0.32	0.32	0.06	0.39
v/c Ratio	0.87	0.26	0.29	0.93	0.31	0.02	0.94	0.36	0.76	0.21
Control Delay (s/veh)	76.2	20.0	47.0	57.0	5.4	40.5	55.6	4.8	84.3	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	76.2	20.0	47.0	57.0	5.4	40.5	55.6	4.8	84.3	8.1
LOS	E	C	D	E	A	D	E	A	F	A
Approach Delay (s/veh)		38.9		43.4			40.2			34.0
Approach LOS		D		D			D			C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 86.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay (s/veh): 40.3	Intersection LOS: D
Intersection Capacity Utilization 84.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 22: Calimesa Bl. & Singleton Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	352	2	32	488	178	2	541	236	74	43	101
Future Volume (veh/h)	179	352	2	32	488	178	2	541	236	74	43	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	190	374	2	34	519	189	2	576	251	79	46	107
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	211	1381	7	58	551	467	5	598	507	101	187	434
Arrive On Green	0.12	0.38	0.38	0.03	0.29	0.29	0.00	0.31	0.31	0.06	0.37	0.37
Sat Flow, veh/h	1810	3682	20	1810	1900	1610	1810	1900	1610	1810	507	1180
Grp Volume(v), veh/h	190	183	193	34	519	189	2	576	251	79	0	153
Grp Sat Flow(s),veh/h/ln	1810	1805	1896	1810	1900	1610	1810	1900	1610	1810	0	1688
Q Serve(g_s), s	9.3	6.3	6.4	1.7	24.0	8.5	0.1	26.8	11.4	3.9	0.0	5.7
Cycle Q Clear(g_c), s	9.3	6.3	6.4	1.7	24.0	8.5	0.1	26.8	11.4	3.9	0.0	5.7
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	211	677	711	58	551	467	5	598	507	101	0	621
V/C Ratio(X)	0.90	0.27	0.27	0.59	0.94	0.40	0.41	0.96	0.50	0.78	0.00	0.25
Avail Cap(c_a), veh/h	211	677	711	119	554	469	101	598	507	101	0	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.2	19.5	19.5	42.9	31.2	25.7	44.7	30.3	25.0	41.9	0.0	19.8
Incr Delay (d2), s/veh	34.9	0.2	0.2	3.5	24.5	0.6	18.9	27.6	0.7	30.1	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	2.6	2.7	0.8	14.2	3.3	0.1	16.3	4.3	2.5	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.0	19.7	19.7	46.5	55.7	26.2	63.7	57.9	25.7	72.0	0.0	20.0
LnGrp LOS	E	B	B	D	E	C	E	E	C	E		B
Approach Vol, veh/h		566			742			829			232	
Approach Delay, s/veh		38.0			47.8			48.2			37.7	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	39.1	4.8	38.5	15.1	31.5	9.6	33.7
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.9	30.8	5.0	28.3	10.5	26.2	5.0	28.3
Max Q Clear Time (g_c+I1), s	3.7	8.4	2.1	7.7	11.3	26.0	5.9	28.8
Green Ext Time (p_c), s	0.0	2.0	0.0	0.8	0.0	0.1	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	44.6
HCM 7th LOS	D

Intersection	
Int Delay, s/veh	32

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	428	530	131	163	0
Future Vol, veh/h	0	428	530	131	163	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	764	946	234	291	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1180	0	-	0	1711	946
Stage 1	-	-	-	-	946	-
Stage 2	-	-	-	-	764	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	480	-	-	-	~ 64	306
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	463	-
Platoon blocked, %	0	-	-	-	0	0
Mov Cap-1 Maneuver	480	-	-	-	~ 64	306
Mov Cap-2 Maneuver	-	-	-	-	~ 209	-
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	463	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	246.11
HCM LOS			F

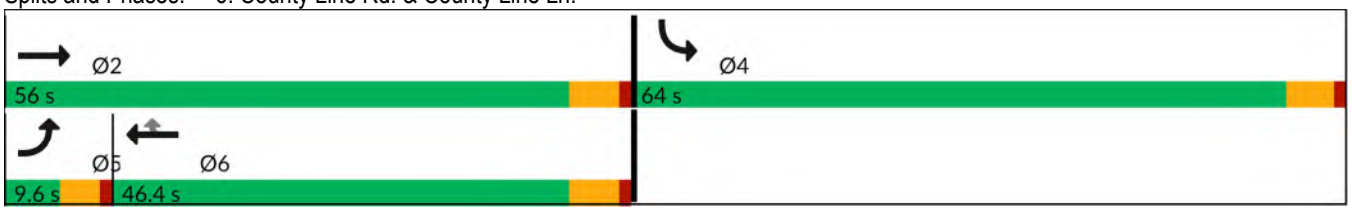
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	480	-	-	-	209
HCM Lane V/C Ratio	-	-	-	-	1.391
HCM Ctrl Dly (s/v)	0	-	-	-	246.1
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	16.7

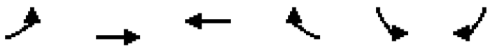
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBT	WBR	SBL	Ø5
Lane Configurations					
Traffic Volume (vph)	428	530	131	163	
Future Volume (vph)	428	530	131	163	
Turn Type	NA	NA	Perm	Prot	
Protected Phases	2	6		4	5
Permitted Phases			6		
Detector Phase	2	6	6	4	
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.4	22.4	22.4	22.4	9.6
Total Split (s)	56.0	46.4	46.4	64.0	9.6
Total Split (%)	46.7%	38.7%	38.7%	53.3%	8%
Yellow Time (s)	4.4	4.4	4.4	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4	5.4	5.4	5.4	
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	Min	None
Act Effct Green (s)	42.5	42.5	42.5	17.6	
Actuated g/C Ratio	0.60	0.60	0.60	0.25	
v/c Ratio	0.67	0.83	0.23	0.65	
Control Delay (s/veh)	14.1	20.9	4.3	31.5	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	14.1	20.9	4.3	31.5	
LOS	B	C	A	C	
Approach Delay (s/veh)	14.1	17.6		31.5	
Approach LOS	B	B		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 71	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 18.2	Intersection LOS: B
Intersection Capacity Utilization 45.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: County Line Rd. & County Line Ln.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	428	530	131	163	0
Future Volume (veh/h)	0	428	530	131	163	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	764	946	234	0	0
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	8	1458	1458	1236	0	0
Arrive On Green	0.00	0.77	0.77	0.77	0.00	0.00
Sat Flow, veh/h	1810	1900	1900	1610	0	0
Grp Volume(v), veh/h	0	764	946	234	0	0
Grp Sat Flow(s),veh/h/ln	1810	1900	1900	1610	0	0
Q Serve(g_s), s	0.0	3.6	5.4	0.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.6	5.4	0.9	0.0	0.0
Prop In Lane	1.00			1.00	0.00	0.00
Lane Grp Cap(c), veh/h	8	1458	1458	1236	0	0
V/C Ratio(X)	0.00	0.52	0.65	0.19	0.00	0.00
Avail Cap(c_a), veh/h	389	4138	3353	2841	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	1.0	1.2	0.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.5	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	1.3	1.7	0.8	0.0	0.0
LnGrp LOS		A	A	A		
Approach Vol, veh/h		764	1180		0	
Approach Delay, s/veh		1.3	1.6		0.0	
Approach LOS		A	A			

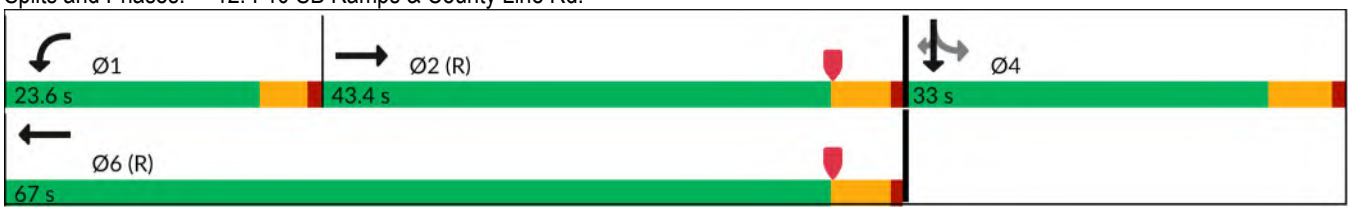
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		23.2		0.0	0.0	23.2
Change Period (Y+Rc), s		5.4		5.4	4.6	5.4
Max Green Setting (Gmax), s		50.6		58.6	5.0	41.0
Max Q Clear Time (g_c+I1), s		5.6		0.0	0.0	7.4
Green Ext Time (p_c), s		6.8		0.0	0.0	10.5

Intersection Summary	
HCM 7th Control Delay, s/veh	1.5
HCM 7th LOS	A

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	454	313	432	3	318
Future Volume (vph)	454	313	432	3	318
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	9.6	22.4	22.8	22.8
Total Split (s)	43.4	23.6	67.0	33.0	33.0
Total Split (%)	43.4%	23.6%	67.0%	33.0%	33.0%
Yellow Time (s)	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	38.0	19.0	61.6	27.2	27.2
Actuated g/C Ratio	0.38	0.19	0.62	0.27	0.27
v/c Ratio	0.99	0.97	0.39	1.00	0.66
Control Delay (s/veh)	61.6	94.2	9.3	77.9	29.2
Queue Delay	0.3	0.0	0.4	26.8	0.0
Total Delay (s/veh)	61.9	94.2	9.7	104.7	29.2
LOS	E	F	A	F	C
Approach Delay (s/veh)	61.9		45.2	73.9	
Approach LOS	E		D	E	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay (s/veh): 60.5	Intersection LOS: E
Intersection Capacity Utilization 107.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	454	197	313	432	0	0	0	0	459	3	318
Future Volume (veh/h)	0	454	197	313	432	0	0	0	0	459	3	318
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	483	104	333	460	0				488	3	232
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	573	123	344	1170	0				489	3	438
Arrive On Green	0.00	0.38	0.38	0.38	1.00	0.00				0.27	0.27	0.27
Sat Flow, veh/h	0	1508	325	1810	1900	0				1799	11	1610
Grp Volume(v), veh/h	0	0	587	333	460	0				491	0	232
Grp Sat Flow(s),veh/h/ln	0	0	1833	1810	1900	0				1810	0	1610
Q Serve(g_s), s	0.0	0.0	29.2	18.1	0.0	0.0				27.1	0.0	12.3
Cycle Q Clear(g_c), s	0.0	0.0	29.2	18.1	0.0	0.0				27.1	0.0	12.3
Prop In Lane	0.00		0.18	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	0	697	344	1170	0				492	0	438
V/C Ratio(X)	0.00	0.00	0.84	0.97	0.39	0.00				1.00	0.00	0.53
Avail Cap(c_a), veh/h	0	0	697	344	1170	0				492	0	438
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	0.00	1.00	0.78	0.78	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	28.3	30.7	0.0	0.0				36.4	0.0	31.0
Incr Delay (d2), s/veh	0.0	0.0	11.9	34.5	0.8	0.0				39.9	0.0	4.5
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	0.0	0.0	14.7	9.3	0.3	0.0				16.7	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	40.1	65.2	0.8	0.0				76.3	0.0	35.5
LnGrp LOS			D	E	A					E		D
Approach Vol, veh/h		587			793						723	
Approach Delay, s/veh		40.1			27.8						63.2	
Approach LOS		D			C						E	

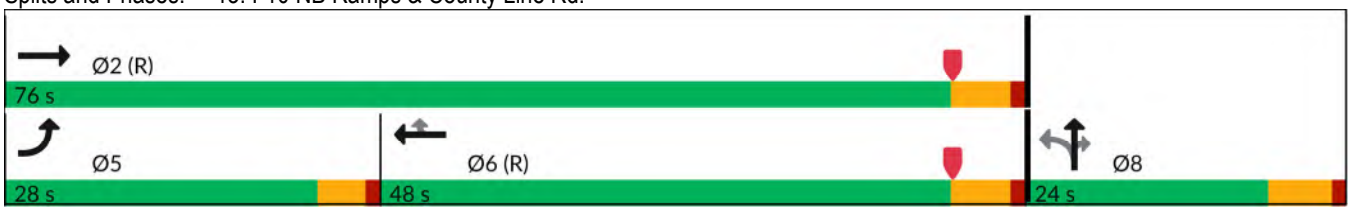
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.6	43.4		33.0		67.0
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	19.0	38.0		27.2		61.6
Max Q Clear Time (g_c+I1), s	20.1	31.2		29.1		2.0
Green Ext Time (p_c), s	0.0	2.2		0.0		3.3

Intersection Summary		
HCM 7th Control Delay, s/veh		43.4
HCM 7th LOS		D

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Traffic Volume (vph)	243	670	497	362	1	281
Future Volume (vph)	243	670	497	362	1	281
Turn Type	Prot	NA	NA	Perm	NA	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8
Total Split (s)	28.0	76.0	48.0	48.0	24.0	24.0
Total Split (%)	28.0%	76.0%	48.0%	48.0%	24.0%	24.0%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	18.3	70.6	47.7	47.7	18.2	18.2
Actuated g/C Ratio	0.18	0.71	0.48	0.48	0.18	0.18
v/c Ratio	0.79	0.53	0.58	0.40	0.54	0.63
Control Delay (s/veh)	33.2	11.1	23.2	3.2	43.9	17.2
Queue Delay	0.0	12.4	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.2	23.5	23.2	3.2	43.9	17.2
LOS	C	C	C	A	D	B
Approach Delay (s/veh)		26.1	14.8		27.1	
Approach LOS		C	B		C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 21.9	Intersection LOS: C
Intersection Capacity Utilization 107.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 13: I-10 NB Ramps & County Line Rd.

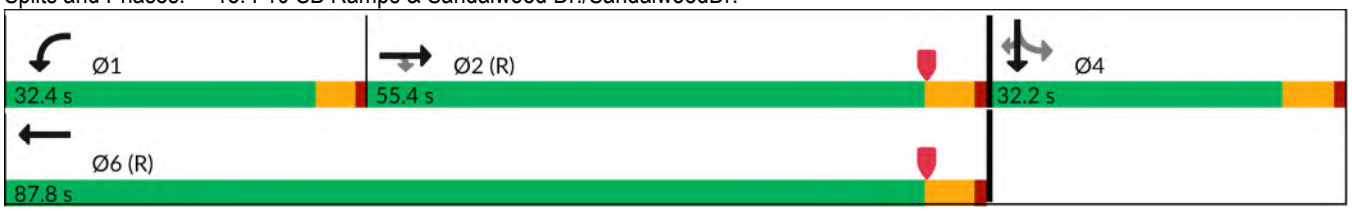


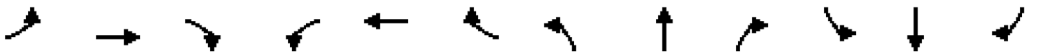
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	243	670	0	0	497	362	165	1	281	0	0	0
Future Volume (veh/h)	243	670	0	0	497	362	165	1	281	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	259	713	0	0	529	385	176	1	299			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	288	1341	0	0	952	807	328	2	293			
Arrive On Green	0.32	1.00	0.00	0.00	0.50	0.50	0.18	0.18	0.18			
Sat Flow, veh/h	1810	1900	0	0	1900	1610	1800	10	1610			
Grp Volume(v), veh/h	259	713	0	0	529	385	177	0	299			
Grp Sat Flow(s),veh/h/ln	1810	1900	0	0	1900	1610	1810	0	1610			
Q Serve(g_s), s	13.7	0.0	0.0	0.0	19.3	15.7	8.9	0.0	18.2			
Cycle Q Clear(g_c), s	13.7	0.0	0.0	0.0	19.3	15.7	8.9	0.0	18.2			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	288	1341	0	0	952	807	329	0	293			
V/C Ratio(X)	0.90	0.53	0.00	0.00	0.56	0.48	0.54	0.00	1.02			
Avail Cap(c_a), veh/h	423	1341	0	0	952	807	329	0	293			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.12	0.12	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	33.3	0.0	0.0	0.0	17.3	16.4	37.1	0.0	40.9			
Incr Delay (d2), s/veh	1.9	0.2	0.0	0.0	2.3	2.0	6.2	0.0	57.9			
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	5.0	0.1	0.0	0.0	8.7	6.0	4.3	0.0	11.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.2	0.2	0.0	0.0	19.6	18.4	43.2	0.0	98.8			
LnGrp LOS	D	A			B	B	D		F			
Approach Vol, veh/h		972			914			476				
Approach Delay, s/veh		9.5			19.1			78.1				
Approach LOS		A			B			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.0			20.5	55.5		24.0				
Change Period (Y+Rc), s		5.4			4.6	5.4		5.8				
Max Green Setting (Gmax), s		70.6			23.4	42.6		18.2				
Max Q Clear Time (g_c+I1), s		2.0			15.7	21.3		20.2				
Green Ext Time (p_c), s		6.2			0.2	5.0		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			27.0									
HCM 7th LOS			C									

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	632	447	323	298	8	168
Future Volume (vph)	632	447	323	298	8	168
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2				4
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8	22.8
Total Split (s)	55.4	55.4	32.4	87.8	32.2	32.2
Total Split (%)	46.2%	46.2%	27.0%	73.2%	26.8%	26.8%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	None	None
Act Effct Green (s)	54.2	54.2	25.3	84.1	24.7	24.7
Actuated g/C Ratio	0.45	0.45	0.21	0.70	0.21	0.21
v/c Ratio	0.78	0.50	0.89	0.24	0.89	0.36
Control Delay (s/veh)	36.7	6.2	66.8	9.0	73.0	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.7	6.2	66.8	9.0	73.0	8.3
LOS	D	A	E	A	E	A
Approach Delay (s/veh)	24.0			39.1	51.3	
Approach LOS	C			D	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay (s/veh): 34.1	Intersection LOS: C
Intersection Capacity Utilization 83.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	632	447	323	298	0	0	0	0	274	8	168
Future Volume (veh/h)	0	632	447	323	298	0	0	0	0	274	8	168
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	665	260	340	314	0				288	8	124
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	0	0	0	0	0				0	0	0
Cap, veh/h	0	919	779	363	1373	0				324	9	296
Arrive On Green	0.00	0.48	0.48	0.33	1.00	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	1900	1610	1810	1900	0				1763	49	1610
Grp Volume(v), veh/h	0	665	260	340	314	0				296	0	124
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1810	1900	0				1812	0	1610
Q Serve(g_s), s	0.0	33.3	11.9	21.9	0.0	0.0				19.1	0.0	8.2
Cycle Q Clear(g_c), s	0.0	33.3	11.9	21.9	0.0	0.0				19.1	0.0	8.2
Prop In Lane	0.00		1.00	1.00		0.00				0.97		1.00
Lane Grp Cap(c), veh/h	0	919	779	363	1373	0				333	0	296
V/C Ratio(X)	0.00	0.72	0.33	0.94	0.23	0.00				0.89	0.00	0.42
Avail Cap(c_a), veh/h	0	919	779	419	1373	0				399	0	354
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.6	19.1	39.2	0.0	0.0				47.8	0.0	43.3
Incr Delay (d2), s/veh	0.0	4.9	1.2	25.4	0.4	0.0				18.7	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	15.5	4.5	10.8	0.1	0.0				10.1	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	29.5	20.2	64.5	0.4	0.0				66.5	0.0	44.2
LnGrp LOS		C	C	E	A					E		D
Approach Vol, veh/h		925			654						420	
Approach Delay, s/veh		26.9			33.7						59.9	
Approach LOS		C			C						E	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	28.7	63.5		27.9		92.1						
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4						
Max Green Setting (Gmax), s	27.8	50.0		26.4		82.4						
Max Q Clear Time (g_c+I1), s	23.9	35.3		21.1		2.0						
Green Ext Time (p_c), s	0.2	4.5		0.9		1.9						

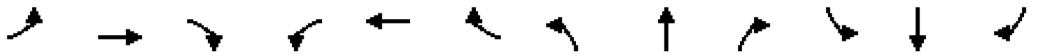
Intersection Summary			
HCM 7th Control Delay, s/veh		36.1	
HCM 7th LOS		D	

Notes
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	234	131	110	25	187	29	240	351	157	32	189	395
Future Volume (vph)	234	131	110	25	187	29	240	351	157	32	189	395
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.0	30.4	30.4	10.0	29.4	29.4	10.0	27.4	27.4	9.6	15.4	10.0
Total Split (s)	30.0	52.0	52.0	10.0	32.0	32.0	31.0	46.9	46.9	11.1	27.0	30.0
Total Split (%)	25.0%	43.3%	43.3%	8.3%	26.7%	26.7%	25.8%	39.1%	39.1%	9.3%	22.5%	25.0%
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	20.2	60.1	60.1	5.8	41.8	41.8	20.7	35.9	35.9	6.0	17.3	38.3
Actuated g/C Ratio	0.17	0.50	0.50	0.05	0.35	0.35	0.17	0.30	0.30	0.05	0.14	0.32
v/c Ratio	0.81	0.15	0.13	0.30	0.30	0.05	0.81	0.34	0.28	0.38	0.73	0.58
Control Delay (s/veh)	76.1	21.6	4.4	64.3	34.0	0.1	73.8	40.2	15.1	67.1	64.2	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	76.1	21.6	4.4	64.3	34.0	0.1	73.8	40.2	15.1	67.1	64.2	11.1
LOS	E	C	A	E	C	A	E	D	B	E	E	B
Approach Delay (s/veh)		44.4			33.0			45.7			30.3	
Approach LOS		D			C			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay (s/veh): 39.4	Intersection LOS: D
Intersection Capacity Utilization 72.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	234	131	110	25	187	29	240	351	157	32	189	395
Future Volume (veh/h)	234	131	110	25	187	29	240	351	157	32	189	395
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	246	138	99	26	197	22	253	369	138	34	199	344
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	278	866	734	75	654	546	282	1110	493	51	342	536
Arrive On Green	0.05	0.15	0.15	0.04	0.34	0.34	0.16	0.31	0.31	0.03	0.18	0.18
Sat Flow, veh/h	1810	1900	1610	1810	1900	1586	1810	3610	1602	1810	1900	1607
Grp Volume(v), veh/h	246	138	99	26	197	22	253	369	138	34	199	344
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1586	1810	1805	1602	1810	1900	1607
Q Serve(g_s), s	16.2	7.6	6.4	1.7	9.1	1.1	16.5	9.5	7.8	2.2	11.5	21.6
Cycle Q Clear(g_c), s	16.2	7.6	6.4	1.7	9.1	1.1	16.5	9.5	7.8	2.2	11.5	21.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	278	866	734	75	654	546	282	1110	493	51	342	536
V/C Ratio(X)	0.89	0.16	0.13	0.34	0.30	0.04	0.90	0.33	0.28	0.67	0.58	0.64
Avail Cap(c_a), veh/h	383	866	734	81	654	546	398	1248	554	98	342	536
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	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	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.9	31.0	30.4	55.9	28.8	26.2	49.7	32.1	31.5	57.7	45.1	33.9
Incr Delay (d2), s/veh	13.6	0.4	0.4	1.0	1.2	0.1	13.7	0.2	0.3	5.4	2.5	2.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	3.7	2.6	0.8	4.3	0.4	8.4	4.1	3.0	1.1	5.6	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.5	31.3	30.8	56.9	30.0	26.3	63.4	32.2	31.8	63.2	47.6	36.5
LnGrp LOS	E	C	C	E	C	C	E	C	C	E	D	D
Approach Vol, veh/h		483			245			760			577	
Approach Delay, s/veh		50.7			32.5			42.5			41.9	
Approach LOS		D			C			D			D	

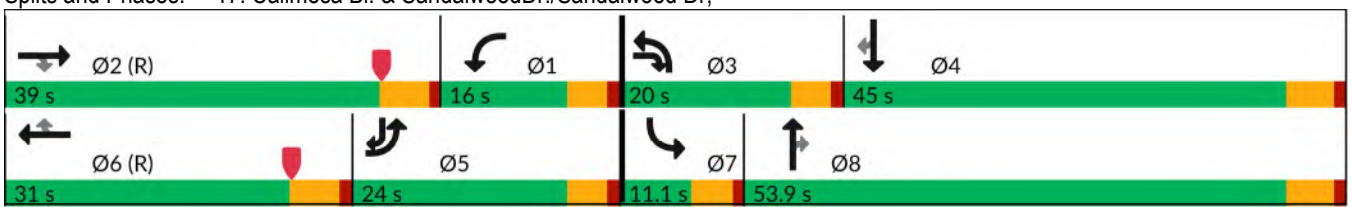
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	60.1	23.3	27.0	23.0	46.7	8.0	42.3
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.4	46.6	26.4	21.6	25.4	26.6	6.5	41.5
Max Q Clear Time (g_c+I1), s	3.7	9.6	18.5	23.6	18.2	11.1	4.2	11.5
Green Ext Time (p_c), s	0.0	1.0	0.2	0.0	0.2	0.9	0.0	2.8

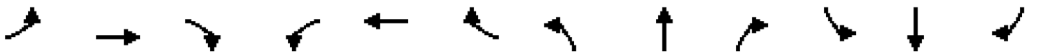
Intersection Summary	
HCM 7th Control Delay, s/veh	43.1
HCM 7th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	234	131	519	83	128	29	220	351	164	32	509	305
Future Volume (vph)	234	131	519	83	128	29	220	351	164	32	509	305
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.0	30.4	10.0	10.0	29.4	29.4	10.0	27.4	27.4	9.6	15.4	10.0
Total Split (s)	24.0	39.0	20.0	16.0	31.0	31.0	20.0	53.9	53.9	11.1	45.0	24.0
Total Split (%)	20.0%	32.5%	16.7%	13.3%	25.8%	25.8%	16.7%	44.9%	44.9%	9.3%	37.5%	20.0%
Yellow Time (s)	3.6	4.4	3.6	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	4.6	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	18.4	40.0	53.0	10.4	32.0	32.0	12.2	47.6	47.6	6.0	37.4	56.6
Actuated g/C Ratio	0.15	0.33	0.44	0.09	0.27	0.27	0.10	0.40	0.40	0.05	0.31	0.47
v/c Ratio	0.89	0.22	0.67	0.56	0.27	0.05	0.65	0.26	0.24	0.38	0.91	0.35
Control Delay (s/veh)	71.0	30.1	14.5	66.2	39.2	0.2	68.5	19.2	2.5	67.1	59.4	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	71.0	30.1	14.5	66.2	39.2	0.2	68.5	19.2	2.5	67.1	59.4	2.0
LOS	E	C	B	E	D	A	E	B	A	E	E	A
Approach Delay (s/veh)		31.8			43.7			30.3			39.0	
Approach LOS		C			D			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4.6 (4%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay (s/veh): 34.7	Intersection LOS: C
Intersection Capacity Utilization 82.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	234	131	519	83	128	29	220	351	164	32	509	305
Future Volume (veh/h)	234	131	519	83	128	29	220	351	164	32	509	305
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	246	138	529	87	135	22	232	369	146	34	536	249
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	420	532	585	299	405	338	292	1299	577	51	579	864
Arrive On Green	0.08	0.09	0.09	0.17	0.21	0.21	0.08	0.36	0.36	0.03	0.30	0.30
Sat Flow, veh/h	1810	1900	1610	1810	1900	1583	3510	3610	1603	1810	1900	1609
Grp Volume(v), veh/h	246	138	529	87	135	22	232	369	146	34	536	249
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1583	1755	1805	1603	1810	1900	1609
Q Serve(g_s), s	15.8	8.1	24.3	5.1	7.2	1.1	7.8	8.7	4.7	2.2	32.8	2.7
Cycle Q Clear(g_c), s	15.8	8.1	24.3	5.1	7.2	1.1	7.8	8.7	4.7	2.2	32.8	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	420	532	585	299	405	338	292	1299	577	51	579	864
V/C Ratio(X)	0.59	0.26	0.90	0.29	0.33	0.07	0.79	0.28	0.25	0.67	0.93	0.29
Avail Cap(c_a), veh/h	420	532	585	299	405	338	451	1459	648	98	627	904
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	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	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	42.9	25.4	43.9	40.0	27.7	54.0	27.4	10.1	57.7	40.4	5.8
Incr Delay (d2), s/veh	1.4	1.2	19.9	0.2	2.2	0.4	2.4	0.1	0.2	5.4	19.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	4.1	13.4	2.3	3.6	0.5	3.5	3.7	2.8	1.1	17.9	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.3	44.1	45.4	44.1	42.2	28.1	56.4	27.5	10.3	63.2	59.3	6.0
LnGrp LOS	D	D	D	D	D	C	E	C	B	E	E	A
Approach Vol, veh/h		913			244			747			819	
Approach Delay, s/veh		46.8			41.6			33.1			43.3	
Approach LOS		D			D			C			D	

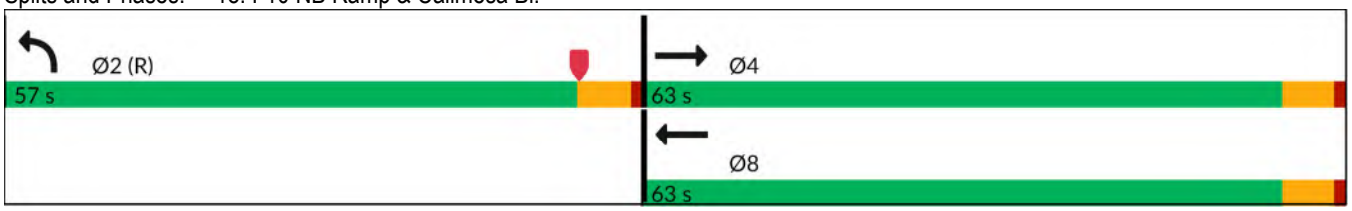
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.4	39.0	14.6	42.0	32.4	31.0	8.0	48.6
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	11.4	33.6	15.4	39.6	19.4	25.6	6.5	48.5
Max Q Clear Time (g_c+I1), s	7.1	26.3	9.8	34.8	17.8	9.2	4.2	10.7
Green Ext Time (p_c), s	0.0	1.7	0.2	1.8	0.1	0.6	0.0	2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	41.5
HCM 7th LOS	D

Lane Group	EBT	WBT	NBL
Lane Configurations			
Traffic Volume (vph)	324	202	556
Future Volume (vph)	324	202	556
Turn Type	NA	NA	Prot
Protected Phases	4	8	2
Permitted Phases			
Detector Phase	4	8	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	22.8	22.8	22.8
Total Split (s)	63.0	63.0	57.0
Total Split (%)	52.5%	52.5%	47.5%
Yellow Time (s)	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	26.7	26.7	81.7
Actuated g/C Ratio	0.22	0.22	0.68
v/c Ratio	0.79	0.49	0.24
Control Delay (s/veh)	86.5	43.6	8.4
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	86.5	43.6	8.4
LOS	F	D	A
Approach Delay (s/veh)	86.5	43.6	8.4
Approach LOS	F	D	A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 38.3	Intersection LOS: D
Intersection Capacity Utilization 42.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	324	0	0	202	556	1
Future Volume (veh/h)	324	0	0	202	556	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	0	0	1900	1900	1900
Adj Flow Rate, veh/h	334	0	0	208	574	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	375	0	0	375	2554	1136
Arrive On Green	0.20	0.00	0.00	0.20	0.71	0.00
Sat Flow, veh/h	1900	0	0	1900	3619	1610
Grp Volume(v), veh/h	334	0	0	208	574	0
Grp Sat Flow(s),veh/h/ln	1900	0	0	1900	1810	1610
Q Serve(g_s), s	20.5	0.0	0.0	11.8	6.7	0.0
Cycle Q Clear(g_c), s	20.5	0.0	0.0	11.8	6.7	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	375	0	0	375	2554	1136
V/C Ratio(X)	0.89	0.00	0.00	0.55	0.22	0.00
Avail Cap(c_a), veh/h	906	0	0	906	2554	1136
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.9	0.0	0.0	43.4	6.2	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.0	0.5	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	0.0	0.0	5.5	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	49.4	0.0	0.0	43.9	6.4	0.0
LnGrp LOS	D			D	A	
Approach Vol, veh/h	334			208	574	
Approach Delay, s/veh	49.4			43.9	6.4	
Approach LOS	D			D	A	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	90.5	29.5	29.5
Change Period (Y+Rc), s	5.8	5.8	5.8
Max Green Setting (Gmax), s	51.2	57.2	57.2
Max Q Clear Time (g_c+I1), s	8.7	22.5	13.8
Green Ext Time (p_c), s	1.0	1.2	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	26.2
HCM 7th LOS	C

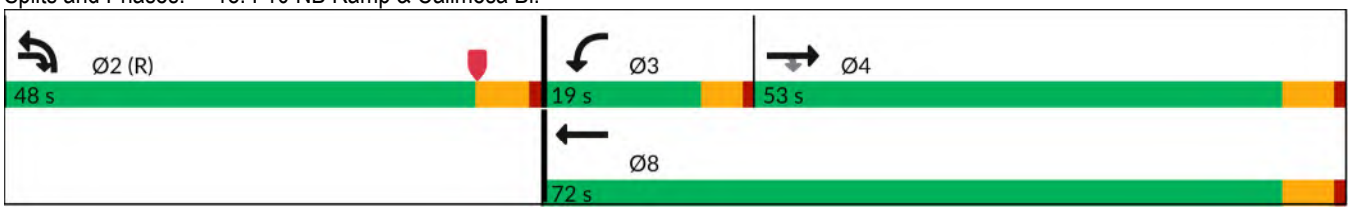
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	377	421	29	180	556
Future Volume (vph)	377	421	29	180	556
Turn Type	NA	pm+ov	Prot	NA	Prot
Protected Phases	4	2	3	8	2
Permitted Phases		4			
Detector Phase	4	2	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.8	22.8	9.6	22.8	22.8
Total Split (s)	53.0	48.0	19.0	72.0	48.0
Total Split (%)	44.2%	40.0%	15.8%	60.0%	40.0%
Yellow Time (s)	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	C-Max	None	None	C-Max
Act Effct Green (s)	29.8	109.2	6.6	37.1	71.3
Actuated g/C Ratio	0.25	0.91	0.06	0.31	0.59
v/c Ratio	0.83	0.29	0.30	0.32	0.28
Control Delay (s/veh)	56.1	0.6	61.7	30.8	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.1	0.6	61.7	30.8	14.3
LOS	E	A	E	C	B
Approach Delay (s/veh)	26.8			35.1	14.3
Approach LOS	C			D	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 23.5	Intersection LOS: C
Intersection Capacity Utilization 49.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	377	421	29	180	556	1
Future Volume (veh/h)	377	421	29	180	556	1
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	389	434	30	186	574	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	450	1350	48	572	2179	969
Arrive On Green	0.08	0.08	0.03	0.30	0.60	0.00
Sat Flow, veh/h	1900	1610	1810	1900	3619	1610
Grp Volume(v), veh/h	389	434	30	186	574	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1810	1610
Q Serve(g_s), s	24.3	6.9	2.0	9.1	9.0	0.0
Cycle Q Clear(g_c), s	24.3	6.9	2.0	9.1	9.0	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	450	1350	48	572	2179	969
V/C Ratio(X)	0.87	0.32	0.63	0.32	0.26	0.00
Avail Cap(c_a), veh/h	747	1603	217	1048	2179	969
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.48	0.48	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.4	2.6	57.8	32.5	11.3	0.0
Incr Delay (d2), s/veh	1.4	0.0	5.0	0.1	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.5	14.0	1.0	4.1	3.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	54.8	2.6	62.8	32.6	11.6	0.0
LnGrp LOS	D	A	E	C	B	
Approach Vol, veh/h	823			216	574	
Approach Delay, s/veh	27.3			36.8	11.6	
Approach LOS	C			D	B	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	78.0	7.8	34.2		42.0
Change Period (Y+Rc), s	5.8	4.6	5.8		5.8
Max Green Setting (Gmax), s	42.2	14.4	47.2		66.2
Max Q Clear Time (g_c+I1), s	11.0	4.0	26.3		11.1
Green Ext Time (p_c), s	1.0	0.0	2.1		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	23.0
HCM 7th LOS	C

Notes
User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	65.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	85	446	2	65	367	103	0	61	79	173	106	117
Future Vol, veh/h	85	446	2	65	367	103	0	61	79	173	106	117
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	93	490	2	71	403	113	0	67	87	190	116	129
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

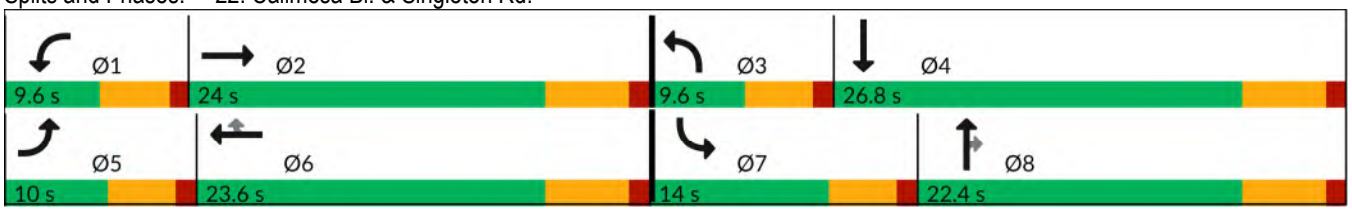
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	32.8	95.3	17.6	20.7
HCM LOS	F	F	C	C

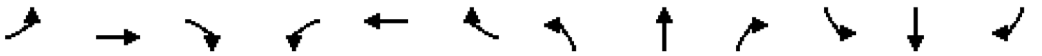
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	100%	44%	0%	100%	0%	78%	0%	48%
Vol Right, %	0%	56%	0%	0%	0%	22%	0%	52%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	140	85	448	65	470	173	223
LT Vol	0	0	85	0	65	0	173	0
Through Vol	0	61	0	446	0	367	0	106
RT Vol	0	79	0	2	0	103	0	117
Lane Flow Rate	0	154	93	492	71	516	190	245
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0	0.375	0.219	1.084	0.168	1.119	0.47	0.546
Departure Headway (Hd)	9.795	9.379	8.747	8.224	8.726	8.048	9.419	8.515
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	386	413	443	414	455	386	426
Service Time	7.495	7.079	6.447	5.924	6.426	5.748	7.119	6.215
HCM Lane V/C Ratio	0	0.399	0.225	1.111	0.171	1.134	0.492	0.575
HCM Control Delay, s/veh	12.5	17.6	13.9	95.9	13.2	106.6	20.2	21
HCM Lane LOS	N	C	B	F	B	F	C	C
HCM 95th-tile Q	0	1.7	0.8	15.8	0.6	17.4	2.4	3.2

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	Ø3
Lane Configurations										
Traffic Volume (vph)	85	446	65	367	103	61	79	173	106	
Future Volume (vph)	85	446	65	367	103	61	79	173	106	
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	Prot	NA	
Protected Phases	5	2	1	6		8		7	4	3
Permitted Phases					6		8			
Detector Phase	5	2	1	6	6	8	8	7	4	
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	22.4	9.6	22.4	22.4	22.4	22.4	9.6	22.4	9.6
Total Split (s)	10.0	24.0	9.6	23.6	23.6	22.4	22.4	14.0	26.8	9.6
Total Split (%)	14.3%	34.3%	13.7%	33.7%	33.7%	32.0%	32.0%	20.0%	38.3%	14%
Yellow Time (s)	3.6	4.4	3.6	4.4	4.4	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	5.4	4.6	5.4	5.4	5.4	5.4	4.6	5.4	
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	5.7	16.8	5.5	16.5	16.5	12.1	12.1	10.8	22.1	
Actuated g/C Ratio	0.10	0.29	0.10	0.29	0.29	0.21	0.21	0.19	0.38	
v/c Ratio	0.52	0.47	0.42	0.74	0.19	0.17	0.18	0.56	0.34	
Control Delay (s/veh)	42.4	20.2	38.5	31.6	1.8	23.4	0.8	35.8	10.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	42.4	20.2	38.5	31.6	1.8	23.4	0.8	35.8	10.3	
LOS	D	C	D	C	A	C	A	D	B	
Approach Delay (s/veh)		23.7		26.7		10.6			21.4	
Approach LOS		C		C		B			C	

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 57.6	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay (s/veh): 23.0	Intersection LOS: C
Intersection Capacity Utilization 53.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 22: Calimesa Bl. & Singleton Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	446	2	65	367	103	0	61	79	173	106	117
Future Volume (veh/h)	85	446	2	65	367	103	0	61	79	173	106	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	93	490	2	71	403	113	0	67	87	190	116	129
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	126	995	4	110	495	420	3	317	269	238	316	351
Arrive On Green	0.07	0.27	0.27	0.06	0.26	0.26	0.00	0.17	0.17	0.13	0.38	0.38
Sat Flow, veh/h	1810	3687	15	1810	1900	1610	1810	1900	1610	1810	822	914
Grp Volume(v), veh/h	93	240	252	71	403	113	0	67	87	190	0	245
Grp Sat Flow(s),veh/h/ln	1810	1805	1897	1810	1900	1610	1810	1900	1610	1810	0	1736
Q Serve(g_s), s	2.7	6.0	6.0	2.1	10.7	3.0	0.0	1.6	2.6	5.5	0.0	5.5
Cycle Q Clear(g_c), s	2.7	6.0	6.0	2.1	10.7	3.0	0.0	1.6	2.6	5.5	0.0	5.5
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	126	487	512	110	495	420	3	317	269	238	0	667
V/C Ratio(X)	0.74	0.49	0.49	0.65	0.81	0.27	0.00	0.21	0.32	0.80	0.00	0.37
Avail Cap(c_a), veh/h	181	622	654	168	641	543	168	599	508	315	0	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.6	16.6	16.6	24.8	18.7	15.9	0.0	19.4	19.8	22.7	0.0	11.9
Incr Delay (d2), s/veh	4.1	0.8	0.7	2.4	6.2	0.3	0.0	0.3	0.7	7.4	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.3	2.4	0.9	4.9	1.0	0.0	0.7	0.9	2.6	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.7	17.4	17.3	27.1	24.9	16.2	0.0	19.7	20.5	30.1	0.0	12.3
LnGrp LOS	C	B	B	C	C	B		B	C	C		B
Approach Vol, veh/h		585			587			154			435	
Approach Delay, s/veh		19.1			23.5			20.1			20.0	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	19.9	0.0	26.1	8.4	19.5	11.7	14.4
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.0	18.6	5.0	21.4	5.4	18.2	9.4	17.0
Max Q Clear Time (g_c+I1), s	4.1	8.0	0.0	7.5	4.7	12.7	7.5	4.6
Green Ext Time (p_c), s	0.0	2.0	0.0	1.2	0.0	1.3	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	20.9
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

APPENDIX 7.1: OPENING YEAR CUMULATIVE (2035) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	10.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	361	282	247	158	0
Future Vol, veh/h	0	361	282	247	158	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	495	386	338	216	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	725	0	-	0	1050	555
Stage 1	-	-	-	-	555	-
Stage 2	-	-	-	-	495	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	887	-	-	-	254	535
Stage 1	-	-	-	-	579	-
Stage 2	-	-	-	-	617	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	887	-	-	-	254	535
Mov Cap-2 Maneuver	-	-	-	-	254	-
Stage 1	-	-	-	-	579	-
Stage 2	-	-	-	-	617	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	66.92
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	887	-	-	-	254
HCM Lane V/C Ratio	-	-	-	-	0.853
HCM Ctrl Dly (s/v)	0	-	-	-	66.9
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	7

Intersection	
Int Delay, s/veh	4.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	497	16	127	517	23	150
Future Vol, veh/h	497	16	127	517	23	150
Conflicting Peds, #/hr	0	2	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	571	18	146	594	26	172

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	592	0	1469	582
Stage 1	-	-	-	-	582	-
Stage 2	-	-	-	-	886	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	994	-	142	516
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	406	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	992	-	111	515
Mov Cap-2 Maneuver	-	-	-	-	111	-
Stage 1	-	-	-	-	561	-
Stage 2	-	-	-	-	317	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.82	28.47
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	347	-	-	355	-
HCM Lane V/C Ratio	0.574	-	-	0.147	-
HCM Control Delay (s/veh)	28.5	-	-	9.3	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	3.4	-	-	0.5	-

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	403	245	395	407	0	0	0	0	343	6	238
Future Vol, veh/h	0	403	245	395	407	0	0	0	0	343	6	238
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	474	288	465	479	0	0	0	0	404	7	280

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	763	0	0	1882	2172	479
Stage 1	-	-	-	-	-	-	1408	1408	-
Stage 2	-	-	-	-	-	-	474	763	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	858	-	0	~ 79	47	591
Stage 1	0	-	-	-	-	0	~ 228	207	-
Stage 2	0	-	-	-	-	0	630	416	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	858	-	-	~ 36	0	591
Mov Cap-2 Maneuver	-	-	-	-	-	-	1933	0	-
Stage 1	-	-	-	-	-	-	~ 228	0	-
Stage 2	-	-	-	-	-	-	~ 289	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	6.91	11.05
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	858	-	1933	591
HCM Lane V/C Ratio	-	-	0.541	-	0.212	0.474
HCM Control Delay (s/veh)	-	-	14	-	7.4	16.5
HCM Lane LOS	-	-	B	-	A	C
HCM 95th %tile Q(veh)	-	-	3.3	-	0.8	2.5

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

Intersection	
Int Delay, s/veh	34.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	239	507	0	0	621	605	181	0	117	0	0	0
Future Vol, veh/h	239	507	0	0	621	605	181	0	117	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	257	545	0	0	668	651	195	0	126	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1318	0	-	-	-	0	1727	2377	545
Stage 1	-	-	-	-	-	-	1059	1059	-
Stage 2	-	-	-	-	-	-	668	1318	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	531	-	0	0	-	-	~ 99	35	542
Stage 1	-	-	0	0	-	-	336	304	-
Stage 2	-	-	0	0	-	-	514	229	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	531	-	-	-	-	-	~ 51	0	542
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 117	0	-
Stage 1	-	-	-	-	-	-	~ 174	0	-
Stage 2	-	-	-	-	-	-	514	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	5.76	0	248.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	117	542	531	-	-	-
HCM Lane V/C Ratio	1.669	0.232	0.484	-	-	-
HCM Control Delay (s/veh)	$ 400.6	13.6	18	-	-	-
HCM Lane LOS	F	B	C	-	-	-
HCM 95th %tile Q(veh)	14.7	0.9	2.6	-	-	-

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

Intersection	
Intersection Delay, s/veh	91
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	97	70	450	128	0	72	0	334	0	0	0
Future Vol, veh/h	0	97	70	450	128	0	72	0	334	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, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	133	96	616	175	0	99	0	458	0	0	0
Number of Lanes	1	1	0	1	1	1	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	2
HCM Control Delay, s/veh	19.5	149.5	37	0
HCM LOS	C	F	E	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	58%	0%	100%	100%	100%
Vol Right, %	0%	100%	0%	42%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	72	334	0	167	450	128	0	0
LT Vol	72	0	0	0	450	0	0	0
Through Vol	0	0	0	97	0	128	0	0
RT Vol	0	334	0	70	0	0	0	0
Lane Flow Rate	99	458	0	229	616	175	0	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.22	0.868	0	0.502	1.335	0.355	0	0
Departure Headway (Hd)	8.666	7.436	8.815	8.511	7.794	7.283	7.283	10.08
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	417	490	0	426	468	493	0	0
Service Time	6.366	5.136	6.515	6.211	5.569	5.058	5.058	7.78
HCM Lane V/C Ratio	0.237	0.935	0	0.538	1.316	0.355	0	0
HCM Control Delay, s/veh	13.8	42	11.5	19.5	188	14.1	10.1	12.8
HCM Lane LOS	B	E	N	C	F	B	N	N
HCM 95th-tile Q	0.8	9.2	0	2.7	27.5	1.6	0	0

Intersection	
Intersection Delay, s/veh	116
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	373	58	209	420	0	0	0	0	157	13	157
Future Vol, veh/h	0	373	58	209	420	0	0	0	0	157	13	157
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	460	72	258	519	0	0	0	0	194	16	194
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

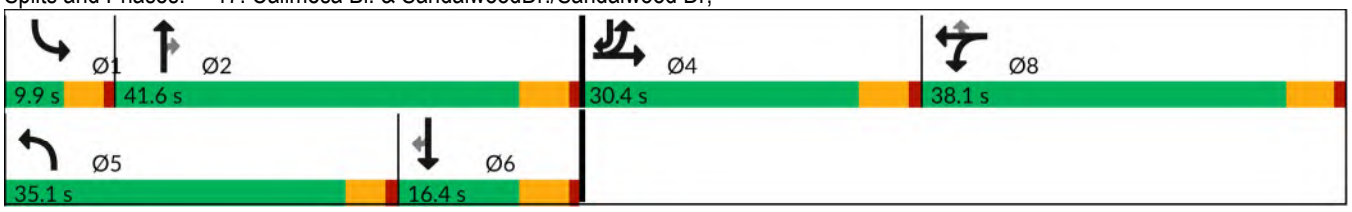
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	50.7	205.8	29.2
HCM LOS	F	F	D

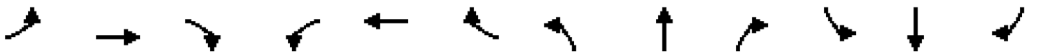
Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	33%	48%
Vol Thru, %	87%	67%	4%
Vol Right, %	13%	0%	48%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	431	629	327
LT Vol	0	209	157
Through Vol	373	420	13
RT Vol	58	0	157
Lane Flow Rate	532	777	404
Geometry Grp	1	1	1
Degree of Util (X)	0.933	1.39	0.75
Departure Headway (Hd)	6.898	6.446	7.351
Convergence, Y/N	Yes	Yes	Yes
Cap	532	567	497
Service Time	4.898	4.523	5.351
HCM Lane V/C Ratio	1	1.37	0.813
HCM Control Delay, s/veh	50.7	205.8	29.2
HCM Lane LOS	F	F	D
HCM 95th-tile Q	11.5	35.1	6.4

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	192	223	94	258	46	194	803	148	19	214	272
Future Volume (vph)	192	223	94	258	46	194	803	148	19	214	272
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4	30.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	17.3	17.3	20.4	20.4	20.4	16.3	32.3	32.3	5.5	14.3	37.3
Actuated g/C Ratio	0.19	0.19	0.23	0.23	0.23	0.18	0.36	0.36	0.06	0.16	0.41
v/c Ratio	0.56	0.55	0.26	0.68	0.11	0.68	0.71	0.26	0.20	0.81	0.37
Control Delay (s/veh)	43.8	36.6	33.4	42.8	0.5	48.3	31.3	9.0	54.5	61.9	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.8	36.6	33.4	42.8	0.5	48.3	31.3	9.0	54.5	61.9	4.0
LOS	D	D	C	D	A	D	C	A	D	E	A
Approach Delay (s/veh)		39.0		35.7			31.3			30.4	
Approach LOS		D		D			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 90.4	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay (s/veh): 33.3	Intersection LOS: C
Intersection Capacity Utilization 66.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	223	58	94	258	46	194	803	148	19	214	272
Future Volume (veh/h)	192	223	58	94	258	46	194	803	148	19	214	272
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	173	316	48	107	293	42	220	912	138	22	243	232
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	274	488	73	362	380	317	267	1218	542	45	408	589
Arrive On Green	0.15	0.15	0.15	0.20	0.20	0.20	0.15	0.34	0.34	0.02	0.21	0.21
Sat Flow, veh/h	1810	3228	485	1810	1900	1587	1810	3610	1607	1810	1900	1610
Grp Volume(v), veh/h	173	185	179	107	293	42	220	912	138	22	243	232
Grp Sat Flow(s),veh/h/ln	1810	1900	1813	1810	1900	1587	1810	1805	1607	1810	1900	1610
Q Serve(g_s), s	6.5	6.6	6.8	3.6	10.6	1.6	8.6	16.3	4.5	0.9	8.4	7.7
Cycle Q Clear(g_c), s	6.5	6.6	6.8	3.6	10.6	1.6	8.6	16.3	4.5	0.9	8.4	7.7
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	274	288	274	362	380	317	267	1218	542	45	408	589
V/C Ratio(X)	0.63	0.64	0.65	0.30	0.77	0.13	0.82	0.75	0.25	0.49	0.60	0.39
Avail Cap(c_a), veh/h	623	654	624	815	856	715	760	1801	802	132	408	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	29.0	29.0	24.7	27.5	23.9	30.0	21.3	17.4	34.9	25.7	17.0
Incr Delay (d2), s/veh	2.4	2.4	2.6	0.5	3.3	0.2	2.5	1.0	0.2	3.1	2.4	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	3.0	2.9	1.5	4.8	0.6	3.7	6.3	1.5	0.4	3.8	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.3	31.3	31.6	25.1	30.8	24.0	32.5	22.3	17.7	38.0	28.0	17.5
LnGrp LOS	C	C	C	C	C	C	C	C	B	D	C	B
Approach Vol, veh/h		537			442			1270			497	
Approach Delay, s/veh		31.4			28.8			23.6			23.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	29.9		16.4	15.3	21.0		19.9				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7				
Max Q Clear Time (g_c+I1), s	2.9	18.3		8.8	10.6	10.4		12.6				
Green Ext Time (p_c), s	0.0	6.2		2.2	0.3	0.2		1.9				

Intersection Summary		
HCM 7th Control Delay, s/veh	25.9	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	298.9
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	132	235	156	911	234	5
Future Vol, veh/h	132	235	156	911	234	5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	155	276	184	1072	275	6
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	21.4	456.8	20.1
HCM LOS	C	F	C

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	98%	0%	15%
Vol Thru, %	0%	36%	85%
Vol Right, %	2%	64%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	239	367	1067
LT Vol	234	0	156
Through Vol	0	132	911
RT Vol	5	235	0
Lane Flow Rate	281	432	1255
Geometry Grp	1	1	1
Degree of Util (X)	0.522	0.657	1.971
Departure Headway (Hd)	8.338	6.613	5.653
Convergence, Y/N	Yes	Yes	Yes
Cap	436	553	653
Service Time	6.338	4.613	3.653
HCM Lane V/C Ratio	0.644	0.781	1.922
HCM Control Delay, s/veh	20.1	21.4	456.8
HCM Lane LOS	C	C	F
HCM 95th-tile Q	2.9	4.8	83

Intersection	
Intersection Delay, s/veh	29.8
Intersection LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	261	69	65	342	91
Future Vol, veh/h	17	261	69	65	342	91
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	24	368	97	92	482	128
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	16.4	11.3	44.1
HCM LOS	C	B	E

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	6%	79%
Vol Thru, %	51%	0%	21%
Vol Right, %	49%	94%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	134	278	433
LT Vol	0	17	342
Through Vol	69	0	91
RT Vol	65	261	0
Lane Flow Rate	189	392	610
Geometry Grp	1	1	1
Degree of Util (X)	0.3	0.596	0.933
Departure Headway (Hd)	5.716	5.484	5.51
Convergence, Y/N	Yes	Yes	Yes
Cap	625	654	659
Service Time	3.792	3.555	3.562
HCM Lane V/C Ratio	0.302	0.599	0.926
HCM Control Delay, s/veh	11.3	16.4	44.1
HCM Lane LOS	B	C	E
HCM 95th-tile Q	1.3	3.9	12.6

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	376	319	486	527	0	0	0	0	0	0	0
Future Vol, veh/h	0	376	319	486	527	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	448	380	579	627	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	827	0	0	2232	2612	627
Stage 1	-	-	-	-	-	-	1785	1785	-
Stage 2	-	-	-	-	-	-	448	827	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	813	-	0	48	25	487
Stage 1	0	-	-	-	-	0	149	135	-
Stage 2	0	-	-	-	-	0	648	389	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	813	-	-	0	0	487
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	149	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	9.4	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 529	-	-
HCM Lane V/C Ratio	-	-	0.712	-	-
HCM Control Delay (s/veh)	-	-	19.6	0	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	6.1	-	-

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

Intersection	
Int Delay, s/veh	127.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	377	0	0	802	0	211	0	301	0	0	0
Future Vol, veh/h	0	377	0	0	802	0	211	0	301	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	419	0	0	891	0	234	0	334	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	891	0	-	-	-	0	1310	1310	419
Stage 1	-	-	-	-	-	-	419	419	-
Stage 2	-	-	-	-	-	-	891	891	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	769	-	0	0	-	-	~ 177	160	639
Stage 1	-	-	0	0	-	-	668	594	-
Stage 2	-	-	0	0	-	-	404	363	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	769	-	-	-	-	-	~ 177	0	639
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 177	0	-
Stage 1	-	-	-	-	-	-	668	0	-
Stage 2	-	-	-	-	-	-	404	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	$ 421.81
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	308	769	-	-	-
HCM Lane V/C Ratio	1.847	-	-	-	-
HCM Control Delay (s/veh)	$ 421.8	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	38.2	0	-	-	-

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

Intersection	
Intersection Delay, s/veh	423.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	182	486	10	35	664	194	11	440	210	75	37	127
Future Vol, veh/h	182	486	10	35	664	194	11	440	210	75	37	127
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	194	517	11	37	706	206	12	468	223	80	39	135
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	387.6	607.6	345	53.7
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	27%	4%	31%
Vol Thru, %	67%	72%	74%	15%
Vol Right, %	32%	1%	22%	53%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	661	678	893	239
LT Vol	11	182	35	75
Through Vol	440	486	664	37
RT Vol	210	10	194	127
Lane Flow Rate	703	721	950	254
Geometry Grp	1	1	1	1
Degree of Util (X)	1.665	1.755	2.267	0.66
Departure Headway (Hd)	13.054	14.316	12.654	19.397
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	288	260	295	188
Service Time	11.054	12.316	10.654	17.397
HCM Lane V/C Ratio	2.441	2.773	3.22	1.351
HCM Control Delay, s/veh	345	387.6	607.6	53.7
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	28.9	29.4	49.9	3.9

Intersection	
Int Delay, s/veh	84.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	353	424	123	159	0
Future Vol, veh/h	0	353	424	123	159	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	630	757	220	284	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	977	0	-	0	1497	867
Stage 1	-	-	-	-	867	-
Stage 2	-	-	-	-	630	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	714	-	-	-	~ 136	355
Stage 1	-	-	-	-	415	-
Stage 2	-	-	-	-	534	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	714	-	-	-	~ 136	355
Mov Cap-2 Maneuver	-	-	-	-	~ 136	-
Stage 1	-	-	-	-	415	-
Stage 2	-	-	-	-	534	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	$ 564.97
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	714	-	-	-	136
HCM Lane V/C Ratio	-	-	-	-	2.083
HCM Ctrl Dly (s/v)	0	-	-	-	$ 565
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	23.1

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

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	475	11	101	432	14	70
Future Vol, veh/h	475	11	101	432	14	70
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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	546	13	116	497	16	80

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	559	0	1281	552
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	729	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1022	-	184	537
Stage 1	-	-	-	-	581	-
Stage 2	-	-	-	-	481	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1022	-	156	537
Mov Cap-2 Maneuver	-	-	-	-	156	-
Stage 1	-	-	-	-	581	-
Stage 2	-	-	-	-	406	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.7	17.62
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	381	-	-	341	-
HCM Lane V/C Ratio	0.253	-	-	0.114	-
HCM Control Delay (s/veh)	17.6	-	-	9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1	-	-	0.4	-

Intersection	
Int Delay, s/veh	473.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	385	160	307	386	0	0	0	0	503	3	147
Future Vol, veh/h	0	385	160	307	386	0	0	0	0	503	3	147
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	410	170	327	411	0	0	0	0	535	3	156

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	580	0	0	1473	1644	411
Stage 1	-	-	-	-	-	-	1064	1064	-
Stage 2	-	-	-	-	-	-	410	580	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1004	-	0	~ 141	101	645
Stage 1	0	-	-	-	-	0	~ 335	302	-
Stage 2	0	-	-	-	-	0	675	503	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1004	-	-	~ 95	0	645
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 114	0	-
Stage 1	-	-	-	-	-	-	~ 335	0	-
Stage 2	-	-	-	-	-	-	~ 455	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	4.56	$ 1365.09
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	1004	-	114	645
HCM Lane V/C Ratio	-	-	0.325	-	4.738	0.242
HCM Control Delay (s/veh)	-	-	10.3	$ 1758.1	12.4	
HCM Lane LOS	-	-	B	-	F	B
HCM 95th %tile Q(veh)	-	-	1.4	-	56.6	0.9

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

Intersection	
Int Delay, s/veh	14.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	184	704	0	0	546	374	147	2	307	0	0	0
Future Vol, veh/h	184	704	0	0	546	374	147	2	307	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	196	749	0	0	581	398	156	2	327	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	979	0	-	-	-	0	1721	2119	749
Stage 1	-	-	-	-	-	-	1140	1140	-
Stage 2	-	-	-	-	-	-	581	979	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	713	-	0	0	-	-	~ 99	51	415
Stage 1	-	-	0	0	-	-	308	278	-
Stage 2	-	-	0	0	-	-	563	331	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	713	-	-	-	-	-	~ 72	0	415
Mov Cap-2 Maneuver	-	-	-	-	-	-	157	0	-
Stage 1	-	-	-	-	-	-	223	0	-
Stage 2	-	-	-	-	-	-	563	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	2.48	0	69.39
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	157	415	713	-	-	-
HCM Lane V/C Ratio	1.009	0.787	0.274	-	-	-
HCM Control Delay (s/veh)	132.1	39	11.9	-	-	-
HCM Lane LOS	F	E	B	-	-	-
HCM 95th %tile Q(veh)	7.8	6.8	1.1	-	-	-

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

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	67	10	30	70	0	6	0	94	0	0	0
Future Vol, veh/h	0	67	10	30	70	0	6	0	94	0	0	0
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	88	13	39	92	0	8	0	124	0	0	0
Number of Lanes	1	1	0	1	1	1	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	2
HCM Control Delay, s/veh	8.6	8.5	8	0
HCM LOS	A	A	A	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	87%	0%	100%	100%	100%
Vol Right, %	0%	100%	0%	13%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	94	0	77	30	70	0	0
LT Vol	6	0	0	0	30	0	0	0
Through Vol	0	0	0	67	0	70	0	0
RT Vol	0	94	0	10	0	0	0	0
Lane Flow Rate	8	124	0	101	39	92	0	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.012	0.153	0	0.141	0.061	0.129	0	0
Departure Headway (Hd)	5.661	4.456	5.115	5.023	5.548	5.046	5.046	5.409
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	634	805	0	714	647	711	0	0
Service Time	3.383	2.178	2.841	2.749	3.273	2.771	2.771	3.143
HCM Lane V/C Ratio	0.013	0.154	0	0.141	0.06	0.129	0	0
HCM Control Delay, s/veh	8.5	8	7.8	8.6	8.6	8.5	7.8	8.1
HCM Lane LOS	A	A	N	A	A	A	N	N
HCM 95th-tile Q	0	0.5	0	0.5	0.2	0.4	0	0

Intersection	
Intersection Delay, s/veh	15.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	119	42	359	71	0	0	0	0	280	7	29
Future Vol, veh/h	0	119	42	359	71	0	0	0	0	280	7	29
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	125	44	378	75	0	0	0	0	295	7	31
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

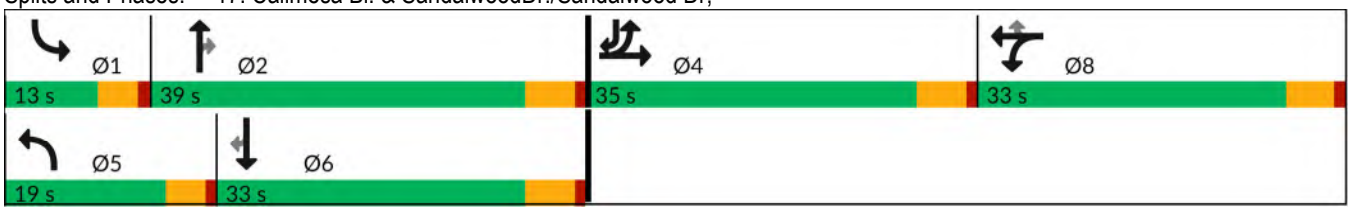
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	10.4	18.7	14.9
HCM LOS	B	C	B

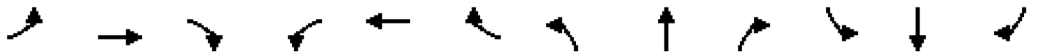
Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	83%	89%
Vol Thru, %	74%	17%	2%
Vol Right, %	26%	0%	9%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	161	430	316
LT Vol	0	359	280
Through Vol	119	71	7
RT Vol	42	0	29
Lane Flow Rate	169	453	333
Geometry Grp	1	1	1
Degree of Util (X)	0.256	0.672	0.525
Departure Headway (Hd)	5.44	5.341	5.68
Convergence, Y/N	Yes	Yes	Yes
Cap	659	674	635
Service Time	3.486	3.375	3.719
HCM Lane V/C Ratio	0.256	0.672	0.524
HCM Control Delay, s/veh	10.4	18.7	14.9
HCM Lane LOS	B	C	B
HCM 95th-tile Q	1	5.2	3.1

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	141	142	53	139	29	68	394	197	35	511	292
Future Volume (vph)	141	142	53	139	29	68	394	197	35	511	292
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0	35.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%	29.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	14.1	14.1	12.5	12.5	12.5	7.9	31.9	31.9	6.3	28.2	42.3
Actuated g/C Ratio	0.17	0.17	0.15	0.15	0.15	0.10	0.39	0.39	0.08	0.35	0.52
v/c Ratio	0.47	0.42	0.20	0.50	0.08	0.41	0.29	0.28	0.26	0.82	0.32
Control Delay (s/veh)	37.8	21.4	34.8	40.3	0.4	44.9	20.3	4.7	44.1	39.4	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.8	21.4	34.8	40.3	0.4	44.9	20.3	4.7	44.1	39.4	2.2
LOS	D	C	C	D	A	D	C	A	D	D	A
Approach Delay (s/veh)		26.8		33.7			18.2			26.7	
Approach LOS		C		C			B			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 81.5	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay (s/veh): 24.8	Intersection LOS: C
Intersection Capacity Utilization 65.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	142	102	53	139	29	68	394	197	35	511	292
Future Volume (veh/h)	141	142	102	53	139	29	68	394	197	35	511	292
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	126	180	80	56	146	16	72	415	184	37	538	224
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	271	379	161	274	287	243	100	1264	562	67	631	775
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.06	0.35	0.35	0.04	0.33	0.33
Sat Flow, veh/h	1810	2529	1078	1810	1900	1604	1810	3610	1606	1810	1900	1608
Grp Volume(v), veh/h	126	133	127	56	146	16	72	415	184	37	538	224
Grp Sat Flow(s),veh/h/ln	1810	1900	1706	1810	1900	1604	1810	1805	1606	1810	1900	1608
Q Serve(g_s), s	4.2	4.3	4.5	1.8	4.7	0.6	2.6	5.6	5.6	1.3	17.6	5.6
Cycle Q Clear(g_c), s	4.2	4.3	4.5	1.8	4.7	0.6	2.6	5.6	5.6	1.3	17.6	5.6
Prop In Lane	1.00		0.63	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	271	285	256	274	287	243	100	1264	562	67	631	775
V/C Ratio(X)	0.46	0.47	0.50	0.20	0.51	0.07	0.72	0.33	0.33	0.55	0.85	0.29
Avail Cap(c_a), veh/h	803	843	757	749	786	663	391	1818	809	228	786	906
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.9	25.9	26.0	24.8	26.0	24.3	31.0	15.9	15.9	31.6	20.8	10.4
Incr Delay (d2), s/veh	1.2	1.2	1.5	0.4	1.4	0.1	3.6	0.2	0.3	2.6	7.5	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.9	1.8	0.7	2.1	0.2	1.2	2.1	1.9	0.6	8.1	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.2	27.1	27.5	25.2	27.4	24.4	34.6	16.1	16.3	34.2	28.3	10.6
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	C	B
Approach Vol, veh/h		386			218			671			799	
Approach Delay, s/veh		27.3			26.6			18.1			23.6	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	28.8		15.4	8.3	27.6		15.5				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6				
Max Q Clear Time (g_c+I1), s	3.3	7.6		6.5	4.6	19.6		6.7				
Green Ext Time (p_c), s	0.0	3.2		1.7	0.0	2.5		0.9				

Intersection Summary		
HCM 7th Control Delay, s/veh	22.8	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	53.9
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	358	307	39	257	403	6
Future Vol, veh/h	358	307	39	257	403	6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	369	316	40	265	415	6
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	85	17.6	29.7
HCM LOS	F	C	D

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	99%	0%	13%
Vol Thru, %	0%	54%	87%
Vol Right, %	1%	46%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	409	665	296
LT Vol	403	0	39
Through Vol	0	358	257
RT Vol	6	307	0
Lane Flow Rate	422	686	305
Geometry Grp	1	1	1
Degree of Util (X)	0.775	1.087	0.548
Departure Headway (Hd)	6.879	5.709	6.72
Convergence, Y/N	Yes	Yes	Yes
Cap	531	631	540
Service Time	4.879	3.783	4.72
HCM Lane V/C Ratio	0.795	1.087	0.565
HCM Control Delay, s/veh	29.7	85	17.6
HCM Lane LOS	D	F	C
HCM 95th-tile Q	7	19.7	3.3

Intersection	
Intersection Delay, s/veh	87.4
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	105	342	83	56	262	56
Future Vol, veh/h	105	342	83	56	262	56
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	175	570	138	93	437	93
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	133	15.7	54.6
HCM LOS	F	C	F

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	23%	82%
Vol Thru, %	60%	0%	18%
Vol Right, %	40%	77%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	139	447	318
LT Vol	0	105	262
Through Vol	83	0	56
RT Vol	56	342	0
Lane Flow Rate	232	745	530
Geometry Grp	1	1	1
Degree of Util (X)	0.426	1.218	0.949
Departure Headway (Hd)	7.335	5.888	7.048
Convergence, Y/N	Yes	Yes	Yes
Cap	493	626	519
Service Time	5.335	3.888	5.048
HCM Lane V/C Ratio	0.471	1.19	1.021
HCM Control Delay, s/veh	15.7	133	54.6
HCM Lane LOS	C	F	F
HCM 95th-tile Q	2.1	27	12

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	311	242	330	703	0	0	0	0	0	0	0
Future Vol, veh/h	0	311	242	330	703	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	334	260	355	756	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	595	0	0	1800	2060	756
Stage 1	-	-	-	-	-	-	1466	1466	-
Stage 2	-	-	-	-	-	-	334	595	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	991	-	0	89	56	411
Stage 1	0	-	-	-	-	0	214	194	-
Stage 2	0	-	-	-	-	0	730	496	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	991	-	-	34	0	411
Mov Cap-2 Maneuver	-	-	-	-	-	-	34	0	-
Stage 1	-	-	-	-	-	-	214	0	-
Stage 2	-	-	-	-	-	-	279	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	3.4	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	575	-	-
HCM Lane V/C Ratio	-	-	0.358	-	-
HCM Control Delay (s/veh)	-	-	10.6	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.6	-	-

Intersection	
Int Delay, s/veh	280.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	311	0	0	704	0	329	0	492	0	0	0
Future Vol, veh/h	0	311	0	0	704	0	329	0	492	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	342	0	0	774	0	362	0	541	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	774	0	-	-	-	0	1115	1115	342
Stage 1	-	-	-	-	-	-	342	342	-
Stage 2	-	-	-	-	-	-	774	774	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	851	-	0	0	-	-	~ 232	210	705
Stage 1	-	-	0	0	-	-	724	642	-
Stage 2	-	-	0	0	-	-	459	411	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	851	-	-	-	-	-	~ 232	0	705
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 232	0	-
Stage 1	-	-	-	-	-	-	724	0	-
Stage 2	-	-	-	-	-	-	459	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	$ 626.34
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	388	851	-	-	-
HCM Lane V/C Ratio	2.325	-	-	-	-
HCM Control Delay (s/veh)	$ 626.3	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	69.2	0	-	-	-

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

Intersection	
Intersection Delay, s/veh	325.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	108	683	12	72	550	102	0	62	69	187	114	154
Future Vol, veh/h	108	683	12	72	550	102	0	62	69	187	114	154
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	119	751	13	79	604	112	0	68	76	205	125	169
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	459.3	368.1	26	108.2
HCM LOS	F	F	D	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	13%	10%	41%
Vol Thru, %	47%	85%	76%	25%
Vol Right, %	53%	1%	14%	34%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	131	803	724	455
LT Vol	0	108	72	187
Through Vol	62	683	550	114
RT Vol	69	12	102	154
Lane Flow Rate	144	882	796	500
Geometry Grp	1	1	1	1
Degree of Util (X)	0.371	1.95	1.74	1.086
Departure Headway (Hd)	14.626	9.723	10.026	10.772
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	248	379	374	340
Service Time	12.626	7.723	8.026	8.772
HCM Lane V/C Ratio	0.581	2.327	2.128	1.471
HCM Control Delay, s/veh	26	459.3	368.1	108.2
HCM Lane LOS	D	F	F	F
HCM 95th-tile Q	1.6	49.4	39.2	13.6

APPENDIX 7.2: OPENING YEAR CUMULATIVE (2035) WITH PROJECT (PHASE 2) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Intersection Delay, s/veh	2.8
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	1	16	45
Demand Flow Rate, veh/h	1	16	45
Vehicles Circulating, veh/h	16	0	1
Vehicles Exiting, veh/h	0	46	16
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	2.7	2.7	2.9
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	1	16	45
Cap Entry Lane, veh/h	1358	1380	1378
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	1	16	45
Cap Entry, veh/h	1358	1380	1378
V/C Ratio	0.001	0.012	0.033
Control Delay, s/veh	2.7	2.7	2.9
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	3.3
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	0	49	136
Demand Flow Rate, veh/h	0	49	136
Vehicles Circulating, veh/h	136	0	0
Vehicles Exiting, veh/h	0	136	49
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	0.0	2.9	3.4
Approach LOS	-	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	0	49	136
Cap Entry Lane, veh/h	1201	1380	1380
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	0	49	136
Cap Entry, veh/h	1201	1380	1380
V/C Ratio	0.000	0.036	0.099
Control Delay, s/veh	3.0	2.9	3.4
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	4.0
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	192	121	186
Demand Flow Rate, veh/h	192	121	186
Vehicles Circulating, veh/h	62	9	168
Vehicles Exiting, veh/h	68	345	86
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.0	3.3	4.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	192	121	186
Cap Entry Lane, veh/h	1295	1367	1163
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	192	121	186
Cap Entry, veh/h	1295	1367	1163
V/C Ratio	0.148	0.088	0.160
Control Delay, s/veh	4.0	3.3	4.5
LOS	A	A	A
95th %tile Queue, veh	1	0	1

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	63	23	117	90	14
Future Vol, veh/h	40	63	23	117	90	14
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	43	68	25	127	98	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	283	105	113	0	-	0
Stage 1	105	-	-	-	-	-
Stage 2	177	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	712	954	1489	-	-	-
Stage 1	924	-	-	-	-	-
Stage 2	858	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	700	954	1489	-	-	-
Mov Cap-2 Maneuver	700	-	-	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	858	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.97	1.23	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1489	-	836	-	-
HCM Lane V/C Ratio	0.017	-	0.134	-	-
HCM Control Delay (s/veh)	7.5	-	10	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Intersection	
Intersection Delay, s/veh	3.8
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	216	209	166
Demand Flow Rate, veh/h	216	209	166
Vehicles Circulating, veh/h	161	15	72
Vehicles Exiting, veh/h	77	362	152
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.2	3.2	3.9
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.069	0.931	0.344	0.656	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	15	201	72	137	166
Cap Entry Lane, veh/h	1227	1227	1401	1401	1282
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	15	201	72	137	166
Cap Entry, veh/h	1227	1227	1401	1401	1282
V/C Ratio	0.012	0.164	0.051	0.098	0.129
Control Delay, s/veh	3.0	4.3	3.0	3.3	3.9
LOS	A	A	A	A	A
95th %tile Queue, veh	0	1	0	0	0

Intersection	
Int Delay, s/veh	59.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↱		⅄	
Traffic Vol, veh/h	0	699	400	247	158	0
Future Vol, veh/h	0	699	400	247	158	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	958	548	338	216	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	886	0	-	0	1675	717
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	958	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	772	-	-	-	~ 106	433
Stage 1	-	-	-	-	487	-
Stage 2	-	-	-	-	376	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	772	-	-	-	~ 106	433
Mov Cap-2 Maneuver	-	-	-	-	~ 106	-
Stage 1	-	-	-	-	487	-
Stage 2	-	-	-	-	376	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	$ 565.68
HCM LOS			F

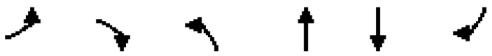
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	772	-	-	-	106
HCM Lane V/C Ratio	-	-	-	-	2.039
HCM Ctrl Dly (s/v)	0	-	-	-	$ 565.7
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	18.2

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

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	754	648		
Future Volume (vph)	754	648		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	40.0	49.0	80.0	31.0
Total Split (%)	33.3%	40.8%	67%	26%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min
Act Effct Green (s)	10.0	13.8		
Actuated g/C Ratio	0.21	0.28		
v/c Ratio	0.39	0.71		
Control Delay (s/veh)	0.5	19.9		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.5	19.9		
LOS	A	B		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 48.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay (s/veh): 9.5	Intersection LOS: A
Intersection Capacity Utilization 30.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	754	648	0	0	0
Future Volume (veh/h)	0	754	648	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	711	704	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	689	1080	1026	523	6	0
Arrive On Green	0.00	0.38	0.29	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	-96900	0
Grp Volume(v), veh/h	0	711	704	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	6.2	5.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.2	5.3	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	689	1080	1026	523	6	0
V/C Ratio(X)	0.00	0.66	0.69	0.00	0.00	0.00
Avail Cap(c_a), veh/h	2127	3332	5251	4794	1658	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.6	9.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.3	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.8	1.3	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	8.3	9.6	0.0	0.0	0.0
LnGrp LOS		A	A			
Approach Vol, veh/h	711			704	0	
Approach Delay, s/veh	8.3			9.6	0.0	
Approach LOS	A			A		

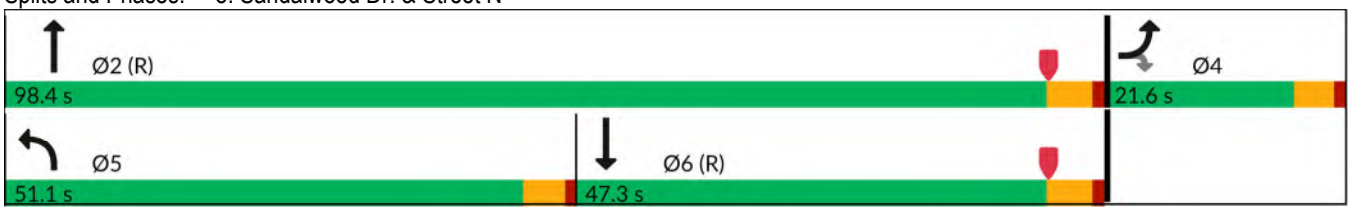
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		13.3		16.4	13.3	0.0
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		74.9		34.9	44.4	25.9
Max Q Clear Time (g_c+I1), s		0.0		8.2	7.3	0.0
Green Ext Time (p_c), s		0.0		3.2	1.4	0.0

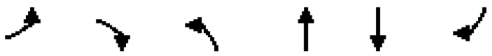
Intersection Summary	
HCM 7th Control Delay, s/veh	8.9
HCM 7th LOS	A

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	2	127	750	646	747
Future Volume (vph)	2	127	750	646	747
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	21.6	21.6	9.6	15.1	22.1
Total Split (s)	21.6	21.6	51.1	98.4	47.3
Total Split (%)	18.0%	18.0%	42.6%	82.0%	39.4%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.4	10.4	33.3	99.9	62.0
Actuated g/C Ratio	0.09	0.09	0.28	0.83	0.52
v/c Ratio	0.01	0.52	0.84	0.23	0.44
Control Delay (s/veh)	49.5	15.7	46.2	1.2	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.5	15.7	46.2	1.2	20.0
LOS	D	B	D	A	B
Approach Delay (s/veh)	16.2			25.4	20.0
Approach LOS	B			C	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 93.3 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay (s/veh): 23.1	Intersection LOS: C
Intersection Capacity Utilization 62.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street N





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	127	750	646	747	7
Future Volume (veh/h)	2	127	750	646	747	7
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	138	815	702	812	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	183	163	880	2953	1937	19
Arrive On Green	0.10	0.10	0.42	1.00	0.53	0.53
Sat Flow, veh/h	1810	1610	3510	3705	3757	36
Grp Volume(v), veh/h	2	138	815	702	400	420
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1894
Q Serve(g_s), s	0.1	10.1	26.5	0.0	16.1	16.1
Cycle Q Clear(g_c), s	0.1	10.1	26.5	0.0	16.1	16.1
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	183	163	880	2953	955	1001
V/C Ratio(X)	0.01	0.85	0.93	0.24	0.42	0.42
Avail Cap(c_a), veh/h	256	228	1360	2953	955	1001
HCM Platoon Ratio	1.00	1.00	1.67	1.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	0.93	0.93
Uniform Delay (d), s/veh	48.5	53.0	33.8	0.0	17.1	17.1
Incr Delay (d2), s/veh	0.0	18.3	5.4	0.2	1.3	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	0.1	9.6	10.3	0.1	6.9	7.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.5	71.3	39.3	0.2	18.4	18.3
LnGrp LOS	D	E	D	A	B	B
Approach Vol, veh/h	140			1517	820	
Approach Delay, s/veh	71.0			21.2	18.3	
Approach LOS	E			C	B	

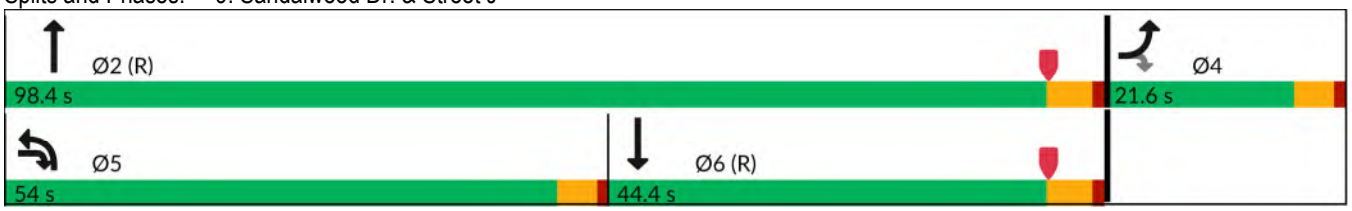
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		103.3		16.7	34.7	68.6
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	46.5	42.2
Max Q Clear Time (g_c+I1), s		2.0		12.1	28.5	18.1
Green Ext Time (p_c), s		5.8		0.2	1.6	5.5

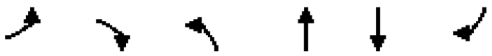
Intersection Summary		
HCM 7th Control Delay, s/veh	23.1	
HCM 7th LOS	C	

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	2	194	1128	1393	867
Future Volume (vph)	2	194	1128	1393	867
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	21.6	9.6	9.6	15.1	22.1
Total Split (s)	21.6	54.0	54.0	98.4	44.4
Total Split (%)	18.0%	45.0%	45.0%	82.0%	37.0%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	50.6	47.7	116.1	59.7
Actuated g/C Ratio	0.08	0.42	0.40	0.97	0.50
v/c Ratio	0.01	0.30	0.88	0.43	0.53
Control Delay (s/veh)	51.0	20.2	41.5	1.2	48.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.0	20.2	41.5	1.2	48.6
LOS	D	C	D	A	D
Approach Delay (s/veh)	20.5			19.2	48.6
Approach LOS	C			B	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 48 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay (s/veh): 26.4	Intersection LOS: C
Intersection Capacity Utilization 76.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	194	1128	1393	867	7
Future Volume (veh/h)	2	194	1128	1393	867	7
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	211	1226	1514	942	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	179	756	1300	2960	1509	13
Arrive On Green	0.10	0.10	0.37	0.82	0.82	0.82
Sat Flow, veh/h	1810	1610	3510	3705	3763	31
Grp Volume(v), veh/h	2	211	1226	1514	464	486
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1894
Q Serve(g_s), s	0.1	9.6	40.6	15.6	11.2	11.2
Cycle Q Clear(g_c), s	0.1	9.6	40.6	15.6	11.2	11.2
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	179	756	1300	2960	743	779
V/C Ratio(X)	0.01	0.28	0.94	0.51	0.62	0.62
Avail Cap(c_a), veh/h	256	824	1445	2960	743	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.70	0.70	0.89	0.89
Uniform Delay (d), s/veh	48.7	19.4	36.6	3.3	7.2	7.2
Incr Delay (d2), s/veh	0.0	0.2	8.7	0.4	3.5	3.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	10.8	18.2	3.7	3.3	3.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.8	19.6	45.3	3.8	10.8	10.6
LnGrp LOS	D	B	D	A	B	B
Approach Vol, veh/h	213			2740	950	
Approach Delay, s/veh	19.9			22.3	10.7	
Approach LOS	B			C	B	

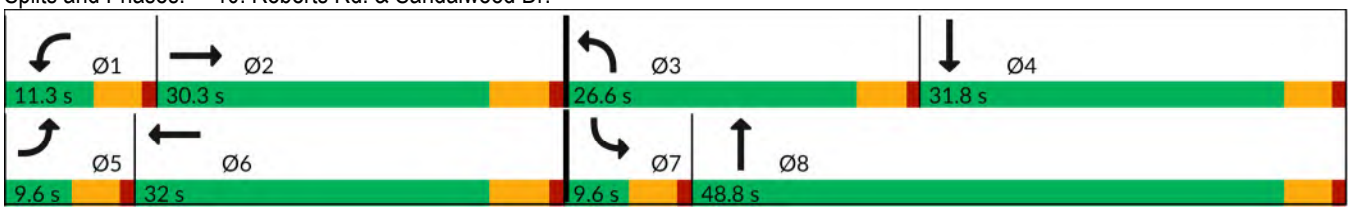
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		103.5		16.5	49.0	54.5
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	49.4	39.3
Max Q Clear Time (g_c+I1), s		17.6		11.6	42.6	13.2
Green Ext Time (p_c), s		17.7		0.3	1.9	6.8

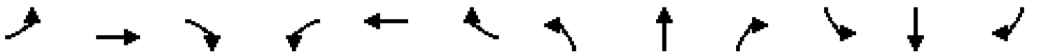
Intersection Summary		
HCM 7th Control Delay, s/veh	19.4	
HCM 7th LOS	B	

Lane Group	EBL	EBT	WBT	SBL	SBT	Ø1	Ø3	Ø8
Lane Configurations								
Traffic Volume (vph)	10	1046	2579	57	0			
Future Volume (vph)	10	1046	2579	57	0			
Turn Type	Prot	NA	NA	Prot	NA			
Protected Phases	5	2	6	7	4	1	3	8
Permitted Phases								
Detector Phase	5	2	6	7	4			
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	27.4	27.4	9.6	31.6	9.6	26.6	31.6
Total Split (s)	9.6	30.3	32.0	9.6	31.8	11.3	26.6	48.8
Total Split (%)	9.6%	30.3%	32.0%	9.6%	31.8%	11%	27%	49%
Yellow Time (s)	3.6	4.4	4.4	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.6	5.4	5.4	4.6	4.6			
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min
Act Effct Green (s)	5.2	29.1	27.8	5.2	12.8			
Actuated g/C Ratio	0.09	0.50	0.48	0.09	0.22			
v/c Ratio	0.07	0.43	1.16	0.20	0.01			
Control Delay (s/veh)	31.5	11.1	94.6	30.6	0.0			
Queue Delay	0.0	0.0	0.0	0.0	0.0			
Total Delay (s/veh)	31.5	11.1	94.6	30.6	0.0			
LOS	C	B	F	C	A			
Approach Delay (s/veh)		11.3	94.6		28.3			
Approach LOS		B	F		C			

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 57.7	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay (s/veh): 70.2	Intersection LOS: E
Intersection Capacity Utilization 68.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1046	0	0	2579	69	0	0	0	57	0	5
Future Volume (veh/h)	10	1046	0	0	2579	69	0	0	0	57	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	1137	0	0	2803	75	0	0	0	62	0	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	26	3462	0	7	2893	77	7	4	0	206	0	199
Arrive On Green	0.01	0.67	0.00	0.00	0.56	0.56	0.00	0.00	0.00	0.06	0.00	0.12
Sat Flow, veh/h	1810	5358	0	3510	5195	138	3510	1900	0	3510	0	1610
Grp Volume(v), veh/h	11	1137	0	0	1858	1020	0	0	0	62	0	5
Grp Sat Flow(s),veh/h/ln	1810	1729	0	1755	1729	1875	1755	1900	0	1755	0	1610
Q Serve(g_s), s	0.3	4.5	0.0	0.0	24.6	25.3	0.0	0.0	0.0	0.8	0.0	0.1
Cycle Q Clear(g_c), s	0.3	4.5	0.0	0.0	24.6	25.3	0.0	0.0	0.0	0.8	0.0	0.1
Prop In Lane	1.00		0.00	1.00		0.07	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	26	3462	0	7	1926	1044	7	4	0	206	0	199
V/C Ratio(X)	0.43	0.33	0.00	0.00	0.96	0.98	0.00	0.00	0.00	0.30	0.00	0.03
Avail Cap(c_a), veh/h	189	3462	0	492	1926	1044	1617	1758	0	367	0	917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.4	3.4	0.0	0.0	10.1	10.3	0.0	0.0	0.0	21.5	0.0	18.4
Incr Delay (d2), s/veh	4.1	0.1	0.0	0.0	13.2	22.3	0.0	0.0	0.0	0.3	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.0	0.0	8.6	12.2	0.0	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.5	3.4	0.0	0.0	23.3	32.6	0.0	0.0	0.0	21.8	0.0	18.5
LnGrp LOS	C	A			C	C				C		B
Approach Vol, veh/h		1148			2878			0			67	
Approach Delay, s/veh		3.7			26.6			0.0			21.6	
Approach LOS		A			C						C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	37.3	0.0	10.5	5.3	32.0	7.4	3.1
Change Period (Y+Rc), s	4.6	5.4	4.6	4.6	4.6	5.4	4.6	4.6
Max Green Setting (Gmax), s	6.7	24.9	22.0	27.2	5.0	26.6	5.0	44.2
Max Q Clear Time (g_c+I1), s	0.0	6.5	0.0	2.1	2.3	27.3	2.8	0.0
Green Ext Time (p_c), s	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	20.1
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	835	16	127	635	23	150
Future Vol, veh/h	835	16	127	635	23	150
Conflicting Peds, #/hr	0	2	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	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	960	18	146	730	26	172

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	980	0	1993	971
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	1022	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	712	-	67	309
Stage 1	-	-	-	-	370	-
Stage 2	-	-	-	-	350	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	711	-	44	309
Mov Cap-2 Maneuver	-	-	-	-	148	-
Stage 1	-	-	-	-	370	-
Stage 2	-	-	-	-	229	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.89	48.18
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	270	-	-	300	-
HCM Lane V/C Ratio	0.737	-	-	0.205	-
HCM Control Delay (s/veh)	48.2	-	-	11.4	0
HCM Lane LOS	E	-	-	B	A
HCM 95th %tile Q(veh)	5.3	-	-	0.8	-

Intersection	
Int Delay, s/veh	16

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	694	292	395	445	0	0	0	0	343	6	318
Future Vol, veh/h	0	694	292	395	445	0	0	0	0	343	6	318
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	816	344	465	524	0	0	0	0	404	7	374

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1161	0	0	2269	2614	524
Stage 1	-	-	-	-	-	-	1453	1453	-
Stage 2	-	-	-	-	-	-	816	1161	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	609	-	0	~ 45	25	558
Stage 1	0	-	-	-	-	0	~ 217	197	-
Stage 2	0	-	-	-	-	0	438	272	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	609	-	-	~ 11	0	558
Mov Cap-2 Maneuver	-	-	-	-	-	-	434	0	-
Stage 1	-	-	-	-	-	-	~ 217	0	-
Stage 2	-	-	-	-	-	-	~ 104	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	12.88	43.55
HCM LOS			E

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	609	-	434	558
HCM Lane V/C Ratio	-	-	0.763	-	0.946	0.671
HCM Control Delay (s/veh)	-	-	27.4	-	61.7	23.6
HCM Lane LOS	-	-	D	-	F	C
HCM 95th %tile Q(veh)	-	-	7	-	11	5

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

Intersection	
Int Delay, s/veh	11.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	469	568	0	0	642	605	198	0	117	0	0	0
Future Vol, veh/h	469	568	0	0	642	605	198	0	117	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	504	611	0	0	690	651	213	0	126	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1341	0	-	-	-	0	2310	2960	611
Stage 1	-	-	-	-	-	-	1619	1619	-
Stage 2	-	-	-	-	-	-	690	1341	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	521	-	0	0	-	-	~ 43	15	498
Stage 1	-	-	0	0	-	-	~ 180	163	-
Stage 2	-	-	0	0	-	-	501	223	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	521	-	-	-	-	-	~ 1	0	498
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ -558	0	-
Stage 1	-	-	-	-	-	-	~ 6	0	-
Stage 2	-	-	-	-	-	-	501	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v27.23		0	5.65
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	+	498	521	-	-	-
HCM Lane V/C Ratio	-	0.253	0.969	-	-	-
HCM Control Delay (s/veh)	0.3	14.7	60.2	-	-	-
HCM Lane LOS	A	B	F	-	-	-
HCM 95th %tile Q(veh)	-	1	12.8	-	-	-

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

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	1128	2567	76	0	81
Future Vol, veh/h	0	1128	2567	76	0	81
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1226	2790	83	0	88

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1395
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	380
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	380
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	17.31
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	380
HCM Lane V/C Ratio	-	-	-	0.232
HCM Control Delay (s/veh)	-	-	-	17.3
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.9

Intersection	
Intersection Delay, s/veh	1011.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	775	353	209	1575	0	0	0	0	157	13	1068
Future Vol, veh/h	0	775	353	209	1575	0	0	0	0	157	13	1068
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	957	436	258	1944	0	0	0	0	194	16	1319
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

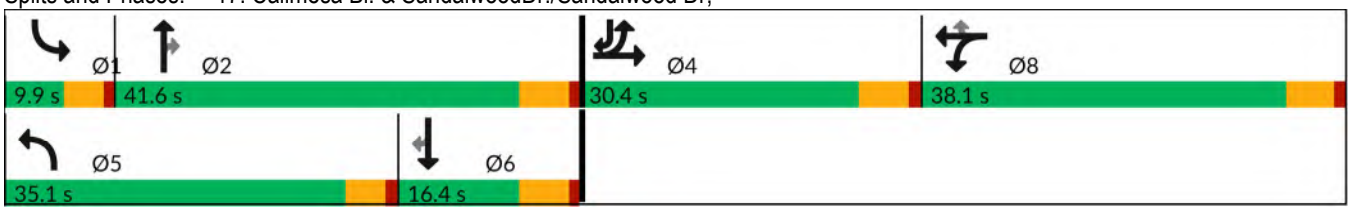
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	383.1	1540	822.4
HCM LOS	F	F	F

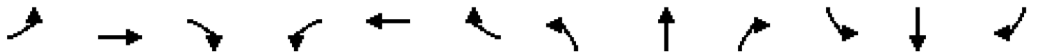
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	12%	13%
Vol Thru, %	100%	0%	88%	1%
Vol Right, %	0%	100%	0%	86%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	775	353	1784	1238
LT Vol	0	0	209	157
Through Vol	775	0	1575	13
RT Vol	0	353	0	1068
Lane Flow Rate	957	436	2202	1528
Geometry Grp	5	5	4a	2
Degree of Util (X)	2.019	0.835	4.355	2.76
Departure Headway (Hd)	21.085	20.277	11.918	10.792
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	182	183	330	352
Service Time	18.785	17.977	9.918	8.792
HCM Lane V/C Ratio	5.258	2.383	6.673	4.341
HCM Control Delay, s/veh	520.9	80.7	1540	822.4
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	26.6	5.8	130.5	77.8

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	288	244	94	286	46	1116	803	148	19	214	478
Future Volume (vph)	288	244	94	286	46	1116	803	148	19	214	478
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4	30.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	24.2	24.2	24.0	24.0	24.0	30.6	42.6	42.6	5.2	11.0	40.7
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22	0.28	0.38	0.38	0.05	0.10	0.37
v/c Ratio	0.82	0.80	0.27	0.79	0.11	2.55	0.66	0.24	0.26	1.29	0.81
Control Delay (s/veh)	61.5	35.1	37.5	55.3	0.5	721.2	33.2	8.9	61.7	203.6	35.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	61.5	35.1	37.5	55.3	0.5	721.2	33.2	8.9	61.7	203.6	35.2
LOS	E	D	D	E	A	F	C	A	E	F	D
Approach Delay (s/veh)		42.9		45.5			402.9			86.6	
Approach LOS		D		D			F			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 110.8	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 2.55	
Intersection Signal Delay (s/veh): 233.2	Intersection LOS: F
Intersection Capacity Utilization 122.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	244	343	94	286	46	1116	803	148	19	214	478
Future Volume (veh/h)	288	244	343	94	286	46	1116	803	148	19	214	478
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	325	279	372	107	325	42	1268	912	138	22	243	466
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	415	435	369	362	380	317	506	1292	575	40	192	531
Arrive On Green	0.23	0.23	0.23	0.20	0.20	0.20	0.28	0.36	0.36	0.02	0.10	0.10
Sat Flow, veh/h	1810	1900	1610	1810	1900	1587	1810	3610	1607	1810	1900	1610
Grp Volume(v), veh/h	325	279	372	107	325	42	1268	912	138	22	243	466
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1587	1810	1805	1607	1810	1900	1610
Q Serve(g_s), s	18.4	14.5	25.0	5.5	18.0	2.4	30.5	23.7	6.6	1.3	11.0	11.0
Cycle Q Clear(g_c), s	18.4	14.5	25.0	5.5	18.0	2.4	30.5	23.7	6.6	1.3	11.0	11.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	415	435	369	362	380	317	506	1292	575	40	192	531
V/C Ratio(X)	0.78	0.64	1.01	0.30	0.86	0.13	2.51	0.71	0.24	0.55	1.27	0.88
Avail Cap(c_a), veh/h	415	435	369	542	569	476	506	1292	575	88	192	531
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.5	38.0	42.1	37.1	42.1	35.9	39.3	30.1	24.6	52.8	49.1	28.2
Incr Delay (d2), s/veh	9.5	3.2	49.0	0.5	8.1	0.2	684.0	1.8	0.2	4.2	155.4	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	6.9	14.6	2.4	9.0	0.9	109.1	10.1	2.5	0.6	13.4	14.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.0	41.2	91.0	37.6	50.3	36.1	723.4	31.9	24.8	57.0	204.5	43.5
LnGrp LOS	D	D	F	D	D	D	F	C	C	E	F	D
Approach Vol, veh/h		976			474			2318			731	
Approach Delay, s/veh		62.8			46.1			409.7			97.4	
Approach LOS		E			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	44.5		30.4	35.1	16.4		27.2				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7				
Max Q Clear Time (g_c+I1), s	3.3	25.7		27.0	32.5	13.0		20.0				
Green Ext Time (p_c), s	0.0	4.7		0.0	0.0	0.0		1.8				

Intersection Summary		
HCM 7th Control Delay, s/veh	245.4	
HCM 7th LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	690.2
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	146	506	156	916	1150	5
Future Vol, veh/h	146	506	156	916	1150	5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	172	595	184	1078	1353	6
Number of Lanes	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	235.8	693.9	943.3
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	100%	0%	0%	15%
Vol Thru, %	0%	0%	22%	85%
Vol Right, %	0%	100%	78%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1150	5	652	1072
LT Vol	1150	0	0	156
Through Vol	0	0	146	916
RT Vol	0	5	506	0
Lane Flow Rate	1353	6	767	1261
Geometry Grp	5	5	2	2
Degree of Util (X)	3.043	0.011	1.391	2.46
Departure Headway (Hd)	10.247	8.976	14.676	12.882
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	365	401	253	303
Service Time	7.947	6.676	12.676	10.882
HCM Lane V/C Ratio	3.707	0.015	3.032	4.162
HCM Control Delay, s/veh	947.3	11.8	235.8	693.9
HCM Lane LOS	F	B	F	F
HCM 95th-tile Q	94	0	18.8	55.6

Intersection	
Intersection Delay, s/veh	29.8
Intersection LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	261	69	65	342	91
Future Vol, veh/h	17	261	69	65	342	91
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	24	368	97	92	482	128
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	16.4	11.3	44.1
HCM LOS	C	B	E

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	6%	79%
Vol Thru, %	51%	0%	21%
Vol Right, %	49%	94%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	134	278	433
LT Vol	0	17	342
Through Vol	69	0	91
RT Vol	65	261	0
Lane Flow Rate	189	392	610
Geometry Grp	1	1	1
Degree of Util (X)	0.3	0.596	0.933
Departure Headway (Hd)	5.716	5.484	5.51
Convergence, Y/N	Yes	Yes	Yes
Cap	625	654	659
Service Time	3.792	3.555	3.562
HCM Lane V/C Ratio	0.302	0.599	0.926
HCM Control Delay, s/veh	11.3	16.4	44.1
HCM Lane LOS	B	C	E
HCM 95th-tile Q	1.3	3.9	12.6

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	376	319	486	527	0	0	0	0	0	0	0
Future Vol, veh/h	0	376	319	486	527	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	448	380	579	627	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	827	0	0	2232	2612	627
Stage 1	-	-	-	-	-	-	1785	1785	-
Stage 2	-	-	-	-	-	-	448	827	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	813	-	0	48	25	487
Stage 1	0	-	-	-	-	0	149	135	-
Stage 2	0	-	-	-	-	0	648	389	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	813	-	-	0	0	487
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	149	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	9.4	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 529	-	-
HCM Lane V/C Ratio	-	-	0.712	-	-
HCM Control Delay (s/veh)	-	-	19.6	0	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	6.1	-	-

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

Intersection	
Int Delay, s/veh	127.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	377	0	0	802	0	211	0	301	0	0	0
Future Vol, veh/h	0	377	0	0	802	0	211	0	301	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	419	0	0	891	0	234	0	334	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	891	0	-	-	-	0	1310	1310	419
Stage 1	-	-	-	-	-	-	419	419	-
Stage 2	-	-	-	-	-	-	891	891	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	769	-	0	0	-	-	~ 177	160	639
Stage 1	-	-	0	0	-	-	668	594	-
Stage 2	-	-	0	0	-	-	404	363	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	769	-	-	-	-	-	~ 177	0	639
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 177	0	-
Stage 1	-	-	-	-	-	-	668	0	-
Stage 2	-	-	-	-	-	-	404	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	$ 421.81
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	308	769	-	-	-
HCM Lane V/C Ratio	1.847	-	-	-	-
HCM Control Delay (s/veh)	$ 421.8	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	38.2	0	-	-	-

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

Intersection	
Intersection Delay, s/veh	433.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	182	486	10	35	664	196	11	443	210	82	44	127
Future Vol, veh/h	182	486	10	35	664	196	11	443	210	82	44	127
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	194	517	11	37	706	209	12	471	223	87	47	135
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	397.9	622.7	358.6	59.3
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	27%	4%	32%
Vol Thru, %	67%	72%	74%	17%
Vol Right, %	32%	1%	22%	50%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	664	678	895	253
LT Vol	11	182	35	82
Through Vol	443	486	664	44
RT Vol	210	10	196	127
Lane Flow Rate	706	721	952	269
Geometry Grp	1	1	1	1
Degree of Util (X)	1.694	1.776	2.299	0.7
Departure Headway (Hd)	13.428	14.744	12.99	19.843
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	275	252	295	186
Service Time	11.428	12.744	10.99	17.843
HCM Lane V/C Ratio	2.567	2.861	3.227	1.446
HCM Control Delay, s/veh	358.6	397.9	622.7	59.3
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	29.1	29.2	49.8	4.3

Intersection	
Intersection Delay, s/veh	2.9
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	2	53	30
Demand Flow Rate, veh/h	2	53	30
Vehicles Circulating, veh/h	51	0	2
Vehicles Exiting, veh/h	2	32	51
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	2.8	2.9	2.8
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	2	53	30
Cap Entry Lane, veh/h	1310	1380	1377
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	2	53	30
Cap Entry, veh/h	1310	1380	1377
V/C Ratio	0.002	0.038	0.022
Control Delay, s/veh	2.8	2.9	2.8
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	3.4
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	0	153	92
Demand Flow Rate, veh/h	0	153	92
Vehicles Circulating, veh/h	92	0	0
Vehicles Exiting, veh/h	0	92	153
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	0.0	3.5	3.1
Approach LOS	-	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	0	153	92
Cap Entry Lane, veh/h	1256	1380	1380
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	0	153	92
Cap Entry, veh/h	1256	1380	1380
V/C Ratio	0.000	0.111	0.067
Control Delay, s/veh	2.9	3.5	3.1
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	4.7
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	126	384	141
Demand Flow Rate, veh/h	126	384	141
Vehicles Circulating, veh/h	196	27	109
Vehicles Exiting, veh/h	215	223	213
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.1	5.2	3.9
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	126	384	141
Cap Entry Lane, veh/h	1130	1342	1235
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	126	384	141
Cap Entry, veh/h	1130	1342	1235
V/C Ratio	0.112	0.286	0.114
Control Delay, s/veh	4.1	5.2	3.9
LOS	A	A	A
95th %tile Queue, veh	0	1	0

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	44	72	127	146	45
Future Vol, veh/h	26	44	72	127	146	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	28	48	78	138	159	49

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	478	183	208	0	-	0
Stage 1	183	-	-	-	-	-
Stage 2	295	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	550	864	1375	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	760	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	519	864	1375	-	-	-
Mov Cap-2 Maneuver	519	-	-	-	-	-
Stage 1	805	-	-	-	-	-
Stage 2	760	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.84	2.81	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1375	-	693	-	-
HCM Lane V/C Ratio	0.057	-	0.11	-	-
HCM Control Delay (s/veh)	7.8	-	10.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	-	-

Intersection	
Intersection Delay, s/veh	4.1
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	143	432	206
Demand Flow Rate, veh/h	143	432	206
Vehicles Circulating, veh/h	190	10	225
Vehicles Exiting, veh/h	241	323	217
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.9	3.8	5.0
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.070	0.930	0.521	0.479	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	10	133	225	207	206
Cap Entry Lane, veh/h	1195	1195	1407	1407	1097
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	10	133	225	207	206
Cap Entry, veh/h	1195	1195	1407	1407	1097
V/C Ratio	0.008	0.111	0.160	0.147	0.188
Control Delay, s/veh	3.1	3.9	3.8	3.7	5.0
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1

Intersection	
Int Delay, s/veh	396.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↱		↰↑	
Traffic Vol, veh/h	0	571	799	123	159	0
Future Vol, veh/h	0	571	799	123	159	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1020	1427	220	284	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1646	0	-	0	2556	1537
Stage 1	-	-	-	-	1537	-
Stage 2	-	-	-	-	1020	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	398	-	-	-	~ 30	144
Stage 1	-	-	-	-	~ 198	-
Stage 2	-	-	-	-	351	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	398	-	-	-	~ 30	144
Mov Cap-2 Maneuver	-	-	-	-	~ 30	-
Stage 1	-	-	-	-	~ 198	-
Stage 2	-	-	-	-	351	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	$ 4119.6
HCM LOS			F

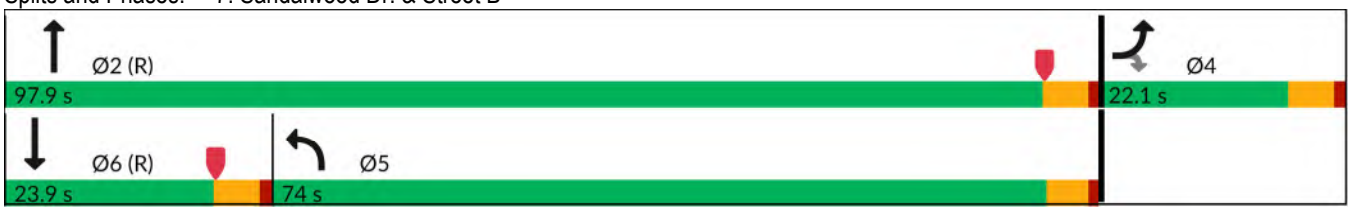
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	398	-	-	-	30
HCM Lane V/C Ratio	-	-	-	-	9.582
HCM Ctrl Dly (s/v)	0	-	-	-	$ 4119.6
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	34.8

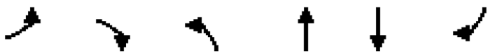
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	329	438		
Future Volume (vph)	329	438		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	22.1	74.0	97.9	23.9
Total Split (%)	18.4%	61.7%	82%	20%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lag		Lead
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	21.8		
Actuated g/C Ratio	0.08	0.18		
v/c Ratio	0.18	0.75		
Control Delay (s/veh)	0.2	42.9		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.2	42.9		
LOS	A	D		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116.9 (97%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay (s/veh): 24.6	Intersection LOS: C
Intersection Capacity Utilization 16.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	329	438	0	0	0
Future Volume (veh/h)	0	329	438	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	255	476	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	195	306	2134	1533	298	0
Arrive On Green	0.00	0.11	0.61	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	1900	0
Grp Volume(v), veh/h	0	255	476	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	10.6	7.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.6	7.4	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	195	306	2134	1533	298	0
V/C Ratio(X)	0.00	0.83	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	256	401	2134	1533	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.99	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	52.5	10.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.9	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.5	2.8	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	63.4	10.7	0.0	0.0	0.0
LnGrp LOS		E	B			
Approach Vol, veh/h	255			476	0	
Approach Delay, s/veh	63.4			10.7	0.0	
Approach LOS	E			B		

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		101.9		18.1	78.0	23.9
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	69.4	* 19
Max Q Clear Time (g_c+I1), s		0.0		12.6	9.4	0.0
Green Ext Time (p_c), s		0.0		0.4	0.9	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	29.1
HCM 7th LOS	C

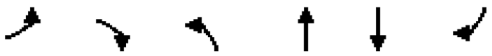
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	8	678	214	431	324
Future Volume (vph)	8	678	214	431	324
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	22.1	9.6	15.1	22.1
Total Split (s)	63.0	63.0	20.0	57.0	37.0
Total Split (%)	52.5%	52.5%	16.7%	47.5%	30.8%
Yellow Time (s)	4.1	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	33.7	33.7	12.3	76.1	59.2
Actuated g/C Ratio	0.28	0.28	0.10	0.63	0.49
v/c Ratio	0.02	0.92	0.65	0.20	0.20
Control Delay (s/veh)	22.3	29.6	59.4	11.7	21.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.3	29.6	59.4	11.7	21.5
LOS	C	C	E	B	C
Approach Delay (s/veh)	29.5			27.6	21.5
Approach LOS	C			C	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 24.1 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 27.2	Intersection LOS: C
Intersection Capacity Utilization 59.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street N



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	678	214	431	324	4
Future Volume (veh/h)	8	678	214	431	324	4
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	9	737	233	468	352	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	851	757	296	1605	1177	13
Arrive On Green	0.47	0.47	0.03	0.15	0.64	0.64
Sat Flow, veh/h	1810	1610	3510	3705	3751	42
Grp Volume(v), veh/h	9	737	233	468	174	182
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1893
Q Serve(g_s), s	0.3	53.6	7.9	13.9	5.1	5.1
Cycle Q Clear(g_c), s	0.3	53.6	7.9	13.9	5.1	5.1
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	851	757	296	1605	581	609
V/C Ratio(X)	0.01	0.97	0.79	0.29	0.30	0.30
Avail Cap(c_a), veh/h	873	777	451	1605	581	609
HCM Platoon Ratio	1.00	1.00	0.33	0.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.99	0.99
Uniform Delay (d), s/veh	16.9	31.0	57.3	34.4	15.4	15.4
Incr Delay (d2), s/veh	0.0	25.4	2.4	0.5	1.3	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	0.1	42.9	3.8	6.8	2.1	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.9	56.5	59.7	34.8	16.7	16.6
LnGrp LOS	B	E	E	C	B	B
Approach Vol, veh/h	746			701	356	
Approach Delay, s/veh	56.0			43.1	16.7	
Approach LOS	E			D	B	

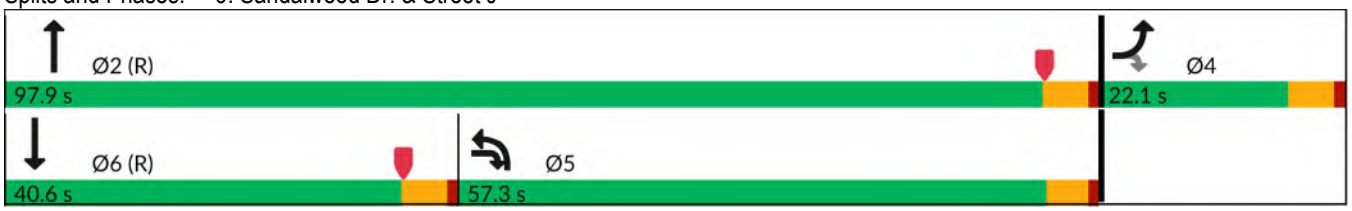
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		58.4		61.6	14.7	43.7
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		51.9		57.9	15.4	31.9
Max Q Clear Time (g_c+I1), s		15.9		55.6	9.9	7.1
Green Ext Time (p_c), s		3.5		0.8	0.2	2.1

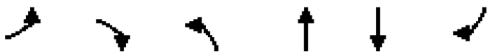
Intersection Summary	
HCM 7th Control Delay, s/veh	43.2
HCM 7th LOS	D

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	8	1019	323	637	998
Future Volume (vph)	8	1019	323	637	998
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	9.6	15.1	22.1
Total Split (s)	22.1	57.3	57.3	97.9	40.6
Total Split (%)	18.4%	47.8%	47.8%	81.6%	33.8%
Yellow Time (s)	4.1	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.6	4.6	5.1	5.1
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	55.7	52.7	116.0	54.6
Actuated g/C Ratio	0.08	0.46	0.44	0.97	0.46
v/c Ratio	0.06	1.47	0.23	0.20	0.66
Control Delay (s/veh)	51.9	246.6	21.5	0.7	27.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.9	246.6	21.5	0.7	27.4
LOS	D	F	C	A	C
Approach Delay (s/veh)	245.1			7.7	27.4
Approach LOS	F			A	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74 (62%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.47	
Intersection Signal Delay (s/veh): 95.9	Intersection LOS: F
Intersection Capacity Utilization 98.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	1019	323	637	998	4
Future Volume (veh/h)	8	1019	323	637	998	4
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	9	673	351	692	1085	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	151	929	1732	3002	1091	4
Arrive On Green	0.08	0.08	0.49	0.83	0.10	0.10
Sat Flow, veh/h	1810	1610	3510	3705	3784	14
Grp Volume(v), veh/h	9	673	351	692	531	558
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1898
Q Serve(g_s), s	0.5	0.0	6.8	4.8	35.3	35.3
Cycle Q Clear(g_c), s	0.5	0.0	6.8	4.8	35.3	35.3
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	151	929	1732	3002	534	561
V/C Ratio(X)	0.06	0.72	0.20	0.23	0.99	0.99
Avail Cap(c_a), veh/h	256	1022	1732	3002	534	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.94	0.94	0.67	0.67
Uniform Delay (d), s/veh	50.7	18.5	17.1	2.1	54.0	54.0
Incr Delay (d2), s/veh	0.2	2.3	0.0	0.2	30.5	29.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	23.0	2.6	1.0	21.6	22.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	50.8	20.8	17.1	2.3	84.5	83.8
LnGrp LOS	D	C	B	A	F	F
Approach Vol, veh/h	682			1043	1089	
Approach Delay, s/veh	21.2			7.3	84.2	
Approach LOS	C			A	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		104.9		15.1	64.3	40.6
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	52.7	* 36
Max Q Clear Time (g_c+I1), s		6.8		2.5	8.8	37.3
Green Ext Time (p_c), s		5.2		2.5	0.6	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	40.4
HCM 7th LOS	D

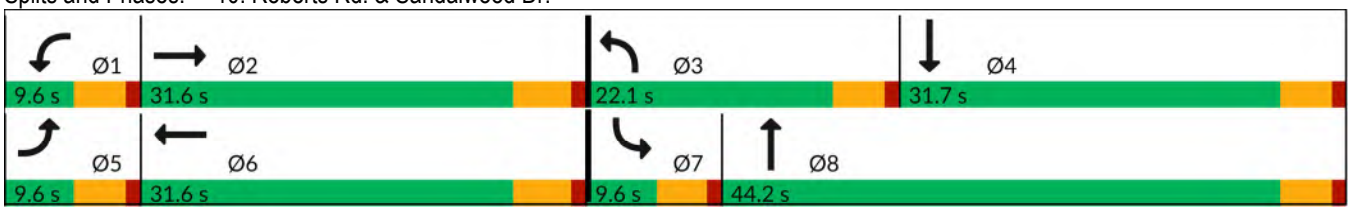
Notes

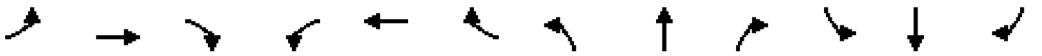
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	SBL	SBT	Ø1	Ø3	Ø8
Lane Configurations								
Traffic Volume (vph)	22	1902	951	177	0			
Future Volume (vph)	22	1902	951	177	0			
Turn Type	Prot	NA	NA	Prot	NA			
Protected Phases	5	2	6	7	4	1	3	8
Permitted Phases								
Detector Phase	5	2	6	7	4			
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	27.1	27.1	9.6	31.6	9.6	22.1	31.6
Total Split (s)	9.6	31.6	31.6	9.6	31.7	9.6	22.1	44.2
Total Split (%)	10.1%	33.3%	33.3%	10.1%	33.4%	10%	23%	47%
Yellow Time (s)	3.6	4.1	4.1	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.6	5.1	5.1	4.6	4.6			
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	None	None	None
Act Effct Green (s)	5.3	32.2	30.9	9.8	14.2			
Actuated g/C Ratio	0.09	0.57	0.55	0.17	0.25			
v/c Ratio	0.14	0.70	0.43	0.32	0.02			
Control Delay (s/veh)	29.5	12.5	10.8	26.8	0.1			
Queue Delay	0.0	0.0	0.0	0.0	0.0			
Total Delay (s/veh)	29.5	12.5	10.8	26.8	0.1			
LOS	C	B	B	C	A			
Approach Delay (s/veh)		12.7	10.8		24.8			
Approach LOS		B	B		C			

Intersection Summary	
Cycle Length: 95	
Actuated Cycle Length: 56.6	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay (s/veh): 12.8	Intersection LOS: B
Intersection Capacity Utilization 53.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1902	0	0	951	157	0	0	0	177	0	15
Future Volume (veh/h)	22	1902	0	0	951	157	0	0	0	177	0	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	24	2067	0	0	1034	171	0	0	0	192	0	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	52	3022	0	8	2031	335	8	5	0	352	0	328
Arrive On Green	0.03	0.58	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.10	0.00	0.20
Sat Flow, veh/h	1810	5358	0	3510	4484	740	3510	1900	0	3510	0	1610
Grp Volume(v), veh/h	24	2067	0	0	797	408	0	0	0	192	0	16
Grp Sat Flow(s),veh/h/ln	1810	1729	0	1755	1729	1767	1755	1900	0	1755	0	1610
Q Serve(g_s), s	0.6	12.6	0.0	0.0	7.5	7.5	0.0	0.0	0.0	2.4	0.0	0.4
Cycle Q Clear(g_c), s	0.6	12.6	0.0	0.0	7.5	7.5	0.0	0.0	0.0	2.4	0.0	0.4
Prop In Lane	1.00		0.00	1.00		0.42	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	52	3022	0	8	1566	800	8	5	0	352	0	328
V/C Ratio(X)	0.46	0.68	0.00	0.00	0.51	0.51	0.00	0.00	0.00	0.55	0.00	0.05
Avail Cap(c_a), veh/h	199	3022	0	386	2015	1029	1351	1654	0	386	0	959
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	6.6	0.0	0.0	8.8	8.9	0.0	0.0	0.0	19.5	0.0	14.6
Incr Delay (d2), s/veh	2.4	1.3	0.0	0.0	0.3	0.5	0.0	0.0	0.0	0.5	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.6	0.0	0.0	1.9	2.0	0.0	0.0	0.0	0.8	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.1	7.9	0.0	0.0	9.1	9.4	0.0	0.0	0.0	20.0	0.0	14.6
LnGrp LOS	C	A			A	A				B		B
Approach Vol, veh/h		2091			1205			0			208	
Approach Delay, s/veh		8.0			9.2			0.0			19.6	
Approach LOS		A			A						B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	31.6	0.0	13.9	5.9	25.7	9.2	4.7
Change Period (Y+Rc), s	4.6	5.1	4.6	4.6	4.6	5.1	4.6	4.6
Max Green Setting (Gmax), s	5.0	26.5	17.5	27.1	5.0	26.5	5.0	39.6
Max Q Clear Time (g_c+I1), s	0.0	14.6	0.0	2.4	2.6	9.5	4.4	0.0
Green Ext Time (p_c), s	0.0	9.6	0.0	0.0	0.0	7.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	9.1
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	693	11	101	807	14	70
Future Vol, veh/h	693	11	101	807	14	70
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	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	797	13	116	928	16	80

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	809	0	1963	803
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	1160	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	825	-	70	387
Stage 1	-	-	-	-	444	-
Stage 2	-	-	-	-	301	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	825	-	50	387
Mov Cap-2 Maneuver	-	-	-	-	151	-
Stage 1	-	-	-	-	444	-
Stage 2	-	-	-	-	214	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.12	22.02
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	307	-	-	200	-
HCM Lane V/C Ratio	0.314	-	-	0.141	-
HCM Control Delay (s/veh)	22	-	-	10.1	0
HCM Lane LOS	C	-	-	B	A
HCM 95th %tile Q(veh)	1.3	-	-	0.5	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	572	191	307	506	0	0	0	0	503	3	402
Future Vol, veh/h	0	572	191	307	506	0	0	0	0	503	3	402
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	609	203	327	538	0	0	0	0	535	3	428

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	812	0	0	1800	2003	538
Stage 1	-	-	-	-	-	-	1191	1191	-
Stage 2	-	-	-	-	-	-	609	812	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	824	-	0	~ 89	60	547
Stage 1	0	-	-	-	-	0	~ 291	263	-
Stage 2	0	-	-	-	-	0	547	395	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	824	-	-	~ 54	0	547
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ -9	0	-
Stage 1	-	-	-	-	-	-	~ 291	0	-
Stage 2	-	-	-	-	-	-	~ 330	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	4.61	
HCM LOS			-

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	824	-	+	547
HCM Lane V/C Ratio	-	-	0.397	-	-	0.782
HCM Control Delay (s/veh)	-	-	12.2	-	-	31.2
HCM Lane LOS	-	-	B	-	-	D
HCM 95th %tile Q(veh)	-	-	1.9	-	-	7.2

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

Intersection	
Int Delay, s/veh	95.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	332	743	0	0	614	374	200	2	307	0	0	0
Future Vol, veh/h	332	743	0	0	614	374	200	2	307	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	353	790	0	0	653	398	213	2	327	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1051	0	-	-	-	0	2150	2548	790
Stage 1	-	-	-	-	-	-	1497	1497	-
Stage 2	-	-	-	-	-	-	653	1051	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	670	-	0	0	-	-	~ 54	27	393
Stage 1	-	-	0	0	-	-	~ 207	188	-
Stage 2	-	-	0	0	-	-	522	306	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	670	-	-	-	-	-	~ 25	0	393
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 67	0	-
Stage 1	-	-	-	-	-	-	~ 98	0	-
Stage 2	-	-	-	-	-	-	522	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	5	0	$ 473.74
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	67	393	670	-	-	-
HCM Lane V/C Ratio	3.206	0.831	0.527	-	-	-
HCM Control Delay (s/veh)	$ 1124	45.9	16.2	-	-	-
HCM Lane LOS	F	E	C	-	-	-
HCM 95th %tile Q(veh)	22.1	7.7	3.1	-	-	-

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

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	2233	1094	70	0	14
Future Vol, veh/h	0	2233	1094	70	0	14
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	3059	1499	96	0	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	749
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	476
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	476
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.88
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	476
HCM Lane V/C Ratio	-	-	-	0.04
HCM Control Delay (s/veh)	-	-	-	12.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Intersection Delay, s/veh	576.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1284	949	359	720	0	0	0	0	280	7	444
Future Vol, veh/h	0	1284	949	359	720	0	0	0	0	280	7	444
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1352	999	378	758	0	0	0	0	295	7	467
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

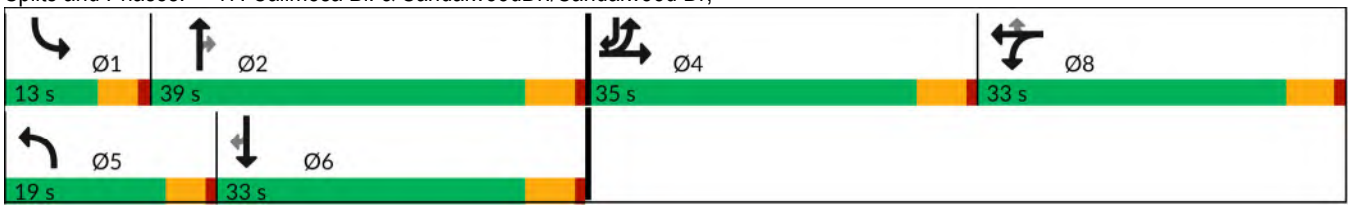
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	685.4	586.3	228.5
HCM LOS	F	F	F

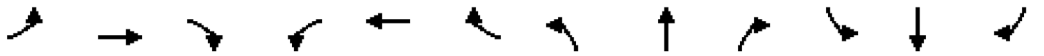
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	33%	38%
Vol Thru, %	100%	0%	67%	1%
Vol Right, %	0%	100%	0%	61%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1284	949	1079	731
LT Vol	0	0	359	280
Through Vol	1284	0	720	7
RT Vol	0	949	0	444
Lane Flow Rate	1352	999	1136	769
Geometry Grp	5	5	4a	2
Degree of Util (X)	2.852	1.914	2.26	1.434
Departure Headway (Hd)	10.924	10.179	5.904	7.622
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	351	370	625	485
Service Time	8.624	7.879	3.904	5.622
HCM Lane V/C Ratio	3.852	2.7	1.818	1.586
HCM Control Delay, s/veh	863.5	444.5	586.3	228.5
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	80.7	45.9	101.1	33.3

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	374	177	53	169	29	533	394	197	35	511	446
Future Volume (vph)	374	177	53	169	29	533	394	197	35	511	446
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0	35.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%	29.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	29.6	29.6	15.3	15.3	15.3	14.4	39.5	39.5	6.6	27.6	57.3
Actuated g/C Ratio	0.27	0.27	0.14	0.14	0.14	0.13	0.37	0.37	0.06	0.26	0.53
v/c Ratio	0.79	1.31dr	0.22	0.66	0.09	2.33	0.31	0.29	0.34	1.11	0.48
Control Delay (s/veh)	50.9	65.1	42.4	55.8	0.5	634.5	27.3	5.2	57.7	111.6	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.9	65.1	42.4	55.8	0.5	634.5	27.3	5.2	57.7	111.6	6.6
LOS	D	E	D	E	A	F	C	A	E	F	A
Approach Delay (s/veh)		62.0		46.5			311.4			62.5	
Approach LOS		E		D			F			E	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 107.8		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 2.33		
Intersection Signal Delay (s/veh): 132.7	Intersection LOS: F	
Intersection Capacity Utilization 115.4%	ICU Level of Service H	
Analysis Period (min) 15		
dr Defacto Right Lane. Recode with 1 though lane as a right lane.		

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	374	177	999	53	169	29	533	394	197	35	511	446
Future Volume (veh/h)	374	177	999	53	169	29	533	394	197	35	511	446
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	394	186	1035	56	178	22	561	415	180	37	538	397
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	509	534	453	221	232	192	248	1327	591	57	498	874
Arrive On Green	0.28	0.28	0.28	0.12	0.12	0.12	0.14	0.37	0.37	0.03	0.26	0.26
Sat Flow, veh/h	1810	1900	1610	1810	1900	1577	1810	3610	1606	1810	1900	1607
Grp Volume(v), veh/h	394	186	1035	56	178	22	561	415	180	37	538	397
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1577	1810	1805	1606	1810	1900	1607
Q Serve(g_s), s	21.1	8.2	29.6	3.0	9.6	1.3	14.4	8.6	8.4	2.1	27.6	15.8
Cycle Q Clear(g_c), s	21.1	8.2	29.6	3.0	9.6	1.3	14.4	8.6	8.4	2.1	27.6	15.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	509	534	453	221	232	192	248	1327	591	57	498	874
V/C Ratio(X)	0.77	0.35	2.29	0.25	0.77	0.11	2.27	0.31	0.30	0.65	1.08	0.45
Avail Cap(c_a), veh/h	509	534	453	475	498	414	248	1327	591	144	498	874
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	30.1	37.8	41.9	44.8	41.1	45.4	23.8	23.7	50.4	38.8	14.6
Incr Delay (d2), s/veh	7.3	0.4	585.4	0.6	5.3	0.3	582.4	0.1	0.3	4.6	63.5	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	3.7	84.8	1.3	4.7	0.5	46.3	3.6	3.1	1.0	21.1	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.1	30.5	623.3	42.5	50.0	41.4	627.8	23.9	24.0	55.0	102.3	14.9
LnGrp LOS	D	C	F	D	D	D	F	C	C	E	F	B
Approach Vol, veh/h		1615			256			1156			972	
Approach Delay, s/veh		413.2			47.6			317.0			64.8	
Approach LOS		F			D			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	44.1		35.0	19.0	33.0		18.2				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6				
Max Q Clear Time (g_c+I1), s	4.1	10.6		31.6	16.4	29.6		11.6				
Green Ext Time (p_c), s	0.0	3.1		0.0	0.0	0.0		1.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	277.3
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	584.8
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	368	1194	39	274	851	6
Future Vol, veh/h	368	1194	39	274	851	6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	379	1231	40	282	877	6
Number of Lanes	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	788.6	33.4	414.7
HCM LOS	F	D	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	100%	0%	0%	12%
Vol Thru, %	0%	0%	24%	88%
Vol Right, %	0%	100%	76%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	851	6	1562	313
LT Vol	851	0	0	39
Through Vol	0	0	368	274
RT Vol	0	6	1194	0
Lane Flow Rate	877	6	1610	323
Geometry Grp	5	5	2	2
Degree of Util (X)	1.851	0.011	2.7	0.629
Departure Headway (Hd)	10.397	9.135	8.057	12.021
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	360	394	467	303
Service Time	8.097	6.835	6.057	10.021
HCM Lane V/C Ratio	2.436	0.015	3.448	1.066
HCM Control Delay, s/veh	417.5	11.9	788.6	33.4
HCM Lane LOS	F	B	F	F
HCM 95th-tile Q	42.5	0	99.5	4

Intersection	
Intersection Delay, s/veh	87.4
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	105	342	83	56	262	56
Future Vol, veh/h	105	342	83	56	262	56
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	175	570	138	93	437	93
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	133	15.7	54.6
HCM LOS	F	C	F

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	23%	82%
Vol Thru, %	60%	0%	18%
Vol Right, %	40%	77%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	139	447	318
LT Vol	0	105	262
Through Vol	83	0	56
RT Vol	56	342	0
Lane Flow Rate	232	745	530
Geometry Grp	1	1	1
Degree of Util (X)	0.426	1.218	0.949
Departure Headway (Hd)	7.335	5.888	7.048
Convergence, Y/N	Yes	Yes	Yes
Cap	493	626	519
Service Time	5.335	3.888	5.048
HCM Lane V/C Ratio	0.471	1.19	1.021
HCM Control Delay, s/veh	15.7	133	54.6
HCM Lane LOS	C	F	F
HCM 95th-tile Q	2.1	27	12

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	311	242	330	703	0	0	0	0	0	0	0
Future Vol, veh/h	0	311	242	330	703	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	334	260	355	756	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	595	0	0	1800	2060	756
Stage 1	-	-	-	-	-	-	1466	1466	-
Stage 2	-	-	-	-	-	-	334	595	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	991	-	0	89	56	411
Stage 1	0	-	-	-	-	0	214	194	-
Stage 2	0	-	-	-	-	0	730	496	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	991	-	-	34	0	411
Mov Cap-2 Maneuver	-	-	-	-	-	-	34	0	-
Stage 1	-	-	-	-	-	-	214	0	-
Stage 2	-	-	-	-	-	-	279	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	3.4	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	575	-	-
HCM Lane V/C Ratio	-	-	0.358	-	-
HCM Control Delay (s/veh)	-	-	10.6	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.6	-	-

Intersection	
Int Delay, s/veh	280.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	311	0	0	704	0	329	0	492	0	0	0
Future Vol, veh/h	0	311	0	0	704	0	329	0	492	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	342	0	0	774	0	362	0	541	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	774	0	-	-	-	0	1115	1115	342
Stage 1	-	-	-	-	-	-	342	342	-
Stage 2	-	-	-	-	-	-	774	774	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	851	-	0	0	-	-	~ 232	210	705
Stage 1	-	-	0	0	-	-	724	642	-
Stage 2	-	-	0	0	-	-	459	411	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	851	-	-	-	-	-	~ 232	0	705
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 232	0	-
Stage 1	-	-	-	-	-	-	724	0	-
Stage 2	-	-	-	-	-	-	459	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	$ 626.34
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	388	851	-	-	-
HCM Lane V/C Ratio	2.325	-	-	-	-
HCM Control Delay (s/veh)	$ 626.3	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	69.2	0	-	-	-

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

Intersection	
Intersection Delay, s/veh	335.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	108	683	12	72	550	110	0	71	69	191	120	154
Future Vol, veh/h	108	683	12	72	550	110	0	71	69	191	120	154
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	119	751	13	79	604	121	0	78	76	210	132	169
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	468.5	384.2	27.6	120.6
HCM LOS	F	F	D	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	13%	10%	41%
Vol Thru, %	51%	85%	75%	26%
Vol Right, %	49%	1%	15%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	140	803	732	465
LT Vol	0	108	72	191
Through Vol	71	683	550	120
RT Vol	69	12	110	154
Lane Flow Rate	154	882	804	511
Geometry Grp	1	1	1	1
Degree of Util (X)	0.398	1.969	1.775	1.121
Departure Headway (Hd)	15.018	10.001	10.281	11.013
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	242	371	362	332
Service Time	13.018	8.001	8.281	9.013
HCM Lane V/C Ratio	0.636	2.377	2.221	1.539
HCM Control Delay, s/veh	27.6	468.5	384.2	120.6
HCM Lane LOS	D	F	F	F
HCM 95th-tile Q	1.8	49	39.8	14.5

APPENDIX 7.3: OPENING YEAR CUMULATIVE (2035) WITH PROJECT (PHASE 2) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		**OYC (2035) WP**
				CALC CS	DATE	10/10/24
Jurisdiction: **City of Calimesa**				CHK CS	DATE	10/10/24
Major Street: **Street A**				Critical Approach Speed (Major)		35 mph
Minor Street: **Street E**				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **414** vpd Minor Street Future ADT = **386** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **414**	*1* **386**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **414**	*1* **386**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 5% **B** 3%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2035) WP
				CALC CS	DATE 10/10/24
Jurisdiction: City of Calimesa				CHK CS	DATE 10/10/24
Major Street: Street B				Critical Approach Speed (Major)	35 mph
Minor Street: Street E				Critical Approach Speed (Minor)	30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **1,169** vpd Minor Street Future ADT = **1,169** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
XX				
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **1,169** / *1* **1,169**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **1,169** / *1* **1,169**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 15% B: 10%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2035) WP
				CALC CS	DATE 10/10/24
Jurisdiction: City of Calimesa				CHK CS	DATE 10/10/24
Major Street: **Street A**				Critical Approach Speed (Major)	35 mph
Minor Street: **Street D**				Critical Approach Speed (Minor)	30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **4,468** vpd Minor Street Future ADT = **1,672** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
XX	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **4,468** / *1* **1,672**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **4,468** / *1* **1,672**	12,000	8,400	1,200 *	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 56% B: 37%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2035) WP
				CALC CS	DATE 10/10/24
Jurisdiction: City of Calimesa				CHK CS	DATE 10/10/24
Major Street: **Street D**				Critical Approach Speed (Major)	35 mph
Minor Street: **Street C**				Critical Approach Speed (Minor)	30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **4,274** vpd Minor Street Future ADT = **1,916** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
XX	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **4,274** / *1* **1,916**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **4,274** / *1* **1,916**	12,000	8,400	1,200 *	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 53% B: 36%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

APPENDIX 7.4: OPENING YEAR CUMULATIVE (2035) WITHOUT PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	130	160	113	756	100
Average Queue (ft)	21	70	7	753	77
95th Queue (ft)	92	132	79	764	146
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)	4		0	99	
Queuing Penalty (veh)	24		0	0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		1		100	5
Queuing Penalty (veh)		5		177	14

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	210	389	45	91	779	100
Average Queue (ft)	157	142	2	8	771	23
95th Queue (ft)	252	406	20	45	785	92
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		7			100	
Queuing Penalty (veh)		49			0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	41	2			100	1
Queuing Penalty (veh)	211	4			129	2

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	WB	SB
Directions Served	TR	LT	LTR
Maximum Queue (ft)	177	284	116
Average Queue (ft)	68	123	55
95th Queue (ft)	149	247	92
Link Distance (ft)	247	451	732
Upstream Blk Time (%)	1	0	
Queuing Penalty (veh)	5	0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	T	T	LR
Maximum Queue (ft)	73	550	89
Average Queue (ft)	38	222	42
95th Queue (ft)	59	439	69
Link Distance (ft)	582	815	523
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	23	255
Average Queue (ft)	3	100
95th Queue (ft)	15	198
Link Distance (ft)	530	615
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	84	728
Average Queue (ft)	15	613
95th Queue (ft)	51	940
Link Distance (ft)	615	712
Upstream Blk Time (%)		63
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 620

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	14	126	19	756	100
Average Queue (ft)	1	57	1	755	65
95th Queue (ft)	7	99	13	756	143
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)				100	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		0		100	1
Queuing Penalty (veh)		0		147	5

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	WB	NB	NB
Directions Served	L	R	LT	R
Maximum Queue (ft)	76	8	624	100
Average Queue (ft)	38	1	248	88
95th Queue (ft)	67	5	651	121
Link Distance (ft)		560	764	
Upstream Blk Time (%)			6	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)	160			50
Storage Blk Time (%)			60	27
Queuing Penalty (veh)			185	41

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	WB	SB
Directions Served	TR	LT	LTR
Maximum Queue (ft)	64	180	157
Average Queue (ft)	33	80	58
95th Queue (ft)	53	140	111
Link Distance (ft)	247	451	732
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	324	113	153
Average Queue (ft)	182	57	80
95th Queue (ft)	284	90	133
Link Distance (ft)	566	815	524
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	17	304
Average Queue (ft)	1	108
95th Queue (ft)	9	249
Link Distance (ft)	530	615
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	100	728
Average Queue (ft)	17	728
95th Queue (ft)	72	728
Link Distance (ft)	615	712
Upstream Blk Time (%)		100
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 377

APPENDIX 7.5: OPENING YEAR CUMULATIVE (2035) WITH PROJECT (PHASE 2) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	60	189	194	755	100
Average Queue (ft)	43	123	48	729	38
95th Queue (ft)	141	216	226	877	115
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)	10		0	87	
Queuing Penalty (veh)	95		1	0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		13		100	3
Queuing Penalty (veh)		58		318	12

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	200	208	20	50	776	100
Average Queue (ft)	153	146	6	10	586	33
95th Queue (ft)	246	445	32	63	917	109
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		11			27	
Queuing Penalty (veh)		111			0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	38				100	2
Queuing Penalty (veh)	213				117	3

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	306	215	454	730
Average Queue (ft)	230	107	451	725
95th Queue (ft)	367	246	460	761
Link Distance (ft)	300	300	454	715
Upstream Blk Time (%)	4	0	7	88
Queuing Penalty (veh)	25	1	122	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB	NB
Directions Served	TR	LT	L	R
Maximum Queue (ft)	205	818	538	60
Average Queue (ft)	130	808	538	20
95th Queue (ft)	229	889	538	85
Link Distance (ft)	581	803	522	
Upstream Blk Time (%)		90	100	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)				50
Storage Blk Time (%)			100	
Queuing Penalty (veh)			5	

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	16	242
Average Queue (ft)	6	140
95th Queue (ft)	18	302
Link Distance (ft)	530	615
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	129	728
Average Queue (ft)	68	674
95th Queue (ft)	197	839
Link Distance (ft)	615	712
Upstream Blk Time (%)		66
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 1081

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	SB	SB
Directions Served	TR	L	LT	R
Maximum Queue (ft)	4	98	756	100
Average Queue (ft)	1	62	753	100
95th Queue (ft)	7	106	774	100
Link Distance (ft)	119		740	
Upstream Blk Time (%)			89	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)		160		50
Storage Blk Time (%)		0	98	11
Queuing Penalty (veh)		0	396	58

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	112	55	3	6	728	100
Average Queue (ft)	80	21	1	1	484	85
95th Queue (ft)	155	140	5	8	914	138
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)					18	
Queuing Penalty (veh)					0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	2				94	15
Queuing Penalty (veh)	16				288	30

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	311	283	457	510
Average Queue (ft)	306	210	444	381
95th Queue (ft)	314	354	488	698
Link Distance (ft)	300	300	454	715
Upstream Blk Time (%)	23	4	13	6
Queuing Penalty (veh)	260	41	145	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB	NB
Directions Served	TR	LT	L	R
Maximum Queue (ft)	582	534	538	60
Average Queue (ft)	523	249	522	12
95th Queue (ft)	675	567	581	66
Link Distance (ft)	572	803	522	
Upstream Blk Time (%)	6		69	
Queuing Penalty (veh)	86		0	
Storage Bay Dist (ft)				50
Storage Blk Time (%)			100	
Queuing Penalty (veh)			6	

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	3	221
Average Queue (ft)	1	99
95th Queue (ft)	6	222
Link Distance (ft)	530	615
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	54	728
Average Queue (ft)	16	723
95th Queue (ft)	56	762
Link Distance (ft)	615	712
Upstream Blk Time (%)		88
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 1327

APPENDIX 7.6: OPENING YEAR CUMULATIVE (2035) WITH PROJECT (PHASE 2) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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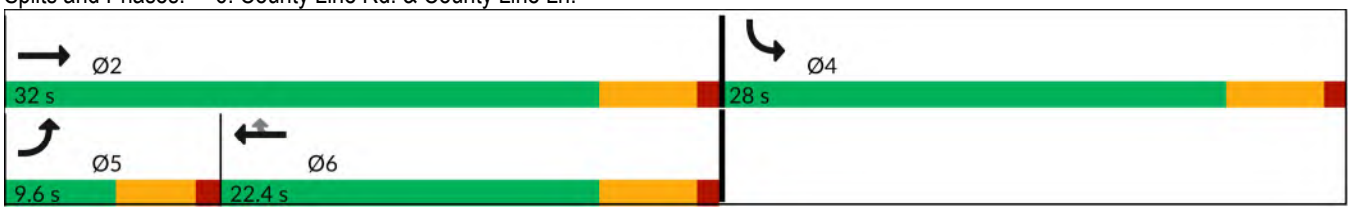
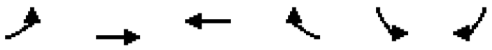
Lane Group	EBT	WBT	WBR	SBL	Ø5
Lane Configurations					
Traffic Volume (vph)	699	400	247	158	
Future Volume (vph)	699	400	247	158	
Turn Type	NA	NA	Perm	Prot	
Protected Phases	2	6		4	5
Permitted Phases			6		
Detector Phase	2	6	6	4	
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.4	22.4	22.4	22.4	9.6
Total Split (s)	32.0	22.4	22.4	28.0	9.6
Total Split (%)	53.3%	37.3%	37.3%	46.7%	16%
Yellow Time (s)	4.4	4.4	4.4	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4	5.4	5.4	5.4	
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	26.7	26.7	26.7	12.0	
Actuated g/C Ratio	0.54	0.54	0.54	0.24	
v/c Ratio	0.94	0.54	0.33	0.49	
Control Delay (s/veh)	31.4	10.5	2.1	20.2	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	31.4	10.5	2.1	20.2	
LOS	C	B	A	C	
Approach Delay (s/veh)	31.4	7.3		20.2	
Approach LOS	C	A		C	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 49.5	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay (s/veh): 19.8	Intersection LOS: B
Intersection Capacity Utilization 54.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: County Line Rd. & County Line Ln.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	699	400	247	158	0
Future Volume (veh/h)	0	699	400	247	158	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	958	548	338	0	0
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	9	1399	1399	1186	0	0
Arrive On Green	0.00	0.74	0.74	0.74	0.00	0.00
Sat Flow, veh/h	1810	1900	1900	1610	0	0
Grp Volume(v), veh/h	0	958	548	338	0	0
Grp Sat Flow(s),veh/h/ln	1810	1900	1900	1610	0	0
Q Serve(g_s), s	0.0	5.5	2.2	1.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	5.5	2.2	1.4	0.0	0.0
Prop In Lane	1.00			1.00	0.00	0.00
Lane Grp Cap(c), veh/h	9	1399	1399	1186	0	0
V/C Ratio(X)	0.00	0.68	0.39	0.29	0.00	0.00
Avail Cap(c_a), veh/h	442	2468	1577	1337	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	1.4	1.0	0.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.2	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	2.0	1.2	1.0	0.0	0.0
LnGrp LOS		A	A	A		
Approach Vol, veh/h		958	886		0	
Approach Delay, s/veh		2.0	1.1		0.0	
Approach LOS		A	A			

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		20.5		0.0	0.0	20.5
Change Period (Y+Rc), s		5.4		5.4	4.6	5.4
Max Green Setting (Gmax), s		26.6		22.6	5.0	17.0
Max Q Clear Time (g_c+I1), s		7.5		0.0	0.0	4.2
Green Ext Time (p_c), s		7.7		0.0	0.0	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	1.6
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	835	16	127	635	23	150
Future Vol, veh/h	835	16	127	635	23	150
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	960	18	146	730	26	172

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	980	0	1993	971
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	1022	-
Critical Hdwy	-	-	4.1	-	5.5	5.5
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	712	-	63	374
Stage 1	-	-	-	-	370	-
Stage 2	-	-	-	-	308	-
Platoon blocked, %	-	-		-	0	
Mov Cap-1 Maneuver	-	-	711	-	50	373
Mov Cap-2 Maneuver	-	-	-	-	156	-
Stage 1	-	-	-	-	370	-
Stage 2	-	-	-	-	245	-

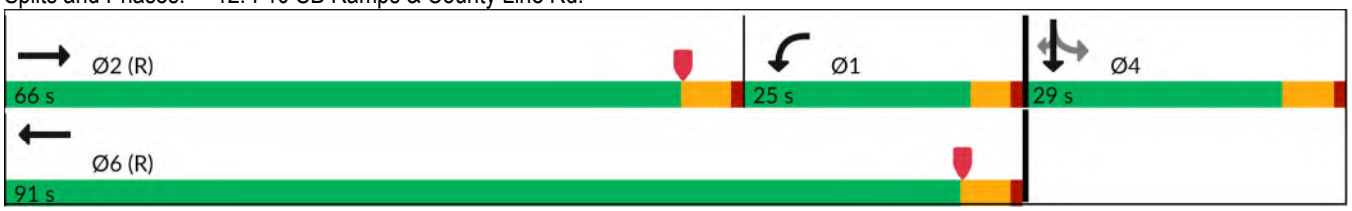
Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.89	34.12
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	315	-	-	711	-
HCM Lane V/C Ratio	0.631	-	-	0.205	-
HCM Control Delay (s/veh)	34.1	-	-	11.4	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	4	-	-	0.8	-

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	694	395	445	6	318
Future Volume (vph)	694	395	445	6	318
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	9.6	22.4	22.8	22.8
Total Split (s)	66.0	25.0	91.0	29.0	29.0
Total Split (%)	55.0%	20.8%	75.8%	24.2%	24.2%
Yellow Time (s)	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	60.6	20.4	85.6	23.2	23.2
Actuated g/C Ratio	0.51	0.17	0.71	0.19	0.19
v/c Ratio	1.16	1.52	0.37	1.17	0.83
Control Delay (s/veh)	113.4	288.9	17.6	147.2	50.6
Queue Delay	1.8	0.0	18.7	0.0	0.0
Total Delay (s/veh)	115.2	288.9	36.3	147.2	50.6
LOS	F	F	D	F	D
Approach Delay (s/veh)	115.2		155.1	101.2	
Approach LOS	F		F	F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 54 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.52	
Intersection Signal Delay (s/veh): 124.9	Intersection LOS: F
Intersection Capacity Utilization 125.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	694	292	395	445	0	0	0	0	343	6	318
Future Volume (veh/h)	0	694	292	395	445	0	0	0	0	343	6	318
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.00	1.04	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1976	1900	1900	1976	0				1900	1900	1900
Adj Flow Rate, veh/h	0	816	168	465	524	0				404	7	198
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85				0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	799	165	655	1802	0				344	6	311
Arrive On Green	0.00	0.61	0.61	0.72	1.00	0.00				0.23	0.23	0.23
Sat Flow, veh/h	0	1583	326	1810	1976	0				1780	31	1610
Grp Volume(v), veh/h	0	0	984	465	524	0				411	0	198
Grp Sat Flow(s),veh/h/ln	0	0	1909	1810	1976	0				1811	0	1610
Q Serve(g_s), s	0.0	0.0	60.6	17.5	0.0	0.0				23.2	0.0	13.3
Cycle Q Clear(g_c), s	0.0	0.0	60.6	17.5	0.0	0.0				23.2	0.0	13.3
Prop In Lane	0.00		0.17	1.00		0.00				0.98		1.00
Lane Grp Cap(c), veh/h	0	0	964	655	1802	0				350	0	311
V/C Ratio(X)	0.00	0.00	1.02	0.71	0.29	0.00				1.17	0.00	0.64
Avail Cap(c_a), veh/h	0	0	964	655	1802	0				350	0	311
HCM Platoon Ratio	1.00	1.20	1.20	2.00	1.20	1.00				1.20	1.20	1.20
Upstream Filter(I)	0.00	0.00	1.00	0.42	0.42	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	13.0	0.0	0.0				46.1	0.0	42.3
Incr Delay (d2), s/veh	0.0	0.0	34.4	1.3	0.2	0.0				104.3	0.0	9.5
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	0.0	0.0	32.9	4.4	0.1	0.0				19.9	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	58.0	14.3	0.2	0.0				150.4	0.0	51.8
LnGrp LOS			F	B	A					F		D
Approach Vol, veh/h		984			989						609	
Approach Delay, s/veh		58.0			6.8						118.3	
Approach LOS		E			A						F	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	48.9	66.0		29.0		114.9
Change Period (Y+Rc), s	5.4	* 5.4		5.8		5.4
Max Green Setting (Gmax), s	20.4	* 61		23.2		85.6
Max Q Clear Time (g_c+I1), s	19.5	62.6		25.2		2.0
Green Ext Time (p_c), s	0.1	0.0		0.0		3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	52.6
HCM 7th LOS	D

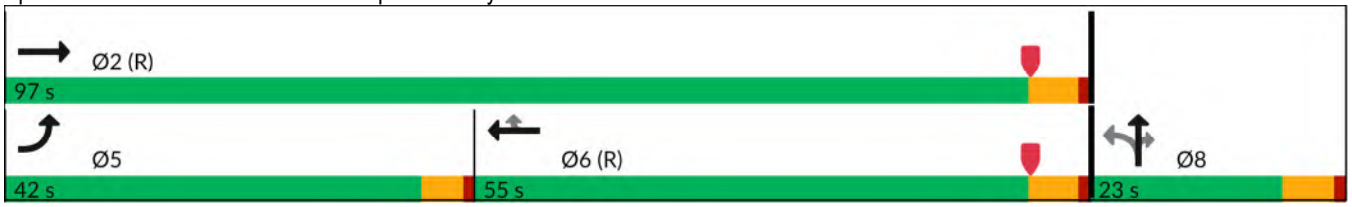
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Traffic Volume (vph)	469	568	642	605	0	117
Future Volume (vph)	469	568	642	605	0	117
Turn Type	Prot	NA	NA	Perm	NA	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8
Total Split (s)	42.0	97.0	55.0	55.0	23.0	23.0
Total Split (%)	35.0%	80.8%	45.8%	45.8%	19.2%	19.2%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	35.6	91.6	51.4	51.4	17.2	17.2
Actuated g/C Ratio	0.30	0.76	0.43	0.43	0.14	0.14
v/c Ratio	0.94	0.42	0.85	0.69	0.83	0.44
Control Delay (s/veh)	34.7	6.6	42.8	13.4	75.6	29.3
Queue Delay	48.8	14.8	3.0	0.0	11.8	0.0
Total Delay (s/veh)	83.4	21.4	45.8	13.4	87.5	29.3
LOS	F	C	D	B	F	C
Approach Delay (s/veh)		49.5	30.1		65.9	
Approach LOS		D	C		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay (s/veh): 42.1	Intersection LOS: D
Intersection Capacity Utilization 125.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 13: I-10 NB Ramps & County Line Rd.

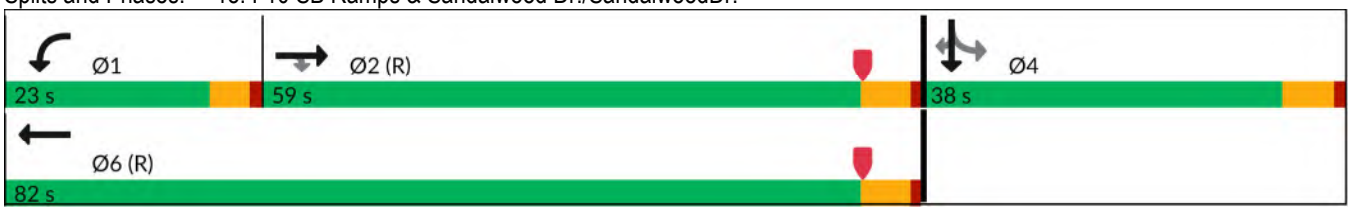


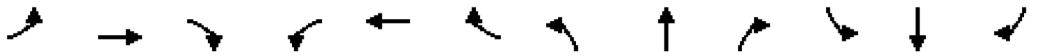
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	469	568	0	0	642	605	198	0	117	0	0	0
Future Volume (veh/h)	469	568	0	0	642	605	198	0	117	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	504	611	0	0	690	436	213	0	126			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	532	1450	0	0	819	694	259	0	231			
Arrive On Green	0.20	0.51	0.00	0.00	0.43	0.43	0.14	0.00	0.14			
Sat Flow, veh/h	1810	1900	0	0	1900	1610	1810	0	1610			
Grp Volume(v), veh/h	504	611	0	0	690	436	213	0	126			
Grp Sat Flow(s),veh/h/ln	1810	1900	0	0	1900	1610	1810	0	1610			
Q Serve(g_s), s	33.0	24.0	0.0	0.0	38.9	25.4	13.7	0.0	8.7			
Cycle Q Clear(g_c), s	33.0	24.0	0.0	0.0	38.9	25.4	13.7	0.0	8.7			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	532	1450	0	0	819	694	259	0	231			
V/C Ratio(X)	0.95	0.42	0.00	0.00	0.84	0.63	0.82	0.00	0.55			
Avail Cap(c_a), veh/h	564	1450	0	0	819	694	259	0	231			
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	47.3	12.8	0.0	0.0	30.5	26.6	49.9	0.0	47.8			
Incr Delay (d2), s/veh	3.8	0.1	0.0	0.0	10.3	4.3	24.5	0.0	9.0			
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	16.0	11.2	0.0	0.0	19.8	10.4	7.8	0.0	4.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.1	12.9	0.0	0.0	40.8	30.9	74.4	0.0	56.8			
LnGrp LOS	D	B			D	C	E		E			
Approach Vol, veh/h		1115			1126			339				
Approach Delay, s/veh		30.2			36.9			67.8				
Approach LOS		C			D			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		97.0			39.9	57.1		23.0				
Change Period (Y+Rc), s		5.4			4.6	5.4		5.8				
Max Green Setting (Gmax), s		91.6			37.4	49.6		17.2				
Max Q Clear Time (g_c+I1), s		26.0			35.0	40.9		15.7				
Green Ext Time (p_c), s		4.9			0.3	4.2		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			38.1									
HCM 7th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	574	206	209	998	13	613
Future Volume (vph)	574	206	209	998	13	613
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2				4
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8	22.8
Total Split (s)	59.0	59.0	23.0	82.0	38.0	38.0
Total Split (%)	49.2%	49.2%	19.2%	68.3%	31.7%	31.7%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	None	None
Act Effct Green (s)	53.8	53.8	18.2	76.6	32.2	32.2
Actuated g/C Ratio	0.45	0.45	0.15	0.64	0.27	0.27
v/c Ratio	0.83	0.30	0.95	1.02	1.05	0.99
Control Delay (s/veh)	39.4	5.3	77.4	48.5	93.4	75.8
Queue Delay	0.0	0.0	0.0	31.7	0.0	0.0
Total Delay (s/veh)	39.4	5.3	77.4	80.1	93.4	75.8
LOS	D	A	E	F	F	E
Approach Delay (s/veh)	30.4			79.7	84.9	
Approach LOS	C			E	F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 23 (19%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay (s/veh): 67.3	Intersection LOS: E
Intersection Capacity Utilization 87.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	574	206	209	998	0	0	0	0	157	13	613
Future Volume (veh/h)	0	574	206	209	998	0	0	0	0	157	13	613
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	709	254	258	1232	0				194	241	360
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	876	742	277	1240	0				210	261	409
Arrive On Green	0.00	0.46	0.46	0.31	1.00	0.00				0.25	0.25	0.25
Sat Flow, veh/h	0	1900	1610	1810	1900	0				829	1030	1610
Grp Volume(v), veh/h	0	709	254	258	1232	0				435	0	360
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1810	1900	0				1859	0	1610
Q Serve(g_s), s	0.0	38.5	12.1	16.6	0.0	0.0				27.4	0.0	25.8
Cycle Q Clear(g_c), s	0.0	38.5	12.1	16.6	0.0	0.0				27.4	0.0	25.8
Prop In Lane	0.00		1.00	1.00		0.00				0.45		1.00
Lane Grp Cap(c), veh/h	0	876	742	277	1240	0				472	0	409
V/C Ratio(X)	0.00	0.81	0.34	0.93	0.99	0.00				0.92	0.00	0.88
Avail Cap(c_a), veh/h	0	876	742	277	1240	0				499	0	432
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	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	27.8	20.7	41.0	0.0	0.0				43.6	0.0	43.0
Incr Delay (d2), s/veh	0.0	8.0	1.3	35.3	24.0	0.0				22.1	0.0	17.9
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	18.5	4.7	8.7	8.3	0.0				15.0	0.0	11.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	35.8	21.9	76.3	24.0	0.0				65.7	0.0	61.0
LnGrp LOS		D	C	E	C					E		E
Approach Vol, veh/h		963			1490						795	
Approach Delay, s/veh		32.1			33.1						63.5	
Approach LOS		C			C						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.0	60.7		36.3		83.7
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	18.4	53.6		32.2		76.6
Max Q Clear Time (g_c+I1), s	18.6	40.5		29.4		2.0
Green Ext Time (p_c), s	0.0	4.6		1.1		18.0

Intersection Summary		
HCM 7th Control Delay, s/veh		40.3
HCM 7th LOS		D

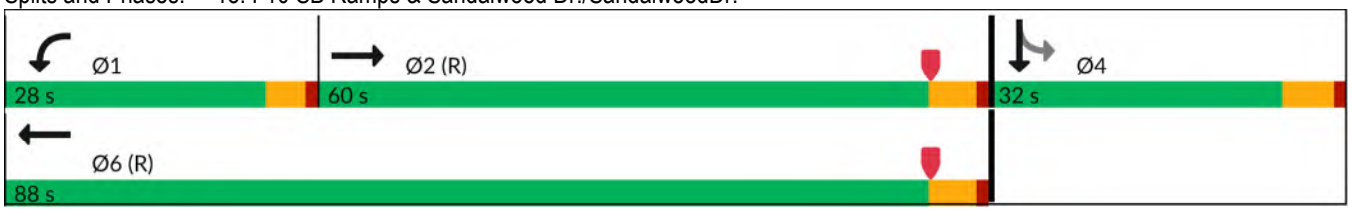
Notes

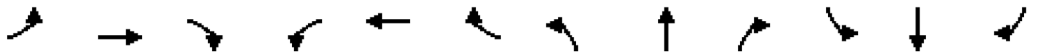
User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	775	353	209	1575	157	13	1068
Future Volume (vph)	775	353	209	1575	157	13	1068
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	60.0		28.0	88.0	32.0	32.0	
Total Split (%)	50.0%		23.3%	73.3%	26.7%	26.7%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	None	None	
Act Effct Green (s)	77.9	120.0	13.2	95.7	13.1	13.1	120.0
Actuated g/C Ratio	0.65	1.00	0.11	0.80	0.11	0.11	1.00
v/c Ratio	0.28	0.27	0.67	0.47	0.56	0.56	0.82
Control Delay (s/veh)	9.9	0.4	68.6	1.8	61.8	61.4	4.7
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay (s/veh)	9.9	0.4	68.6	1.9	61.8	61.4	4.7
LOS	A	A	E	A	E	E	A
Approach Delay (s/veh)	6.9			9.7		12.5	
Approach LOS	A			A		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay (s/veh): 9.8	Intersection LOS: A
Intersection Capacity Utilization 48.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↰	↱
Traffic Volume (veh/h)	0	775	353	209	1575	0	0	0	0	157	13	1068
Future Volume (veh/h)	0	775	353	209	1575	0	0	0	0	157	13	1068
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	957	0	258	1944	0				205	0	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	3604		317	4271	0				301	0	
Arrive On Green	0.00	0.69	0.00	0.18	1.00	0.00				0.08	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	957	0	258	1944	0				205	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	8.3	0.0	8.5	0.0	0.0				6.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.3	0.0	8.5	0.0	0.0				6.6	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3604		317	4271	0				301	0	
V/C Ratio(X)	0.00	0.27		0.81	0.46	0.00				0.68	0.00	
Avail Cap(c_a), veh/h	0	3604		685	4271	0				790	0	
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	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.9	0.0	48.2	0.0	0.0				53.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	1.9	0.4	0.0				2.7	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.7	0.0	3.4	0.1	0.0				3.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	7.0	0.0	50.1	0.4	0.0				56.2	0.0	0.0
LnGrp LOS		A		D	A					E		
Approach Vol, veh/h		957			2202						205	
Approach Delay, s/veh		7.0			6.2						56.2	
Approach LOS		A			A						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.4	88.8		15.8		104.2
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	23.4	54.6		26.2		82.6
Max Q Clear Time (g_c+I1), s	10.5	10.3		8.6		2.0
Green Ext Time (p_c), s	0.4	7.7		0.6		27.4

Intersection Summary		
HCM 7th Control Delay, s/veh		9.5
HCM 7th LOS		A

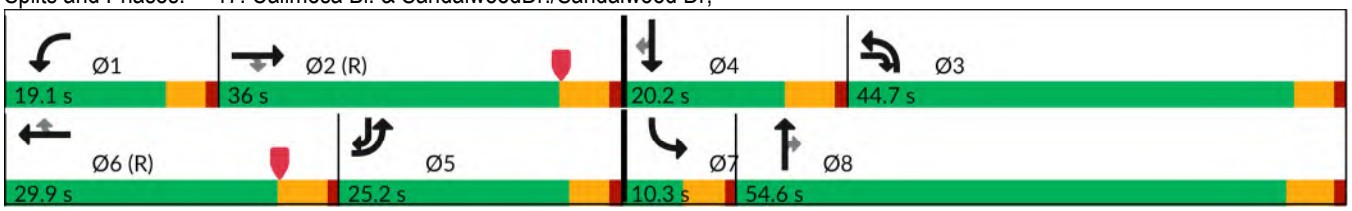
Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	288	244	343	94	286	46	1116	803	148	19	214	478
Future Volume (vph)	288	244	343	94	286	46	1116	803	148	19	214	478
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	30.4	9.6	9.6	29.4	29.4	9.6	27.4	27.4	9.6	15.4	9.6
Total Split (s)	25.2	36.0	44.7	19.1	29.9	29.9	44.7	54.6	54.6	10.3	20.2	25.2
Total Split (%)	21.0%	30.0%	37.3%	15.9%	24.9%	24.9%	37.3%	45.5%	45.5%	8.6%	16.8%	21.0%
Yellow Time (s)	3.6	4.4	3.6	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	4.6	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	20.6	34.0	74.9	11.1	24.5	24.5	40.1	53.3	53.3	5.4	14.8	40.8
Actuated g/C Ratio	0.17	0.28	0.62	0.09	0.20	0.20	0.33	0.44	0.44	0.05	0.12	0.34
v/c Ratio	1.06	0.51	0.36	0.64	0.84	0.11	1.08	0.57	0.21	0.27	1.04	0.87
Control Delay (s/veh)	102.5	32.8	2.3	69.5	65.8	0.5	85.7	33.5	11.7	63.8	120.4	45.4
Queue Delay	0.0	0.0	0.0	0.0	58.6	0.0	8.5	0.0	0.0	0.0	0.0	2.3
Total Delay (s/veh)	102.5	32.8	2.3	69.5	124.4	0.5	94.1	33.5	11.7	63.8	120.4	47.7
LOS	F	C	A	E	F	A	F	C	B	E	F	D
Approach Delay (s/veh)		43.8			98.9			64.7			70.0	
Approach LOS		D			F			E			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay (s/veh): 64.7	Intersection LOS: E
Intersection Capacity Utilization 90.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	244	343	94	286	46	1116	803	148	19	214	478
Future Volume (veh/h)	288	244	343	94	286	46	1116	803	148	19	214	478
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	327	277	372	107	325	42	1268	912	104	22	243	238
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1106	1418	1740	136	388	324	1173	1597	711	39	234	1182
Arrive On Green	0.20	0.25	0.25	0.08	0.20	0.20	0.33	0.44	0.44	0.02	0.12	0.12
Sat Flow, veh/h	1810	1900	1610	1810	1900	1587	3510	3610	1607	1810	1900	1610
Grp Volume(v), veh/h	327	277	372	107	325	42	1268	912	104	22	243	238
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1587	1755	1805	1607	1810	1900	1610
Q Serve(g_s), s	18.4	13.9	7.7	7.0	19.7	3.7	40.1	22.6	4.6	1.4	14.8	0.0
Cycle Q Clear(g_c), s	18.4	13.9	7.7	7.0	19.7	3.7	40.1	22.6	4.6	1.4	14.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1106	1418	1740	136	388	324	1173	1597	711	39	234	1182
V/C Ratio(X)	0.30	0.20	0.21	0.79	0.84	0.13	1.08	0.57	0.15	0.56	1.04	0.20
Avail Cap(c_a), veh/h	1106	1418	1740	219	388	324	1173	1597	711	86	234	1182
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	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	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	16.7	10.7	54.5	45.8	80.6	40.0	25.0	19.9	58.1	52.6	5.0
Incr Delay (d2), s/veh	0.1	0.3	0.3	3.8	19.0	0.8	38.2	0.0	0.0	4.6	68.8	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	7.1	4.1	3.3	11.1	1.1	22.8	9.3	1.7	0.7	11.4	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.0	17.0	11.0	58.3	64.9	81.4	78.1	25.0	19.9	62.7	121.4	5.1
LnGrp LOS	C	B	B	E	E	F	F	C	B	E	F	A
Approach Vol, veh/h		976			474			2284			503	
Approach Delay, s/veh		17.7			64.8			54.3			63.8	
Approach LOS		B			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	96.4	45.5	20.2	80.1	29.9	7.2	58.5
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	5.4	* 5.4	4.6	5.4
Max Green Setting (Gmax), s	14.5	30.6	40.1	* 15	20.6	* 25	5.7	49.2
Max Q Clear Time (g_c+I1), s	9.0	15.9	42.1	16.8	20.4	21.7	3.4	24.6
Green Ext Time (p_c), s	0.1	2.5	0.0	0.0	0.0	0.5	0.0	6.9

Intersection Summary	
HCM 7th Control Delay, s/veh	48.2
HCM 7th LOS	D

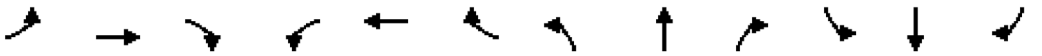
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	288	244	343	94	286	46	1116	803	148	19	214	478
Future Volume (vph)	288	244	343	94	286	46	1116	803	148	19	214	478
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	30.4		9.6	29.4	29.4	9.6	27.4	27.4	9.6	15.4	9.6
Total Split (s)	30.0	50.3		10.3	30.6	30.6	44.0	49.4	49.4	10.0	15.4	30.0
Total Split (%)	25.0%	41.9%		8.6%	25.5%	25.5%	36.7%	41.2%	41.2%	8.3%	12.8%	25.0%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	25.4	44.9	120.0	5.7	25.2	25.2	39.4	48.0	48.0	5.2	10.0	36.2
Actuated g/C Ratio	0.21	0.37	1.00	0.05	0.21	0.21	0.33	0.40	0.40	0.04	0.08	0.30
v/c Ratio	0.39	0.19	0.20	1.19	0.41	0.09	0.98	0.58	0.20	0.27	0.77	0.84
Control Delay (s/veh)	40.0	26.5	0.2	202.9	42.8	0.3	60.3	26.8	5.8	63.6	70.6	34.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.0	26.5	0.2	202.9	42.8	0.3	60.3	26.8	5.8	63.6	70.6	34.5
LOS	D	C	A	F	D	A	E	C	A	E	E	C
Approach Delay (s/veh)		20.6			73.6			43.4			46.1	
Approach LOS		C			E			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.19	
Intersection Signal Delay (s/veh): 42.1	Intersection LOS: D
Intersection Capacity Utilization 81.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	244	343	94	286	46	1116	803	148	19	214	478
Future Volume (veh/h)	288	244	343	94	286	46	1116	803	148	19	214	478
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	327	277	0	107	325	42	1268	912	104	22	243	238
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	797	1422		86	798	333	1236	1541	627	39	317	475
Arrive On Green	0.07	0.12	0.00	0.05	0.21	0.21	0.33	0.39	0.39	0.02	0.08	0.08
Sat Flow, veh/h	3764	3800	1675	1810	3800	1587	3764	3952	1608	1810	3800	1610
Grp Volume(v), veh/h	327	277	0	107	325	42	1268	912	104	22	243	238
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1587	1882	1976	1608	1810	1900	1610
Q Serve(g_s), s	10.0	7.9	0.0	5.7	8.9	2.2	39.4	22.0	4.0	1.4	7.5	7.6
Cycle Q Clear(g_c), s	10.0	7.9	0.0	5.7	8.9	2.2	39.4	22.0	4.0	1.4	7.5	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	797	1422		86	798	333	1236	1541	627	39	317	475
V/C Ratio(X)	0.41	0.19		1.24	0.41	0.13	1.03	0.59	0.17	0.56	0.77	0.50
Avail Cap(c_a), veh/h	797	1422		86	798	333	1236	1541	627	81	317	475
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.66	0.66	0.66	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	36.4	0.0	57.1	40.9	28.9	40.3	29.0	14.7	58.1	53.9	14.0
Incr Delay (d2), s/veh	0.1	0.3	0.0	176.6	1.5	0.8	27.7	0.4	0.1	4.6	10.8	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	3.8	0.0	6.8	4.3	1.1	22.3	10.2	1.9	0.7	4.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.8	36.7	0.0	233.8	42.5	29.7	68.0	29.4	14.8	62.7	64.7	14.9
LnGrp LOS	D	D		F	D	C	F	C	B	E	E	B
Approach Vol, veh/h		604			474			2284			503	
Approach Delay, s/veh		43.2			84.5			50.2			41.0	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	50.3	44.0	15.4	30.0	30.6	7.2	52.2
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.7	44.9	39.4	10.0	25.4	25.2	5.4	44.0
Max Q Clear Time (g_c+I1), s	7.7	9.9	41.4	9.6	12.0	10.9	3.4	24.0
Green Ext Time (p_c), s	0.0	1.7	0.0	0.1	0.5	1.7	0.0	6.4

Intersection Summary	
HCM 7th Control Delay, s/veh	52.1
HCM 7th LOS	D

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	288	244	343	94	286	46	1116	803	148	19	214	478
Future Volume (vph)	288	244	343	94	286	46	1116	803	148	19	214	478
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	30.4		9.6	29.4	29.4	9.6	27.4	27.4	9.6	15.4	9.6
Total Split (s)	30.0	50.3		10.3	30.6	30.6	44.0	49.4	49.4	10.0	15.4	30.0
Total Split (%)	25.0%	41.9%		8.6%	25.5%	25.5%	36.7%	41.2%	41.2%	8.3%	12.8%	25.0%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	25.4	44.9	120.0	5.7	25.2	25.2	39.4	48.0	48.0	5.2	10.0	36.2
Actuated g/C Ratio	0.21	0.37	1.00	0.05	0.21	0.21	0.33	0.40	0.40	0.04	0.08	0.30
v/c Ratio	0.39	0.39	0.20	1.19	0.41	0.09	0.98	0.58	0.20	0.27	0.77	0.84
Control Delay (s/veh)	40.0	30.6	0.2	202.9	42.8	0.3	60.3	26.8	5.9	63.6	70.6	34.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.0	30.6	0.2	202.9	42.8	0.3	60.3	26.8	5.9	63.6	70.6	34.5
LOS	D	C	A	F	D	A	E	C	A	E	E	C
Approach Delay (s/veh)		21.8			73.6			43.4			46.1	
Approach LOS		C			E			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.19	
Intersection Signal Delay (s/veh): 42.4	Intersection LOS: D
Intersection Capacity Utilization 81.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	244	343	94	286	46	1116	803	148	19	214	478
Future Volume (veh/h)	288	244	343	94	286	46	1116	803	148	19	214	478
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	327	277	0	107	325	42	1268	913	104	22	243	238
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	797	711		86	798	333	1236	1541	626	39	317	475
Arrive On Green	0.07	0.12	0.00	0.05	0.21	0.21	0.33	0.39	0.39	0.02	0.08	0.08
Sat Flow, veh/h	3764	1900	1675	1810	3800	1587	3764	3952	1606	1810	3800	1610
Grp Volume(v), veh/h	327	277	0	107	325	42	1268	913	104	22	243	238
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1587	1882	1976	1606	1810	1900	1610
Q Serve(g_s), s	10.0	16.1	0.0	5.7	8.9	2.2	39.4	22.0	4.0	1.4	7.5	7.6
Cycle Q Clear(g_c), s	10.0	16.1	0.0	5.7	8.9	2.2	39.4	22.0	4.0	1.4	7.5	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	797	711		86	798	333	1236	1541	626	39	317	475
V/C Ratio(X)	0.41	0.39		1.24	0.41	0.13	1.03	0.59	0.17	0.56	0.77	0.50
Avail Cap(c_a), veh/h	797	711		86	798	333	1236	1541	626	81	317	475
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.66	0.66	0.66	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	40.0	0.0	57.1	40.9	28.9	40.3	29.0	14.7	58.1	53.9	14.0
Incr Delay (d2), s/veh	0.1	1.6	0.0	176.6	1.5	0.8	27.7	0.4	0.1	4.6	10.8	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	8.5	0.0	6.8	4.3	1.1	22.3	10.2	1.9	0.7	4.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.8	41.6	0.0	233.8	42.5	29.7	68.0	29.4	14.8	62.7	64.7	14.9
LnGrp LOS	D	D		F	D	C	F	C	B	E	E	B
Approach Vol, veh/h		604			474			2285			503	
Approach Delay, s/veh		45.5			84.5			50.2			41.0	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	50.3	44.0	15.4	30.0	30.6	7.2	52.2
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.7	44.9	39.4	10.0	25.4	25.2	5.4	44.0
Max Q Clear Time (g_c+I1), s	7.7	18.1	41.4	9.6	12.0	10.9	3.4	24.0
Green Ext Time (p_c), s	0.0	1.5	0.0	0.1	0.5	1.7	0.0	6.4

Intersection Summary	
HCM 7th Control Delay, s/veh	52.5
HCM 7th LOS	D

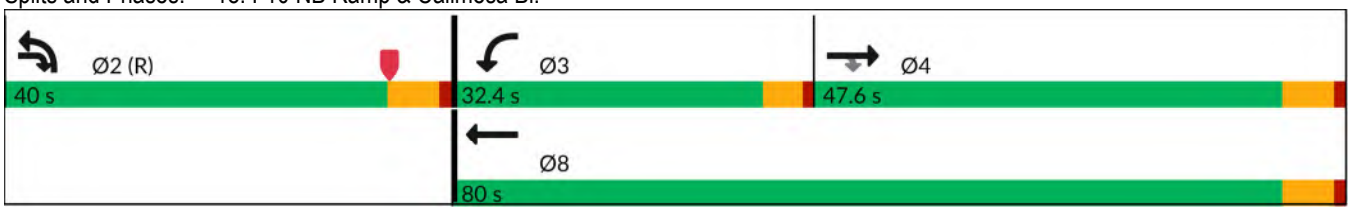
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	146	506	156	916	1150
Future Volume (vph)	146	506	156	916	1150
Turn Type	NA	pm+ov	Prot	NA	Prot
Protected Phases	4	2	3	8	2
Permitted Phases		4			
Detector Phase	4	2	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.8	22.8	9.6	22.8	22.8
Total Split (s)	47.6	40.0	32.4	80.0	40.0
Total Split (%)	39.7%	33.3%	27.0%	66.7%	33.3%
Yellow Time (s)	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	C-Max	None	None	C-Max
Act Effct Green (s)	51.6	93.0	16.6	72.8	35.6
Actuated g/C Ratio	0.43	0.78	0.14	0.61	0.30
v/c Ratio	0.21	0.44	0.74	0.91	1.20
Control Delay (s/veh)	16.4	3.4	66.6	32.7	137.9
Queue Delay	0.0	0.3	0.0	0.0	0.0
Total Delay (s/veh)	16.4	3.7	66.6	32.7	137.9
LOS	B	A	E	C	F
Approach Delay (s/veh)	6.5			37.6	137.9
Approach LOS	A			D	F

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.20	
Intersection Signal Delay (s/veh): 70.8	Intersection LOS: E
Intersection Capacity Utilization 90.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	146	506	156	916	1150	5
Future Volume (veh/h)	146	506	156	916	1150	5
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.04	1.00
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	1900	1900	1900	1976	1976	1900
Adj Flow Rate, veh/h	172	595	184	1078	1359	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	783	1203	213	1123	1261	539
Arrive On Green	0.69	0.69	0.12	0.57	0.34	0.00
Sat Flow, veh/h	1900	1610	1810	1976	3764	1610
Grp Volume(v), veh/h	172	595	184	1078	1359	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1976	1882	1610
Q Serve(g_s), s	4.0	15.5	12.0	62.2	40.2	0.0
Cycle Q Clear(g_c), s	4.0	15.5	12.0	62.2	40.2	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	783	1203	213	1123	1261	539
V/C Ratio(X)	0.22	0.49	0.86	0.96	1.08	0.00
Avail Cap(c_a), veh/h	783	1203	419	1222	1261	539
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.6	3.1	52.0	24.6	39.9	0.0
Incr Delay (d2), s/veh	0.0	0.1	4.0	16.0	49.1	0.0
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	5.6	31.2	26.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	11.7	3.2	56.0	40.6	89.0	0.0
LnGrp LOS	B	A	E	D	F	
Approach Vol, veh/h	767			1262	1359	
Approach Delay, s/veh	5.1			42.8	89.0	
Approach LOS	A			D	F	

Timer - Assigned Phs	2	3	4	8
Phs Duration (G+Y+Rc), s	46.0	18.7	55.3	74.0
Change Period (Y+Rc), s	5.8	4.6	5.8	5.8
Max Green Setting (Gmax), s	34.2	27.8	41.8	74.2
Max Q Clear Time (g_c+I1), s	42.2	14.0	17.5	64.2
Green Ext Time (p_c), s	0.0	0.2	1.7	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	52.8
HCM 7th LOS	D

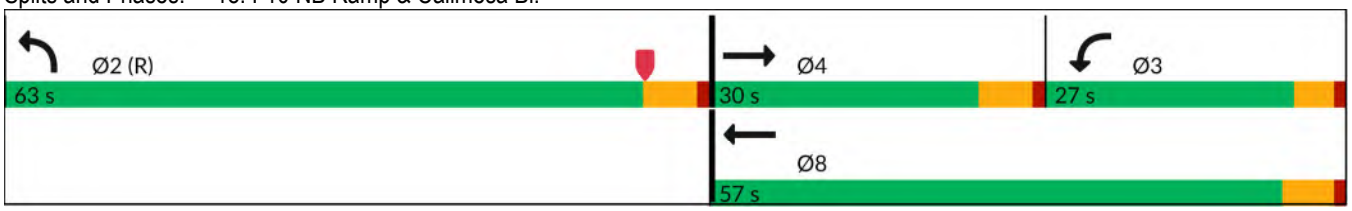
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	146	506	156	916	1150
Future Volume (vph)	146	506	156	916	1150
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.8		9.6	22.8	22.8
Total Split (s)	30.0		27.0	57.0	63.0
Total Split (%)	25.0%		22.5%	47.5%	52.5%
Yellow Time (s)	4.8		3.6	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	5.8
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	15.0	120.0	22.1	41.7	66.7
Actuated g/C Ratio	0.13	1.00	0.18	0.35	0.56
v/c Ratio	0.70	0.30	0.51	0.83	0.59
Control Delay (s/veh)	68.3	1.7	49.2	41.9	19.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.3	1.7	49.2	41.9	19.6
LOS	E	A	D	D	B
Approach Delay (s/veh)	16.6			42.9	19.6
Approach LOS	B			D	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 27.6	Intersection LOS: C
Intersection Capacity Utilization 68.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	146	506	156	916	1150	5
Future Volume (veh/h)	146	506	156	916	1150	5
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.04	1.04	1.04	1.04	1.04	1.00
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	1976	1976	1976	1976	1976	1900
Adj Flow Rate, veh/h	172	0	184	1078	1359	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	208		325	1226	2171	929
Arrive On Green	0.11	0.00	0.17	0.33	0.58	0.00
Sat Flow, veh/h	1976	1675	1882	3853	3764	1610
Grp Volume(v), veh/h	172	0	184	1078	1359	0
Grp Sat Flow(s),veh/h/ln	1976	1675	1882	1877	1882	1610
Q Serve(g_s), s	10.2	0.0	10.8	32.6	28.7	0.0
Cycle Q Clear(g_c), s	10.2	0.0	10.8	32.6	28.7	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	208		325	1226	2171	929
V/C Ratio(X)	0.83		0.57	0.88	0.63	0.00
Avail Cap(c_a), veh/h	398		351	1602	2171	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.6	0.0	45.5	38.2	16.8	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.9	4.0	1.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	5.0	15.1	11.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	55.3	0.0	46.4	42.2	18.2	0.0
LnGrp LOS	E		D	D	B	
Approach Vol, veh/h	172			1262	1359	
Approach Delay, s/veh	55.3			42.8	18.2	
Approach LOS	E			D	B	

Timer - Assigned Phs	2	3	4	8
Phs Duration (G+Y+Rc), s	75.0	26.6	18.4	45.0
Change Period (Y+Rc), s	5.8	5.8	* 5.8	5.8
Max Green Setting (Gmax), s	57.2	22.4	* 24	51.2
Max Q Clear Time (g_c+I1), s	30.7	12.8	12.2	34.6
Green Ext Time (p_c), s	3.0	0.2	0.4	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	31.6
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	334.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	182	486	10	35	664	196	11	443	210	82	44	127
Future Vol, veh/h	182	486	10	35	664	196	11	443	210	82	44	127
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	194	517	11	37	706	209	12	471	223	87	47	135
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

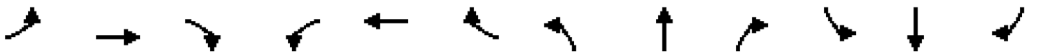
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	448.3	559	338.5	26.8
HCM LOS	F	F	F	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	68%	0%	98%	0%	77%	0%	26%
Vol Right, %	0%	32%	0%	2%	0%	23%	0%	74%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	653	182	496	35	860	82	171
LT Vol	11	0	182	0	35	0	82	0
Through Vol	0	443	0	486	0	664	0	44
RT Vol	0	210	0	10	0	196	0	127
Lane Flow Rate	12	695	194	528	37	915	87	182
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.031	1.679	0.502	1.294	0.097	2.22	0.247	0.463
Departure Headway (Hd)	11.652	10.873	13.761	13.2	11.35	10.647	15.321	14.197
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	309	340	265	280	318	348	236	257
Service Time	9.352	8.573	11.461	10.9	9.05	8.347	13.021	11.897
HCM Lane V/C Ratio	0.039	2.044	0.732	1.886	0.116	2.629	0.369	0.708
HCM Control Delay, s/veh	14.7	344	29.6	191.9	15.3	581.1	23	28.6
HCM Lane LOS	B	F	D	F	C	F	C	D
HCM 95th-tile Q	0.1	34.2	2.6	17.6	0.3	56.5	0.9	2.3

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	182	486	35	664	196	11	443	210	82	44
Future Volume (vph)	182	486	35	664	196	11	443	210	82	44
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6		3	8		7	4
Permitted Phases					6			8		
Detector Phase	5	2	1	6	6	3	8	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	22.4	9.6	22.4	22.4	9.6	22.4	22.4	9.6	22.4
Total Split (s)	19.0	60.3	11.3	52.6	52.6	9.6	37.0	37.0	11.4	38.8
Total Split (%)	15.8%	50.3%	9.4%	43.8%	43.8%	8.0%	30.8%	30.8%	9.5%	32.3%
Yellow Time (s)	3.6	4.4	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	14.0	57.6	6.2	45.5	45.5	5.0	30.7	30.7	6.8	38.4
Actuated g/C Ratio	0.12	0.49	0.05	0.39	0.39	0.04	0.26	0.26	0.06	0.33
v/c Ratio	0.90	0.30	0.39	0.96	0.29	0.16	0.95	0.39	0.83	0.29
Control Delay (s/veh)	92.1	19.2	67.1	59.5	7.8	60.2	72.4	7.6	106.9	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	92.1	19.2	67.1	59.5	7.8	60.2	72.4	7.6	106.9	13.4
LOS	F	B	E	E	A	E	E	A	F	B
Approach Delay (s/veh)		38.8		48.5			51.8			43.7
Approach LOS		D		D			D			D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 117.1	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay (s/veh): 46.2	Intersection LOS: D
Intersection Capacity Utilization 89.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 22: Calimesa Bl. & Singleton Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	486	10	35	664	196	11	443	210	82	44	127
Future Volume (veh/h)	182	486	10	35	664	196	11	443	210	82	44	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	194	517	11	37	706	209	12	471	223	87	47	135
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	220	1738	37	54	739	626	25	499	423	104	133	381
Arrive On Green	0.12	0.48	0.48	0.03	0.39	0.39	0.01	0.26	0.26	0.06	0.31	0.31
Sat Flow, veh/h	1810	3614	77	1810	1900	1610	1810	1900	1610	1810	433	1243
Grp Volume(v), veh/h	194	258	270	37	706	209	12	471	223	87	0	182
Grp Sat Flow(s),veh/h/ln	1810	1805	1886	1810	1900	1610	1810	1900	1610	1810	0	1676
Q Serve(g_s), s	12.5	10.2	10.3	2.4	42.8	10.8	0.8	28.8	14.0	5.6	0.0	10.0
Cycle Q Clear(g_c), s	12.5	10.2	10.3	2.4	42.8	10.8	0.8	28.8	14.0	5.6	0.0	10.0
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.74
Lane Grp Cap(c), veh/h	220	868	907	54	739	626	25	499	423	104	0	514
V/C Ratio(X)	0.88	0.30	0.30	0.69	0.96	0.33	0.48	0.94	0.53	0.84	0.00	0.35
Avail Cap(c_a), veh/h	220	868	907	102	758	642	76	507	430	104	0	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.1	18.6	18.6	56.9	35.2	25.4	57.9	42.8	37.3	55.2	0.0	31.9
Incr Delay (d2), s/veh	30.3	0.2	0.2	5.7	22.1	0.3	5.3	26.2	1.2	40.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	4.2	4.4	1.2	23.6	4.2	0.4	17.0	5.7	3.7	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	81.4	18.8	18.8	62.6	57.2	25.7	63.2	69.0	38.5	95.4	0.0	32.3
LnGrp LOS	F	B	B	E	E	C	E	E	D	F		C
Approach Vol, veh/h		722			952			706			269	
Approach Delay, s/veh		35.6			50.5			59.2			52.7	
Approach LOS		D			D			E			D	

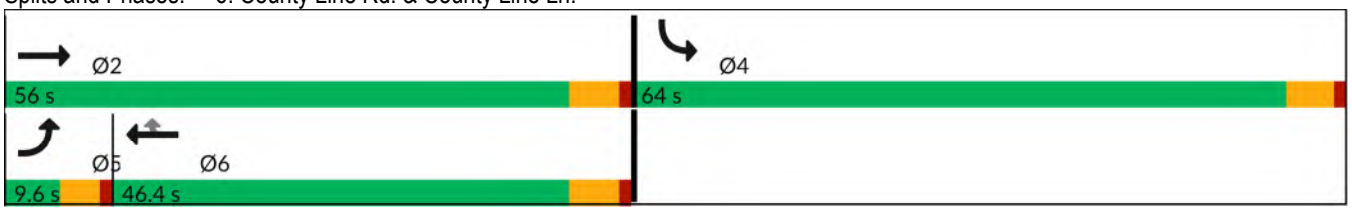
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	62.3	6.2	41.7	19.0	51.5	11.4	36.5
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	6.7	54.9	5.0	33.4	14.4	47.2	6.8	31.6
Max Q Clear Time (g_c+I1), s	4.4	12.3	2.8	12.0	14.5	44.8	7.6	30.8
Green Ext Time (p_c), s	0.0	3.3	0.0	1.0	0.0	1.3	0.0	0.4

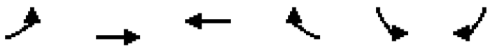
Intersection Summary	
HCM 7th Control Delay, s/veh	49.0
HCM 7th LOS	D

Lane Group	EBT	WBT	WBR	SBL	Ø5
Lane Configurations					
Traffic Volume (vph)	571	799	123	159	
Future Volume (vph)	571	799	123	159	
Turn Type	NA	NA	Perm	Prot	
Protected Phases	2	6		4	5
Permitted Phases			6		
Detector Phase	2	6	6	4	
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.4	22.4	22.4	22.4	9.6
Total Split (s)	56.0	46.4	46.4	64.0	9.6
Total Split (%)	46.7%	38.7%	38.7%	53.3%	8%
Yellow Time (s)	4.4	4.4	4.4	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4	5.4	5.4	5.4	
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	50.7	50.7	50.7	17.5	
Actuated g/C Ratio	0.64	0.64	0.64	0.22	
v/c Ratio	0.84	1.17	0.21	0.71	
Control Delay (s/veh)	20.3	104.2	4.8	38.9	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	20.3	104.2	4.8	38.9	
LOS	C	F	A	D	
Approach Delay (s/veh)	20.3	90.9		38.9	
Approach LOS	C	F		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 79	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.17	
Intersection Signal Delay (s/veh): 61.5	Intersection LOS: E
Intersection Capacity Utilization 59.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: County Line Rd. & County Line Ln.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	571	799	123	159	0
Future Volume (veh/h)	0	571	799	123	159	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	1020	1427	220	0	0
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	4	1648	1648	1396	0	0
Arrive On Green	0.00	0.87	0.87	0.87	0.00	0.00
Sat Flow, veh/h	1810	1900	1900	1610	0	0
Grp Volume(v), veh/h	0	1020	1427	220	0	0
Grp Sat Flow(s),veh/h/ln	1810	1900	1900	1610	0	0
Q Serve(g_s), s	0.0	6.3	16.3	0.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.3	16.3	0.9	0.0	0.0
Prop In Lane	1.00			1.00	0.00	0.00
Lane Grp Cap(c), veh/h	4	1648	1648	1396	0	0
V/C Ratio(X)	0.00	0.62	0.87	0.16	0.00	0.00
Avail Cap(c_a), veh/h	222	2364	1915	1623	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.8	1.4	0.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	4.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	1.8	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	1.2	5.4	0.5	0.0	0.0
LnGrp LOS		A	A	A		
Approach Vol, veh/h		1020	1647		0	
Approach Delay, s/veh		1.2	4.8		0.0	
Approach LOS		A	A			

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		40.7		0.0	0.0	40.7
Change Period (Y+Rc), s		5.4		5.4	4.6	5.4
Max Green Setting (Gmax), s		50.6		58.6	5.0	41.0
Max Q Clear Time (g_c+I1), s		8.3		0.0	0.0	18.3
Green Ext Time (p_c), s		11.5		0.0	0.0	17.0

Intersection Summary		
HCM 7th Control Delay, s/veh	3.4	
HCM 7th LOS	A	

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	693	11	101	807	14	70
Future Vol, veh/h	693	11	101	807	14	70
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	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	797	13	116	928	16	80

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	809	0	1963	803
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	1160	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	825	-	32	387
Stage 1	-	-	-	-	444	-
Stage 2	-	-	-	-	240	-
Platoon blocked, %	-	-		-	0	
Mov Cap-1 Maneuver	-	-	825	-	28	387
Mov Cap-2 Maneuver	-	-	-	-	139	-
Stage 1	-	-	-	-	444	-
Stage 2	-	-	-	-	206	-

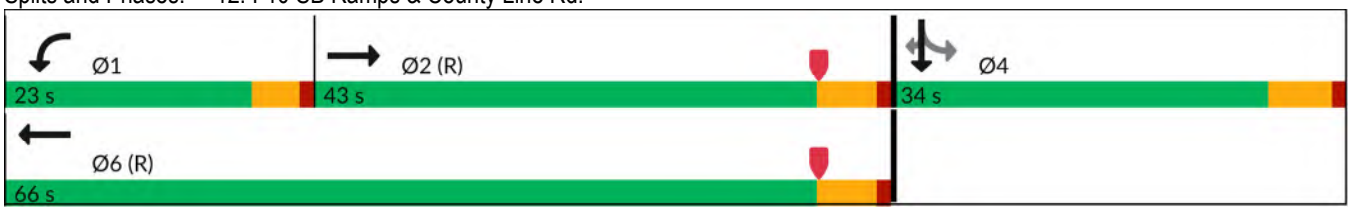
Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.12	22.74
HCM LOS			C

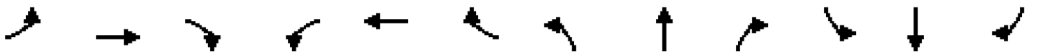
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	298	-	-	825	-
HCM Lane V/C Ratio	0.324	-	-	0.141	-
HCM Control Delay (s/veh)	22.7	-	-	10.1	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	1.4	-	-	0.5	-

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	572	307	506	3	402
Future Volume (vph)	572	307	506	3	402
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	9.6	22.4	22.8	22.8
Total Split (s)	43.0	23.0	66.0	34.0	34.0
Total Split (%)	43.0%	23.0%	66.0%	34.0%	34.0%
Yellow Time (s)	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	37.6	18.4	60.6	28.2	28.2
Actuated g/C Ratio	0.38	0.18	0.61	0.28	0.28
v/c Ratio	1.16	0.98	0.47	1.05	0.79
Control Delay (s/veh)	118.7	76.1	5.5	91.3	35.7
Queue Delay	0.0	0.0	1.7	17.1	0.0
Total Delay (s/veh)	118.7	76.1	7.1	108.4	35.7
LOS	F	E	A	F	D
Approach Delay (s/veh)	118.7		33.2	76.2	
Approach LOS	F		C	E	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 23.6 (24%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay (s/veh): 75.2	Intersection LOS: E
Intersection Capacity Utilization 123.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	572	191	307	506	0	0	0	0	503	3	402
Future Volume (veh/h)	0	572	191	307	506	0	0	0	0	503	3	402
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	609	97	327	538	0				535	3	322
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	599	95	333	1151	0				508	3	454
Arrive On Green	0.00	0.38	0.38	0.37	1.00	0.00				0.28	0.28	0.28
Sat Flow, veh/h	0	1594	254	1810	1900	0				1800	10	1610
Grp Volume(v), veh/h	0	0	706	327	538	0				538	0	322
Grp Sat Flow(s),veh/h/ln	0	0	1848	1810	1900	0				1810	0	1610
Q Serve(g_s), s	0.0	0.0	37.6	17.9	0.0	0.0				28.2	0.0	17.9
Cycle Q Clear(g_c), s	0.0	0.0	37.6	17.9	0.0	0.0				28.2	0.0	17.9
Prop In Lane	0.00		0.14	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	0	695	333	1151	0				510	0	454
V/C Ratio(X)	0.00	0.00	1.02	0.98	0.47	0.00				1.05	0.00	0.71
Avail Cap(c_a), veh/h	0	0	695	333	1151	0				510	0	454
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	0.00	1.00	0.49	0.49	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	31.2	31.4	0.0	0.0				35.9	0.0	32.2
Incr Delay (d2), s/veh	0.0	0.0	38.3	29.9	0.7	0.0				54.8	0.0	9.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	23.5	8.8	0.2	0.0				19.4	0.0	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	69.5	61.3	0.7	0.0				90.7	0.0	41.3
LnGrp LOS			F	E	A					F		D
Approach Vol, veh/h		706			865						860	
Approach Delay, s/veh		69.5			23.6						72.2	
Approach LOS		E			C						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.0	43.0		34.0		66.0
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	18.4	37.6		28.2		60.6
Max Q Clear Time (g_c+I1), s	19.9	39.6		30.2		2.0
Green Ext Time (p_c), s	0.0	0.0		0.0		4.1

Intersection Summary	
HCM 7th Control Delay, s/veh	54.1
HCM 7th LOS	D

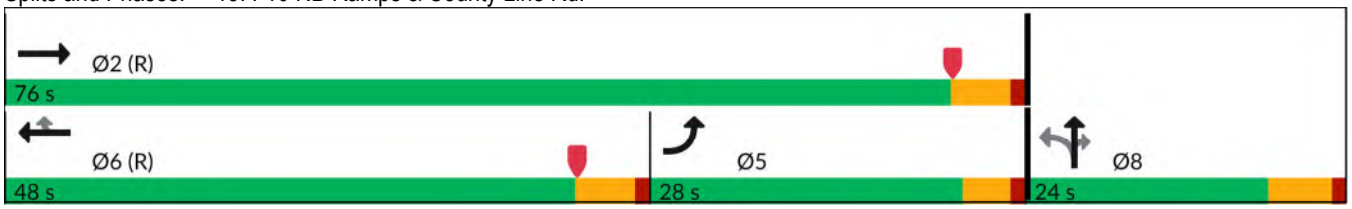
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Traffic Volume (vph)	332	743	614	374	2	307
Future Volume (vph)	332	743	614	374	2	307
Turn Type	Prot	NA	NA	Perm	NA	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8
Total Split (s)	28.0	76.0	48.0	48.0	24.0	24.0
Total Split (%)	28.0%	76.0%	48.0%	48.0%	24.0%	24.0%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	23.4	70.6	42.6	42.6	18.2	18.2
Actuated g/C Ratio	0.23	0.71	0.43	0.43	0.18	0.18
v/c Ratio	0.84	0.59	0.81	0.43	0.65	0.71
Control Delay (s/veh)	39.4	10.8	34.5	3.5	48.4	24.5
Queue Delay	0.0	21.8	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.4	32.6	34.5	3.5	48.4	24.5
LOS	D	C	C	A	D	C
Approach Delay (s/veh)		34.7	22.8		34.0	
Approach LOS		C	C		C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay (s/veh): 30.0	Intersection LOS: C
Intersection Capacity Utilization 123.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 13: I-10 NB Ramps & County Line Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	332	743	0	0	614	374	200	2	307	0	0	0
Future Volume (veh/h)	332	743	0	0	614	374	200	2	307	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	353	790	0	0	653	398	213	2	327			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	409	1341	0	0	809	686	326	3	293			
Arrive On Green	0.45	1.00	0.00	0.00	0.43	0.43	0.18	0.18	0.18			
Sat Flow, veh/h	1810	1900	0	0	1900	1610	1793	17	1610			
Grp Volume(v), veh/h	353	790	0	0	653	398	215	0	327			
Grp Sat Flow(s),veh/h/ln	1810	1900	0	0	1900	1610	1810	0	1610			
Q Serve(g_s), s	17.5	0.0	0.0	0.0	30.1	18.8	11.0	0.0	18.2			
Cycle Q Clear(g_c), s	17.5	0.0	0.0	0.0	30.1	18.8	11.0	0.0	18.2			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	409	1341	0	0	809	686	329	0	293			
V/C Ratio(X)	0.86	0.59	0.00	0.00	0.81	0.58	0.65	0.00	1.12			
Avail Cap(c_a), veh/h	423	1341	0	0	809	686	329	0	293			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	26.0	0.0	0.0	0.0	25.1	21.9	38.0	0.0	40.9			
Incr Delay (d2), s/veh	1.7	0.2	0.0	0.0	8.5	3.6	9.7	0.0	87.4			
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	5.6	0.1	0.0	0.0	14.9	7.6	5.6	0.0	14.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.7	0.2	0.0	0.0	33.6	25.4	47.6	0.0	128.3			
LnGrp LOS	C	A			C	C	D		F			
Approach Vol, veh/h		1143			1051			542				
Approach Delay, s/veh		8.7			30.5			96.3				
Approach LOS		A			C			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.0			28.0	48.0		24.0				
Change Period (Y+Rc), s		5.4			5.4	* 5.4		5.8				
Max Green Setting (Gmax), s		70.6			23.4	* 43		18.2				
Max Q Clear Time (g_c+I1), s		2.0			19.5	32.1		20.2				
Green Ext Time (p_c), s		7.4			0.2	4.4		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	34.4
HCM 7th LOS	C

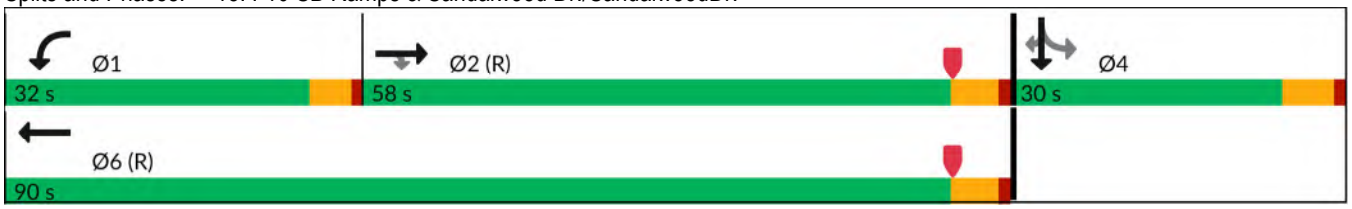
Notes

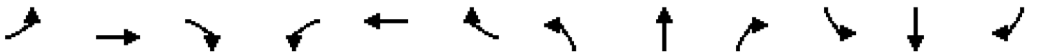
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	702	496	359	396	7	237
Future Volume (vph)	702	496	359	396	7	237
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2				4
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8	22.8
Total Split (s)	58.0	58.0	32.0	90.0	30.0	30.0
Total Split (%)	48.3%	48.3%	26.7%	75.0%	25.0%	25.0%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	None	None
Act Effct Green (s)	53.6	53.6	26.6	84.8	24.0	24.0
Actuated g/C Ratio	0.45	0.45	0.22	0.71	0.20	0.20
v/c Ratio	0.87	0.55	0.95	0.31	0.95	0.46
Control Delay (s/veh)	43.2	7.4	68.3	5.1	85.2	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.2	7.4	68.3	5.1	85.2	8.5
LOS	D	A	E	A	F	A
Approach Delay (s/veh)	28.4			35.1	54.0	
Approach LOS	C			D	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay (s/veh): 35.9	Intersection LOS: D
Intersection Capacity Utilization 90.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	702	496	359	396	0	0	0	0	280	7	237
Future Volume (veh/h)	0	702	496	359	396	0	0	0	0	280	7	237
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	739	522	378	417	0				295	7	144
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	0	0	0	0	0				0	0	0
Cap, veh/h	0	883	748	396	1372	0				327	8	297
Arrive On Green	0.00	0.46	0.46	0.44	1.00	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	1900	1610	1810	1900	0				1770	42	1610
Grp Volume(v), veh/h	0	739	522	378	417	0				302	0	144
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1810	1900	0				1812	0	1610
Q Serve(g_s), s	0.0	40.9	30.8	24.2	0.0	0.0				19.6	0.0	9.6
Cycle Q Clear(g_c), s	0.0	40.9	30.8	24.2	0.0	0.0				19.6	0.0	9.6
Prop In Lane	0.00		1.00	1.00		0.00				0.98		1.00
Lane Grp Cap(c), veh/h	0	883	748	396	1372	0				334	0	297
V/C Ratio(X)	0.00	0.84	0.70	0.95	0.30	0.00				0.90	0.00	0.48
Avail Cap(c_a), veh/h	0	883	748	413	1372	0				365	0	325
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	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	28.1	25.4	33.1	0.0	0.0				47.9	0.0	43.8
Incr Delay (d2), s/veh	0.0	9.3	5.3	31.4	0.6	0.0				23.7	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	19.8	12.3	11.3	0.2	0.0				10.8	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	37.4	30.8	64.6	0.6	0.0				71.6	0.0	45.0
LnGrp LOS		D	C	E	A					E		D
Approach Vol, veh/h		1261			795						446	
Approach Delay, s/veh		34.7			31.0						63.0	
Approach LOS		C			C						E	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	30.9	61.2		27.9		92.1						
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4						
Max Green Setting (Gmax), s	27.4	52.6		24.2		84.6						
Max Q Clear Time (g_c+I1), s	26.2	42.9		21.6		2.0						
Green Ext Time (p_c), s	0.1	4.7		0.6		2.6						

Intersection Summary		
HCM 7th Control Delay, s/veh		38.6
HCM 7th LOS		D

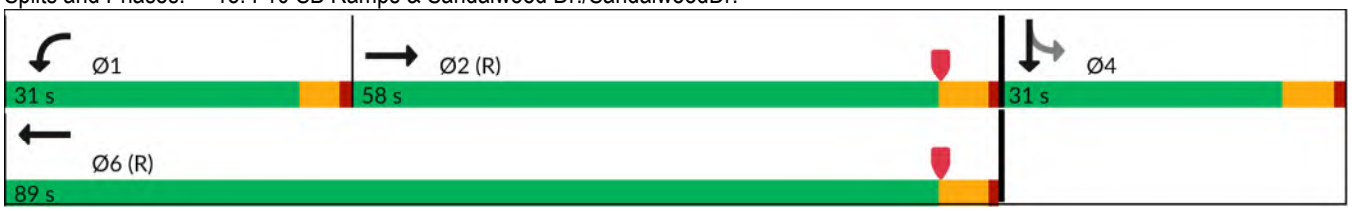
Notes

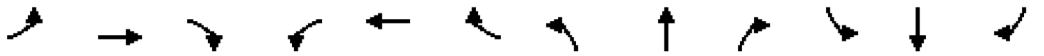
User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1284	949	359	720	280	7	444
Future Volume (vph)	1284	949	359	720	280	7	444
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	58.0		31.0	89.0	31.0	31.0	
Total Split (%)	48.3%		25.8%	74.2%	25.8%	25.8%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	None	None	
Act Effct Green (s)	71.0	120.0	17.3	92.9	15.9	15.9	120.0
Actuated g/C Ratio	0.59	1.00	0.14	0.77	0.13	0.13	1.00
v/c Ratio	0.44	0.62	0.75	0.19	0.66	0.67	0.29
Control Delay (s/veh)	15.1	1.8	67.0	2.8	62.9	63.2	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.1	1.8	67.0	2.8	62.9	63.2	0.5
LOS	B	A	E	A	E	E	A
Approach Delay (s/veh)	9.4			24.2		25.0	
Approach LOS	A			C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay (s/veh): 16.2	Intersection LOS: B
Intersection Capacity Utilization 56.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1284	949	359	720	0	0	0	0	280	7	444
Future Volume (veh/h)	0	1284	949	359	720	0	0	0	0	280	7	444
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	1352	0	378	758	0				300	0	0
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	0	0	0	0	0				0	0	0
Cap, veh/h	0	3317		437	4161	0				378	0	
Arrive On Green	0.00	0.64	0.00	0.25	1.00	0.00				0.10	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	1352	0	378	758	0				300	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	15.3	0.0	12.4	0.0	0.0				9.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.3	0.0	12.4	0.0	0.0				9.7	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3317		437	4161	0				378	0	
V/C Ratio(X)	0.00	0.41		0.86	0.18	0.00				0.79	0.00	
Avail Cap(c_a), veh/h	0	3317		772	4161	0				760	0	
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	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	10.6	0.0	44.1	0.0	0.0				52.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	2.0	0.1	0.0				3.8	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.4	0.0	4.7	0.0	0.0				4.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	10.9	0.0	46.1	0.1	0.0				56.3	0.0	0.0
LnGrp LOS		B		D	A					E		
Approach Vol, veh/h		1352			1136						300	
Approach Delay, s/veh		10.9			15.4						56.3	
Approach LOS		B			B						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.5	82.1		18.3		101.7
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	26.4	52.6		25.2		83.6
Max Q Clear Time (g_c+I1), s	14.4	17.3		11.7		2.0
Green Ext Time (p_c), s	0.6	11.8		0.8		5.8

Intersection Summary		
HCM 7th Control Delay, s/veh		17.6
HCM 7th LOS		B

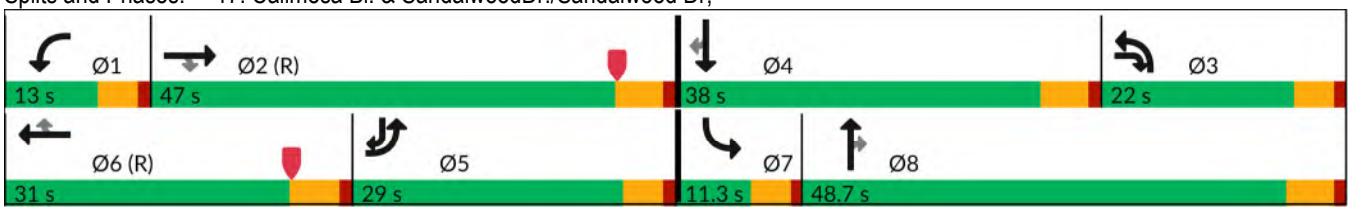
Notes

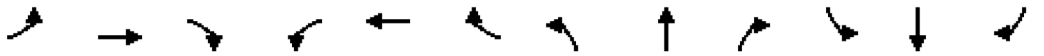
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	374	177	9	53	169	29	533	394	197	35	511	446
Future Volume (vph)	374	177	9	53	169	29	533	394	197	35	511	446
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.0	30.4	10.0	10.0	29.4	29.4	10.0	27.4	27.4	9.6	15.4	10.0
Total Split (s)	29.0	47.0	22.0	13.0	31.0	31.0	22.0	48.7	48.7	11.3	38.0	29.0
Total Split (%)	24.2%	39.2%	18.3%	10.8%	25.8%	25.8%	18.3%	40.6%	40.6%	9.4%	31.7%	24.2%
Yellow Time (s)	3.6	4.4	3.6	3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	4.6	4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	24.4	44.6	63.7	7.3	25.6	25.6	17.4	47.8	47.8	6.2	32.6	57.8
Actuated g/C Ratio	0.20	0.37	0.53	0.06	0.21	0.21	0.15	0.40	0.40	0.05	0.27	0.48
v/c Ratio	1.07	0.26	0.01	0.51	0.44	0.07	1.11	0.29	0.28	0.40	1.04	0.53
Control Delay (s/veh)	95.6	20.9	0.0	70.5	45.0	0.3	119.9	34.6	13.4	67.8	94.0	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	95.6	20.9	0.0	70.5	45.0	0.3	119.9	34.6	13.4	67.8	94.0	12.4
LOS	F	C	A	E	D	A	F	C	B	E	F	B
Approach Delay (s/veh)		70.6			45.2			71.3			56.4	
Approach LOS		E			D			E			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay (s/veh): 63.9	Intersection LOS: E
Intersection Capacity Utilization 99.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	374	177	9	53	169	29	533	394	197	35	511	446
Future Volume (veh/h)	374	177	9	53	169	29	533	394	197	35	511	446
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	394	186	-8	56	178	22	561	415	180	37	538	397
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1163	1549	1546	85	405	338	509	1422	632	53	516	1472
Arrive On Green	0.21	0.27	0.00	0.05	0.21	0.21	0.15	0.39	0.39	0.03	0.27	0.27
Sat Flow, veh/h	1810	1900	1610	1810	1900	1583	3510	3610	1604	1810	1900	1608
Grp Volume(v), veh/h	394	186	-8	56	178	22	561	415	180	37	538	397
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1583	1755	1805	1604	1810	1900	1608
Q Serve(g_s), s	22.2	8.9	0.0	3.7	9.8	1.9	17.4	9.4	9.2	2.4	32.6	0.0
Cycle Q Clear(g_c), s	22.2	8.9	0.0	3.7	9.8	1.9	17.4	9.4	9.2	2.4	32.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1163	1549	1546	85	405	338	509	1422	632	53	516	1472
V/C Ratio(X)	0.34	0.12	-0.01	0.66	0.44	0.07	1.10	0.29	0.28	0.69	1.04	0.27
Avail Cap(c_a), veh/h	1163	1549	1546	127	405	338	509	1422	632	101	516	1472
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	11.3	0.0	56.2	41.0	77.2	51.3	24.9	24.8	57.7	43.7	0.6
Incr Delay (d2), s/veh	0.1	0.2	0.0	3.2	3.4	0.4	68.5	0.1	0.2	5.8	51.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	3.5	0.0	1.7	4.9	0.5	12.3	4.0	3.5	1.2	22.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.7	11.5	0.0	59.4	44.4	77.6	119.8	25.0	25.1	63.5	94.8	0.7
LnGrp LOS	C	B		E	D	E	F	C	C	E	F	A
Approach Vol, veh/h		572			256			1156			972	
Approach Delay, s/veh		21.4			50.5			71.0			55.1	
Approach LOS		C			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	104.6	22.8	38.0	83.9	31.0	8.1	52.7
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	5.4	* 5.4	4.6	5.4
Max Green Setting (Gmax), s	8.4	41.6	17.4	* 33	24.4	* 26	6.7	43.3
Max Q Clear Time (g_c+I1), s	5.7	10.9	19.4	34.6	24.2	11.8	4.4	11.4
Green Ext Time (p_c), s	0.0	1.0	0.0	0.0	0.0	0.7	0.0	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	54.4
HCM 7th LOS	D

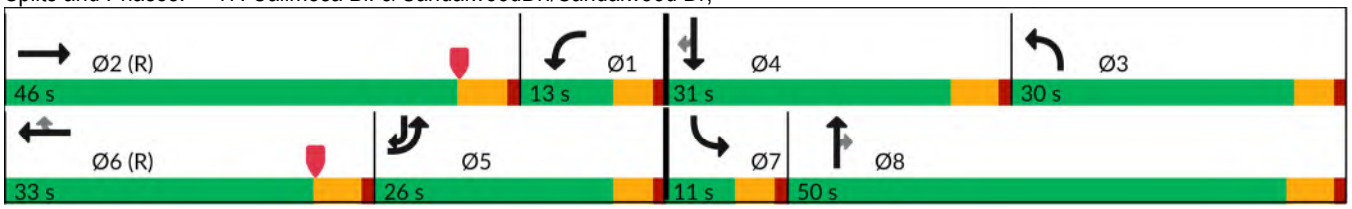
Notes

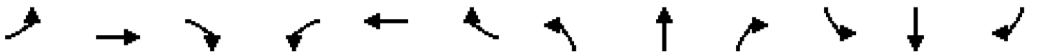
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	374	177	999	53	169	29	533	394	197	35	511	446
Future Volume (vph)	374	177	999	53	169	29	533	394	197	35	511	446
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.0	30.4		10.0	29.4	29.4	10.0	27.4	27.4	9.6	15.4	10.0
Total Split (s)	26.0	46.0		13.0	33.0	33.0	30.0	50.0	50.0	11.0	31.0	26.0
Total Split (%)	21.7%	38.3%		10.8%	27.5%	27.5%	25.0%	41.7%	41.7%	9.2%	25.8%	21.7%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	19.1	51.3	120.0	7.3	37.5	37.5	21.2	41.3	41.3	6.0	22.2	42.1
Actuated g/C Ratio	0.16	0.43	1.00	0.06	0.31	0.31	0.18	0.34	0.34	0.05	0.19	0.35
v/c Ratio	0.63	0.11	0.54	0.49	0.15	0.04	0.81	0.31	0.27	0.39	0.77	0.58
Control Delay (s/veh)	50.2	17.9	4.7	68.5	33.0	0.1	58.8	34.9	11.5	66.9	54.0	16.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.2	17.9	4.7	68.5	33.0	0.1	58.8	34.9	11.5	66.9	54.0	16.4
LOS	D	B	A	E	C	A	E	C	B	E	D	B
Approach Delay (s/veh)		17.2			36.6			42.1			37.6	
Approach LOS		B			D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay (s/veh): 30.8	Intersection LOS: C
Intersection Capacity Utilization 76.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	374	177	999	53	169	29	533	394	197	35	511	446
Future Volume (veh/h)	374	177	999	53	169	29	533	394	197	35	511	446
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	394	186	0	56	178	22	561	415	180	37	538	397
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	950	1286		261	874	364	632	1270	516	53	670	690
Arrive On Green	0.08	0.11	0.00	0.14	0.23	0.23	0.17	0.32	0.32	0.03	0.18	0.18
Sat Flow, veh/h	3764	3800	1675	1810	3800	1584	3764	3952	1606	1810	3800	1607
Grp Volume(v), veh/h	394	186	0	56	178	22	561	415	180	37	538	397
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1584	1882	1976	1606	1810	1900	1607
Q Serve(g_s), s	11.9	5.3	0.0	3.3	4.5	1.1	17.5	9.6	6.8	2.4	16.3	0.0
Cycle Q Clear(g_c), s	11.9	5.3	0.0	3.3	4.5	1.1	17.5	9.6	6.8	2.4	16.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	950	1286		261	874	364	632	1270	516	53	670	690
V/C Ratio(X)	0.41	0.14		0.21	0.20	0.06	0.89	0.33	0.35	0.69	0.80	0.58
Avail Cap(c_a), veh/h	950	1286		261	874	364	797	1469	597	97	811	749
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	37.6	0.0	45.4	37.3	26.3	48.8	30.9	13.8	57.7	47.4	26.0
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.2	0.5	0.3	8.2	0.1	0.4	5.8	4.9	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	2.5	0.0	1.5	2.1	0.5	8.8	4.5	3.8	1.2	8.0	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.7	37.9	0.0	45.5	37.8	26.6	57.0	31.0	14.1	63.5	52.3	26.9
LnGrp LOS	D	D		D	D	C	E	C	B	E	D	C
Approach Vol, veh/h		580			256			1156			972	
Approach Delay, s/veh		43.9			38.6			41.0			42.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.9	46.0	25.6	26.6	34.9	33.0	8.1	44.0
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	8.4	40.6	25.4	* 26	21.4	27.6	6.4	44.6
Max Q Clear Time (g_c+I1), s	5.3	7.3	19.5	18.3	13.9	6.5	4.4	11.6
Green Ext Time (p_c), s	0.0	1.1	0.7	2.9	0.5	1.0	0.0	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	41.8
HCM 7th LOS	D

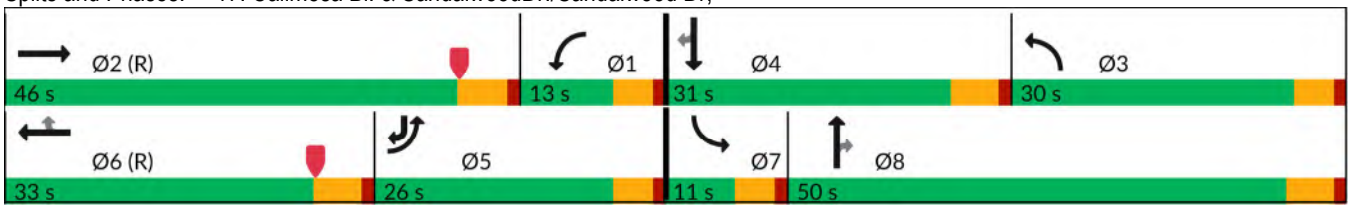
Notes

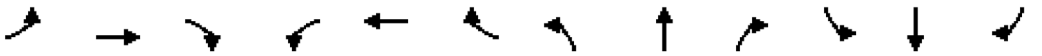
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	374	177	999	53	169	29	533	394	197	35	511	446
Future Volume (vph)	374	177	999	53	169	29	533	394	197	35	511	446
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.0	30.4		10.0	29.4	29.4	10.0	27.4	27.4	9.6	15.4	10.0
Total Split (s)	26.0	46.0		13.0	33.0	33.0	30.0	50.0	50.0	11.0	31.0	26.0
Total Split (%)	21.7%	38.3%		10.8%	27.5%	27.5%	25.0%	41.7%	41.7%	9.2%	25.8%	21.7%
Yellow Time (s)	3.6	4.4		3.6	4.4	4.4	3.6	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4		4.6	5.4	5.4	4.6	5.4	5.4	4.6	5.4	4.6
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	19.1	51.3	120.0	7.3	37.5	37.5	21.2	41.3	41.3	6.0	22.2	42.1
Actuated g/C Ratio	0.16	0.43	1.00	0.06	0.31	0.31	0.18	0.34	0.34	0.05	0.19	0.35
v/c Ratio	0.63	0.23	0.54	0.49	0.15	0.04	0.81	0.31	0.27	0.39	0.77	0.58
Control Delay (s/veh)	50.2	20.2	4.7	68.5	33.0	0.1	58.8	34.9	11.5	66.9	54.0	16.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.2	20.2	4.7	68.5	33.0	0.1	58.8	34.9	11.5	66.9	54.0	16.4
LOS	D	C	A	E	C	A	E	C	B	E	D	B
Approach Delay (s/veh)		17.5			36.6			42.1			37.6	
Approach LOS		B			D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 114.6 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay (s/veh): 30.9	Intersection LOS: C
Intersection Capacity Utilization 76.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	374	177	999	53	169	29	533	394	197	35	511	446
Future Volume (veh/h)	374	177	999	53	169	29	533	394	197	35	511	446
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	394	186	0	56	178	22	561	415	180	37	538	397
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	950	643		261	874	364	632	1270	515	53	670	690
Arrive On Green	0.08	0.11	0.00	0.14	0.23	0.23	0.17	0.32	0.32	0.03	0.18	0.18
Sat Flow, veh/h	3764	1900	1675	1810	3800	1584	3764	3952	1603	1810	3800	1607
Grp Volume(v), veh/h	394	186	0	56	178	22	561	415	180	37	538	397
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1584	1882	1976	1603	1810	1900	1607
Q Serve(g_s), s	11.9	10.8	0.0	3.3	4.5	1.1	17.5	9.6	6.9	2.4	16.3	0.0
Cycle Q Clear(g_c), s	11.9	10.8	0.0	3.3	4.5	1.1	17.5	9.6	6.9	2.4	16.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	950	643		261	874	364	632	1270	515	53	670	690
V/C Ratio(X)	0.41	0.29		0.21	0.20	0.06	0.89	0.33	0.35	0.69	0.80	0.58
Avail Cap(c_a), veh/h	950	643		261	874	364	797	1469	596	97	811	749
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	40.1	0.0	45.4	37.3	26.3	48.8	30.9	13.8	57.7	47.4	26.0
Incr Delay (d2), s/veh	0.1	1.1	0.0	0.2	0.5	0.3	8.2	0.1	0.4	5.8	4.9	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	5.6	0.0	1.5	2.1	0.5	8.8	4.5	3.8	1.2	8.0	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.7	41.2	0.0	45.5	37.8	26.6	57.0	31.0	14.1	63.5	52.3	26.9
LnGrp LOS	D	D		D	D	C	E	C	B	E	D	C
Approach Vol, veh/h		580			256			1156			972	
Approach Delay, s/veh		44.9			38.6			41.0			42.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.9	46.0	25.6	26.6	34.9	33.0	8.1	44.0
Change Period (Y+Rc), s	4.6	5.4	5.4	* 5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	8.4	40.6	25.4	* 26	21.4	27.6	6.4	44.6
Max Q Clear Time (g_c+I1), s	5.3	12.8	19.5	18.3	13.9	6.5	4.4	11.6
Green Ext Time (p_c), s	0.0	0.9	0.7	2.9	0.5	1.0	0.0	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	42.0
HCM 7th LOS	D

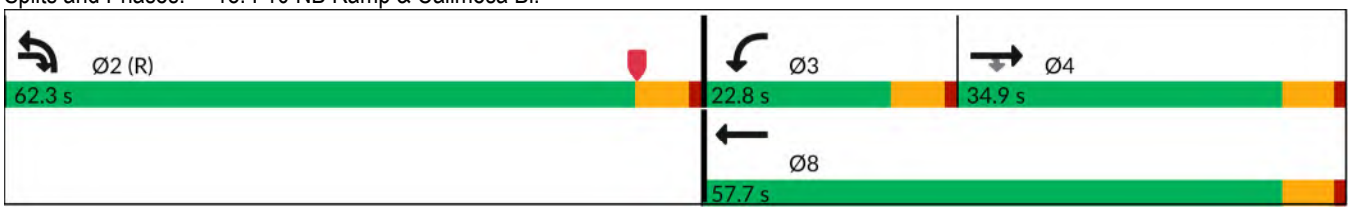
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	368	1194	39	274	851
Future Volume (vph)	368	1194	39	274	851
Turn Type	NA	pm+ov	Prot	NA	Prot
Protected Phases	4	2	3	8	2
Permitted Phases		4			
Detector Phase	4	2	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	22.8	22.8	22.8	22.8	22.8
Total Split (s)	34.9	62.3	22.8	57.7	62.3
Total Split (%)	29.1%	51.9%	19.0%	48.1%	51.9%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	C-Max	Max	None	C-Max
Act Effct Green (s)	26.7	91.4	17.0	49.5	58.9
Actuated g/C Ratio	0.22	0.76	0.14	0.41	0.49
v/c Ratio	0.90	0.87	0.16	0.36	0.51
Control Delay (s/veh)	69.6	13.6	47.1	25.4	22.5
Queue Delay	0.0	18.3	0.0	0.0	0.0
Total Delay (s/veh)	69.6	31.9	47.1	25.4	22.5
LOS	E	C	D	C	C
Approach Delay (s/veh)	40.8			28.1	22.5
Approach LOS	D			C	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay (s/veh): 33.6	Intersection LOS: C
Intersection Capacity Utilization 91.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	368	1194	39	274	851	6
Future Volume (veh/h)	368	1194	39	274	851	6
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	379	1231	40	282	883	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	461	1149	256	822	1704	758
Arrive On Green	0.16	0.16	0.14	0.43	0.47	0.00
Sat Flow, veh/h	1900	1610	1810	1900	3619	1610
Grp Volume(v), veh/h	379	1231	40	282	883	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1810	1610
Q Serve(g_s), s	23.1	29.1	2.3	11.9	20.5	0.0
Cycle Q Clear(g_c), s	23.1	29.1	2.3	11.9	20.5	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	461	1149	256	822	1704	758
V/C Ratio(X)	0.82	1.07	0.16	0.34	0.52	0.00
Avail Cap(c_a), veh/h	461	1149	256	822	1704	758
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.14	0.14	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.8	10.1	45.2	22.7	22.2	0.0
Incr Delay (d2), s/veh	1.7	35.3	1.3	0.1	1.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	47.0	1.1	5.2	8.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	49.4	45.3	46.5	22.8	23.4	0.0
LnGrp LOS	D	F	D	C	C	
Approach Vol, veh/h	1610			322	883	
Approach Delay, s/veh	46.3			25.7	23.4	
Approach LOS	D			C	C	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	62.3	22.8	34.9		57.7
Change Period (Y+Rc), s	5.8	5.8	5.8		5.8
Max Green Setting (Gmax), s	56.5	17.0	29.1		51.9
Max Q Clear Time (g_c+I1), s	22.5	4.3	31.1		13.9
Green Ext Time (p_c), s	1.7	0.0	0.0		1.0

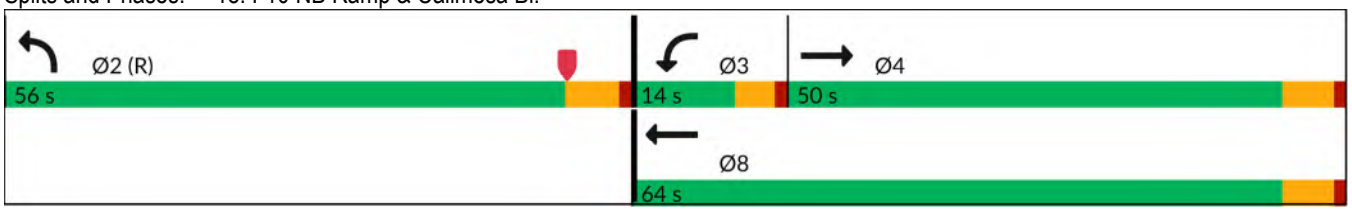
Intersection Summary	
HCM 7th Control Delay, s/veh	36.8
HCM 7th LOS	D

Notes
User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	368	1194	39	278	851
Future Volume (vph)	368	1194	39	278	851
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.8		9.6	22.8	22.8
Total Split (s)	50.0		14.0	64.0	56.0
Total Split (%)	41.7%		11.7%	53.3%	46.7%
Yellow Time (s)	4.8		3.6	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.8		4.6	5.8	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	28.9	120.0	7.1	38.7	69.7
Actuated g/C Ratio	0.24	1.00	0.06	0.32	0.58
v/c Ratio	0.83	0.76	0.37	0.25	0.43
Control Delay (s/veh)	49.6	6.7	63.6	28.7	16.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.6	6.7	63.6	28.7	16.7
LOS	D	A	E	C	B
Approach Delay (s/veh)	16.8			33.0	16.7
Approach LOS	B			C	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 18.7	Intersection LOS: B
Intersection Capacity Utilization 61.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	368	1194	39	278	851	6
Future Volume (veh/h)	368	1194	39	278	851	6
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	379	0	40	287	883	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	420		56	1047	2219	987
Arrive On Green	0.22	0.00	0.03	0.29	0.61	0.00
Sat Flow, veh/h	1900	1610	1810	3705	3619	1610
Grp Volume(v), veh/h	379	0	40	287	883	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1805	1810	1610
Q Serve(g_s), s	23.3	0.0	2.6	7.4	15.0	0.0
Cycle Q Clear(g_c), s	23.3	0.0	2.6	7.4	15.0	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	420		56	1047	2219	987
V/C Ratio(X)	0.90		0.72	0.27	0.40	0.00
Avail Cap(c_a), veh/h	700		142	1751	2219	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.5	0.0	57.6	32.8	11.9	0.0
Incr Delay (d2), s/veh	4.3	0.0	6.4	0.1	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	1.3	3.2	5.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	49.8	0.0	64.0	32.9	12.4	0.0
LnGrp LOS	D		E	C	B	
Approach Vol, veh/h	379			327	883	
Approach Delay, s/veh	49.8			36.7	12.4	
Approach LOS	D			D	B	

Timer - Assigned Phs	2	3	4	8
Phs Duration (G+Y+Rc), s	79.4	8.3	32.3	40.6
Change Period (Y+Rc), s	5.8	4.6	5.8	5.8
Max Green Setting (Gmax), s	50.2	9.4	44.2	58.2
Max Q Clear Time (g_c+I1), s	17.0	4.6	25.3	9.4
Green Ext Time (p_c), s	1.7	0.0	1.2	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	26.3
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	222.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	108	683	12	72	550	110	0	71	69	191	120	154
Future Vol, veh/h	108	683	12	72	550	110	0	71	69	191	120	154
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	119	751	13	79	604	121	0	78	76	210	132	169
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

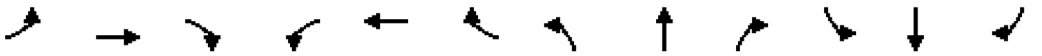
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	312.8	286.2	20.9	28.1
HCM LOS	F	F	C	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	100%	51%	0%	98%	0%	83%	0%	44%
Vol Right, %	0%	49%	0%	2%	0%	17%	0%	56%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	140	108	695	72	660	191	274
LT Vol	0	0	108	0	72	0	191	0
Through Vol	0	71	0	683	0	550	0	120
RT Vol	0	69	0	12	0	110	0	154
Lane Flow Rate	0	154	119	764	79	725	210	301
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0	0.388	0.285	1.726	0.191	1.627	0.524	0.676
Departure Headway (Hd)	11.614	11.243	9.635	9.098	9.74	9.093	10.71	9.761
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	323	375	405	371	406	340	373
Service Time	9.314	8.943	7.335	6.798	7.44	6.793	8.41	7.461
HCM Lane V/C Ratio	0	0.477	0.317	1.886	0.213	1.786	0.618	0.807
HCM Control Delay, s/veh	14.3	20.9	16.1	358.9	14.7	315.8	24.6	30.6
HCM Lane LOS	N	C	C	F	B	F	C	D
HCM 95th-tile Q	0	1.8	1.2	42	0.7	37.5	2.9	4.7

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	Ø3
Lane Configurations										
Traffic Volume (vph)	108	683	72	550	110	71	69	191	120	
Future Volume (vph)	108	683	72	550	110	71	69	191	120	
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	Prot	NA	
Protected Phases	5	2	1	6		8		7	4	3
Permitted Phases					6		8			
Detector Phase	5	2	1	6	6	8	8	7	4	
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	22.4	9.6	22.4	22.4	22.4	22.4	9.6	22.4	9.6
Total Split (s)	18.0	56.3	16.3	54.6	54.6	22.4	22.4	25.0	37.8	9.6
Total Split (%)	15.0%	46.9%	13.6%	45.5%	45.5%	18.7%	18.7%	20.8%	31.5%	8%
Yellow Time (s)	3.6	4.4	3.6	4.4	4.4	4.4	4.4	3.6	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	5.4	4.6	5.4	5.4	5.4	5.4	4.6	5.4	
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	10.5	41.0	8.7	35.7	35.7	12.2	12.2	16.1	27.9	
Actuated g/C Ratio	0.12	0.45	0.10	0.39	0.39	0.13	0.13	0.18	0.31	
v/c Ratio	0.57	0.47	0.46	0.81	0.17	0.31	0.22	0.66	0.53	
Control Delay (s/veh)	56.0	21.4	54.9	36.2	2.7	46.5	1.5	50.5	25.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	56.0	21.4	54.9	36.2	2.7	46.5	1.5	50.5	25.8	
LOS	E	C	D	D	A	D	A	D	C	
Approach Delay (s/veh)		26.1		33.0		24.3			35.9	
Approach LOS		C		C		C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 91	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay (s/veh): 30.5	Intersection LOS: C
Intersection Capacity Utilization 65.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 22: Calimesa Bl. & Singleton Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	683	12	72	550	110	0	71	69	191	120	154
Future Volume (veh/h)	108	683	12	72	550	110	0	71	69	191	120	154
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	119	751	13	79	604	121	0	78	76	210	132	169
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	153	1473	25	103	718	608	2	244	207	254	251	321
Arrive On Green	0.08	0.41	0.41	0.06	0.38	0.38	0.00	0.13	0.13	0.14	0.33	0.33
Sat Flow, veh/h	1810	3631	63	1810	1900	1610	1810	1900	1610	1810	757	969
Grp Volume(v), veh/h	119	373	391	79	604	121	0	78	76	210	0	301
Grp Sat Flow(s),veh/h/ln	1810	1805	1889	1810	1900	1610	1810	1900	1610	1810	0	1726
Q Serve(g_s), s	4.8	11.5	11.6	3.2	21.6	3.8	0.0	2.8	3.2	8.4	0.0	10.5
Cycle Q Clear(g_c), s	4.8	11.5	11.6	3.2	21.6	3.8	0.0	2.8	3.2	8.4	0.0	10.5
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	153	732	766	103	718	608	2	244	207	254	0	571
V/C Ratio(X)	0.78	0.51	0.51	0.77	0.84	0.20	0.00	0.32	0.37	0.83	0.00	0.53
Avail Cap(c_a), veh/h	325	1233	1290	284	1255	1063	121	434	367	495	0	750
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.4	16.6	16.6	34.7	21.1	15.6	0.0	29.5	29.7	31.1	0.0	20.2
Incr Delay (d2), s/veh	3.2	0.6	0.5	4.5	2.8	0.2	0.0	0.7	1.1	2.6	0.0	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.4	4.6	1.5	9.2	1.3	0.0	1.3	1.3	3.7	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.7	17.1	17.1	39.2	23.9	15.7	0.0	30.2	30.8	33.7	0.0	20.9
LnGrp LOS	D	B	B	D	C	B		C	C	C		C
Approach Vol, veh/h		883			804			154			511	
Approach Delay, s/veh		19.8			24.2			30.5			26.2	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	35.6	0.0	30.1	10.9	33.6	15.1	15.0
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	11.7	50.9	5.0	32.4	13.4	49.2	20.4	17.0
Max Q Clear Time (g_c+I1), s	5.2	13.6	0.0	12.5	6.8	23.6	10.4	5.2
Green Ext Time (p_c), s	0.0	5.2	0.0	1.8	0.1	4.6	0.2	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	23.4
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

APPENDIX 8.1: OPENING YEAR CUMULATIVE (2038) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	428	289	257	127	0
Future Vol, veh/h	0	428	289	257	127	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	586	396	352	174	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	748	0	-	0	1158	572
Stage 1	-	-	-	-	572	-
Stage 2	-	-	-	-	586	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	870	-	-	-	219	523
Stage 1	-	-	-	-	569	-
Stage 2	-	-	-	-	560	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	870	-	-	-	219	523
Mov Cap-2 Maneuver	-	-	-	-	219	-
Stage 1	-	-	-	-	569	-
Stage 2	-	-	-	-	560	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	64.96
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	870	-	-	-	219
HCM Lane V/C Ratio	-	-	-	-	0.796
HCM Ctrl Dly (s/v)	0	-	-	-	65
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	5.8

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	514	16	127	543	23	150
Future Vol, veh/h	514	16	127	543	23	150
Conflicting Peds, #/hr	0	2	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	591	18	146	624	26	172

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	611	0	1518	602
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	916	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	978	-	132	503
Stage 1	-	-	-	-	551	-
Stage 2	-	-	-	-	393	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	976	-	102	502
Mov Cap-2 Maneuver	-	-	-	-	102	-
Stage 1	-	-	-	-	550	-
Stage 2	-	-	-	-	303	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.77	31.16
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	330	-	-	341	-
HCM Lane V/C Ratio	0.603	-	-	0.15	-
HCM Control Delay (s/veh)	31.2	-	-	9.3	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	3.7	-	-	0.5	-

Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	374	290	420	408	0	0	0	0	376	6	262
Future Vol, veh/h	0	374	290	420	408	0	0	0	0	376	6	262
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	440	341	494	480	0	0	0	0	442	7	308

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	782	0	0	1908	2250	480
Stage 1	-	-	-	-	-	-	1468	1468	-
Stage 2	-	-	-	-	-	-	440	782	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	845	-	0	~ 76	42	590
Stage 1	0	-	-	-	-	0	~ 214	194	-
Stage 2	0	-	-	-	-	0	653	408	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	845	-	-	~ 32	0	590
Mov Cap-2 Maneuver	-	-	-	-	-	-	611	0	-
Stage 1	-	-	-	-	-	-	~ 214	0	-
Stage 2	-	-	-	-	-	-	~ 271	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	7.65	22.24
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	845	-	611	590
HCM Lane V/C Ratio	-	-	0.585	-	0.735	0.522
HCM Control Delay (s/veh)	-	-	15.1	-	25.4	17.6
HCM Lane LOS	-	-	C	-	D	C
HCM 95th %tile Q(veh)	-	-	3.9	-	6.3	3

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

Intersection	
Int Delay, s/veh	48.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	244	506	0	0	620	530	208	0	111	0	0	0
Future Vol, veh/h	244	506	0	0	620	530	208	0	111	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	262	544	0	0	667	570	224	0	119	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1237	0	-	-	-	0	1735	2305	544
Stage 1	-	-	-	-	-	-	1069	1069	-
Stage 2	-	-	-	-	-	-	667	1237	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	570	-	0	0	-	-	~ 97	39	543
Stage 1	-	-	0	0	-	-	333	300	-
Stage 2	-	-	0	0	-	-	514	250	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	570	-	-	-	-	-	~ 53	0	543
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 119	0	-
Stage 1	-	-	-	-	-	-	~ 180	0	-
Stage 2	-	-	-	-	-	-	514	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	5.39	0	$ 323.46
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	119	543	570	-	-	-
HCM Lane V/C Ratio	1.882	0.22	0.46	-	-	-
HCM Control Delay (s/veh)	$ 488.9	13.5	16.6	-	-	-
HCM Lane LOS	F	B	C	-	-	-
HCM 95th %tile Q(veh)	17.8	0.8	2.4	-	-	-

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

Intersection	
Intersection Delay, s/veh	93.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	120	70	450	180	0	72	0	334	0	0	0
Future Vol, veh/h	0	120	70	450	180	0	72	0	334	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, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	164	96	616	247	0	99	0	458	0	0	0
Number of Lanes	1	1	0	1	1	1	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	2
HCM Control Delay, s/veh	22.9	148.1	41	0
HCM LOS	C	F	E	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	63%	0%	100%	100%	100%
Vol Right, %	0%	100%	0%	37%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	72	334	0	190	450	180	0	0
LT Vol	72	0	0	0	450	0	0	0
Through Vol	0	0	0	120	0	180	0	0
RT Vol	0	334	0	70	0	0	0	0
Lane Flow Rate	99	458	0	260	616	247	0	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.226	0.894	0	0.584	1.363	0.51	0	0
Departure Headway (Hd)	8.858	7.626	8.959	8.691	7.961	7.449	7.449	10.404
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	408	480	0	419	456	481	0	0
Service Time	6.558	5.326	6.659	6.391	5.752	5.24	5.24	8.104
HCM Lane V/C Ratio	0.243	0.954	0	0.621	1.351	0.514	0	0
HCM Control Delay, s/veh	14.1	46.8	11.7	22.9	200.2	17.8	10.2	13.1
HCM Lane LOS	B	E	N	C	F	C	N	N
HCM 95th-tile Q	0.9	9.8	0	3.6	28.3	2.8	0	0

Intersection	
Intersection Delay, s/veh	162.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	385	69	225	476	0	0	0	0	170	11	153
Future Vol, veh/h	0	385	69	225	476	0	0	0	0	170	11	153
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	475	85	278	588	0	0	0	0	210	14	189
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

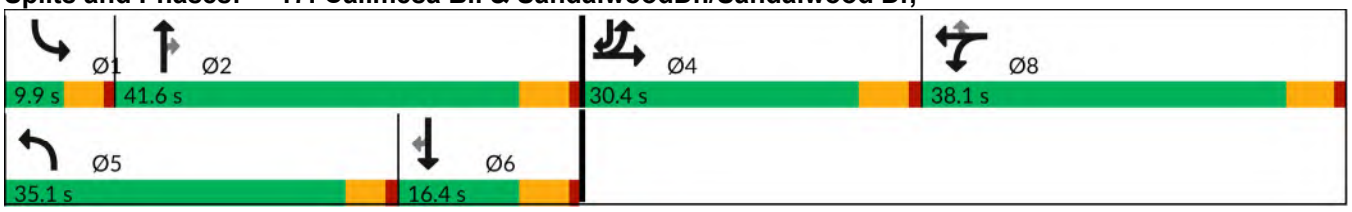
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	64.5	287.7	32.6
HCM LOS	F	F	D

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	32%	51%
Vol Thru, %	85%	68%	3%
Vol Right, %	15%	0%	46%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	454	701	334
LT Vol	0	225	170
Through Vol	385	476	11
RT Vol	69	0	153
Lane Flow Rate	560	865	412
Geometry Grp	1	1	1
Degree of Util (X)	0.99	1.58	0.777
Departure Headway (Hd)	7.177	6.573	7.67
Convergence, Y/N	Yes	Yes	Yes
Cap	510	554	474
Service Time	5.177	4.651	5.67
HCM Lane V/C Ratio	1.098	1.561	0.869
HCM Control Delay, s/veh	64.5	287.7	32.6
HCM Lane LOS	F	F	D
HCM 95th-tile Q	13.3	46.2	6.9

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	202	249	65	324	55	218	807	163	21	204
Future Volume (vph)	202	249	65	324	55	218	807	163	21	204
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	8	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	4	4	8	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	19.2	19.2	24.5	24.5	24.5	18.6	33.5	33.5	5.4	15.1
Actuated g/C Ratio	0.19	0.19	0.25	0.25	0.25	0.19	0.34	0.34	0.05	0.15
v/c Ratio	0.61	0.59	0.17	0.79	0.12	0.73	0.75	0.29	0.24	0.80
Control Delay (s/veh)	48.4	40.5	33.3	49.8	0.5	53.7	36.6	9.7	59.8	65.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.4	40.5	33.3	49.8	0.5	53.7	36.6	9.7	59.8	65.7
LOS	D	D	C	D	A	D	D	A	E	E
Approach Delay (s/veh)		43.1		41.2			36.1			33.4
Approach LOS		D		D			D			C

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 99.4		
Natural Cycle: 100		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.80		
Intersection Signal Delay (s/veh): 37.8	Intersection LOS: D	
Intersection Capacity Utilization 70.7%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations										
Traffic Volume (veh/h)	202	249	65	65	324	55	218	807	163	21
Future Volume (veh/h)	202	249	65	65	324	55	218	807	163	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	190	340	56	74	368	52	248	917	155	24
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	282	497	81	425	447	373	291	1180	525	47
Arrive On Green	0.16	0.16	0.16	0.24	0.24	0.24	0.16	0.33	0.33	0.03
Sat Flow, veh/h	1810	3187	520	1810	1900	1588	1810	3610	1607	1810
Grp Volume(v), veh/h	190	201	195	74	368	52	248	917	155	24
Grp Sat Flow(s),veh/h/ln	1810	1900	1806	1810	1900	1588	1810	1805	1607	1810
Q Serve(g_s), s	8.0	8.1	8.3	2.6	14.9	2.1	10.8	18.6	5.8	1.1
Cycle Q Clear(g_c), s	8.0	8.1	8.3	2.6	14.9	2.1	10.8	18.6	5.8	1.1
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	282	296	281	425	447	373	291	1180	525	47
V/C Ratio(X)	0.67	0.68	0.69	0.17	0.82	0.14	0.85	0.78	0.29	0.52
Avail Cap(c_a), veh/h	558	586	557	729	766	640	680	1611	717	118
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	32.3	32.4	24.7	29.4	24.5	33.1	24.6	20.3	39.0
Incr Delay (d2), s/veh	2.8	2.7	3.0	0.2	3.9	0.2	2.7	1.7	0.3	3.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	3.7	3.7	1.1	6.8	0.8	4.7	7.5	2.1	0.5
Unsig. Movement Delay, s/veh										
LnGrp Delay(d), s/veh	35.1	35.1	35.4	24.9	33.3	24.7	35.8	26.3	20.6	42.3
LnGrp LOS	D	D	D	C	C	C	D	C	C	D
Approach Vol, veh/h		586			494			1320		
Approach Delay, s/veh		35.2			31.1			27.4		
Approach LOS		D			C			C		

Timer - Assigned Phs	1	2		4	5	6		8		
Phs Duration (G+Y+Rc), s	6.7	31.9		18.0	17.7	20.9		24.5		
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4		
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7		
Max Q Clear Time (g_c+I1), s	3.1	20.6		10.3	12.8	12.5		16.9		
Green Ext Time (p_c), s	0.0	5.9		2.4	0.3	0.0		2.2		

Intersection Summary		
HCM 7th Control Delay, s/veh	29.7	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	37.7
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	143	192	177	941	247	13
Future Vol, veh/h	143	192	177	941	247	13
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	168	226	208	1107	291	15
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	20.2	506.3	21.8
HCM LOS	C	F	C

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	95%	0%	16%
Vol Thru, %	0%	43%	84%
Vol Right, %	5%	57%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	260	335	1118
LT Vol	247	0	177
Through Vol	0	143	941
RT Vol	13	192	0
Lane Flow Rate	306	394	1315
Geometry Grp	1	1	1
Degree of Util (X)	0.562	0.613	2.082
Departure Headway (Hd)	8.458	6.885	5.698
Convergence, Y/N	Yes	Yes	Yes
Cap	431	528	658
Service Time	6.458	4.885	3.698
HCM Lane V/C Ratio	0.71	0.746	1.998
HCM Control Delay, s/veh	21.8	20.2	506.3
HCM Lane LOS	C	C	F
HCM 95th-tile Q	3.4	4.1	90.9

Intersection	
Intersection Delay, s/veh	56.8
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	69	267	102	132	338	122
Future Vol, veh/h	69	267	102	132	338	122
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	97	376	144	186	476	172
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	28.9	17.3	97.2
HCM LOS	D	C	F

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	21%	73%
Vol Thru, %	44%	0%	27%
Vol Right, %	56%	79%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	234	336	460
LT Vol	0	69	338
Through Vol	102	0	122
RT Vol	132	267	0
Lane Flow Rate	330	473	648
Geometry Grp	1	1	1
Degree of Util (X)	0.562	0.79	1.116
Departure Headway (Hd)	6.415	6.301	6.2
Convergence, Y/N	Yes	Yes	Yes
Cap	567	577	583
Service Time	4.415	4.301	4.266
HCM Lane V/C Ratio	0.582	0.82	1.111
HCM Control Delay, s/veh	17.3	28.9	97.2
HCM Lane LOS	C	D	F
HCM 95th-tile Q	3.5	7.5	20.2

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	453	353	512	655	0	0	0	0	0	0	0
Future Vol, veh/h	0	453	353	512	655	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	539	420	610	780	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	960	0	0	2538	2958	780
Stage 1	-	-	-	-	-	-	1999	1999	-
Stage 2	-	-	-	-	-	-	539	960	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	725	-	0	30	15	399
Stage 1	0	-	-	-	-	0	116	106	-
Stage 2	0	-	-	-	-	0	589	338	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	725	-	-	0	0	399
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	116	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	13.32	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 411	-	-
HCM Lane V/C Ratio	-	-	0.841	-	-
HCM Control Delay (s/veh)	-	-	30.3	0	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	9.5	-	-

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

Intersection	
Int Delay, s/veh	223.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	453	0	0	931	0	236	0	315	0	0	0
Future Vol, veh/h	0	453	0	0	931	0	236	0	315	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	503	0	0	1034	0	262	0	350	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1034	0	-	-	-	0	1538	1538	503
Stage 1	-	-	-	-	-	-	503	503	-
Stage 2	-	-	-	-	-	-	1034	1034	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	680	-	0	0	-	-	~ 129	117	572
Stage 1	-	-	0	0	-	-	611	545	-
Stage 2	-	-	0	0	-	-	346	312	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	680	-	-	-	-	-	~ 129	0	572
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 129	0	-
Stage 1	-	-	-	-	-	-	611	0	-
Stage 2	-	-	-	-	-	-	346	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	$ 786.21
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	231	680	-	-	-
HCM Lane V/C Ratio	2.648	-	-	-	-
HCM Control Delay (s/veh)	$ 786.2	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	52	0	-	-	-

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

Intersection	
Intersection Delay, s/veh	510
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	184	561	24	37	758	206	27	390	196	79	36	145
Future Vol, veh/h	184	561	24	37	758	206	27	390	196	79	36	145
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	196	597	26	39	806	219	29	415	209	84	38	154
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	505.4	751.2	310.7	65.1
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	24%	4%	30%
Vol Thru, %	64%	73%	76%	14%
Vol Right, %	32%	3%	21%	56%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	613	769	1001	260
LT Vol	27	184	37	79
Through Vol	390	561	758	36
RT Vol	196	24	206	145
Lane Flow Rate	652	818	1065	277
Geometry Grp	1	1	1	1
Degree of Util (X)	1.572	2.02	2.586	0.716
Departure Headway (Hd)	14.734	15.157	13.356	21.339
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	254	254	288	171
Service Time	12.734	13.157	11.356	19.339
HCM Lane V/C Ratio	2.567	3.22	3.698	1.62
HCM Control Delay, s/veh	310.7	505.4	751.2	65.1
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	23.6	35.4	57.9	4.4

Intersection	
Int Delay, s/veh	117.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	390	502	118	157	0
Future Vol, veh/h	0	390	502	118	157	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	696	896	211	280	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1107	0	-	0	1698	1002
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	696	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	638	-	-	-	~ 103	297
Stage 1	-	-	-	-	358	-
Stage 2	-	-	-	-	498	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	638	-	-	-	~ 103	297
Mov Cap-2 Maneuver	-	-	-	-	~ 103	-
Stage 1	-	-	-	-	358	-
Stage 2	-	-	-	-	498	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	$ 871.02
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	638	-	-	-	103
HCM Lane V/C Ratio	-	-	-	-	2.731
HCM Ctrl Dly (s/v)	0	-	-	-	$ 871
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	26.2

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

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	482	11	100	434	14	70
Future Vol, veh/h	482	11	100	434	14	70
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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	554	13	115	499	16	80

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	567	0	1289	560
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	729	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1015	-	182	531
Stage 1	-	-	-	-	576	-
Stage 2	-	-	-	-	481	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1015	-	154	531
Mov Cap-2 Maneuver	-	-	-	-	154	-
Stage 1	-	-	-	-	576	-
Stage 2	-	-	-	-	406	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.68	17.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	377	-	-	337	-
HCM Lane V/C Ratio	0.256	-	-	0.113	-
HCM Control Delay (s/veh)	17.8	-	-	9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1	-	-	0.4	-

Intersection	
Int Delay, s/veh	863.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	401	150	329	405	0	0	0	0	531	3	130
Future Vol, veh/h	0	401	150	329	405	0	0	0	0	531	3	130
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	427	160	350	431	0	0	0	0	565	3	138

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	586	0	0	1557	1717	431
Stage 1	-	-	-	-	-	-	1131	1131	-
Stage 2	-	-	-	-	-	-	427	586	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	999	-	0	~ 125	91	629
Stage 1	0	-	-	-	-	0	~ 311	281	-
Stage 2	0	-	-	-	-	0	663	500	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	999	-	-	~ 81	0	629
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 73	0	-
Stage 1	-	-	-	-	-	-	~ 311	0	-
Stage 2	-	-	-	-	-	-	~ 430	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	4.72	$ 2529.56
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	999	-	73	629
HCM Lane V/C Ratio	-	-	0.35	-	7.74	0.22
HCM Control Delay (s/veh)	-	-	10.5	-	$ 3142.4	12.3
HCM Lane LOS	-	-	B	-	F	B
HCM 95th %tile Q(veh)	-	-	1.6	-	65.1	0.8

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

Intersection	
Int Delay, s/veh	22.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	203	730	0	0	578	382	156	2	325	0	0	0
Future Vol, veh/h	203	730	0	0	578	382	156	2	325	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	216	777	0	0	615	406	166	2	346	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1021	0	-	-	-	0	1823	2230	777
Stage 1	-	-	-	-	-	-	1209	1209	-
Stage 2	-	-	-	-	-	-	615	1021	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	687	-	0	0	-	-	~ 86	43	400
Stage 1	-	-	0	0	-	-	285	258	-
Stage 2	-	-	0	0	-	-	543	316	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	687	-	-	-	-	-	~ 59	0	400
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 136	0	-
Stage 1	-	-	-	-	-	-	196	0	-
Stage 2	-	-	-	-	-	-	543	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	2.75	0	103.96
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	136	400	687	-	-	-
HCM Lane V/C Ratio	1.231	0.864	0.314	-	-	-
HCM Control Delay (s/veh)	215.1	49.9	12.6	-	-	-
HCM Lane LOS	F	E	B	-	-	-
HCM 95th %tile Q(veh)	10.2	8.5	1.3	-	-	-

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

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	82	10	30	82	0	6	0	96	0	0	0
Future Vol, veh/h	0	82	10	30	82	0	6	0	96	0	0	0
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	108	13	39	108	0	8	0	126	0	0	0
Number of Lanes	1	1	0	1	1	1	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	2
HCM Control Delay, s/veh	8.9	8.8	8.2	0
HCM LOS	A	A	A	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	89%	0%	100%	100%	100%
Vol Right, %	0%	100%	0%	11%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	96	0	92	30	82	0	0
LT Vol	6	0	0	0	30	0	0	0
Through Vol	0	0	0	82	0	82	0	0
RT Vol	0	96	0	10	0	0	0	0
Lane Flow Rate	8	126	0	121	39	108	0	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.013	0.16	0	0.171	0.061	0.153	0	0
Departure Headway (Hd)	5.764	4.558	5.162	5.085	5.604	5.102	5.102	5.522
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	622	787	0	706	639	702	0	0
Service Time	3.491	2.286	2.894	2.817	3.337	2.834	2.834	3.266
HCM Lane V/C Ratio	0.013	0.16	0	0.171	0.061	0.154	0	0
HCM Control Delay, s/veh	8.6	8.2	7.9	8.9	8.7	8.8	7.8	8.3
HCM Lane LOS	A	A	N	A	A	A	N	N
HCM 95th-tile Q	0	0.6	0	0.6	0.2	0.5	0	0

Intersection	
Intersection Delay, s/veh	17.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	131	46	382	71	0	0	0	0	284	6	41
Future Vol, veh/h	0	131	46	382	71	0	0	0	0	284	6	41
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	138	48	402	75	0	0	0	0	299	6	43
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

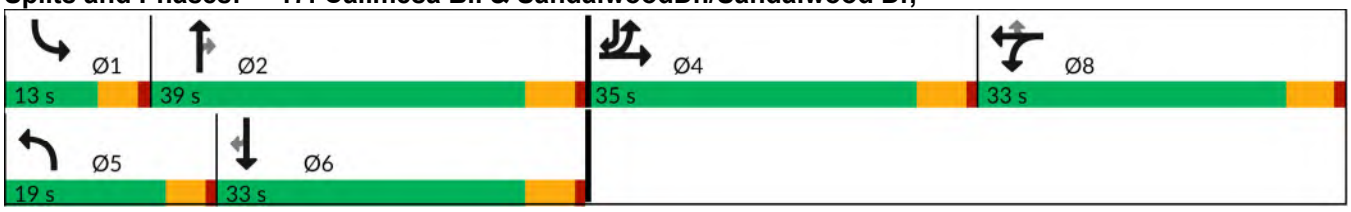
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	10.9	21.3	16
HCM LOS	B	C	C

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	84%	86%
Vol Thru, %	74%	16%	2%
Vol Right, %	26%	0%	12%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	177	453	331
LT Vol	0	382	284
Through Vol	131	71	6
RT Vol	46	0	41
Lane Flow Rate	186	477	348
Geometry Grp	1	1	1
Degree of Util (X)	0.288	0.721	0.56
Departure Headway (Hd)	5.561	5.441	5.781
Convergence, Y/N	Yes	Yes	Yes
Cap	643	663	624
Service Time	3.618	3.484	3.828
HCM Lane V/C Ratio	0.289	0.719	0.558
HCM Control Delay, s/veh	10.9	21.3	16
HCM Lane LOS	B	C	C
HCM 95th-tile Q	1.2	6.1	3.5

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	142	160	41	159	28	78	422	220	36	504
Future Volume (vph)	142	160	41	159	28	78	422	220	36	504
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	8	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	4	4	8	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	14.7	14.7	13.4	13.4	13.4	8.4	32.4	32.4	6.4	28.3
Actuated g/C Ratio	0.18	0.18	0.16	0.16	0.16	0.10	0.39	0.39	0.08	0.34
v/c Ratio	0.47	0.46	0.15	0.55	0.08	0.45	0.32	0.31	0.28	0.83
Control Delay (s/veh)	38.4	24.9	34.4	41.8	0.4	46.8	21.4	4.7	45.9	41.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.4	24.9	34.4	41.8	0.4	46.8	21.4	4.7	45.9	41.5
LOS	D	C	C	D	A	D	C	A	D	D
Approach Delay (s/veh)		29.2		35.4			19.0			27.3
Approach LOS		C		D			B			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 83.7	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 25.8	Intersection LOS: C
Intersection Capacity Utilization 65.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations										
Traffic Volume (veh/h)	142	160	104	41	159	28	78	422	220	36
Future Volume (veh/h)	142	160	104	41	159	28	78	422	220	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	133	191	82	43	167	14	82	444	209	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	271	382	158	274	287	243	107	1265	563	69
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.06	0.35	0.35	0.04
Sat Flow, veh/h	1810	2555	1055	1810	1900	1604	1810	3610	1606	1810
Grp Volume(v), veh/h	133	140	133	43	167	14	82	444	209	38
Grp Sat Flow(s),veh/h/ln	1810	1900	1710	1810	1900	1604	1810	1805	1606	1810
Q Serve(g_s), s	4.5	4.5	4.8	1.4	5.5	0.5	3.0	6.1	6.5	1.4
Cycle Q Clear(g_c), s	4.5	4.5	4.8	1.4	5.5	0.5	3.0	6.1	6.5	1.4
Prop In Lane	1.00		0.62	1.00		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	271	284	256	274	287	243	107	1265	563	69
V/C Ratio(X)	0.49	0.49	0.52	0.16	0.58	0.06	0.77	0.35	0.37	0.55
Avail Cap(c_a), veh/h	801	841	757	747	784	662	390	1814	807	227
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	26.1	26.2	24.7	26.4	24.3	31.0	16.1	16.2	31.6
Incr Delay (d2), s/veh	1.4	1.3	1.6	0.3	1.9	0.1	4.3	0.2	0.4	2.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	2.0	1.9	0.6	2.4	0.2	1.3	2.2	2.2	0.6
Unsig. Movement Delay, s/veh										
LnGrp Delay(d), s/veh	27.5	27.4	27.9	24.9	28.3	24.4	35.3	16.3	16.6	34.2
LnGrp LOS	C	C	C	C	C	C	D	B	B	C
Approach Vol, veh/h		406			224			735		
Approach Delay, s/veh		27.6			27.4			18.5		
Approach LOS		C			C			B		

Timer - Assigned Phs	1	2		4	5	6		8		
Phs Duration (G+Y+Rc), s	7.1	28.8		15.4	8.5	27.4		15.5		
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4		
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6		
Max Q Clear Time (g_c+I1), s	3.4	8.5		6.8	5.0	19.4		7.5		
Green Ext Time (p_c), s	0.0	3.5		1.8	0.1	2.6		0.9		

Intersection Summary		
HCM 7th Control Delay, s/veh	22.8	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	56.6
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	351	297	47	315	404	16
Future Vol, veh/h	351	297	47	315	404	16
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	362	306	48	325	416	16
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	90.2	23	33.7
HCM LOS	F	C	D

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	96%	0%	13%
Vol Thru, %	0%	54%	87%
Vol Right, %	4%	46%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	420	648	362
LT Vol	404	0	47
Through Vol	0	351	315
RT Vol	16	297	0
Lane Flow Rate	433	668	373
Geometry Grp	1	1	1
Degree of Util (X)	0.811	1.099	0.678
Departure Headway (Hd)	7.035	5.925	6.822
Convergence, Y/N	Yes	Yes	Yes
Cap	520	608	534
Service Time	5.035	4.017	4.822
HCM Lane V/C Ratio	0.833	1.099	0.699
HCM Control Delay, s/veh	33.7	90.2	23
HCM Lane LOS	D	F	C
HCM 95th-tile Q	7.8	19.8	5.1

Intersection	
Intersection Delay, s/veh	230
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	156	448	122	121	314	82
Future Vol, veh/h	156	448	122	121	314	82
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	260	747	203	202	523	137
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	357.9	34.8	154.6
HCM LOS	F	D	F

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	26%	79%
Vol Thru, %	50%	0%	21%
Vol Right, %	50%	74%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	243	604	396
LT Vol	0	156	314
Through Vol	122	0	82
RT Vol	121	448	0
Lane Flow Rate	405	1007	660
Geometry Grp	1	1	1
Degree of Util (X)	0.754	1.74	1.242
Departure Headway (Hd)	8.973	6.752	8.686
Convergence, Y/N	Yes	Yes	Yes
Cap	409	544	422
Service Time	6.973	4.752	6.686
HCM Lane V/C Ratio	0.99	1.851	1.564
HCM Control Delay, s/veh	34.8	357.9	154.6
HCM Lane LOS	D	F	F
HCM 95th-tile Q	6.1	55.6	21.5

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	481	325	384	963	0	0	0	0	0	0	0
Future Vol, veh/h	0	481	325	384	963	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	517	349	413	1035	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	867	0	0	2378	2728	1035
Stage 1	-	-	-	-	-	-	1861	1861	-
Stage 2	-	-	-	-	-	-	517	867	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	786	-	0	38	21	284
Stage 1	0	-	-	-	-	0	136	124	-
Stage 2	0	-	-	-	-	0	602	373	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	786	-	-	0	0	284
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	136	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	4.15	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 334	-	-
HCM Lane V/C Ratio	-	-	0.526	-	-
HCM Control Delay (s/veh)	-	-	14.5	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	3.1	-	-

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

Intersection	
Int Delay, s/veh	688.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	481	0	0	932	0	416	0	541	0	0	0
Future Vol, veh/h	0	481	0	0	932	0	416	0	541	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	529	0	0	1024	0	457	0	595	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1024	0	-	-	-	0	1553	1553	529
Stage 1	-	-	-	-	-	-	529	529	-
Stage 2	-	-	-	-	-	-	1024	1024	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	686	-	0	0	-	-	~ 126	114	~ 554
Stage 1	-	-	0	0	-	-	595	531	-
Stage 2	-	-	0	0	-	-	~ 350	315	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	686	-	-	-	-	-	~ 126	0	~ 554
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 126	0	-
Stage 1	-	-	-	-	-	-	595	0	-
Stage 2	-	-	-	-	-	-	~ 350	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	$ 1705.63
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	224	686	-	-	-
HCM Lane V/C Ratio	4.699	-	-	-	-
HCM Control Delay (s/veh)	$ 1705.6	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	107.2	0	-	-	-

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

Intersection	
Intersection Delay, s/veh	524.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	124	860	38	76	701	105	30	65	64	197	122	202
Future Vol, veh/h	124	860	38	76	701	105	30	65	64	197	122	202
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	136	945	42	84	770	115	33	71	70	216	134	222
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	732	572.1	38.1	184.2
HCM LOS	F	F	E	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	19%	12%	9%	38%
Vol Thru, %	41%	84%	79%	23%
Vol Right, %	40%	4%	12%	39%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	159	1022	882	521
LT Vol	30	124	76	197
Through Vol	65	860	701	122
RT Vol	64	38	105	202
Lane Flow Rate	175	1123	969	573
Geometry Grp	1	1	1	1
Degree of Util (X)	0.456	2.553	2.189	1.276
Departure Headway (Hd)	19.631	11.592	12.312	12.927
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	185	326	310	286
Service Time	17.631	9.592	10.312	10.927
HCM Lane V/C Ratio	0.946	3.445	3.126	2.003
HCM Control Delay, s/veh	38.1	732	572.1	184.2
HCM Lane LOS	E	F	F	F
HCM 95th-tile Q	2.1	64.9	48.4	17.3

APPENDIX 8.2: OPENING YEAR CUMULATIVE (2038) WITH PROJECT (PHASE 3) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Intersection Delay, s/veh	3.5
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	161	77	83
Demand Flow Rate, veh/h	161	77	83
Vehicles Circulating, veh/h	27	0	161
Vehicles Exiting, veh/h	50	244	27
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.6	3.0	3.7
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	161	77	83
Cap Entry Lane, veh/h	1342	1380	1171
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	161	77	83
Cap Entry, veh/h	1342	1380	1171
V/C Ratio	0.120	0.056	0.071
Control Delay, s/veh	3.6	3.0	3.7
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	3.1
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	81	44	64
Demand Flow Rate, veh/h	81	44	64
Vehicles Circulating, veh/h	62	2	24
Vehicles Exiting, veh/h	26	141	22
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.3	2.9	3.0
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	81	44	64
Cap Entry Lane, veh/h	1295	1377	1346
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	81	44	64
Cap Entry, veh/h	1295	1377	1346
V/C Ratio	0.063	0.032	0.048
Control Delay, s/veh	3.3	2.9	3.0
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	4.9
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	350	148	205
Demand Flow Rate, veh/h	350	148	205
Vehicles Circulating, veh/h	58	16	298
Vehicles Exiting, veh/h	106	487	110
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.1	3.5	5.4
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	350	148	205
Cap Entry Lane, veh/h	1301	1358	1018
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	350	148	205
Cap Entry, veh/h	1301	1358	1018
V/C Ratio	0.269	0.109	0.201
Control Delay, s/veh	5.1	3.5	5.4
LOS	A	A	A
95th %tile Queue, veh	1	0	1

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	137	24	11	55	119	42
Future Vol, veh/h	137	24	11	55	119	42
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	149	26	12	60	129	46

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	236	152	175	0	-	0
Stage 1	152	-	-	-	-	-
Stage 2	84	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	757	899	1414	-	-	-
Stage 1	881	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	750	899	1414	-	-	-
Mov Cap-2 Maneuver	750	-	-	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	945	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.05	1.26	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1414	-	769	-	-
HCM Lane V/C Ratio	0.008	-	0.227	-	-
HCM Control Delay (s/veh)	7.6	-	11.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.9	-	-

Intersection	
Intersection Delay, s/veh	3.8
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	243	121	157
Demand Flow Rate, veh/h	243	121	157
Vehicles Circulating, veh/h	150	20	70
Vehicles Exiting, veh/h	77	373	71
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.3	2.9	3.8
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.082	0.918	0.579	0.421	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	20	223	70	51	157
Cap Entry Lane, veh/h	1239	1239	1395	1395	1285
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	20	223	70	51	157
Cap Entry, veh/h	1239	1239	1395	1395	1285
V/C Ratio	0.016	0.180	0.050	0.037	0.122
Control Delay, s/veh	3.0	4.4	3.0	2.9	3.8
LOS	A	A	A	A	A
95th %tile Queue, veh	0	1	0	0	0

Intersection	
Int Delay, s/veh	61.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	885	428	257	127	0
Future Vol, veh/h	0	885	428	257	127	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1212	586	352	174	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	938	0	-	0	1975	762
Stage 1	-	-	-	-	762	-
Stage 2	-	-	-	-	1212	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	738	-	-	-	~ 69	408
Stage 1	-	-	-	-	464	-
Stage 2	-	-	-	-	284	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	738	-	-	-	~ 69	408
Mov Cap-2 Maneuver	-	-	-	-	~ 69	-
Stage 1	-	-	-	-	464	-
Stage 2	-	-	-	-	284	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	$ 816.86
HCM LOS			F

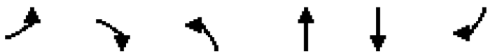
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	738	-	-	-	69
HCM Lane V/C Ratio	-	-	-	-	2.516
HCM Ctrl Dly (s/v)	0	-	-	-	$ 816.9
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	17

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

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	881	674		
Future Volume (vph)	881	674		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	40.0	49.0	80.0	31.0
Total Split (%)	33.3%	40.8%	67%	26%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min
Act Effct Green (s)	10.0	14.3		
Actuated g/C Ratio	0.20	0.29		
v/c Ratio	0.45	0.72		
Control Delay (s/veh)	0.7	20.1		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.7	20.1		
LOS	A	C		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 49.2	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay (s/veh): 9.1	Intersection LOS: A
Intersection Capacity Utilization 35.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	881	674	0	0	0
Future Volume (veh/h)	0	881	674	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	849	733	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	764	1196	1020	524	6	0
Arrive On Green	0.00	0.42	0.29	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	-96900	0
Grp Volume(v), veh/h	0	849	733	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	8.3	6.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.3	6.3	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	764	1196	1020	524	6	0
V/C Ratio(X)	0.00	0.71	0.72	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1871	2930	4618	4216	1458	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.1	10.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.4	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.4	1.8	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	8.8	11.1	0.0	0.0	0.0
LnGrp LOS		A	B			
Approach Vol, veh/h	849			733	0	
Approach Delay, s/veh	8.8			11.1	0.0	
Approach LOS	A			B		

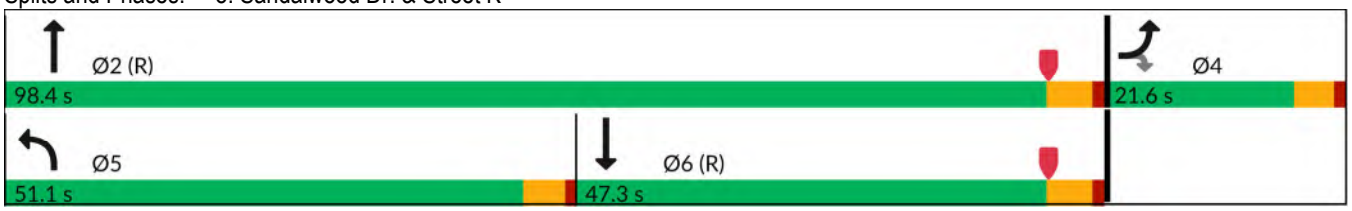
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		14.4		19.3	14.4	0.0
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		74.9		34.9	44.4	25.9
Max Q Clear Time (g_c+I1), s		0.0		10.3	8.3	0.0
Green Ext Time (p_c), s		0.0		3.9	1.5	0.0

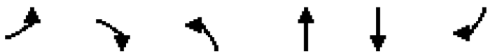
Intersection Summary	
HCM 7th Control Delay, s/veh	9.9
HCM 7th LOS	A

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	3	140	778	672	872
Future Volume (vph)	3	140	778	672	872
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	21.6	21.6	9.6	15.1	22.1
Total Split (s)	21.6	21.6	51.1	98.4	47.3
Total Split (%)	18.0%	18.0%	42.6%	82.0%	39.4%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.5	10.5	34.3	99.8	60.9
Actuated g/C Ratio	0.09	0.09	0.29	0.83	0.51
v/c Ratio	0.02	0.54	0.85	0.24	0.52
Control Delay (s/veh)	49.7	15.7	45.6	2.3	22.1
Queue Delay	0.0	0.0	0.0	0.0	0.4
Total Delay (s/veh)	49.7	15.7	45.6	2.3	22.5
LOS	D	B	D	A	C
Approach Delay (s/veh)	16.4			25.5	22.5
Approach LOS	B			C	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 93.3 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay (s/veh): 23.9	Intersection LOS: C
Intersection Capacity Utilization 66.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	140	778	672	872	9
Future Volume (veh/h)	3	140	778	672	872	9
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	152	846	730	948	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	199	177	911	2921	1871	20
Arrive On Green	0.11	0.11	0.43	1.00	0.51	0.51
Sat Flow, veh/h	1810	1610	3510	3705	3754	39
Grp Volume(v), veh/h	3	152	846	730	468	490
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1893
Q Serve(g_s), s	0.2	11.1	27.4	0.0	20.5	20.5
Cycle Q Clear(g_c), s	0.2	11.1	27.4	0.0	20.5	20.5
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	199	177	911	2921	923	968
V/C Ratio(X)	0.02	0.86	0.93	0.25	0.51	0.51
Avail Cap(c_a), veh/h	256	228	1360	2921	923	968
HCM Platoon Ratio	1.00	1.00	1.67	1.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	0.89	0.89
Uniform Delay (d), s/veh	47.6	52.5	33.0	0.0	19.3	19.3
Incr Delay (d2), s/veh	0.0	21.8	6.2	0.2	1.8	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	10.6	10.7	0.1	8.9	9.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	47.6	74.3	39.2	0.2	21.1	21.0
LnGrp LOS	D	E	D	A	C	C
Approach Vol, veh/h	155			1576	958	
Approach Delay, s/veh	73.8			21.1	21.1	
Approach LOS	E			C	C	

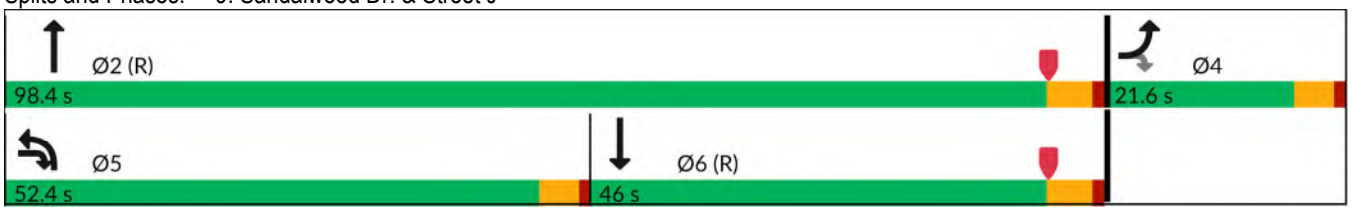
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		102.2		17.8	35.7	66.5
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	46.5	42.2
Max Q Clear Time (g_c+I1), s		2.0		13.1	29.4	22.5
Green Ext Time (p_c), s		6.2		0.1	1.7	6.2

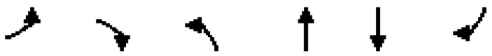
Intersection Summary		
HCM 7th Control Delay, s/veh		24.1
HCM 7th LOS		C

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	3	207	1132	1447	1003
Future Volume (vph)	3	207	1132	1447	1003
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	21.6	9.6	9.6	15.1	22.1
Total Split (s)	21.6	52.4	52.4	98.4	46.0
Total Split (%)	18.0%	43.7%	43.7%	82.0%	38.3%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	50.5	47.6	116.1	59.8
Actuated g/C Ratio	0.08	0.42	0.40	0.97	0.50
v/c Ratio	0.02	0.33	0.89	0.45	0.61
Control Delay (s/veh)	51.0	21.8	42.1	1.2	48.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.0	21.8	42.1	1.2	48.5
LOS	D	C	D	A	D
Approach Delay (s/veh)	22.1			19.1	48.5
Approach LOS	C			B	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 48 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay (s/veh): 27.1	Intersection LOS: C
Intersection Capacity Utilization 80.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	207	1132	1447	1003	9
Future Volume (veh/h)	3	207	1132	1447	1003	9
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	225	1230	1573	1090	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	189	764	1298	2941	1490	14
Arrive On Green	0.10	0.10	0.37	0.81	0.81	0.81
Sat Flow, veh/h	1810	1610	3510	3705	3760	34
Grp Volume(v), veh/h	3	225	1230	1573	537	563
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1894
Q Serve(g_s), s	0.2	10.2	40.8	17.2	16.4	16.5
Cycle Q Clear(g_c), s	0.2	10.2	40.8	17.2	16.4	16.5
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	189	764	1298	2941	734	770
V/C Ratio(X)	0.02	0.29	0.95	0.53	0.73	0.73
Avail Cap(c_a), veh/h	256	823	1398	2941	734	770
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.62	0.62	0.84	0.84
Uniform Delay (d), s/veh	48.2	19.3	36.7	3.7	8.2	8.2
Incr Delay (d2), s/veh	0.0	0.2	8.8	0.4	5.4	5.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	11.5	18.3	4.1	4.2	4.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.2	19.5	45.5	4.1	13.6	13.3
LnGrp LOS	D	B	D	A	B	B
Approach Vol, veh/h	228			2803	1100	
Approach Delay, s/veh	19.9			22.3	13.4	
Approach LOS	B			C	B	

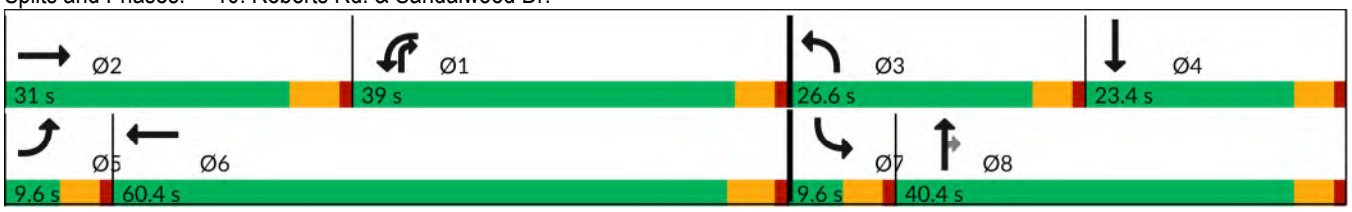
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		102.9		17.1	49.0	53.9
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	47.8	40.9
Max Q Clear Time (g_c+I1), s		19.2		12.2	42.8	18.5
Green Ext Time (p_c), s		19.1		0.3	1.6	7.8

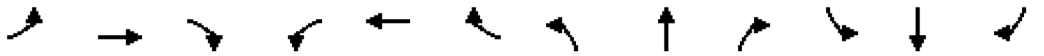
Intersection Summary	
HCM 7th Control Delay, s/veh	19.8
HCM 7th LOS	B

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBL	SBT	Ø8
Lane Configurations									
Traffic Volume (vph)	4	1306	1084	2660	11	136	32	0	
Future Volume (vph)	4	1306	1084	2660	11	136	32	0	
Turn Type	Prot	NA	Prot	NA	Prot	pm+ov	Prot	NA	
Protected Phases	5	2	1	6	3	1	7	4	8
Permitted Phases						8			
Detector Phase	5	2	1	6	3	1	7	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	10.0	10.0
Minimum Split (s)	9.6	22.4	9.6	22.4	26.6	9.6	9.6	22.0	22.0
Total Split (s)	9.6	31.0	39.0	60.4	26.6	39.0	9.6	23.4	40.4
Total Split (%)	8.0%	25.8%	32.5%	50.3%	22.2%	32.5%	8.0%	19.5%	34%
Yellow Time (s)	3.6	4.4	3.6	4.4	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	5.4	4.6	5.4	4.6	4.6	4.6	4.6	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	None	None	Min
Act Effct Green (s)	5.0	25.7	34.6	63.2	13.0	47.9	5.0	11.3	
Actuated g/C Ratio	0.05	0.28	0.38	0.69	0.14	0.52	0.05	0.12	
v/c Ratio	0.04	0.87	0.84	0.72	0.02	0.14	0.18	0.00	
Control Delay (s/veh)	45.5	39.4	33.9	12.3	38.3	3.1	46.1	0.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	45.5	39.4	33.9	12.3	38.3	3.1	46.1	0.0	
LOS	D	D	C	B	D	A	D	A	
Approach Delay (s/veh)		39.4		18.5				43.6	
Approach LOS		D		B				D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 91.8	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay (s/veh): 23.6	Intersection LOS: C
Intersection Capacity Utilization 77.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1306	19	1084	2660	39	11	0	136	32	0	2
Future Volume (veh/h)	4	1306	19	1084	2660	39	11	0	136	32	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1976	1900	1976	1976	1900	1900	1900	1976	1900	1900	1900
Adj Flow Rate, veh/h	4	1420	0	1178	2891	20	12	0	94	35	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	10	1634	0	1280	3641	25	201	247	787	117	0	172
Arrive On Green	0.01	0.28	0.00	0.34	0.62	0.62	0.06	0.00	0.13	0.03	0.00	0.11
Sat Flow, veh/h	1810	5928	0	3764	5880	41	3619	1900	1675	3619	0	1610
Grp Volume(v), veh/h	4	1420	0	1178	1941	970	12	0	94	35	0	2
Grp Sat Flow(s),veh/h/ln	1810	1976	0	1882	1976	1969	1810	1900	1675	1810	0	1610
Q Serve(g_s), s	0.2	20.6	0.0	27.1	33.1	33.3	0.3	0.0	0.4	0.9	0.0	0.1
Cycle Q Clear(g_c), s	0.2	20.6	0.0	27.1	33.1	33.3	0.3	0.0	0.4	0.9	0.0	0.1
Prop In Lane	1.00		0.00	1.00		0.02	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	10	1634	0	1280	2447	1219	201	247	787	117	0	172
V/C Ratio(X)	0.42	0.87	0.00	0.92	0.79	0.80	0.06	0.00	0.12	0.30	0.00	0.01
Avail Cap(c_a), veh/h	100	1685	0	1437	2447	1219	884	755	1235	201	0	336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.7	31.1	0.0	28.6	12.8	12.9	40.3	0.0	5.7	42.6	0.0	36.0
Incr Delay (d2), s/veh	10.4	5.1	0.0	8.8	1.9	3.8	0.0	0.0	0.1	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	10.0	0.0	12.9	12.4	13.1	0.1	0.0	0.5	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.1	36.1	0.0	37.3	14.7	16.6	40.4	0.0	5.8	43.1	0.0	36.0
LnGrp LOS	E	D		D	B	B	D		A	D		D
Approach Vol, veh/h		1424			4089			106			37	
Approach Delay, s/veh		36.2			21.7			9.7			42.7	
Approach LOS		D			C			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.0	30.2	9.6	14.2	5.1	61.2	7.5	16.3
Change Period (Y+Rc), s	5.4	* 5.4	4.6	4.6	4.6	5.4	4.6	4.6
Max Green Setting (Gmax), s	34.4	* 26	22.0	18.8	5.0	55.0	5.0	35.8
Max Q Clear Time (g_c+I1), s	29.1	22.6	2.3	2.1	2.2	35.3	2.9	2.4
Green Ext Time (p_c), s	1.5	2.3	0.0	0.0	0.0	17.8	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	25.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	8.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	971	16	127	682	23	150
Future Vol, veh/h	971	16	127	682	23	150
Conflicting Peds, #/hr	0	2	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	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1116	18	146	784	26	172

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1136	0	2203	1127
Stage 1	-	-	-	-	1127	-
Stage 2	-	-	-	-	1076	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	622	-	50	251
Stage 1	-	-	-	-	312	-
Stage 2	-	-	-	-	330	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	621	-	29	251
Mov Cap-2 Maneuver	-	-	-	-	121	-
Stage 1	-	-	-	-	312	-
Stage 2	-	-	-	-	193	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.97	84.79
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	219	-	-	283	-
HCM Lane V/C Ratio	0.906	-	-	0.235	-
HCM Control Delay (s/veh)	84.8	-	-	12.6	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	7.4	-	-	0.9	-

Intersection	
Int Delay, s/veh	44.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	767	354	420	452	0	0	0	0	376	6	356
Future Vol, veh/h	0	767	354	420	452	0	0	0	0	376	6	356
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	902	416	494	532	0	0	0	0	442	7	419

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1320	0	0	2422	2840	532
Stage 1	-	-	-	-	-	-	1520	1520	-
Stage 2	-	-	-	-	-	-	902	1320	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	530	-	0	~ 36	18	552
Stage 1	0	-	-	-	-	0	~ 201	183	-
Stage 2	0	-	-	-	-	0	~ 399	228	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	530	-	-	~ 2	0	552
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 317	0	-
Stage 1	-	-	-	-	-	-	~ 201	0	-
Stage 2	-	-	-	-	-	-	~ 27	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	25.03	136.34
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	530	-	317	552
HCM Lane V/C Ratio	-	-	0.932	-	1.415	0.759
HCM Control Delay (s/veh)	-	-	52	-	236.2	29.2
HCM Lane LOS	-	-	F	-	F	D
HCM 95th %tile Q(veh)	-	-	11.5	-	23.6	6.7

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

Intersection	
Int Delay, s/veh	17.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	555	588	0	0	645	530	227	0	111	0	0	0
Future Vol, veh/h	555	588	0	0	645	530	227	0	111	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	597	632	0	0	694	570	244	0	119	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1263	0	-	-	-	0	2519	3089	632
Stage 1	-	-	-	-	-	-	1826	1826	-
Stage 2	-	-	-	-	-	-	694	1263	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	~ 557	-	0	0	-	-	~ 31	12	484
Stage 1	-	-	0	0	-	-	~ 142	129	-
Stage 2	-	-	0	0	-	-	500	243	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	~ 557	-	-	-	-	-	0	0	484
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ -280	0	-
Stage 1	-	-	-	-	-	-	~ 142	0	-
Stage 2	-	-	-	-	-	-	500	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	41.56	0	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	+	484	~ 557	-	-	-
HCM Lane V/C Ratio	-	0.247	1.071	-	-	-
HCM Control Delay (s/veh)	-	14.9	85.6	-	-	-
HCM Lane LOS	-	B	F	-	-	-
HCM 95th %tile Q(veh)	-	1	17.6	-	-	-

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

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	1524	3696	105	0	88
Future Vol, veh/h	0	1524	3696	105	0	88
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1657	4017	114	0	96

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	2009
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	243
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	243
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	29.09
HCM LOS			D

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	243
HCM Lane V/C Ratio	-	-	-	0.393
HCM Control Delay (s/veh)	-	-	-	29.1
HCM Lane LOS	-	-	-	D
HCM 95th %tile Q(veh)	-	-	-	1.8

Intersection	
Intersection Delay, s/veh	1553.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1003	521	225	2252	0	0	0	0	170	11	1548
Future Vol, veh/h	0	1003	521	225	2252	0	0	0	0	170	11	1548
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1238	643	278	2780	0	0	0	0	210	14	1911
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

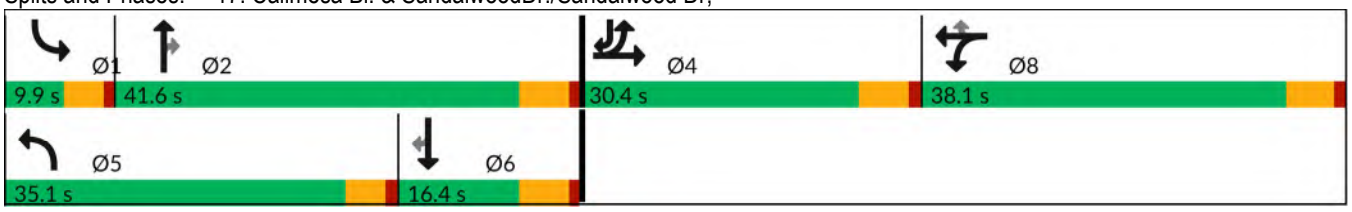
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	611	2300.5	1313.2
HCM LOS	F	F	F

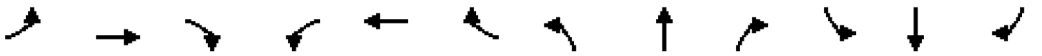
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	9%	10%
Vol Thru, %	100%	0%	91%	1%
Vol Right, %	0%	100%	0%	90%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1003	521	2477	1729
LT Vol	0	0	225	170
Through Vol	1003	0	2252	11
RT Vol	0	521	0	1548
Lane Flow Rate	1238	643	3058	2135
Geometry Grp	5	5	4a	2
Degree of Util (X)	2.613	1.232	6.041	3.84
Departure Headway (Hd)	32.287	31.413	13.246	13.794
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	136	122	306	299
Service Time	29.987	29.113	11.246	11.794
HCM Lane V/C Ratio	9.103	5.27	9.993	7.14
HCM Control Delay, s/veh	809.8	228.2	2300.5	1313.2
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	26.6	9.1	174.8	96.5

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	351	279	65	365	55	1628	807	163	21	204	627
Future Volume (vph)	351	279	65	365	55	1628	807	163	21	204	627
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4	30.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	25.0	25.0	29.1	29.1	29.1	30.5	40.4	40.4	5.2	11.0	41.5
Actuated g/C Ratio	0.21	0.21	0.25	0.25	0.25	0.26	0.35	0.35	0.04	0.09	0.36
v/c Ratio	1.02	1.02	0.16	0.88	0.12	3.91	0.73	0.29	0.30	1.30	1.11
Control Delay (s/veh)	98.7	65.3	34.7	62.1	0.5	Error	39.2	9.5	65.2	209.8	101.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	98.7	65.3	34.7	62.1	0.5	Error	39.2	9.5	65.2	209.8	101.2
LOS	F	E	C	E	A	F	D	A	E	F	F
Approach Delay (s/veh)		74.6		51.4			846.8			126.3	
Approach LOS		E		D			F			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.5	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 3.91	
Intersection Signal Delay (s/veh): 476.7	Intersection LOS: F
Intersection Capacity Utilization 161.1%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	279	504	65	365	55	1628	807	163	21	204	627
Future Volume (veh/h)	351	279	504	65	365	55	1628	807	163	21	204	627
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	399	317	555	74	415	52	1850	917	155	24	232	635
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	393	412	349	438	460	384	479	1217	542	42	181	503
Arrive On Green	0.22	0.22	0.22	0.24	0.24	0.24	0.26	0.34	0.34	0.02	0.10	0.10
Sat Flow, veh/h	1810	1900	1610	1810	1900	1588	1810	3610	1607	1810	1900	1610
Grp Volume(v), veh/h	399	317	555	74	415	52	1850	917	155	24	232	635
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1588	1810	1805	1607	1810	1900	1610
Q Serve(g_s), s	25.0	18.1	25.0	3.7	24.4	3.0	30.5	26.0	8.2	1.5	11.0	11.0
Cycle Q Clear(g_c), s	25.0	18.1	25.0	3.7	24.4	3.0	30.5	26.0	8.2	1.5	11.0	11.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	393	412	349	438	460	384	479	1217	542	42	181	503
V/C Ratio(X)	1.02	0.77	1.59	0.17	0.90	0.14	3.86	0.75	0.29	0.57	1.28	1.26
Avail Cap(c_a), veh/h	393	412	349	514	539	451	479	1217	542	83	181	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	42.4	45.1	34.5	42.3	34.2	42.3	33.9	28.0	55.7	52.1	31.0
Incr Delay (d2), s/veh	49.5	8.5	277.9	0.2	16.7	0.2	1292.5	2.7	0.3	4.4	160.9	133.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.3	9.2	36.7	1.6	13.2	1.1	185.2	11.4	3.1	0.7	13.2	33.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	94.6	50.9	323.0	34.7	59.0	34.4	1334.9	36.6	28.3	60.1	213.0	164.1
LnGrp LOS	F	D	F	C	E	C	F	D	C	E	F	F
Approach Vol, veh/h		1271			541			2922			891	
Approach Delay, s/veh		183.4			53.3			858.1			174.0	
Approach LOS		F			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	44.2		30.4	35.1	16.4		33.3				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7				
Max Q Clear Time (g_c+I1), s	3.5	28.0		27.0	32.5	13.0		26.4				
Green Ext Time (p_c), s	0.0	4.0		0.0	0.0	0.0		1.5				

Intersection Summary		
HCM 7th Control Delay, s/veh	519.9	
HCM 7th LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	1030.3
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	163	611	177	949	1649	13
Future Vol, veh/h	163	611	177	949	1649	13
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	192	719	208	1116	1940	15
Number of Lanes	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	355.6	759.5	1527.9
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	100%	0%	0%	16%
Vol Thru, %	0%	0%	21%	84%
Vol Right, %	0%	100%	79%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1649	13	774	1126
LT Vol	1649	0	0	177
Through Vol	0	0	163	949
RT Vol	0	13	611	0
Lane Flow Rate	1940	15	911	1325
Geometry Grp	5	5	2	2
Degree of Util (X)	4.363	0.029	1.649	2.585
Departure Headway (Hd)	10.426	9.148	18.803	16.813
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	369	394	209	238
Service Time	8.126	6.848	16.803	14.813
HCM Lane V/C Ratio	5.257	0.038	4.359	5.567
HCM Control Delay, s/veh	1539.9	12.1	355.6	759.5
HCM Lane LOS	F	B	F	F
HCM 95th-tile Q	148.9	0.1	21.1	46.9

Intersection	
Intersection Delay, s/veh	56.8
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	69	267	102	132	338	122
Future Vol, veh/h	69	267	102	132	338	122
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	97	376	144	186	476	172
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	28.9	17.3	97.2
HCM LOS	D	C	F

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	21%	73%
Vol Thru, %	44%	0%	27%
Vol Right, %	56%	79%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	234	336	460
LT Vol	0	69	338
Through Vol	102	0	122
RT Vol	132	267	0
Lane Flow Rate	330	473	648
Geometry Grp	1	1	1
Degree of Util (X)	0.562	0.79	1.116
Departure Headway (Hd)	6.415	6.301	6.2
Convergence, Y/N	Yes	Yes	Yes
Cap	567	577	583
Service Time	4.415	4.301	4.266
HCM Lane V/C Ratio	0.582	0.82	1.111
HCM Control Delay, s/veh	17.3	28.9	97.2
HCM Lane LOS	C	D	F
HCM 95th-tile Q	3.5	7.5	20.2

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	453	353	512	655	0	0	0	0	0	0	0
Future Vol, veh/h	0	453	353	512	655	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	539	420	610	780	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	960	0	0	2538	2958	780
Stage 1	-	-	-	-	-	-	1999	1999	-
Stage 2	-	-	-	-	-	-	539	960	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	725	-	0	30	15	399
Stage 1	0	-	-	-	-	0	116	106	-
Stage 2	0	-	-	-	-	0	589	338	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	725	-	-	0	0	399
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	116	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	13.32	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 411	-	-
HCM Lane V/C Ratio	-	-	0.841	-	-
HCM Control Delay (s/veh)	-	-	30.3	0	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	9.5	-	-

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

Intersection	
Int Delay, s/veh	223.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	453	0	0	931	0	236	0	315	0	0	0
Future Vol, veh/h	0	453	0	0	931	0	236	0	315	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	503	0	0	1034	0	262	0	350	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1034	0	-	-	-	0	1538	1538	503
Stage 1	-	-	-	-	-	-	503	503	-
Stage 2	-	-	-	-	-	-	1034	1034	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	680	-	0	0	-	-	~ 129	117	572
Stage 1	-	-	0	0	-	-	611	545	-
Stage 2	-	-	0	0	-	-	346	312	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	680	-	-	-	-	-	~ 129	0	572
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 129	0	-
Stage 1	-	-	-	-	-	-	611	0	-
Stage 2	-	-	-	-	-	-	346	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	$ 786.21
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	231	680	-	-	-
HCM Lane V/C Ratio	2.648	-	-	-	-
HCM Control Delay (s/veh)	$ 786.2	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	52	0	-	-	-

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

Intersection	
Intersection Delay, s/veh	525.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	184	561	24	37	758	209	27	395	196	88	46	145
Future Vol, veh/h	184	561	24	37	758	209	27	395	196	88	46	145
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	196	597	26	39	806	222	29	420	209	94	49	154
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	521.3	774.8	329.1	75
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	24%	4%	32%
Vol Thru, %	64%	73%	75%	16%
Vol Right, %	32%	3%	21%	52%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	618	769	1004	279
LT Vol	27	184	37	88
Through Vol	395	561	758	46
RT Vol	196	24	209	145
Lane Flow Rate	657	818	1068	297
Geometry Grp	1	1	1	1
Degree of Util (X)	1.611	2.052	2.636	0.771
Departure Headway (Hd)	15.363	15.807	13.864	22.046
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	243	237	278	169
Service Time	13.363	13.807	11.864	20.046
HCM Lane V/C Ratio	2.704	3.451	3.842	1.757
HCM Control Delay, s/veh	329.1	521.3	774.8	75
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	23.8	35	57.6	4.9

Intersection	
Intersection Delay, s/veh	4.0
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	102	276	53
Demand Flow Rate, veh/h	102	276	53
Vehicles Circulating, veh/h	93	0	102
Vehicles Exiting, veh/h	183	155	93
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.5	4.3	3.2
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	102	276	53
Cap Entry Lane, veh/h	1255	1380	1244
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	102	276	53
Cap Entry, veh/h	1255	1380	1244
V/C Ratio	0.081	0.200	0.043
Control Delay, s/veh	3.5	4.3	3.2
LOS	A	A	A
95th %tile Queue, veh	0	1	0

Intersection	
Intersection Delay, s/veh	3.4
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	52	161	46
Demand Flow Rate, veh/h	52	161	46
Vehicles Circulating, veh/h	42	4	88
Vehicles Exiting, veh/h	92	90	77
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.0	3.6	3.1
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	52	161	46
Cap Entry Lane, veh/h	1322	1374	1261
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	52	161	46
Cap Entry, veh/h	1322	1374	1261
V/C Ratio	0.039	0.117	0.036
Control Delay, s/veh	3.0	3.6	3.1
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	5.9
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	216	537	176
Demand Flow Rate, veh/h	216	537	176
Vehicles Circulating, veh/h	209	62	179
Vehicles Exiting, veh/h	390	293	246
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.0	6.8	4.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	216	537	176
Cap Entry Lane, veh/h	1115	1295	1150
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	216	537	176
Cap Entry, veh/h	1115	1295	1150
V/C Ratio	0.194	0.415	0.153
Control Delay, s/veh	5.0	6.8	4.5
LOS	A	A	A
95th %tile Queue, veh	1	2	1

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	83	25	34	142	96	151
Future Vol, veh/h	83	25	34	142	96	151
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	90	27	37	154	104	164

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	415	186	268	0	-	0
Stage 1	186	-	-	-	-	-
Stage 2	228	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	598	861	1307	-	-	-
Stage 1	850	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	581	861	1307	-	-	-
Mov Cap-2 Maneuver	581	-	-	-	-	-
Stage 1	826	-	-	-	-	-
Stage 2	814	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	12.04	1.51	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1307	-	628	-	-
HCM Lane V/C Ratio	0.028	-	0.187	-	-
HCM Control Delay (s/veh)	7.8	-	12	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-

Intersection	
Intersection Delay, s/veh	3.9
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	154	431	132
Demand Flow Rate, veh/h	154	431	132
Vehicles Circulating, veh/h	110	12	251
Vehicles Exiting, veh/h	273	252	192
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.6	3.8	4.5
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.078	0.922	0.582	0.418	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	12	142	251	180	132
Cap Entry Lane, veh/h	1285	1285	1405	1405	1068
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	12	142	251	180	132
Cap Entry, veh/h	1285	1285	1405	1405	1068
V/C Ratio	0.009	0.111	0.179	0.128	0.124
Control Delay, s/veh	2.9	3.7	4.0	3.6	4.5
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	1	0	0

Intersection	
Int Delay, s/veh	769.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	666	1006	118	157	0
Future Vol, veh/h	0	666	1006	118	157	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1189	1796	211	280	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2007	0	-	0	3091	1902
Stage 1	-	-	-	-	1902	-
Stage 2	-	-	-	-	1189	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	289	-	-	-	~ 13	87
Stage 1	-	-	-	-	~ 130	-
Stage 2	-	-	-	-	291	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	289	-	-	-	~ 13	87
Mov Cap-2 Maneuver	-	-	-	-	~ 13	-
Stage 1	-	-	-	-	~ 130	-
Stage 2	-	-	-	-	291	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	$ 9546.51
HCM LOS			F

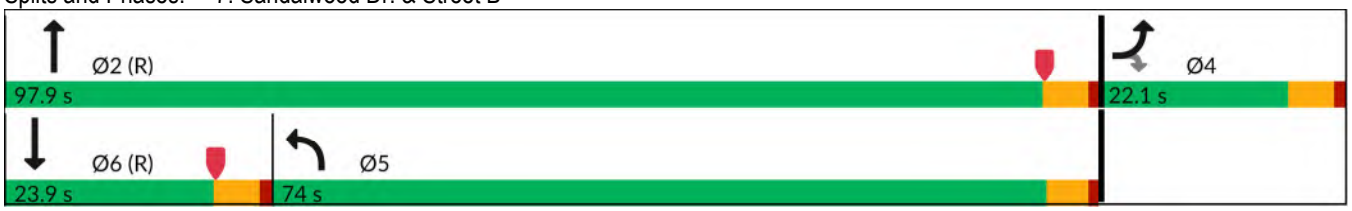
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	289	-	-	-	13
HCM Lane V/C Ratio	-	-	-	-	20.994
HCM Ctrl Dly (s/v)	0	-	-	-	$ 9546.5
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	36.3

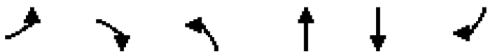
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	410	592		
Future Volume (vph)	410	592		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	22.1	74.0	97.9	23.9
Total Split (%)	18.4%	61.7%	82%	20%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lag		Lead
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	28.4		
Actuated g/C Ratio	0.08	0.24		
v/c Ratio	0.22	0.78		
Control Delay (s/veh)	0.3	34.1		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.3	34.1		
LOS	A	C		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116.9 (97%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 20.2	Intersection LOS: C
Intersection Capacity Utilization 21.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	410	592	0	0	0
Future Volume (veh/h)	0	410	592	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	343	643	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	247	387	2034	1479	298	0
Arrive On Green	0.00	0.14	0.58	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	1900	0
Grp Volume(v), veh/h	0	343	643	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	14.3	11.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.3	11.3	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	247	387	2034	1479	298	0
V/C Ratio(X)	0.00	0.89	0.32	0.00	0.00	0.00
Avail Cap(c_a), veh/h	256	401	2034	1479	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.96	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	50.9	13.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	20.1	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.7	4.4	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	71.0	13.0	0.0	0.0	0.0
LnGrp LOS		E	B			
Approach Vol, veh/h	343			643	0	
Approach Delay, s/veh	71.0			13.0	0.0	
Approach LOS	E			B		

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		98.5		21.5	74.6	23.9
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	69.4	* 19
Max Q Clear Time (g_c+I1), s		0.0		16.3	13.3	0.0
Green Ext Time (p_c), s		0.0		0.1	1.3	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	33.2
HCM 7th LOS	C

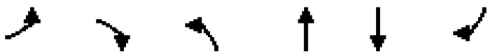
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	10	722	264	582	405
Future Volume (vph)	10	722	264	582	405
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	22.1	9.6	15.1	22.1
Total Split (s)	63.0	63.0	20.0	57.0	37.0
Total Split (%)	52.5%	52.5%	16.7%	47.5%	30.8%
Yellow Time (s)	4.1	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	41.9	41.9	14.1	67.9	49.2
Actuated g/C Ratio	0.35	0.35	0.12	0.57	0.41
v/c Ratio	0.02	0.93	0.70	0.31	0.30
Control Delay (s/veh)	18.8	32.3	59.0	16.2	28.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.8	32.3	59.0	16.2	28.4
LOS	B	C	E	B	C
Approach Delay (s/veh)	32.1			29.6	28.4
Approach LOS	C			C	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 24.1 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay (s/veh): 30.3	Intersection LOS: C
Intersection Capacity Utilization 64.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	722	264	582	405	6
Future Volume (veh/h)	10	722	264	582	405	6
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	785	287	633	440	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	873	777	346	1561	1075	17
Arrive On Green	0.48	0.48	0.10	0.43	0.59	0.59
Sat Flow, veh/h	1810	1610	3510	3705	3732	58
Grp Volume(v), veh/h	11	785	287	633	218	229
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1890
Q Serve(g_s), s	0.4	57.9	9.6	14.5	7.8	7.8
Cycle Q Clear(g_c), s	0.4	57.9	9.6	14.5	7.8	7.8
Prop In Lane	1.00	1.00	1.00			0.03
Lane Grp Cap(c), veh/h	873	777	346	1561	533	558
V/C Ratio(X)	0.01	1.01	0.83	0.41	0.41	0.41
Avail Cap(c_a), veh/h	873	777	451	1561	533	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.99	0.99	0.98	0.98
Uniform Delay (d), s/veh	16.2	31.0	53.1	23.4	18.9	18.9
Incr Delay (d2), s/veh	0.0	34.9	7.5	0.8	2.3	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	46.8	4.6	6.3	3.1	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.2	65.9	60.6	24.2	21.2	21.1
LnGrp LOS	B	F	E	C	C	C
Approach Vol, veh/h	796			920	447	
Approach Delay, s/veh	65.2			35.6	21.1	
Approach LOS	E			D	C	

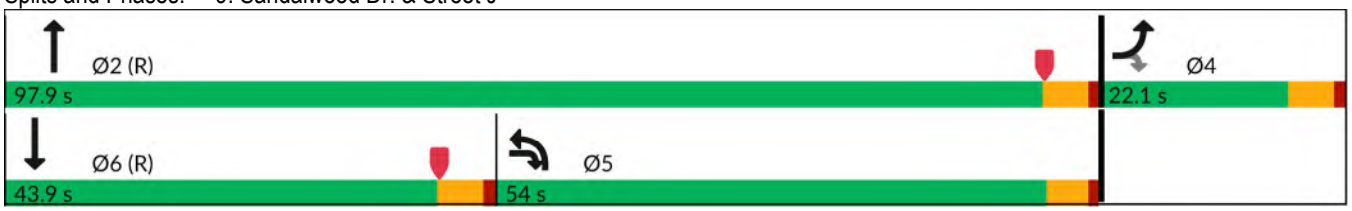
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		57.0		63.0	16.4	40.6
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		51.9		57.9	15.4	31.9
Max Q Clear Time (g_c+I1), s		16.5		59.9	11.6	9.8
Green Ext Time (p_c), s		4.9		0.0	0.2	2.6

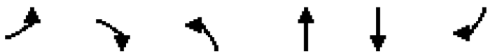
Intersection Summary	
HCM 7th Control Delay, s/veh	43.5
HCM 7th LOS	D

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	10	1044	380	835	1121
Future Volume (vph)	10	1044	380	835	1121
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	9.6	15.1	22.1
Total Split (s)	22.1	54.0	54.0	97.9	43.9
Total Split (%)	18.4%	45.0%	45.0%	81.6%	36.6%
Yellow Time (s)	4.1	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.6	4.6	5.1	5.1
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	52.4	49.4	116.0	57.9
Actuated g/C Ratio	0.08	0.44	0.41	0.97	0.48
v/c Ratio	0.07	1.60	0.29	0.26	0.70
Control Delay (s/veh)	52.1	304.6	24.2	0.8	26.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.1	304.6	24.2	0.8	26.5
LOS	D	F	C	A	C
Approach Delay (s/veh)	302.1			8.1	26.5
Approach LOS	F			A	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74 (62%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.60	
Intersection Signal Delay (s/veh): 105.5	Intersection LOS: F
Intersection Capacity Utilization 103.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	1044	380	835	1121	6
Future Volume (veh/h)	10	1044	380	835	1121	6
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	700	413	908	1218	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	151	884	1635	3002	1190	7
Arrive On Green	0.08	0.08	0.47	0.83	0.11	0.11
Sat Flow, veh/h	1810	1610	3510	3705	3775	21
Grp Volume(v), veh/h	11	700	413	908	597	628
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1896
Q Serve(g_s), s	0.7	0.0	8.5	6.8	38.8	38.8
Cycle Q Clear(g_c), s	0.7	0.0	8.5	6.8	38.8	38.8
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	151	884	1635	3002	584	613
V/C Ratio(X)	0.07	0.79	0.25	0.30	1.02	1.02
Avail Cap(c_a), veh/h	256	978	1635	3002	584	613
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.96	0.96	0.65	0.65
Uniform Delay (d), s/veh	50.7	21.6	19.4	2.3	53.6	53.6
Incr Delay (d2), s/veh	0.2	4.1	0.0	0.2	36.1	35.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	24.3	3.4	1.5	24.7	25.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	50.9	25.7	19.4	2.5	89.7	89.1
LnGrp LOS	D	C	B	A	F	F
Approach Vol, veh/h	711			1321	1225	
Approach Delay, s/veh	26.1			7.8	89.4	
Approach LOS	C			A	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		104.9		15.1	61.0	43.9
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	49.4	* 39
Max Q Clear Time (g_c+I1), s		8.8		2.7	10.5	40.8
Green Ext Time (p_c), s		7.4		2.6	0.7	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	42.5
HCM 7th LOS	D

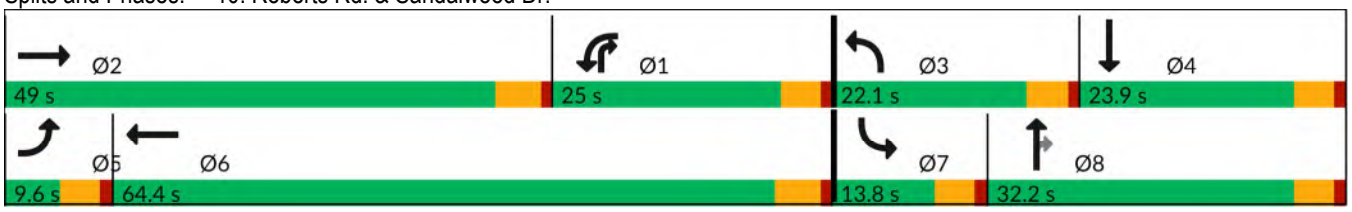
Notes

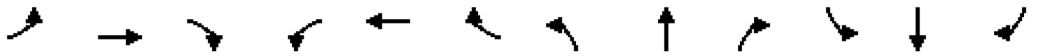
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBL	SBT	Ø8
Lane Configurations									
Traffic Volume (vph)	10	2480	752	1157	60	742	131	0	
Future Volume (vph)	10	2480	752	1157	60	742	131	0	
Turn Type	Prot	NA	Prot	NA	Prot	pm+ov	Prot	NA	
Protected Phases	5	2	1	6	3	1	7	4	8
Permitted Phases						8			
Detector Phase	5	2	1	6	3	1	7	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	10.0	10.0
Minimum Split (s)	9.6	22.1	9.6	22.1	22.1	9.6	9.6	21.6	21.6
Total Split (s)	9.6	49.0	25.0	64.4	22.1	25.0	13.8	23.9	32.2
Total Split (%)	8.0%	40.8%	20.8%	53.7%	18.4%	20.8%	11.5%	19.9%	27%
Yellow Time (s)	3.6	4.1	3.6	4.1	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	5.1	4.6	5.1	4.6	4.6	4.6	4.6	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	None	None	None	None
Act Effct Green (s)	5.0	44.3	20.6	67.9	7.0	23.5	11.0	11.5	
Actuated g/C Ratio	0.05	0.47	0.22	0.72	0.07	0.25	0.12	0.12	
v/c Ratio	0.11	0.99	1.00	0.32	0.24	1.63	0.34	0.01	
Control Delay (s/veh)	49.6	41.7	70.3	6.6	45.6	317.7	41.9	0.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	49.6	41.7	70.3	6.6	45.6	317.7	41.9	0.0	
LOS	D	D	E	A	D	F	D	A	
Approach Delay (s/veh)		41.7		30.4				40.8	
Approach LOS		D		C				D	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 94		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 1.63		
Intersection Signal Delay (s/veh): 74.8	Intersection LOS: E	
Intersection Capacity Utilization 111.2%	ICU Level of Service H	
Analysis Period (min) 15		

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	2480	56	752	1157	107	60	0	742	131	0	4
Future Volume (veh/h)	10	2480	56	752	1157	107	60	0	742	131	0	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1976	1900	1976	1976	1900	1900	1900	1976	1900	1900	1900
Adj Flow Rate, veh/h	11	2696	34	817	1258	62	65	0	427	142	0	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	24	2578	32	772	3576	176	182	191	512	210	0	174
Arrive On Green	0.01	0.44	0.44	0.21	0.64	0.64	0.05	0.00	0.10	0.06	0.00	0.11
Sat Flow, veh/h	1810	5841	73	3764	5602	276	3619	1900	1675	3619	0	1610
Grp Volume(v), veh/h	11	1821	909	817	887	433	65	0	427	142	0	4
Grp Sat Flow(s),veh/h/ln	1810	1976	1963	1882	1976	1926	1810	1900	1675	1810	0	1610
Q Serve(g_s), s	0.6	43.9	43.9	20.4	10.4	10.4	1.7	0.0	3.6	3.8	0.0	0.2
Cycle Q Clear(g_c), s	0.6	43.9	43.9	20.4	10.4	10.4	1.7	0.0	3.6	3.8	0.0	0.2
Prop In Lane	1.00		0.04	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	24	1744	866	772	2522	1229	182	191	512	210	0	174
V/C Ratio(X)	0.46	1.04	1.05	1.06	0.35	0.35	0.36	0.00	0.83	0.68	0.00	0.02
Avail Cap(c_a), veh/h	91	1744	866	772	2522	1229	637	527	808	335	0	312
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.7	27.8	27.8	39.5	8.4	8.4	45.7	0.0	16.9	45.9	0.0	39.6
Incr Delay (d2), s/veh	5.1	34.1	44.4	49.0	0.1	0.2	0.4	0.0	4.4	1.4	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	27.1	29.4	14.3	3.8	3.8	0.8	0.0	6.5	1.7	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.8	61.9	72.2	88.5	8.5	8.6	46.1	0.0	21.3	47.3	0.0	39.7
LnGrp LOS	D	F	F	F	A	A	D		C	D		D
Approach Vol, veh/h		2741			2137			492			146	
Approach Delay, s/veh		65.2			39.1			24.6			47.1	
Approach LOS		E			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.5	49.0	9.6	15.4	5.9	68.6	10.4	14.6
Change Period (Y+Rc), s	5.1	* 5.1	4.6	4.6	4.6	5.1	4.6	4.6
Max Green Setting (Gmax), s	20.4	* 44	17.5	19.3	5.0	59.3	9.2	27.6
Max Q Clear Time (g_c+I1), s	22.4	45.9	3.7	2.2	2.6	12.4	5.8	5.6
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.0	11.3	0.1	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	51.0
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	758	11	100	938	14	70
Future Vol, veh/h	758	11	100	938	14	70
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	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	871	13	115	1078	16	80

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	884	0	2186	878
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	1308	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	774	-	51	350
Stage 1	-	-	-	-	410	-
Stage 2	-	-	-	-	255	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	774	-	32	350
Mov Cap-2 Maneuver	-	-	-	-	117	-
Stage 1	-	-	-	-	410	-
Stage 2	-	-	-	-	161	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.01	26.43
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	263	-	-	173	-
HCM Lane V/C Ratio	0.367	-	-	0.149	-
HCM Control Delay (s/veh)	26.4	-	-	10.5	0
HCM Lane LOS	D	-	-	B	A
HCM 95th %tile Q(veh)	1.6	-	-	0.5	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	638	189	329	567	0	0	0	0	531	3	472
Future Vol, veh/h	0	638	189	329	567	0	0	0	0	531	3	472
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	679	201	350	603	0	0	0	0	565	3	502

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	880	0	0	1982	2183	603
Stage 1	-	-	-	-	-	-	1303	1303	-
Stage 2	-	-	-	-	-	-	679	880	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	777	-	0	~ 68	47	503
Stage 1	0	-	-	-	-	0	~ 257	233	-
Stage 2	0	-	-	-	-	0	~ 508	368	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	777	-	-	~ 38	0	503
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ -163	0	-
Stage 1	-	-	-	-	-	-	~ 257	0	-
Stage 2	-	-	-	-	-	-	~ 279	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	4.91	
HCM LOS			-

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	777	-	+	503
HCM Lane V/C Ratio	-	-	0.451	-	-	0.999
HCM Control Delay (s/veh)	-	-	13.4	-	-	68.7
HCM Lane LOS	-	-	B	-	-	F
HCM 95th %tile Q(veh)	-	-	2.4	-	-	13.7

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

Intersection	
Int Delay, s/veh	241.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	390	780	0	0	669	382	227	2	325	0	0	0
Future Vol, veh/h	390	780	0	0	669	382	227	2	325	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	415	830	0	0	712	406	241	2	346	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1118	0	-	-	-	0	2371	2778	830
Stage 1	-	-	-	-	-	-	1660	1660	-
Stage 2	-	-	-	-	-	-	712	1118	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	632	-	0	0	-	-	~ 39	19	373
Stage 1	-	-	0	0	-	-	~ 172	156	-
Stage 2	-	-	0	0	-	-	490	285	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	632	-	-	-	-	-	~ 13	0	373
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 36	0	-
Stage 1	-	-	-	-	-	-	~ 59	0	-
Stage 2	-	-	-	-	-	-	490	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	6.97	0	$ 1193.24
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	36	373	632	-	-	-
HCM Lane V/C Ratio	6.733	0.927	0.656	-	-	-
HCM Control Delay (s/veh)	$ 2796.4	63.7	20.9	-	-	-
HCM Lane LOS	F	F	C	-	-	-
HCM 95th %tile Q(veh)	29.1	9.8	4.9	-	-	-

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

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	3657	2000	88	0	16
Future Vol, veh/h	0	3657	2000	88	0	16
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	5010	2740	121	0	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1370
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	264
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	264
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	19.85
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	264
HCM Lane V/C Ratio	-	-	-	0.083
HCM Control Delay (s/veh)	-	-	-	19.9
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.3

Intersection	
Intersection Delay, s/veh	1174.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2103	1553	382	1279	0	0	0	0	284	6	809
Future Vol, veh/h	0	2103	1553	382	1279	0	0	0	0	284	6	809
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2214	1635	402	1346	0	0	0	0	299	6	852
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	1396.9	1104.8	542.3
HCM LOS	F	F	F

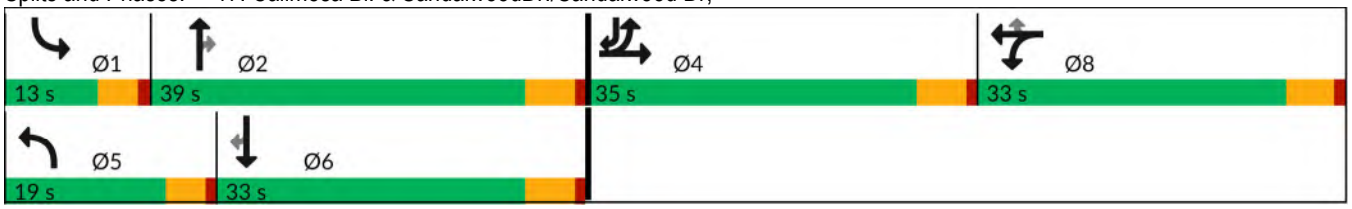
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	23%	26%
Vol Thru, %	100%	0%	77%	1%
Vol Right, %	0%	100%	0%	74%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2103	1553	1661	1099
LT Vol	0	0	382	284
Through Vol	2103	0	1279	6
RT Vol	0	1553	0	809
Lane Flow Rate	2214	1635	1748	1157
Geometry Grp	5	5	4a	2
Degree of Util (X)	4.671	3.132	-	2.123
Departure Headway (Hd)	15.949	15.172	-	12.088
Convergence, Y/N	Yes	Yes	-	Yes
Cap	266	262	-	312
Service Time	13.649	12.872	-	10.088
HCM Lane V/C Ratio	8.323	6.24	-	3.708
HCM Control Delay, s/veh	1690.6	999.1	+	542.3
HCM Lane LOS	F	F	-	F
HCM 95th-tile Q	107.3	67.4	-	46.9

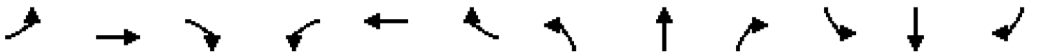
Notes
HCM 7th Edition AWSC methodology error - negative departure headway

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	577	214	41	205	28	930	422	220	36	504	624
Future Volume (vph)	577	214	41	205	28	930	422	220	36	504	624
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0	35.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%	29.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	29.6	29.6	17.7	17.7	17.7	14.4	39.5	39.5	6.7	27.6	57.3
Actuated g/C Ratio	0.27	0.27	0.16	0.16	0.16	0.13	0.36	0.36	0.06	0.25	0.52
v/c Ratio	1.24	2.05dr	0.15	0.71	0.08	4.15	0.34	0.32	0.35	1.12	0.70
Control Delay (s/veh)	160.4	303.6	40.1	56.9	0.4	Error	28.9	5.3	59.7	116.0	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	160.4	303.6	40.1	56.9	0.4	Error	28.9	5.3	59.7	116.0	15.7
LOS	F	F	D	E	A	F	C	A	E	F	B
Approach Delay (s/veh)		272.4		48.7			860.6			60.5	
Approach LOS		F		D			F			E	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 110.2		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 4.15		
Intersection Signal Delay (s/veh): 386.9	Intersection LOS: F	
Intersection Capacity Utilization 156.1%	ICU Level of Service H	
Analysis Period (min) 15		
dr Defacto Right Lane. Recode with 1 though lane as a right lane.		

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	577	214	1587	41	205	28	930	422	220	36	504	624
Future Volume (veh/h)	577	214	1587	41	205	28	930	422	220	36	504	624
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	607	225	1654	43	216	20	979	444	205	38	531	585
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	498	523	443	255	268	223	242	1296	576	57	488	855
Arrive On Green	0.28	0.28	0.28	0.14	0.14	0.14	0.13	0.36	0.36	0.03	0.26	0.26
Sat Flow, veh/h	1810	1900	1610	1810	1900	1579	1810	3610	1606	1810	1900	1607
Grp Volume(v), veh/h	607	225	1654	43	216	20	979	444	205	38	531	585
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1579	1810	1805	1606	1810	1900	1607
Q Serve(g_s), s	29.6	10.5	29.6	2.2	11.9	1.2	14.4	9.7	10.1	2.2	27.6	27.6
Cycle Q Clear(g_c), s	29.6	10.5	29.6	2.2	11.9	1.2	14.4	9.7	10.1	2.2	27.6	27.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	498	523	443	255	268	223	242	1296	576	57	488	855
V/C Ratio(X)	1.22	0.43	3.73	0.17	0.81	0.09	4.04	0.34	0.36	0.67	1.09	0.68
Avail Cap(c_a), veh/h	498	523	443	464	488	405	242	1296	576	141	488	855
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	32.1	39.0	40.7	44.8	40.2	46.6	25.2	25.3	51.5	40.0	18.3
Incr Delay (d2), s/veh	115.7	0.6	1235.3	0.3	5.7	0.2	1378.4	0.2	0.4	4.9	67.1	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	28.6	4.8	163.2	1.0	5.9	0.5	99.1	4.0	3.8	1.1	21.5	16.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	154.7	32.6	1274.3	41.0	50.4	40.4	1425.0	25.4	25.7	56.4	107.1	20.5
LnGrp LOS	F	C	F	D	D	D	F	C	C	E	F	C
Approach Vol, veh/h		2486			279			1628			1154	
Approach Delay, s/veh		888.6			48.3			867.1			61.5	
Approach LOS		F			D			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	44.0		35.0	19.0	33.0		20.6				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6				
Max Q Clear Time (g_c+I1), s	4.2	12.1		31.6	16.4	29.6		13.9				
Green Ext Time (p_c), s	0.0	3.4		0.0	0.0	0.0		1.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	667.9
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	1005.9
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	369	1762	47	341	1230	16
Future Vol, veh/h	369	1762	47	341	1230	16
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	380	1816	48	352	1268	16
Number of Lanes	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	1289.7	62.4	814.3
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	100%	0%	0%	12%
Vol Thru, %	0%	0%	17%	88%
Vol Right, %	0%	100%	83%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1230	16	2131	388
LT Vol	1230	0	0	47
Through Vol	0	0	369	341
RT Vol	0	16	1762	0
Lane Flow Rate	1268	16	2197	400
Geometry Grp	5	5	2	2
Degree of Util (X)	2.759	0.03	3.806	0.78
Departure Headway (Hd)	12.005	10.72	10.249	17.048
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	317	336	373	216
Service Time	9.705	8.42	8.249	15.048
HCM Lane V/C Ratio	4	0.048	5.89	1.852
HCM Control Delay, s/veh	824.7	13.8	1289.7	62.4
HCM Lane LOS	F	B	F	F
HCM 95th-tile Q	70.3	0.1	127.1	5.5

Intersection	
Intersection Delay, s/veh	230
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	156	448	122	121	314	82
Future Vol, veh/h	156	448	122	121	314	82
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	260	747	203	202	523	137
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	357.9	34.8	154.6
HCM LOS	F	D	F

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	26%	79%
Vol Thru, %	50%	0%	21%
Vol Right, %	50%	74%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	243	604	396
LT Vol	0	156	314
Through Vol	122	0	82
RT Vol	121	448	0
Lane Flow Rate	405	1007	660
Geometry Grp	1	1	1
Degree of Util (X)	0.754	1.74	1.242
Departure Headway (Hd)	8.973	6.752	8.686
Convergence, Y/N	Yes	Yes	Yes
Cap	409	544	422
Service Time	6.973	4.752	6.686
HCM Lane V/C Ratio	0.99	1.851	1.564
HCM Control Delay, s/veh	34.8	357.9	154.6
HCM Lane LOS	D	F	F
HCM 95th-tile Q	6.1	55.6	21.5

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	481	325	384	963	0	0	0	0	0	0	0
Future Vol, veh/h	0	481	325	384	963	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	517	349	413	1035	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	867	0	0	2378	2728	1035
Stage 1	-	-	-	-	-	-	1861	1861	-
Stage 2	-	-	-	-	-	-	517	867	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	786	-	0	38	21	284
Stage 1	0	-	-	-	-	0	136	124	-
Stage 2	0	-	-	-	-	0	602	373	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	786	-	-	0	0	284
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	136	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	4.15	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 334	-	-
HCM Lane V/C Ratio	-	-	0.526	-	-
HCM Control Delay (s/veh)	-	-	14.5	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	3.1	-	-

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

Intersection	
Int Delay, s/veh	688.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	481	0	0	932	0	416	0	541	0	0	0
Future Vol, veh/h	0	481	0	0	932	0	416	0	541	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	529	0	0	1024	0	457	0	595	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1024	0	-	-	-	0	1553	1553	529
Stage 1	-	-	-	-	-	-	529	529	-
Stage 2	-	-	-	-	-	-	1024	1024	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	686	-	0	0	-	-	~ 126	114	~ 554
Stage 1	-	-	0	0	-	-	595	531	-
Stage 2	-	-	0	0	-	-	~ 350	315	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	686	-	-	-	-	-	~ 126	0	~ 554
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 126	0	-
Stage 1	-	-	-	-	-	-	595	0	-
Stage 2	-	-	-	-	-	-	~ 350	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	$ 1705.63
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	224	686	-	-	-
HCM Lane V/C Ratio	4.699	-	-	-	-
HCM Control Delay (s/veh)	$ 1705.6	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	107.2	0	-	-	-

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

Intersection	
Intersection Delay, s/veh	541.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	124	860	38	76	701	115	30	81	64	203	134	202
Future Vol, veh/h	124	860	38	76	701	115	30	81	64	203	134	202
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	136	945	42	84	770	126	33	89	70	223	147	222
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	750.9	598.5	42.7	212
HCM LOS	F	F	E	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	12%	9%	38%
Vol Thru, %	46%	84%	79%	25%
Vol Right, %	37%	4%	13%	37%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	175	1022	892	539
LT Vol	30	124	76	203
Through Vol	81	860	701	134
RT Vol	64	38	115	202
Lane Flow Rate	192	1123	980	592
Geometry Grp	1	1	1	1
Degree of Util (X)	0.503	2.592	2.245	1.342
Departure Headway (Hd)	20.572	12.179	12.905	13.481
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	177	314	294	278
Service Time	18.572	10.179	10.905	11.481
HCM Lane V/C Ratio	1.085	3.576	3.333	2.129
HCM Control Delay, s/veh	42.7	750.9	598.5	212
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	2.5	63.4	48.3	18.6

APPENDIX 8.3: OPENING YEAR CUMULATIVE (2038) WITHOUT PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	20	209	327	756	100
Average Queue (ft)	3	111	33	752	61
95th Queue (ft)	13	203	195	764	140
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)			1	100	
Queuing Penalty (veh)			8	0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		9		100	3
Queuing Penalty (veh)		37		262	13

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	128	40	118	210	779	100
Average Queue (ft)	66	2	11	14	703	68
95th Queue (ft)	121	32	98	114	982	143
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)				0	75	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	0				99	3
Queuing Penalty (veh)	2				110	6

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	WB	SB
Directions Served	TR	LT	LTR
Maximum Queue (ft)	208	456	121
Average Queue (ft)	85	354	62
95th Queue (ft)	173	546	105
Link Distance (ft)	247	451	732
Upstream Blk Time (%)	1	3	
Queuing Penalty (veh)	3	24	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	141	830	122
Average Queue (ft)	78	830	52
95th Queue (ft)	126	830	89
Link Distance (ft)	570	815	524
Upstream Blk Time (%)		100	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	167	540
Average Queue (ft)	26	249
95th Queue (ft)	141	525
Link Distance (ft)	530	615
Upstream Blk Time (%)		1
Queuing Penalty (veh)		9
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	WB	NB
Directions Served	LT	TR	LTR
Maximum Queue (ft)	539	27	720
Average Queue (ft)	336	2	710
95th Queue (ft)	647	24	723
Link Distance (ft)	615	136	712
Upstream Blk Time (%)	3		100
Queuing Penalty (veh)	12		0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 484

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	16	168	75	756	100
Average Queue (ft)	1	66	3	755	65
95th Queue (ft)	8	119	39	758	142
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)				100	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		0	0	100	1
Queuing Penalty (veh)		2	0	130	5

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	WB	WB	NB	NB
Directions Served	L	T	R	LT	R
Maximum Queue (ft)	98	11	47	680	100
Average Queue (ft)	43	0	3	323	92
95th Queue (ft)	81	8	25	752	121
Link Distance (ft)		560	560	764	
Upstream Blk Time (%)				6	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)	160				50
Storage Blk Time (%)				69	34
Queuing Penalty (veh)				225	53

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	WB	SB
Directions Served	TR	LT	LTR
Maximum Queue (ft)	90	168	137
Average Queue (ft)	36	80	59
95th Queue (ft)	65	140	101
Link Distance (ft)	247	451	732
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	354	148	189
Average Queue (ft)	194	70	85
95th Queue (ft)	310	116	150
Link Distance (ft)	566	815	524
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	70	536
Average Queue (ft)	10	195
95th Queue (ft)	73	423
Link Distance (ft)	530	615
Upstream Blk Time (%)		0
Queuing Penalty (veh)		3
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	WB	NB
Directions Served	LT	TR	LTR
Maximum Queue (ft)	365	35	728
Average Queue (ft)	155	1	720
95th Queue (ft)	379	19	734
Link Distance (ft)	615	136	712
Upstream Blk Time (%)	0	0	100
Queuing Penalty (veh)	2	0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 420

APPENDIX 8.4: OPENING YEAR CUMULATIVE (2038) WITH PROJECT (PHASE 3) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	101	210	394	749	60
Average Queue (ft)	25	196	309	744	3
95th Queue (ft)	99	264	539	757	30
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)	5		36	100	
Queuing Penalty (veh)	56		318	0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		82	0	100	0
Queuing Penalty (veh)		369	0	356	0

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	210	352	575	575	774	60
Average Queue (ft)	133	94	427	419	766	4
95th Queue (ft)	235	346	827	835	779	36
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		5	58	59	96	
Queuing Penalty (veh)		62	0	0	0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	25	0			100	0
Queuing Penalty (veh)	145	0			111	0

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	333	355	462	703
Average Queue (ft)	315	309	456	703
95th Queue (ft)	330	372	460	703
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	30	15	19	100
Queuing Penalty (veh)	229	113	472	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB	NB
Directions Served	TR	LT	L	R
Maximum Queue (ft)	149	818	538	80
Average Queue (ft)	69	817	537	5
95th Queue (ft)	107	823	541	39
Link Distance (ft)	581	803	522	
Upstream Blk Time (%)		100	100	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)				50
Storage Blk Time (%)			100	
Queuing Penalty (veh)			13	

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	48	568
Average Queue (ft)	8	237
95th Queue (ft)	37	532
Link Distance (ft)	530	615
Upstream Blk Time (%)		1
Queuing Penalty (veh)		15
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	WB	NB
Directions Served	LT	TR	LTR
Maximum Queue (ft)	559	92	719
Average Queue (ft)	329	7	709
95th Queue (ft)	623	48	720
Link Distance (ft)	615	136	712
Upstream Blk Time (%)	1	0	100
Queuing Penalty (veh)	2	2	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 2265

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	10	116	56	756	100
Average Queue (ft)	0	56	3	755	93
95th Queue (ft)	4	96	28	755	132
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)				100	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)			0	99	12
Queuing Penalty (veh)			0	496	68

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	151	36	22	69	779	100
Average Queue (ft)	66	1	1	3	778	86
95th Queue (ft)	117	25	12	32	783	142
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)					100	
Queuing Penalty (veh)					0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	0	0			99	15
Queuing Penalty (veh)	2	0			342	36

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	335	364	463	703
Average Queue (ft)	314	326	457	703
95th Queue (ft)	329	366	462	703
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	32	22	19	100
Queuing Penalty (veh)	810	559	364	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB	NB
Directions Served	TR	LT	L	R
Maximum Queue (ft)	576	818	538	25
Average Queue (ft)	445	814	536	2
95th Queue (ft)	673	827	544	25
Link Distance (ft)	572	803	522	
Upstream Blk Time (%)	1	100	100	
Queuing Penalty (veh)	24	0	0	
Storage Bay Dist (ft)				50
Storage Blk Time (%)			100	
Queuing Penalty (veh)			16	

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	180	596
Average Queue (ft)	43	262
95th Queue (ft)	216	575
Link Distance (ft)	530	615
Upstream Blk Time (%)		3
Queuing Penalty (veh)		37
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	WB	NB
Directions Served	LT	TR	LTR
Maximum Queue (ft)	562	96	719
Average Queue (ft)	364	10	710
95th Queue (ft)	694	65	722
Link Distance (ft)	615	136	712
Upstream Blk Time (%)	4	1	100
Queuing Penalty (veh)	22	12	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 2787

APPENDIX 8.5: OPENING YEAR CUMULATIVE (2038) WITH PROJECT (PHASE 3) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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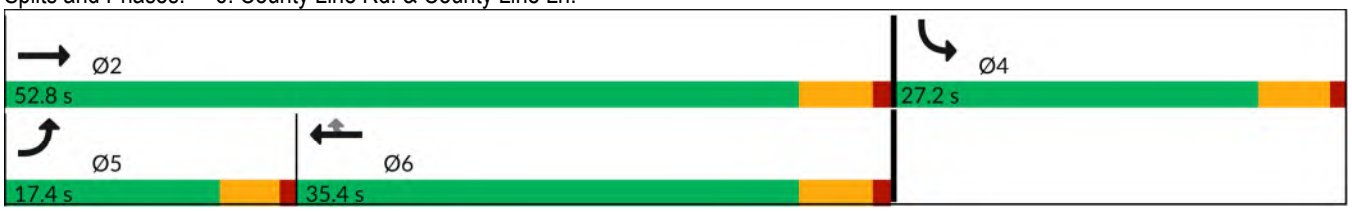
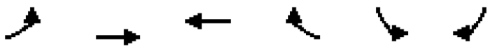
Lane Group	EBT	WBT	WBR	SBL	Ø5
Lane Configurations					
Traffic Volume (vph)	885	428	257	127	
Future Volume (vph)	885	428	257	127	
Turn Type	NA	NA	Perm	Prot	
Protected Phases	2	6		4	5
Permitted Phases			6		
Detector Phase	2	6	6	4	
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.4	22.4	22.4	27.2	9.6
Total Split (s)	52.8	35.4	35.4	27.2	17.4
Total Split (%)	66.0%	44.3%	44.3%	34.0%	22%
Yellow Time (s)	4.4	4.4	4.4	4.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4	5.4	5.4	5.2	
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	47.6	47.6	47.6	13.4	
Actuated g/C Ratio	0.66	0.66	0.66	0.19	
v/c Ratio	0.96	0.46	0.30	0.52	
Control Delay (s/veh)	31.8	8.1	1.5	31.6	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	31.8	8.1	1.5	31.6	
LOS	C	A	A	C	
Approach Delay (s/veh)	31.8	5.6		31.6	
Approach LOS	C	A		C	

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 71.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay (s/veh): 21.2	Intersection LOS: C
Intersection Capacity Utilization 63.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: County Line Rd. & County Line Ln.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	885	428	257	127	0
Future Volume (veh/h)	0	885	428	257	127	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	1212	586	352	0	0
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	6	1586	1586	1344	0	0
Arrive On Green	0.00	0.83	0.83	0.83	0.00	0.00
Sat Flow, veh/h	1810	1900	1900	1610	0	0
Grp Volume(v), veh/h	0	1212	586	352	0	0
Grp Sat Flow(s),veh/h/ln	1810	1900	1900	1610	0	0
Q Serve(g_s), s	0.0	9.5	2.4	1.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.5	2.4	1.5	0.0	0.0
Prop In Lane	1.00			1.00	0.00	0.00
Lane Grp Cap(c), veh/h	6	1586	1586	1344	0	0
V/C Ratio(X)	0.00	0.76	0.37	0.26	0.00	0.00
Avail Cap(c_a), veh/h	708	2753	1743	1477	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	1.2	0.6	0.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.1	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	2.0	0.8	0.7	0.0	0.0
LnGrp LOS		A	A	A		
Approach Vol, veh/h		1212	938		0	
Approach Delay, s/veh		2.0	0.7		0.0	
Approach LOS		A	A			

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		32.7		0.0	0.0	32.7
Change Period (Y+Rc), s		5.4		5.2	4.6	5.4
Max Green Setting (Gmax), s		47.4		22.0	12.8	30.0
Max Q Clear Time (g_c+I1), s		11.5		0.0	0.0	4.4
Green Ext Time (p_c), s		15.8		0.0	0.0	5.6

Intersection Summary	
HCM 7th Control Delay, s/veh	1.5
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	971	16	127	682	23	150
Future Vol, veh/h	971	16	127	682	23	150
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1055	17	138	741	25	163

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1075	0	1713	538
Stage 1	-	-	-	-	1066	-
Stage 2	-	-	-	-	647	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	656	-	83	492
Stage 1	-	-	-	-	297	-
Stage 2	-	-	-	-	489	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	655	-	65	492
Mov Cap-2 Maneuver	-	-	-	-	182	-
Stage 1	-	-	-	-	296	-
Stage 2	-	-	-	-	386	-

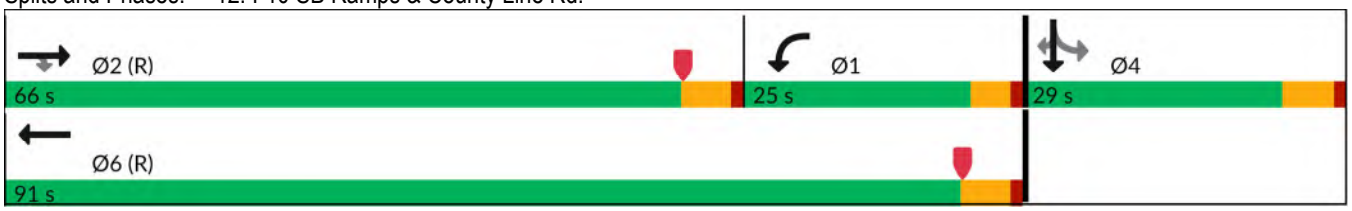
Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.88	21.66
HCM LOS			C

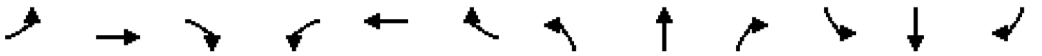
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	401	-	-	655	-
HCM Lane V/C Ratio	0.469	-	-	0.211	-
HCM Control Delay (s/veh)	21.7	-	-	12	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	2.4	-	-	0.8	-

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	767	354	420	452	6	356
Future Volume (vph)	767	354	420	452	6	356
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2				4
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8	22.8
Total Split (s)	66.0	66.0	25.0	91.0	29.0	29.0
Total Split (%)	55.0%	55.0%	20.8%	75.8%	24.2%	24.2%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lead	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	60.6	60.6	20.4	85.6	23.2	23.2
Actuated g/C Ratio	0.51	0.51	0.17	0.71	0.19	0.19
v/c Ratio	0.91	0.44	1.61	0.38	1.28	0.60
Control Delay (s/veh)	41.8	6.3	327.5	17.4	187.2	7.9
Queue Delay	49.4	0.0	0.0	23.1	0.0	0.0
Total Delay (s/veh)	91.2	6.3	327.5	40.5	187.2	7.9
LOS	F	A	F	D	F	A
Approach Delay (s/veh)	64.4			178.7	100.6	
Approach LOS	E			F	F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 54 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.61	
Intersection Signal Delay (s/veh): 110.7	Intersection LOS: F
Intersection Capacity Utilization 111.8%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	767	354	420	452	0	0	0	0	376	6	356
Future Volume (veh/h)	0	767	354	420	452	0	0	0	0	376	6	356
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.00	1.04	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1976	1900	1900	1976	0				1900	1900	1900
Adj Flow Rate, veh/h	0	902	240	494	532	0				442	7	243
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85				0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	998	795	686	1836	0				345	5	311
Arrive On Green	0.00	0.61	0.61	0.76	1.00	0.00				0.23	0.23	0.23
Sat Flow, veh/h	0	1976	1574	1810	1976	0				1783	28	1610
Grp Volume(v), veh/h	0	902	240	494	532	0				449	0	243
Grp Sat Flow(s),veh/h/ln	0	1976	1574	1810	1976	0				1811	0	1610
Q Serve(g_s), s	0.0	47.7	8.8	17.5	0.0	0.0				23.2	0.0	17.0
Cycle Q Clear(g_c), s	0.0	47.7	8.8	17.5	0.0	0.0				23.2	0.0	17.0
Prop In Lane	0.00		1.00	1.00		0.00				0.98		1.00
Lane Grp Cap(c), veh/h	0	998	795	686	1836	0				350	0	311
V/C Ratio(X)	0.00	0.90	0.30	0.72	0.29	0.00				1.28	0.00	0.78
Avail Cap(c_a), veh/h	0	998	795	686	1836	0				350	0	311
HCM Platoon Ratio	1.00	1.20	1.20	2.00	1.20	1.00				1.20	1.20	1.20
Upstream Filter(I)	0.00	1.00	1.00	0.35	0.35	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	21.1	13.4	11.1	0.0	0.0				46.1	0.0	43.7
Incr Delay (d2), s/veh	0.0	13.0	1.0	1.1	0.1	0.0				147.3	0.0	17.5
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	0.0	22.9	3.2	4.1	0.1	0.0				24.0	0.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	34.1	14.4	12.3	0.1	0.0				193.3	0.0	61.2
LnGrp LOS		C	B	B	A					F		E
Approach Vol, veh/h		1142			1026						692	
Approach Delay, s/veh		30.0			6.0						146.9	
Approach LOS		C			A						F	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	50.9	66.0		29.0		116.9						
Change Period (Y+Rc), s	5.4	* 5.4		5.8		5.4						
Max Green Setting (Gmax), s	20.4	* 61		23.2		85.6						
Max Q Clear Time (g_c+I1), s	19.5	49.7		25.2		2.0						
Green Ext Time (p_c), s	0.1	5.6		0.0		4.0						

Intersection Summary												
HCM 7th Control Delay, s/veh			49.7									
HCM 7th LOS			D									

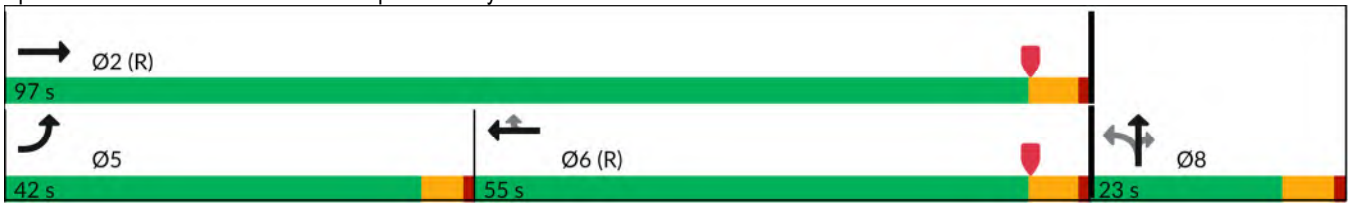
Notes

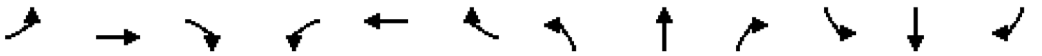
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Traffic Volume (vph)	555	588	645	530	0	111
Future Volume (vph)	555	588	645	530	0	111
Turn Type	Prot	NA	NA	Perm	NA	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8
Total Split (s)	42.0	97.0	55.0	55.0	23.0	23.0
Total Split (%)	35.0%	80.8%	45.8%	45.8%	19.2%	19.2%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	37.4	91.6	49.6	49.6	17.2	17.2
Actuated g/C Ratio	0.31	0.76	0.41	0.41	0.14	0.14
v/c Ratio	1.06	0.44	0.88	0.63	0.95	0.36
Control Delay (s/veh)	64.3	8.1	47.2	11.0	95.1	11.3
Queue Delay	15.9	19.7	5.1	0.0	23.9	0.0
Total Delay (s/veh)	80.2	27.8	52.3	11.0	118.9	11.3
LOS	F	C	D	B	F	B
Approach Delay (s/veh)		53.2	33.7		83.6	
Approach LOS		D	C		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay (s/veh): 48.4	Intersection LOS: D
Intersection Capacity Utilization 111.8%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 13: I-10 NB Ramps & County Line Rd.



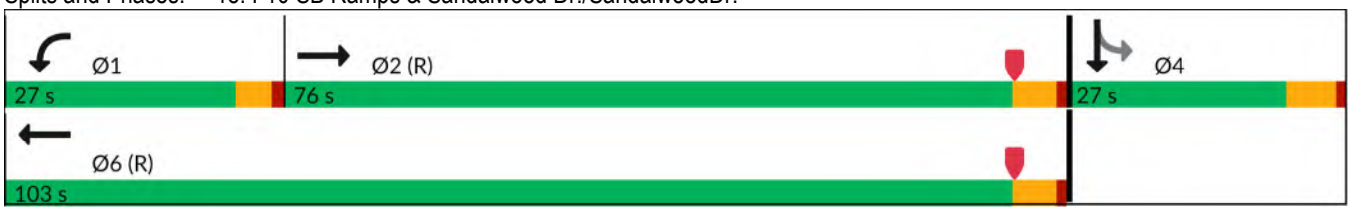


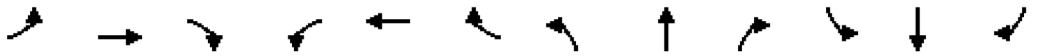
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	555	588	0	0	645	530	227	0	111	0	0	0
Future Volume (veh/h)	555	588	0	0	645	530	227	0	111	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	597	632	0	0	694	355	244	0	119			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	564	1450	0	0	785	666	259	0	231			
Arrive On Green	0.21	0.51	0.00	0.00	0.41	0.41	0.14	0.00	0.14			
Sat Flow, veh/h	1810	1900	0	0	1900	1610	1810	0	1610			
Grp Volume(v), veh/h	597	632	0	0	694	355	244	0	119			
Grp Sat Flow(s),veh/h/ln	1810	1900	0	0	1900	1610	1810	0	1610			
Q Serve(g_s), s	37.4	25.1	0.0	0.0	40.5	19.9	16.0	0.0	8.2			
Cycle Q Clear(g_c), s	37.4	25.1	0.0	0.0	40.5	19.9	16.0	0.0	8.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	564	1450	0	0	785	666	259	0	231			
V/C Ratio(X)	1.06	0.44	0.00	0.00	0.88	0.53	0.94	0.00	0.52			
Avail Cap(c_a), veh/h	564	1450	0	0	785	666	259	0	231			
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.29	0.29	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	47.5	13.1	0.0	0.0	32.5	26.5	50.9	0.0	47.5			
Incr Delay (d2), s/veh	38.0	0.3	0.0	0.0	13.8	3.0	42.5	0.0	8.0			
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	23.4	11.8	0.0	0.0	21.2	8.1	10.1	0.0	3.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	85.4	13.3	0.0	0.0	46.3	29.5	93.4	0.0	55.6			
LnGrp LOS	F	B			D	C	F		E			
Approach Vol, veh/h		1229			1049			363				
Approach Delay, s/veh		48.4			40.6			81.0				
Approach LOS		D			D			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		97.0			42.0	55.0		23.0				
Change Period (Y+Rc), s		5.4			4.6	5.4		5.8				
Max Green Setting (Gmax), s		91.6			37.4	49.6		17.2				
Max Q Clear Time (g_c+I1), s		27.1			39.4	42.5		18.0				
Green Ext Time (p_c), s		5.1			0.0	3.4		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			49.8									
HCM 7th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1003	521	225	2252	170	11	1548
Future Volume (vph)	1003	521	225	2252	170	11	1548
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	76.0		27.0	103.0	27.0	27.0	
Total Split (%)	58.5%		20.8%	79.2%	20.8%	20.8%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	Max	Max	
Act Effct Green (s)	78.3	130.0	14.7	97.6	21.2	21.2	130.0
Actuated g/C Ratio	0.60	1.00	0.11	0.75	0.16	0.16	1.00
v/c Ratio	0.40	0.40	0.70	0.71	0.40	0.40	1.18
Control Delay (s/veh)	14.3	0.7	64.0	6.5	53.5	53.6	97.0
Queue Delay	0.0	0.0	0.0	3.3	0.0	0.0	0.0
Total Delay (s/veh)	14.3	0.7	64.0	9.8	53.5	53.6	97.0
LOS	B	A	E	A	D	D	F
Approach Delay (s/veh)	9.6			14.8		92.4	
Approach LOS	A			B		F	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay (s/veh): 36.8	Intersection LOS: D
Intersection Capacity Utilization 61.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↰	↱
Traffic Volume (veh/h)	0	1003	521	225	2252	0	0	0	0	170	11	1548
Future Volume (veh/h)	0	1003	521	225	2252	0	0	0	0	170	11	1548
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	1238	0	278	2780	0				220	0	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	3213		337	3894	0				590	0	
Arrive On Green	0.00	0.62	0.00	0.10	0.75	0.00				0.16	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	1238	0	278	2780	0				220	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	15.5	0.0	10.1	37.4	0.0				7.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.5	0.0	10.1	37.4	0.0				7.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3213		337	3894	0				590	0	
V/C Ratio(X)	0.00	0.39		0.83	0.71	0.00				0.37	0.00	
Avail Cap(c_a), veh/h	0	3213		605	3894	0				590	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	12.4	0.0	57.7	8.7	0.0				48.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	2.0	1.1	0.0				1.8	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.7	0.0	4.5	11.7	0.0				3.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	12.7	0.0	59.7	9.8	0.0				50.3	0.0	0.0
LnGrp LOS		B		E	A					D		
Approach Vol, veh/h		1238			3058						220	
Approach Delay, s/veh		12.7			14.4						50.3	
Approach LOS		B			B						D	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	17.1	85.9		27.0		103.0						
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4						
Max Green Setting (Gmax), s	22.4	70.6		21.2		97.6						
Max Q Clear Time (g_c+I1), s	12.1	17.5		9.0		39.4						
Green Ext Time (p_c), s	0.4	11.3		0.5		44.6						

Intersection Summary		
HCM 7th Control Delay, s/veh		15.7
HCM 7th LOS		B

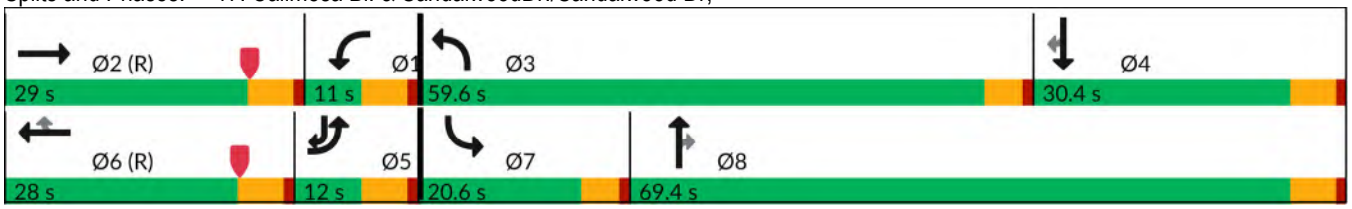
Notes

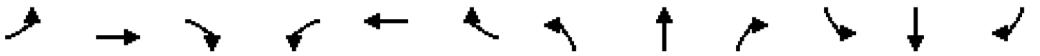
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	351	279	504	65	365	55	1628	807	163	21	204	627
Future Volume (vph)	351	279	504	65	365	55	1628	807	163	21	204	627
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.4	29.0		10.4	28.0	28.0	10.0	27.4	27.4	10.0	30.4	10.4
Total Split (s)	12.0	29.0		11.0	28.0	28.0	59.6	69.4	69.4	20.6	30.4	12.0
Total Split (%)	9.2%	22.3%		8.5%	21.5%	21.5%	45.8%	53.4%	53.4%	15.8%	23.4%	9.2%
Yellow Time (s)	4.4	4.4		4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4		5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	None	None
Act Effct Green (s)	6.6	34.3	130.0	5.6	33.3	33.3	54.7	67.0	67.0	6.2	14.6	21.2
Actuated g/C Ratio	0.05	0.26	1.00	0.04	0.26	0.26	0.42	0.52	0.52	0.05	0.11	0.16
v/c Ratio	1.85	0.29	0.27	0.84	0.39	0.10	0.98	0.42	0.16	0.24	0.50	1.69
Control Delay (s/veh)	433.8	34.4	0.4	123.9	42.8	0.3	49.9	20.9	3.0	65.7	57.4	343.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	42.3	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	433.8	34.4	0.4	123.9	42.8	0.3	92.3	20.9	3.0	65.7	57.4	343.9
LOS	F	C	A	F	D	A	F	C	A	E	E	F
Approach Delay (s/veh)		142.7			48.7			64.5			268.4	
Approach LOS		F			D			E			F	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.85	
Intersection Signal Delay (s/veh): 114.8	Intersection LOS: F
Intersection Capacity Utilization 108.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	279	504	65	365	55	1628	807	163	21	204	627
Future Volume (veh/h)	351	279	504	65	365	55	1628	807	163	21	204	627
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	369	294	0	68	384	49	1714	849	88	22	215	283
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	441	690		198	661	276	1592	2086	849	38	478	391
Arrive On Green	0.04	0.06	0.00	0.11	0.17	0.17	0.42	0.53	0.53	0.02	0.13	0.13
Sat Flow, veh/h	3764	3800	1675	1810	3800	1587	3764	3952	1608	1810	3800	1610
Grp Volume(v), veh/h	369	294	0	68	384	49	1714	849	88	22	215	283
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1587	1882	1976	1608	1810	1900	1610
Q Serve(g_s), s	12.7	9.7	0.0	4.5	12.1	3.0	55.0	16.8	2.1	1.6	6.8	12.7
Cycle Q Clear(g_c), s	12.7	9.7	0.0	4.5	12.1	3.0	55.0	16.8	2.1	1.6	6.8	12.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	441	690		198	661	276	1592	2086	849	38	478	391
V/C Ratio(X)	0.84	0.43		0.34	0.58	0.18	1.08	0.41	0.10	0.58	0.45	0.72
Avail Cap(c_a), veh/h	441	690		198	661	276	1592	2086	849	223	731	498
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.28	0.28	0.28	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.2	54.6	0.0	53.5	49.4	35.6	37.5	18.5	5.4	63.1	52.7	20.2
Incr Delay (d2), s/veh	12.4	1.9	0.0	0.4	3.7	1.4	38.4	0.0	0.0	5.0	0.7	3.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	5.0	0.0	2.1	6.0	1.4	32.6	7.4	1.2	0.8	3.3	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	73.7	56.5	0.0	53.9	53.1	37.0	75.9	18.5	5.4	68.1	53.3	24.0
LnGrp LOS	E	E		D	D	D	F	B	A	E	D	C
Approach Vol, veh/h		663			501			2651			520	
Approach Delay, s/veh		66.1			51.6			55.2			38.0	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	29.0	59.6	21.8	20.6	28.0	7.3	74.0
Change Period (Y+Rc), s	5.4	5.4	4.6	5.4	5.4	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.6	23.6	55.0	25.0	6.6	22.6	16.0	64.0
Max Q Clear Time (g_c+I1), s	6.5	11.7	57.0	14.7	14.7	14.1	3.6	18.8
Green Ext Time (p_c), s	0.0	1.3	0.0	1.6	0.0	1.6	0.0	7.0

Intersection Summary	
HCM 7th Control Delay, s/veh	54.4
HCM 7th LOS	D

Notes

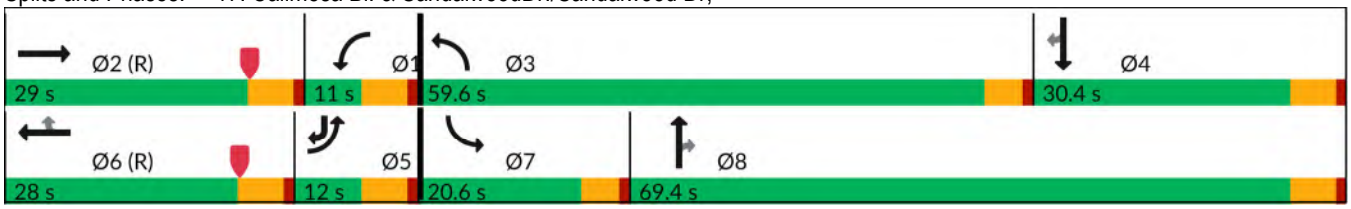
User approved pedestrian interval to be less than phase max green.

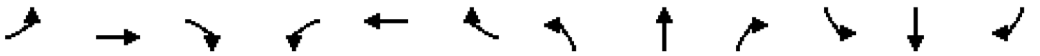
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	351	279	504	65	365	55	1628	807	163	21	204	627
Future Volume (vph)	351	279	504	65	365	55	1628	807	163	21	204	627
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.4	29.0		10.4	28.0	28.0	10.0	27.4	27.4	10.0	30.4	10.4
Total Split (s)	12.0	29.0		11.0	28.0	28.0	59.6	69.4	69.4	20.6	30.4	12.0
Total Split (%)	9.2%	22.3%		8.5%	21.5%	21.5%	45.8%	53.4%	53.4%	15.8%	23.4%	9.2%
Yellow Time (s)	4.4	4.4		4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4		5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	None	None
Act Effct Green (s)	6.6	34.3	130.0	5.6	33.3	33.3	54.7	67.0	67.0	6.2	14.6	21.2
Actuated g/C Ratio	0.05	0.26	1.00	0.04	0.26	0.26	0.42	0.52	0.52	0.05	0.11	0.16
v/c Ratio	1.85	0.59	0.27	0.84	0.39	0.10	0.98	0.42	0.17	0.24	0.50	1.69
Control Delay (s/veh)	433.8	42.7	0.4	123.9	42.8	0.3	49.9	20.9	3.0	65.7	57.4	343.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	42.3	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	433.8	42.7	0.4	123.9	42.8	0.3	92.3	20.9	3.0	65.7	57.4	343.9
LOS	F	D	A	F	D	A	F	C	A	E	E	F
Approach Delay (s/veh)		144.7			48.7			64.5			268.4	
Approach LOS		F			D			E			F	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.85	
Intersection Signal Delay (s/veh): 115.2	Intersection LOS: F
Intersection Capacity Utilization 108.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	279	504	65	365	55	1628	807	163	21	204	627
Future Volume (veh/h)	351	279	504	65	365	55	1628	807	163	21	204	627
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	369	294	0	68	384	49	1714	849	88	22	215	283
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	441	345		198	661	276	1592	2086	848	38	478	391
Arrive On Green	0.04	0.06	0.00	0.11	0.17	0.17	0.42	0.53	0.53	0.02	0.13	0.13
Sat Flow, veh/h	3764	1900	1675	1810	3800	1587	3764	3952	1607	1810	3800	1610
Grp Volume(v), veh/h	369	294	0	68	384	49	1714	849	88	22	215	283
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1587	1882	1976	1607	1810	1900	1610
Q Serve(g_s), s	12.7	19.9	0.0	4.5	12.1	3.0	55.0	16.8	2.1	1.6	6.8	12.7
Cycle Q Clear(g_c), s	12.7	19.9	0.0	4.5	12.1	3.0	55.0	16.8	2.1	1.6	6.8	12.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	441	345		198	661	276	1592	2086	848	38	478	391
V/C Ratio(X)	0.84	0.85		0.34	0.58	0.18	1.08	0.41	0.10	0.58	0.45	0.72
Avail Cap(c_a), veh/h	441	345		198	661	276	1592	2086	848	223	731	498
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.28	0.28	0.28	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.2	59.4	0.0	53.5	49.4	35.6	37.5	18.5	5.4	63.1	52.7	20.2
Incr Delay (d2), s/veh	12.4	22.5	0.0	0.4	3.7	1.4	38.4	0.0	0.0	5.0	0.7	3.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	12.3	0.0	2.1	6.0	1.4	32.6	7.4	1.2	0.8	3.3	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	73.7	81.9	0.0	53.9	53.1	37.0	75.9	18.5	5.4	68.1	53.3	24.0
LnGrp LOS	E	F		D	D	D	F	B	A	E	D	C
Approach Vol, veh/h		663			501			2651			520	
Approach Delay, s/veh		77.3			51.6			55.2			38.0	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	29.0	59.6	21.8	20.6	28.0	7.3	74.0
Change Period (Y+Rc), s	5.4	5.4	4.6	5.4	5.4	5.4	4.6	5.4
Max Green Setting (Gmax), s	5.6	23.6	55.0	25.0	6.6	22.6	16.0	64.0
Max Q Clear Time (g_c+I1), s	6.5	21.9	57.0	14.7	14.7	14.1	3.6	18.8
Green Ext Time (p_c), s	0.0	0.3	0.0	1.6	0.0	1.6	0.0	7.0

Intersection Summary	
HCM 7th Control Delay, s/veh	56.1
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	163	611	177	949	1649
Future Volume (vph)	163	611	177	949	1649
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.4		9.6	22.4	22.8
Total Split (s)	25.3		23.7	49.0	81.0
Total Split (%)	19.5%		18.2%	37.7%	62.3%
Yellow Time (s)	4.4		3.6	4.4	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.4		4.6	5.4	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	20.8	130.0	17.1	42.5	76.3
Actuated g/C Ratio	0.16	1.00	0.13	0.33	0.59
v/c Ratio	0.33	0.38	0.83	0.90	0.92
Control Delay (s/veh)	54.2	2.5	81.2	52.2	32.7
Queue Delay	0.0	0.0	0.0	52.5	0.0
Total Delay (s/veh)	54.2	2.5	81.2	104.7	32.7
LOS	D	A	F	F	C
Approach Delay (s/veh)	13.4			101.0	32.7
Approach LOS	B			F	C

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 49.4	Intersection LOS: D
Intersection Capacity Utilization 87.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	163	611	177	949	1649	163
Future Volume (veh/h)	163	611	177	949	1649	163
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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	1900	1900	1900	1900	1976	1900
Adj Flow Rate, veh/h	192	0	208	1116	2064	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	564		233	1218	2233	955
Arrive On Green	0.16	0.00	0.13	0.32	0.59	0.00
Sat Flow, veh/h	3705	1610	1810	3800	3764	1610
Grp Volume(v), veh/h	192	0	208	1116	2064	0
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1900	1882	1610
Q Serve(g_s), s	6.2	0.0	14.7	36.7	64.2	0.0
Cycle Q Clear(g_c), s	6.2	0.0	14.7	36.7	64.2	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	564		233	1218	2233	955
V/C Ratio(X)	0.34		0.89	0.92	0.92	0.00
Avail Cap(c_a), veh/h	564		266	1274	2233	955
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.9	0.0	55.7	42.5	23.8	0.0
Incr Delay (d2), s/veh	0.3	0.0	25.1	10.2	8.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	8.2	18.5	27.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	49.2	0.0	80.8	52.7	31.8	0.0
LnGrp LOS	D		F	D	C	
Approach Vol, veh/h	192			1324	2064	
Approach Delay, s/veh	49.2			57.1	31.8	
Approach LOS	D			E	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		82.9	21.4	25.7		47.1
Change Period (Y+Rc), s		5.8	4.6	5.4		5.4
Max Green Setting (Gmax), s		75.2	19.1	19.9		43.6
Max Q Clear Time (g_c+I1), s		66.2	16.7	8.2		38.7
Green Ext Time (p_c), s		6.1	0.1	0.8		2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	42.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	394.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	184	561	24	37	758	209	27	395	196	88	46	145
Future Vol, veh/h	184	561	24	37	758	209	27	395	196	88	46	145
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	196	597	26	39	806	222	29	420	209	94	49	154
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

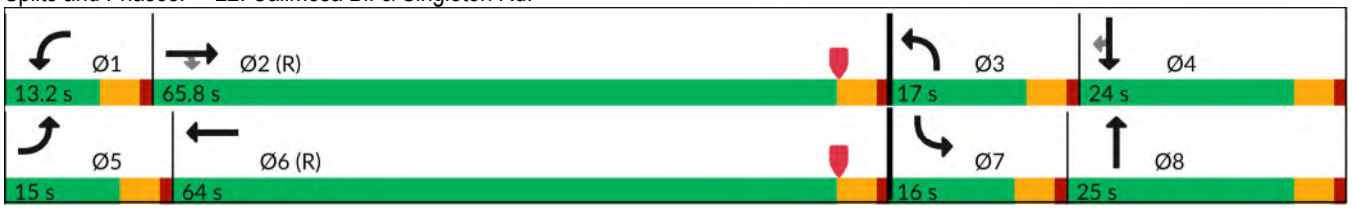
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	231	695	273.6	29.3
HCM LOS	F	F	F	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	67%	0%	96%	0%	78%	0%	24%
Vol Right, %	0%	33%	0%	4%	0%	22%	0%	76%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	591	184	585	37	967	88	191
LT Vol	27	0	184	0	37	0	88	0
Through Vol	0	395	0	561	0	758	0	46
RT Vol	0	196	0	24	0	209	0	145
Lane Flow Rate	29	629	196	622	39	1029	94	203
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.076	1.537	0.514	1.543	0.104	2.534	0.265	0.517
Departure Headway (Hd)	12.349	11.556	13.987	13.408	11.397	10.703	15.682	14.542
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	292	321	260	280	316	350	231	250
Service Time	10.049	9.256	11.687	11.108	9.097	8.403	13.382	12.242
HCM Lane V/C Ratio	0.099	1.96	0.754	2.221	0.123	2.94	0.407	0.812
HCM Control Delay, s/veh	16.1	285.4	30.6	294	15.4	721	23.9	31.8
HCM Lane LOS	C	F	D	F	C	F	C	D
HCM 95th-tile Q	0.2	27.5	2.7	24.6	0.3	69.1	1	2.7

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	184	561	24	37	758	27	395	88	46	145
Future Volume (vph)	184	561	24	37	758	27	395	88	46	145
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	21.6	21.6	9.6	21.6	9.6	21.6	9.6	21.6	21.6
Total Split (s)	15.0	65.8	65.8	13.2	64.0	17.0	25.0	16.0	24.0	24.0
Total Split (%)	12.5%	54.8%	54.8%	11.0%	53.3%	14.2%	20.8%	13.3%	20.0%	20.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	9.7	66.9	66.9	6.9	60.1	5.6	22.1	9.7	30.0	30.0
Actuated g/C Ratio	0.08	0.56	0.56	0.06	0.50	0.05	0.18	0.08	0.25	0.25
v/c Ratio	0.69	0.30	0.03	0.38	0.58	0.18	0.92	0.65	0.05	0.30
Control Delay (s/veh)	46.7	22.3	4.2	64.2	21.9	57.2	63.8	73.5	37.0	7.7
Queue Delay	4.4	1.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.1	23.3	4.2	64.2	22.4	57.2	63.8	73.5	37.0	7.8
LOS	D	C	A	E	C	E	E	E	D	A
Approach Delay (s/veh)		29.3			23.9		63.5		33.4	
Approach LOS		C			C		E		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 77 (64%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 35.6	Intersection LOS: D
Intersection Capacity Utilization 70.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 22: Calimesa Bl. & Singleton Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	561	24	37	758	209	27	395	196	88	46	145
Future Volume (veh/h)	184	561	24	37	758	209	27	395	196	88	46	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	196	597	26	39	806	222	29	420	209	94	49	154
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	249	2098	936	55	1511	416	91	398	196	118	756	337
Arrive On Green	0.14	1.00	1.00	0.03	0.54	0.54	0.03	0.17	0.17	0.07	0.21	0.21
Sat Flow, veh/h	3510	3610	1610	1810	2796	770	3510	2343	1154	1810	3610	1610
Grp Volume(v), veh/h	196	597	26	39	520	508	29	322	307	94	49	154
Grp Sat Flow(s),veh/h/ln	1755	1805	1610	1810	1805	1761	1755	1805	1692	1810	1805	1610
Q Serve(g_s), s	6.5	0.0	0.0	2.6	22.3	22.3	1.0	20.4	20.4	6.1	1.3	10.0
Cycle Q Clear(g_c), s	6.5	0.0	0.0	2.6	22.3	22.3	1.0	20.4	20.4	6.1	1.3	10.0
Prop In Lane	1.00		1.00	1.00		0.44	1.00		0.68	1.00		1.00
Lane Grp Cap(c), veh/h	249	2098	936	55	976	952	91	307	288	118	756	337
V/C Ratio(X)	0.79	0.28	0.03	0.71	0.53	0.53	0.32	1.05	1.07	0.80	0.06	0.46
Avail Cap(c_a), veh/h	304	2098	936	130	976	952	363	307	288	172	756	337
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.6	0.0	0.0	57.7	17.8	17.8	57.4	49.8	49.8	55.3	38.0	41.5
Incr Delay (d2), s/veh	8.3	0.3	0.1	6.2	2.1	2.1	0.7	65.4	71.4	9.1	0.2	4.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.1	0.0	1.3	9.5	9.3	0.4	14.7	14.3	3.1	0.6	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.9	0.3	0.1	63.8	19.9	19.9	58.2	115.2	121.2	64.4	38.2	45.9
LnGrp LOS	E	A	A	E	B	B	E	F	F	E	D	D
Approach Vol, veh/h		819			1067			658			297	
Approach Delay, s/veh		14.3			21.5			115.5			50.5	
Approach LOS		B			C			F			D	

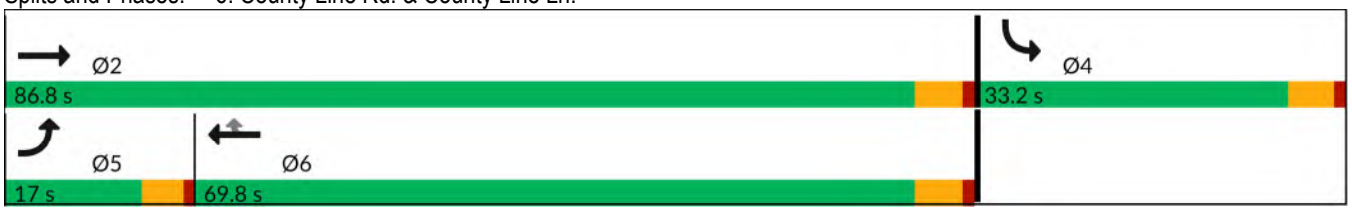
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	74.3	7.7	29.7	13.1	69.5	12.4	25.0
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	8.6	61.2	12.4	19.4	10.4	59.4	11.4	20.4
Max Q Clear Time (g_c+I1), s	4.6	2.0	3.0	12.0	8.5	24.3	8.1	22.4
Green Ext Time (p_c), s	0.0	2.8	0.0	0.3	0.1	4.7	0.0	0.0

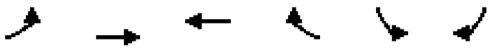
Intersection Summary	
HCM 7th Control Delay, s/veh	44.2
HCM 7th LOS	D

Lane Group	EBT	WBT	WBR	SBL	Ø5
Lane Configurations					
Traffic Volume (vph)	666	1006	118	157	
Future Volume (vph)	666	1006	118	157	
Turn Type	NA	NA	Perm	Prot	
Protected Phases	2	6		4	5
Permitted Phases			6		
Detector Phase	2	6	6	4	
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.4	22.4	22.4	27.2	9.6
Total Split (s)	86.8	69.8	69.8	33.2	17.0
Total Split (%)	72.3%	58.2%	58.2%	27.7%	14%
Yellow Time (s)	4.4	4.4	4.4	4.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4	5.4	5.4	5.2	
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	74.6	74.6	74.6	21.4	
Actuated g/C Ratio	0.70	0.70	0.70	0.20	
v/c Ratio	0.90	1.35	0.18	0.78	
Control Delay (s/veh)	24.7	184.3	4.5	56.5	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	24.7	184.3	4.5	56.5	
LOS	C	F	A	E	
Approach Delay (s/veh)	24.7	165.4		56.5	
Approach LOS	C	F		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106.7	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.35	
Intersection Signal Delay (s/veh): 108.5	Intersection LOS: F
Intersection Capacity Utilization 70.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: County Line Rd. & County Line Ln.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	666	1006	118	157	0
Future Volume (veh/h)	0	666	1006	118	157	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	1189	1796	211	0	0
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	3	1753	1753	1486	0	0
Arrive On Green	0.00	0.92	0.92	0.92	0.00	0.00
Sat Flow, veh/h	1810	1900	1900	1610	0	0
Grp Volume(v), veh/h	0	1189	1796	211	0	0
Grp Sat Flow(s),veh/h/ln	1810	1900	1900	1610	0	0
Q Serve(g_s), s	0.0	9.0	64.4	0.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.0	64.4	0.8	0.0	0.0
Prop In Lane	1.00			1.00	0.00	0.00
Lane Grp Cap(c), veh/h	3	1753	1753	1486	0	0
V/C Ratio(X)	0.00	0.68	1.02	0.14	0.00	0.00
Avail Cap(c_a), veh/h	321	2216	1753	1486	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.6	2.7	0.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	28.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	13.6	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	1.1	30.7	0.3	0.0	0.0
LnGrp LOS		A	F	A		
Approach Vol, veh/h		1189	2007		0	
Approach Delay, s/veh		1.1	27.5		0.0	
Approach LOS		A	C			

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		69.8		0.0	0.0	69.8
Change Period (Y+Rc), s		5.4		5.2	4.6	5.4
Max Green Setting (Gmax), s		81.4		28.0	12.4	64.4
Max Q Clear Time (g_c+I1), s		11.0		0.0	0.0	66.4
Green Ext Time (p_c), s		18.4		0.0	0.0	0.0

Intersection Summary		
HCM 7th Control Delay, s/veh		17.7
HCM 7th LOS		B

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	758	11	100	938	14	70
Future Vol, veh/h	758	11	100	938	14	70
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	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	824	12	109	1020	15	76

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	836	0	1557	418
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	727	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	807	-	105	589
Stage 1	-	-	-	-	394	-
Stage 2	-	-	-	-	445	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	807	-	91	589
Mov Cap-2 Maneuver	-	-	-	-	219	-
Stage 1	-	-	-	-	394	-
Stage 2	-	-	-	-	385	-

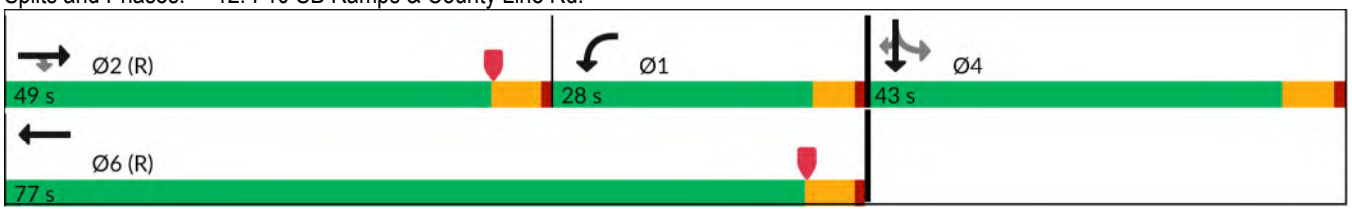
Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.98	14.76
HCM LOS			B

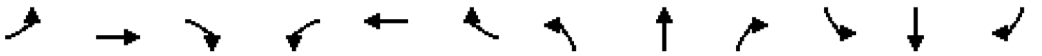
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	460	-	-	807	-
HCM Lane V/C Ratio	0.199	-	-	0.135	-
HCM Control Delay (s/veh)	14.8	-	-	10.2	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.7	-	-	0.5	-

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	638	189	329	567	3	472
Future Volume (vph)	638	189	329	567	3	472
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2				4
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8	22.8
Total Split (s)	49.0	49.0	28.0	77.0	43.0	43.0
Total Split (%)	40.8%	40.8%	23.3%	64.2%	35.8%	35.8%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8	5.8
Lead/Lag	Lead	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Max	Max
Act Effct Green (s)	43.6	43.6	23.4	71.6	37.2	37.2
Actuated g/C Ratio	0.36	0.36	0.20	0.60	0.31	0.31
v/c Ratio	0.98	0.30	1.00	0.53	1.01	0.72
Control Delay (s/veh)	69.0	8.8	81.6	8.7	82.7	21.1
Queue Delay	39.3	0.0	0.0	5.3	19.6	0.0
Total Delay (s/veh)	108.3	8.8	81.6	14.1	102.3	21.1
LOS	F	A	F	B	F	C
Approach Delay (s/veh)	85.5			38.9	64.2	
Approach LOS	F			D	E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay (s/veh): 62.4	Intersection LOS: E
Intersection Capacity Utilization 121.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 12: I-10 SB Ramps & County Line Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	638	189	329	567	0	0	0	0	531	3	472
Future Volume (veh/h)	0	638	189	329	567	0	0	0	0	531	3	472
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	679	95	350	603	0				565	3	396
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	690	572	414	1210	0				558	3	499
Arrive On Green	0.00	0.36	0.36	0.46	1.00	0.00				0.31	0.31	0.31
Sat Flow, veh/h	0	1900	1575	1810	1900	0				1800	10	1610
Grp Volume(v), veh/h	0	679	95	350	603	0				568	0	396
Grp Sat Flow(s),veh/h/ln	0	1900	1575	1810	1900	0				1810	0	1610
Q Serve(g_s), s	0.0	42.5	4.9	20.5	0.0	0.0				37.2	0.0	27.0
Cycle Q Clear(g_c), s	0.0	42.5	4.9	20.5	0.0	0.0				37.2	0.0	27.0
Prop In Lane	0.00		1.00	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	690	572	414	1210	0				561	0	499
V/C Ratio(X)	0.00	0.98	0.17	0.85	0.50	0.00				1.01	0.00	0.79
Avail Cap(c_a), veh/h	0	690	572	414	1210	0				561	0	499
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	0.40	0.40	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	37.8	25.9	30.7	0.0	0.0				41.4	0.0	37.9
Incr Delay (d2), s/veh	0.0	30.5	0.6	6.3	0.6	0.0				41.1	0.0	12.2
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	25.2	2.0	7.7	0.2	0.0				22.2	0.0	11.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	68.3	26.5	36.9	0.6	0.0				82.5	0.0	50.1
LnGrp LOS		E	C	D	A					F		D
Approach Vol, veh/h		774			953						964	
Approach Delay, s/veh		63.2			13.9						69.2	
Approach LOS		E			B						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	32.9	49.0		43.0		81.9
Change Period (Y+Rc), s	5.4	* 5.4		5.8		5.4
Max Green Setting (Gmax), s	23.4	* 44		37.2		71.6
Max Q Clear Time (g_c+I1), s	22.5	44.5		39.2		2.0
Green Ext Time (p_c), s	0.1	0.0		0.0		4.8

Intersection Summary		
HCM 7th Control Delay, s/veh		47.9
HCM 7th LOS		D

Notes

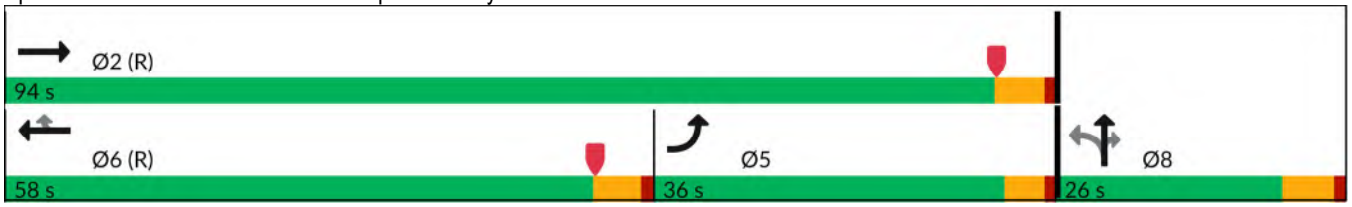
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	WBR	NBT	NBR
Lane Configurations						
Traffic Volume (vph)	390	780	669	382	2	325
Future Volume (vph)	390	780	669	382	2	325
Turn Type	Prot	NA	NA	Perm	NA	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8
Total Split (s)	36.0	94.0	58.0	58.0	26.0	26.0
Total Split (%)	30.0%	78.3%	48.3%	48.3%	21.7%	21.7%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max
Act Effct Green (s)	31.4	88.6	52.6	52.6	20.2	20.2
Actuated g/C Ratio	0.26	0.74	0.44	0.44	0.17	0.17
v/c Ratio	0.88	0.59	0.86	0.45	0.80	0.72
Control Delay (s/veh)	59.7	10.6	42.1	6.2	68.1	22.8
Queue Delay	36.6	35.6	1.7	0.0	0.0	0.0
Total Delay (s/veh)	96.3	46.2	43.8	6.2	68.1	22.8
LOS	F	D	D	A	E	C
Approach Delay (s/veh)		62.9	30.1		41.5	
Approach LOS		E	C		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay (s/veh): 46.2	Intersection LOS: D
Intersection Capacity Utilization 121.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 13: I-10 NB Ramps & County Line Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	780	0	0	669	382	227	2	325	0	0	0
Future Volume (veh/h)	390	780	0	0	669	382	227	2	325	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	415	830	0	0	712	406	241	2	346			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	461	1403	0	0	833	706	302	3	271			
Arrive On Green	0.51	1.00	0.00	0.00	0.44	0.44	0.17	0.17	0.17			
Sat Flow, veh/h	1810	1900	0	0	1900	1610	1795	15	1610			
Grp Volume(v), veh/h	415	830	0	0	712	406	243	0	346			
Grp Sat Flow(s),veh/h/ln	1810	1900	0	0	1900	1610	1810	0	1610			
Q Serve(g_s), s	24.9	0.0	0.0	0.0	40.4	22.7	15.5	0.0	20.2			
Cycle Q Clear(g_c), s	24.9	0.0	0.0	0.0	40.4	22.7	15.5	0.0	20.2			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	461	1403	0	0	833	706	305	0	271			
V/C Ratio(X)	0.90	0.59	0.00	0.00	0.85	0.58	0.80	0.00	1.28			
Avail Cap(c_a), veh/h	473	1403	0	0	833	706	305	0	271			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.13	0.13	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	28.0	0.0	0.0	0.0	30.3	25.3	47.9	0.0	49.9			
Incr Delay (d2), s/veh	3.3	0.2	0.0	0.0	10.9	3.4	19.2	0.0	149.9			
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	8.5	0.1	0.0	0.0	20.5	9.3	8.4	0.0	19.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.3	0.2	0.0	0.0	41.2	28.7	67.1	0.0	199.8			
LnGrp LOS	C	A			D	C	E		F			
Approach Vol, veh/h		1245			1118			589				
Approach Delay, s/veh		10.6			36.7			145.1				
Approach LOS		B			D			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		94.0			36.0	58.0		26.0				
Change Period (Y+Rc), s		5.4			5.4	* 5.4		5.8				
Max Green Setting (Gmax), s		88.6			31.4	* 53		20.2				
Max Q Clear Time (g_c+I1), s		2.0			26.9	42.4		22.2				
Green Ext Time (p_c), s		8.1			0.3	4.7		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	47.3
HCM 7th LOS	D

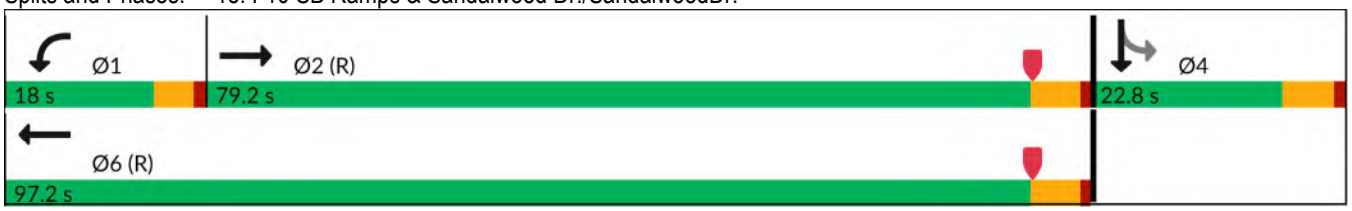
Notes

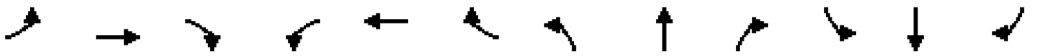
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	2103	1553	382	1279	284	6	809
Future Volume (vph)	2103	1553	382	1279	284	6	809
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	79.2		18.0	97.2	22.8	22.8	
Total Split (%)	66.0%		15.0%	81.0%	19.0%	19.0%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	Min	Min	
Act Effct Green (s)	74.0	120.0	15.5	94.1	14.7	14.7	120.0
Actuated g/C Ratio	0.62	1.00	0.13	0.78	0.12	0.12	1.00
v/c Ratio	0.69	1.01	0.89	0.33	0.73	0.73	0.53
Control Delay (s/veh)	16.9	28.8	67.9	2.0	70.3	70.3	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.9	28.8	67.9	2.0	70.3	70.3	1.2
LOS	B	C	E	A	E	E	A
Approach Delay (s/veh)	22.0			17.2		19.4	
Approach LOS	C			B		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay (s/veh): 20.3	Intersection LOS: C
Intersection Capacity Utilization 73.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↲	↱
Traffic Volume (veh/h)	0	2103	1553	382	1279	0	0	0	0	284	6	809
Future Volume (veh/h)	0	2103	1553	382	1279	0	0	0	0	284	6	809
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	2214	0	402	1346	0				303	0	0
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	0	0	0	0	0				0	0	0
Cap, veh/h	0	3393		392	4171	0				371	0	
Arrive On Green	0.00	0.65	0.00	0.22	1.00	0.00				0.10	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	2214	0	402	1346	0				303	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	30.9	0.0	13.4	0.0	0.0				9.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	30.9	0.0	13.4	0.0	0.0				9.8	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3393		392	4171	0				371	0	
V/C Ratio(X)	0.00	0.65		1.03	0.32	0.00				0.82	0.00	
Avail Cap(c_a), veh/h	0	3393		392	4171	0				513	0	
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	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	12.5	0.0	46.6	0.0	0.0				52.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	52.1	0.2	0.0				7.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.9	0.0	7.8	0.1	0.0				4.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	13.5	0.0	98.7	0.2	0.0				59.9	0.0	0.0
LnGrp LOS		B		F	A					E		
Approach Vol, veh/h		2214			1748						303	
Approach Delay, s/veh		13.5			22.9						59.9	
Approach LOS		B			C						E	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	18.0	83.9		18.1		101.9						
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4						
Max Green Setting (Gmax), s	13.4	73.8		17.0		91.8						
Max Q Clear Time (g_c+I1), s	15.4	32.9		11.8		2.0						
Green Ext Time (p_c), s	0.0	25.8		0.5		13.4						

Intersection Summary		
HCM 7th Control Delay, s/veh		20.6
HCM 7th LOS		C

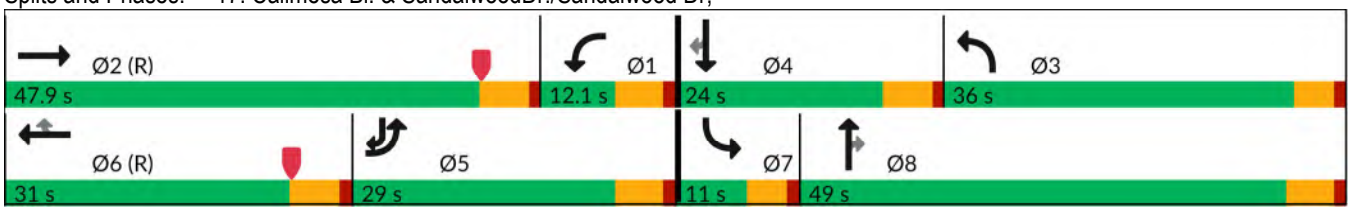
Notes

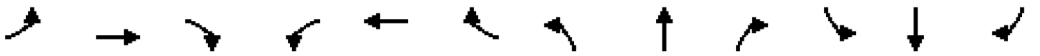
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	577	214	1587	41	205	28	930	422	220	36	504	624
Future Volume (vph)	577	214	1587	41	205	28	930	422	220	36	504	624
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.4	30.4		10.4	29.4	29.4	10.0	27.4	27.4	10.0	22.4	10.4
Total Split (s)	29.0	47.9		12.1	31.0	31.0	36.0	49.0	49.0	11.0	24.0	29.0
Total Split (%)	24.2%	39.9%		10.1%	25.8%	25.8%	30.0%	40.8%	40.8%	9.2%	20.0%	24.2%
Yellow Time (s)	4.4	4.4		4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4		5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	23.6	45.3	120.0	6.4	26.0	26.0	31.1	47.6	47.6	6.0	18.5	42.1
Actuated g/C Ratio	0.20	0.38	1.00	0.05	0.22	0.22	0.26	0.40	0.40	0.05	0.15	0.35
v/c Ratio	0.79	0.16	0.85	0.43	0.26	0.05	0.96	0.29	0.26	0.40	0.91	0.88
Control Delay (s/veh)	42.0	23.3	17.8	68.1	40.2	0.2	70.5	32.1	12.4	67.8	70.5	40.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.0	23.3	17.8	68.1	40.2	0.2	70.5	32.1	12.4	67.8	70.5	40.6
LOS	D	C	B	E	D	A	E	C	B	E	E	D
Approach Delay (s/veh)		24.1			40.3			52.0			54.4	
Approach LOS		C			D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74.6 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay (s/veh): 39.6	Intersection LOS: D
Intersection Capacity Utilization 98.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	577	214	1587	41	205	28	930	422	220	36	504	624
Future Volume (veh/h)	577	214	1587	41	205	28	930	422	220	36	504	624
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	607	225	0	43	216	20	979	444	99	38	531	270
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	717	1346		90	811	338	985	1493	631	54	587	555
Arrive On Green	0.25	0.47	0.00	0.05	0.21	0.21	0.26	0.39	0.39	0.03	0.15	0.15
Sat Flow, veh/h	3764	3800	1675	1810	3800	1583	3764	3800	1606	1810	3800	1607
Grp Volume(v), veh/h	607	225	0	43	216	20	979	444	99	38	531	270
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1583	1882	1900	1606	1810	1900	1607
Q Serve(g_s), s	18.4	4.1	0.0	2.8	5.7	1.0	31.1	9.6	3.7	2.5	16.5	0.0
Cycle Q Clear(g_c), s	18.4	4.1	0.0	2.8	5.7	1.0	31.1	9.6	3.7	2.5	16.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	717	1346		90	811	338	985	1493	631	54	587	555
V/C Ratio(X)	0.85	0.17		0.48	0.27	0.06	0.99	0.30	0.16	0.70	0.90	0.49
Avail Cap(c_a), veh/h	740	1346		101	811	338	985	1493	631	97	589	556
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	21.6	0.0	55.5	39.4	27.6	44.2	25.0	14.0	57.7	49.9	30.9
Incr Delay (d2), s/veh	8.3	0.3	0.0	1.5	0.8	0.3	25.4	0.1	0.1	6.0	17.5	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	1.8	0.0	1.3	2.7	0.5	17.5	4.3	1.8	1.2	9.1	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.4	21.8	0.0	57.0	40.2	27.9	69.6	25.1	14.1	63.7	67.3	31.6
LnGrp LOS	D	C		E	D	C	E	C	B	E	E	C
Approach Vol, veh/h		832			279			1522			839	
Approach Delay, s/veh		43.4			41.9			53.0			55.7	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	47.9	36.8	23.9	28.3	31.0	8.2	52.5
Change Period (Y+Rc), s	5.4	5.4	5.4	* 5.4	5.4	5.4	4.6	5.4
Max Green Setting (Gmax), s	6.7	42.5	31.4	* 19	23.6	25.6	6.4	43.6
Max Q Clear Time (g_c+I1), s	4.8	6.1	33.1	18.5	20.4	7.7	4.5	11.6
Green Ext Time (p_c), s	0.0	1.4	0.0	0.1	0.5	1.2	0.0	3.2

Intersection Summary	
HCM 7th Control Delay, s/veh	50.5
HCM 7th LOS	D

Notes

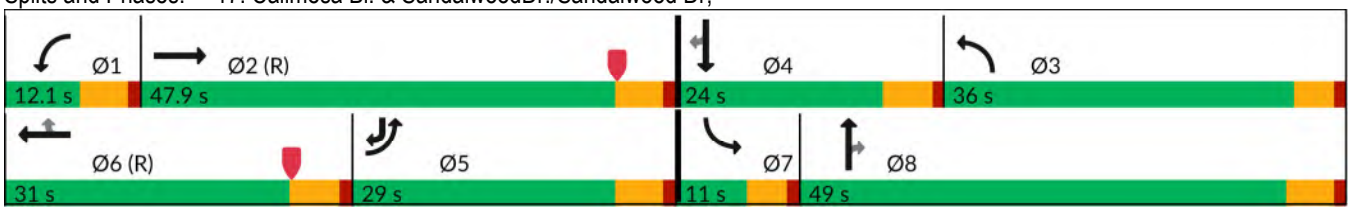
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

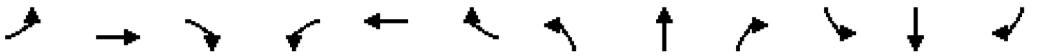
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	577	214	1587	41	205	28	930	422	220	36	504	624
Future Volume (vph)	577	214	1587	41	205	28	930	422	220	36	504	624
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.4	30.4		10.4	29.4	29.4	10.0	27.4	27.4	10.0	22.4	10.4
Total Split (s)	29.0	47.9		12.1	31.0	31.0	36.0	49.0	49.0	11.0	24.0	29.0
Total Split (%)	24.2%	39.9%		10.1%	25.8%	25.8%	30.0%	40.8%	40.8%	9.2%	20.0%	24.2%
Yellow Time (s)	4.4	4.4		4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4		5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	23.6	45.5	120.0	6.2	26.0	26.0	31.1	47.6	47.6	6.0	18.5	42.1
Actuated g/C Ratio	0.20	0.38	1.00	0.05	0.22	0.22	0.26	0.40	0.40	0.05	0.15	0.35
v/c Ratio	0.79	0.31	0.85	0.44	0.26	0.05	0.96	0.29	0.27	0.40	0.91	0.89
Control Delay (s/veh)	42.0	20.3	17.8	69.1	40.2	0.2	70.5	32.1	12.4	67.8	70.5	42.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.0	20.3	17.8	69.1	40.2	0.2	70.5	32.1	12.4	67.8	70.5	42.6
LOS	D	C	B	E	D	A	E	C	B	E	E	D
Approach Delay (s/veh)		23.9			40.5			52.0			55.5	
Approach LOS		C			D			D			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74.6 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay (s/veh): 39.8	Intersection LOS: D
Intersection Capacity Utilization 98.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	577	214	1587	41	205	28	930	422	220	36	504	624
Future Volume (veh/h)	577	214	1587	41	205	28	930	422	220	36	504	624
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	607	225	0	43	216	20	979	444	99	38	531	270
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	717	688		75	811	338	985	1493	630	54	587	555
Arrive On Green	0.06	0.12	0.00	0.04	0.21	0.21	0.26	0.39	0.39	0.03	0.15	0.15
Sat Flow, veh/h	3764	1900	1675	1810	3800	1583	3764	3800	1604	1810	3800	1607
Grp Volume(v), veh/h	607	225	0	43	216	20	979	444	99	38	531	270
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1583	1882	1900	1604	1810	1900	1607
Q Serve(g_s), s	19.2	13.0	0.0	2.8	5.7	1.0	31.1	9.6	4.8	2.5	16.5	0.0
Cycle Q Clear(g_c), s	19.2	13.0	0.0	2.8	5.7	1.0	31.1	9.6	4.8	2.5	16.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	717	688		75	811	338	985	1493	630	54	587	555
V/C Ratio(X)	0.85	0.33		0.57	0.27	0.06	0.99	0.30	0.16	0.70	0.90	0.49
Avail Cap(c_a), veh/h	740	688		101	811	338	985	1493	630	97	589	556
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	39.4	0.0	56.4	39.4	27.6	44.2	25.0	23.6	57.7	49.9	30.9
Incr Delay (d2), s/veh	8.3	1.3	0.0	2.5	0.8	0.3	25.4	0.1	0.1	6.0	17.5	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	6.9	0.0	1.3	2.7	0.5	17.5	4.3	1.8	1.2	9.1	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.8	40.7	0.0	59.0	40.2	27.9	69.6	25.1	23.7	63.7	67.3	31.6
LnGrp LOS	E	D		E	D	C	E	C	C	E	E	C
Approach Vol, veh/h		832			279			1522			839	
Approach Delay, s/veh		56.8			42.2			53.6			55.7	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	48.9	36.8	23.9	28.3	31.0	8.2	52.5
Change Period (Y+Rc), s	5.4	5.4	5.4	* 5.4	5.4	5.4	4.6	5.4
Max Green Setting (Gmax), s	6.7	42.5	31.4	* 19	23.6	25.6	6.4	43.6
Max Q Clear Time (g_c+I1), s	4.8	15.0	33.1	18.5	21.2	7.7	4.5	11.6
Green Ext Time (p_c), s	0.0	1.2	0.0	0.1	0.4	1.2	0.0	3.2

Intersection Summary	
HCM 7th Control Delay, s/veh	54.0
HCM 7th LOS	D

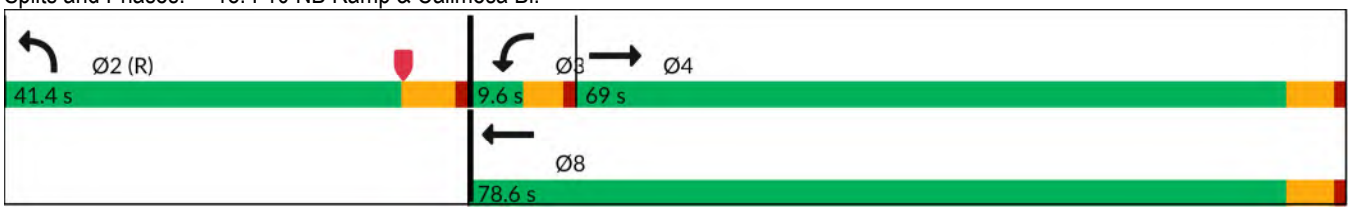
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	369	1762	47	341	1230
Future Volume (vph)	369	1762	47	341	1230
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.4		9.6	22.4	22.8
Total Split (s)	69.0		9.6	78.6	41.4
Total Split (%)	57.5%		8.0%	65.5%	34.5%
Yellow Time (s)	4.4		3.6	4.4	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.4		4.6	5.4	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	18.4	120.0	5.0	26.1	82.7
Actuated g/C Ratio	0.15	1.00	0.04	0.22	0.69
v/c Ratio	0.69	0.96	0.61	0.43	0.47
Control Delay (s/veh)	38.7	18.4	87.3	41.1	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.7	18.4	87.3	41.1	10.1
LOS	D	B	F	D	B
Approach Delay (s/veh)	21.9			46.7	10.1
Approach LOS	C			D	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay (s/veh): 20.6	Intersection LOS: C
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	369	1762	47	341	1230	16
Future Volume (veh/h)	369	1762	47	341	1230	16
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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	1900	1900	1900	1900	1976	1900
Adj Flow Rate, veh/h	380	0	48	352	1235	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	502		62	805	2616	1119
Arrive On Green	0.14	0.00	0.03	0.21	0.69	0.00
Sat Flow, veh/h	3705	1610	1810	3800	3764	1610
Grp Volume(v), veh/h	380	0	48	352	1235	0
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1900	1882	1610
Q Serve(g_s), s	12.2	0.0	3.2	9.7	17.9	0.0
Cycle Q Clear(g_c), s	12.2	0.0	3.2	9.7	17.9	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	502		62	805	2616	1119
V/C Ratio(X)	0.76		0.77	0.44	0.47	0.00
Avail Cap(c_a), veh/h	1913		75	2318	2616	1119
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.40	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.7	0.0	57.5	41.1	8.3	0.0
Incr Delay (d2), s/veh	1.0	0.0	26.1	0.4	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	1.9	4.5	6.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	50.7	0.0	83.6	41.5	8.9	0.0
LnGrp LOS	D		F	D	A	
Approach Vol, veh/h	380			400	1235	
Approach Delay, s/veh	50.7			46.5	8.9	
Approach LOS	D			D	A	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		89.2	8.7	22.1		30.8
Change Period (Y+Rc), s		5.8	4.6	5.4		5.4
Max Green Setting (Gmax), s		35.6	5.0	63.6		73.2
Max Q Clear Time (g_c+I1), s		19.9	5.2	14.2		11.7
Green Ext Time (p_c), s		4.6	0.0	2.5		2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	24.3
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	393.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	124	860	38	76	701	115	30	81	64	203	134	202
Future Vol, veh/h	124	860	38	76	701	115	30	81	64	203	134	202
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	136	945	42	84	770	126	33	89	70	223	147	222
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

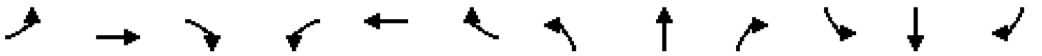
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	556.5	491.4	23.2	43.2
HCM LOS	F	F	C	E

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	56%	0%	96%	0%	86%	0%	40%
Vol Right, %	0%	44%	0%	4%	0%	14%	0%	60%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	145	124	898	76	816	203	336
LT Vol	30	0	124	0	76	0	203	0
Through Vol	0	81	0	860	0	701	0	134
RT Vol	0	64	0	38	0	115	0	202
Lane Flow Rate	33	159	136	987	84	897	223	369
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.093	0.413	0.342	2.335	0.211	2.12	0.567	0.845
Departure Headway (Hd)	13.748	12.863	10.689	10.128	10.858	10.223	11.84	10.841
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	262	282	339	375	332	368	308	336
Service Time	11.448	10.563	8.389	7.828	8.558	7.923	9.54	8.541
HCM Lane V/C Ratio	0.126	0.564	0.401	2.632	0.253	2.438	0.724	1.098
HCM Control Delay, s/veh	17.9	24.3	18.8	630.8	16.4	535.6	29	51.7
HCM Lane LOS	C	C	C	F	C	F	D	F
HCM 95th-tile Q	0.3	1.9	1.5	64.2	0.8	54.4	3.3	7.5

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	124	860	38	76	701	30	81	203	134	202
Future Volume (vph)	124	860	38	76	701	30	81	203	134	202
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	21.6	21.6	9.6	21.6	9.6	21.6	9.6	21.6	21.6
Total Split (s)	13.8	62.4	62.4	12.0	60.6	19.8	21.6	24.0	25.8	25.8
Total Split (%)	11.5%	52.0%	52.0%	10.0%	50.5%	16.5%	18.0%	20.0%	21.5%	21.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	8.3	58.0	58.0	7.2	56.9	5.7	18.8	17.6	34.5	34.5
Actuated g/C Ratio	0.07	0.48	0.48	0.06	0.47	0.05	0.16	0.15	0.29	0.29
v/c Ratio	0.56	0.54	0.05	0.77	0.53	0.20	0.27	0.84	0.14	0.36
Control Delay (s/veh)	63.7	17.3	0.7	96.6	23.2	57.4	26.7	76.8	33.8	6.4
Queue Delay	0.7	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.3	25.0	0.7	96.6	23.2	57.4	26.7	76.8	33.8	6.4
LOS	E	C	A	F	C	E	C	E	C	A
Approach Delay (s/veh)		28.8			29.5		32.0		39.7	
Approach LOS		C			C		C		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay (s/veh): 31.5	Intersection LOS: C
Intersection Capacity Utilization 58.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 22: Calimesa Bl. & Singleton Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	860	38	76	701	115	30	81	64	203	134	202
Future Volume (veh/h)	124	860	38	76	701	115	30	81	64	203	134	202
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	136	945	42	84	770	126	33	89	70	223	147	222
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	189	1833	818	106	1592	260	98	284	204	251	911	406
Arrive On Green	0.11	1.00	1.00	0.06	0.51	0.51	0.03	0.14	0.14	0.14	0.25	0.25
Sat Flow, veh/h	3510	3610	1610	1810	3105	508	3510	2005	1441	1810	3610	1610
Grp Volume(v), veh/h	136	945	42	84	447	449	33	79	80	223	147	222
Grp Sat Flow(s),veh/h/ln	1755	1805	1610	1810	1805	1809	1755	1805	1641	1810	1805	1610
Q Serve(g_s), s	4.5	0.0	0.0	5.5	19.3	19.3	1.1	4.7	5.3	14.5	3.8	14.3
Cycle Q Clear(g_c), s	4.5	0.0	0.0	5.5	19.3	19.3	1.1	4.7	5.3	14.5	3.8	14.3
Prop In Lane	1.00		1.00	1.00		0.28	1.00		0.88	1.00		1.00
Lane Grp Cap(c), veh/h	189	1833	818	106	925	927	98	256	232	251	911	406
V/C Ratio(X)	0.72	0.52	0.05	0.79	0.48	0.48	0.34	0.31	0.34	0.89	0.16	0.55
Avail Cap(c_a), veh/h	269	1833	818	112	925	927	445	256	232	293	911	406
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.6	0.0	0.0	55.8	19.0	19.0	57.2	46.2	46.5	50.8	35.0	38.9
Incr Delay (d2), s/veh	2.0	1.0	0.1	27.1	1.8	1.8	0.8	3.1	4.0	22.5	0.4	5.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.3	0.0	3.3	8.3	8.3	0.5	2.4	2.4	8.1	1.7	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.7	1.0	0.1	82.9	20.8	20.8	58.0	49.4	50.4	73.3	35.3	44.1
LnGrp LOS	D	A	A	F	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1123			980			192			592	
Approach Delay, s/veh		7.5			26.1			51.3			52.9	
Approach LOS		A			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	65.5	7.9	34.9	11.1	66.1	21.2	21.6
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	7.4	57.8	15.2	21.2	9.2	56.0	19.4	17.0
Max Q Clear Time (g_c+I1), s	7.5	2.0	3.1	16.3	6.5	21.3	16.5	7.3
Green Ext Time (p_c), s	0.0	5.0	0.0	0.5	0.1	3.9	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	26.0
HCM 7th LOS	C

APPENDIX 9.1: OPENING YEAR CUMULATIVE (2040) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	478	296	252	110	0
Future Vol, veh/h	0	478	296	252	110	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	655	405	345	151	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	751	0	-	0	1233	578
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	655	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	868	-	-	-	197	519
Stage 1	-	-	-	-	565	-
Stage 2	-	-	-	-	521	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	868	-	-	-	197	519
Mov Cap-2 Maneuver	-	-	-	-	197	-
Stage 1	-	-	-	-	565	-
Stage 2	-	-	-	-	521	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	65.53
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	868	-	-	-	197
HCM Lane V/C Ratio	-	-	-	-	0.764
HCM Ctrl Dly (s/v)	0	-	-	-	65.5
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	5.2

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	528	16	126	556	22	149
Future Vol, veh/h	528	16	126	556	22	149
Conflicting Peds, #/hr	0	2	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	607	18	145	639	25	171

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	627	0	1547	618
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	929	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	964	-	127	493
Stage 1	-	-	-	-	541	-
Stage 2	-	-	-	-	388	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	962	-	97	492
Mov Cap-2 Maneuver	-	-	-	-	97	-
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	297	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.74	31.99
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	323	-	-	333	-
HCM Lane V/C Ratio	0.608	-	-	0.15	-
HCM Control Delay (s/veh)	32	-	-	9.4	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	3.8	-	-	0.5	-

Intersection	
Int Delay, s/veh	23.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	356	321	435	421	0	0	0	0	396	6	262
Future Vol, veh/h	0	356	321	435	421	0	0	0	0	396	6	262
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	419	378	512	495	0	0	0	0	466	7	308

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	797	0	0	1938	2316	495
Stage 1	-	-	-	-	-	-	1519	1519	-
Stage 2	-	-	-	-	-	-	419	797	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	834	-	0	~ 73	38	578
Stage 1	0	-	-	-	-	0	~ 202	183	-
Stage 2	0	-	-	-	-	0	668	401	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	834	-	-	~ 28	0	578
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 438	0	-
Stage 1	-	-	-	-	-	-	~ 202	0	-
Stage 2	-	-	-	-	-	-	~ 258	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	8.1	65.99
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	834	-	438	578
HCM Lane V/C Ratio	-	-	0.614	-	1.081	0.533
HCM Control Delay (s/veh)	-	-	15.9	-	97.2	18.1
HCM Lane LOS	-	-	C	-	F	C
HCM 95th %tile Q(veh)	-	-	4.3	-	15.7	3.1

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

Intersection	
Int Delay, s/veh	67.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	248	505	0	0	619	485	238	0	107	0	0	0
Future Vol, veh/h	248	505	0	0	619	485	238	0	107	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	267	543	0	0	666	522	256	0	115	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1187	0	-	-	-	0	1742	2263	543
Stage 1	-	-	-	-	-	-	1076	1076	-
Stage 2	-	-	-	-	-	-	666	1187	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	595	-	0	0	-	-	~ 96	41	544
Stage 1	-	-	0	0	-	-	330	298	-
Stage 2	-	-	0	0	-	-	515	264	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	595	-	-	-	-	-	~ 53	0	544
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 119	0	-
Stage 1	-	-	-	-	-	-	~ 182	0	-
Stage 2	-	-	-	-	-	-	515	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	5.22	0	$ 418.48
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	119	544	595	-	-	-
HCM Lane V/C Ratio	2.142	0.212	0.448	-	-	-
HCM Control Delay (s/veh)	$ 600.6	13.4	15.9	-	-	-
HCM Lane LOS	F	B	C	-	-	-
HCM 95th %tile Q(veh)	21.5	0.8	2.3	-	-	-

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

Intersection	
Intersection Delay, s/veh	100.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	111	92	445	212	0	76	0	355	0	0	0
Future Vol, veh/h	0	111	92	445	212	0	76	0	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, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	152	126	610	290	0	104	0	486	0	0	0
Number of Lanes	1	1	0	1	1	1	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	2
HCM Control Delay, s/veh	25.7	154.4	53.5	0
HCM LOS	D	F	F	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	55%	0%	100%	100%	100%
Vol Right, %	0%	100%	0%	45%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	76	355	0	203	445	212	0	0
LT Vol	76	0	0	0	445	0	0	0
Through Vol	0	0	0	111	0	212	0	0
RT Vol	0	355	0	92	0	0	0	0
Lane Flow Rate	104	486	0	278	610	290	0	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.242	0.968	0	0.635	1.402	0.627	0	0
Departure Headway (Hd)	8.999	7.767	9.187	8.858	8.281	7.768	7.768	10.752
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	402	472	0	412	445	468	0	0
Service Time	6.699	5.467	6.887	6.558	5.981	5.468	5.468	8.452
HCM Lane V/C Ratio	0.259	1.03	0	0.675	1.371	0.62	0	0
HCM Control Delay, s/veh	14.5	61.9	11.9	25.7	217.2	22.6	10.5	13.5
HCM Lane LOS	B	F	F	D	F	C	N	N
HCM 95th-tile Q	0.9	12.1	0	4.2	29.6	4.2	0	0

Intersection	
Intersection Delay, s/veh	192.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	389	77	237	507	0	0	0	0	180	10	150
Future Vol, veh/h	0	389	77	237	507	0	0	0	0	180	10	150
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	480	95	293	626	0	0	0	0	222	12	185
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

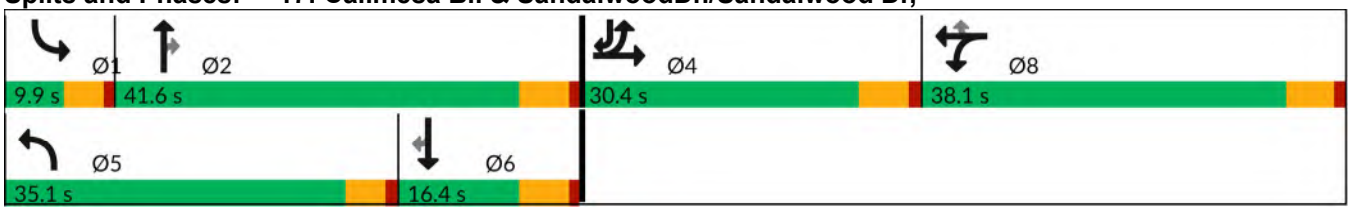
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	73.7	339.4	35.2
HCM LOS	F	F	E

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	32%	53%
Vol Thru, %	83%	68%	3%
Vol Right, %	17%	0%	44%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	466	744	340
LT Vol	0	237	180
Through Vol	389	507	10
RT Vol	77	0	150
Lane Flow Rate	575	919	420
Geometry Grp	1	1	1
Degree of Util (X)	1.022	1.698	0.797
Departure Headway (Hd)	7.36	6.656	7.86
Convergence, Y/N	Yes	Yes	Yes
Cap	501	551	466
Service Time	5.36	4.736	5.86
HCM Lane V/C Ratio	1.148	1.668	0.901
HCM Control Delay, s/veh	73.7	339.4	35.2
HCM Lane LOS	F	F	E
HCM 95th-tile Q	14.4	53	7.3

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	209	263	51	361	61	235	847	175	23	197
Future Volume (vph)	209	263	51	361	61	235	847	175	23	197
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	8	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	4	4	8	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	19.9	19.9	26.9	26.9	26.9	20.2	34.0	34.0	5.4	14.1
Actuated g/C Ratio	0.19	0.19	0.26	0.26	0.26	0.20	0.33	0.33	0.05	0.14
v/c Ratio	0.65	0.62	0.12	0.83	0.13	0.76	0.81	0.32	0.28	0.86
Control Delay (s/veh)	50.9	42.1	32.7	52.4	0.5	54.9	40.2	10.5	61.9	76.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.9	42.1	32.7	52.4	0.5	54.9	40.2	10.5	61.9	76.1
LOS	D	D	C	D	A	D	D	B	E	E
Approach Delay (s/veh)		45.0		43.6			38.8			38.4
Approach LOS		D		D			D			D

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 102.8		
Natural Cycle: 100		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.86		
Intersection Signal Delay (s/veh): 40.7	Intersection LOS: D	
Intersection Capacity Utilization 74.3%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations										
Traffic Volume (veh/h)	209	263	70	51	361	61	235	847	175	23
Future Volume (veh/h)	209	263	70	51	361	61	235	847	175	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	200	353	62	58	410	59	267	962	169	26
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	284	496	86	457	480	401	307	1188	529	48
Arrive On Green	0.16	0.16	0.16	0.25	0.25	0.25	0.17	0.33	0.33	0.03
Sat Flow, veh/h	1810	3153	548	1810	1900	1588	1810	3610	1607	1810
Grp Volume(v), veh/h	200	211	204	58	410	59	267	962	169	26
Grp Sat Flow(s),veh/h/ln	1810	1900	1801	1810	1900	1588	1810	1805	1607	1810
Q Serve(g_s), s	9.3	9.4	9.5	2.2	18.2	2.6	12.8	21.6	7.0	1.3
Cycle Q Clear(g_c), s	9.3	9.4	9.5	2.2	18.2	2.6	12.8	21.6	7.0	1.3
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	284	299	283	457	480	401	307	1188	529	48
V/C Ratio(X)	0.70	0.71	0.72	0.13	0.85	0.15	0.87	0.81	0.32	0.54
Avail Cap(c_a), veh/h	510	535	508	667	700	585	622	1473	656	108
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	35.4	35.5	25.6	31.6	25.7	35.9	27.2	22.3	42.6
Incr Delay (d2), s/veh	3.2	3.1	3.4	0.1	6.9	0.2	3.0	2.9	0.3	3.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.4	4.3	0.9	8.8	0.9	5.6	9.1	2.5	0.6
Unsig. Movement Delay, s/veh										
LnGrp Delay(d), s/veh	38.6	38.5	39.0	25.7	38.5	25.9	38.9	30.1	22.7	46.1
LnGrp LOS	D	D	D	C	D	C	D	C	C	D
Approach Vol, veh/h		615			527			1398		
Approach Delay, s/veh		38.7			35.7			30.9		
Approach LOS		D			D			C		

Timer - Assigned Phs	1	2		4	5	6		8		
Phs Duration (G+Y+Rc), s	7.0	34.6		19.3	19.6	21.9		27.8		
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4		
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7		
Max Q Clear Time (g_c+I1), s	3.3	23.6		11.5	14.8	14.8		20.2		
Green Ext Time (p_c), s	0.0	5.6		2.4	0.3	0.0		2.2		

Intersection Summary		
HCM 7th Control Delay, s/veh	33.2	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	393.3
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	151	167	193	1000	256	23
Future Vol, veh/h	151	167	193	1000	256	23
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	178	196	227	1176	301	27
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	20.2	579.2	23.8
HCM LOS	C	F	C

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	92%	0%	16%
Vol Thru, %	0%	47%	84%
Vol Right, %	8%	53%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	279	318	1193
LT Vol	256	0	193
Through Vol	0	151	1000
RT Vol	23	167	0
Lane Flow Rate	328	374	1404
Geometry Grp	1	1	1
Degree of Util (X)	0.598	0.594	2.245
Departure Headway (Hd)	8.673	7.194	5.758
Convergence, Y/N	Yes	Yes	Yes
Cap	420	505	646
Service Time	6.673	5.194	3.758
HCM Lane V/C Ratio	0.781	0.741	2.173
HCM Control Delay, s/veh	23.8	20.2	579.2
HCM Lane LOS	C	C	F
HCM 95th-tile Q	3.8	3.8	102.4

Intersection	
Intersection Delay, s/veh	78
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	275	132	166	336	149
Future Vol, veh/h	67	275	132	166	336	149
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	94	387	186	234	473	210
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	33.4	25.5	141.8
HCM LOS	D	D	F

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	20%	69%
Vol Thru, %	44%	0%	31%
Vol Right, %	56%	80%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	298	342	485
LT Vol	0	67	336
Through Vol	132	0	149
RT Vol	166	275	0
Lane Flow Rate	420	482	683
Geometry Grp	1	1	1
Degree of Util (X)	0.73	0.822	1.233
Departure Headway (Hd)	6.635	6.662	6.5
Convergence, Y/N	Yes	Yes	Yes
Cap	550	549	560
Service Time	4.635	4.662	4.527
HCM Lane V/C Ratio	0.764	0.878	1.22
HCM Control Delay, s/veh	25.5	33.4	141.8
HCM Lane LOS	D	D	F
HCM 95th-tile Q	6.1	8.2	25.9

Intersection	
Int Delay, s/veh	11.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	509	378	531	747	0	0	0	0	0	0	0
Future Vol, veh/h	0	509	378	531	747	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	606	450	632	889	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1056	0	0	2760	3210	889
Stage 1	-	-	-	-	-	-	2154	2154	-
Stage 2	-	-	-	-	-	-	606	1056	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	667	-	0	22	10	345
Stage 1	0	-	-	-	-	0	97	88	-
Stage 2	0	-	-	-	-	0	548	305	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	667	-	-	0	0	345
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	97	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	19.94	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 338	-	-
HCM Lane V/C Ratio	-	-	0.948	-	-
HCM Control Delay (s/veh)	-	-	48	0	0
HCM Lane LOS	-	-	E	A	A
HCM 95th %tile Q(veh)	-	-	13.4	-	-

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

Intersection	
Int Delay, s/veh	317

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	509	0	0	1022	0	255	0	324	0	0	0
Future Vol, veh/h	0	509	0	0	1022	0	255	0	324	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	566	0	0	1136	0	283	0	360	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1136	0	-	-	-	0	1701	1701	566
Stage 1	-	-	-	-	-	-	566	566	-
Stage 2	-	-	-	-	-	-	1136	1136	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	623	-	0	0	-	-	~ 102	93	528
Stage 1	-	-	0	0	-	-	572	511	-
Stage 2	-	-	0	0	-	-	309	279	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	623	-	-	-	-	-	~ 102	0	528
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 102	0	-
Stage 1	-	-	-	-	-	-	572	0	-
Stage 2	-	-	-	-	-	-	309	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	$ 1155.05
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	186	623	-	-	-
HCM Lane V/C Ratio	3.454	-	-	-	-
HCM Control Delay (s/veh)	$ 1155	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	61.1	0	-	-	-

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

Intersection	
Intersection Delay, s/veh	574.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	185	606	42	38	812	214	51	360	187	81	35	159
Future Vol, veh/h	185	606	42	38	812	214	51	360	187	81	35	159
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	197	645	45	40	864	228	54	383	199	86	37	169
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	591	840.7	307.1	75
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	22%	4%	29%
Vol Thru, %	60%	73%	76%	13%
Vol Right, %	31%	5%	20%	58%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	598	833	1064	275
LT Vol	51	185	38	81
Through Vol	360	606	812	35
RT Vol	187	42	214	159
Lane Flow Rate	636	886	1132	293
Geometry Grp	1	1	1	1
Degree of Util (X)	1.554	2.21	2.783	0.756
Departure Headway (Hd)	15.975	15.88	14.045	22.939
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	235	239	272	161
Service Time	13.975	13.88	12.045	20.939
HCM Lane V/C Ratio	2.706	3.707	4.162	1.82
HCM Control Delay, s/veh	307.1	591	840.7	75
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	21.7	39.1	61.5	4.7

Intersection	
Int Delay, s/veh	144.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	416	558	113	156	0
Future Vol, veh/h	0	416	558	113	156	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	743	996	202	279	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1198	0	-	0	1840	1097
Stage 1	-	-	-	-	1097	-
Stage 2	-	-	-	-	743	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	590	-	-	-	~ 84	261
Stage 1	-	-	-	-	323	-
Stage 2	-	-	-	-	474	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	590	-	-	-	~ 84	261
Mov Cap-2 Maneuver	-	-	-	-	~ 84	-
Stage 1	-	-	-	-	323	-
Stage 2	-	-	-	-	474	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	$ 1151.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	590	-	-	-	84
HCM Lane V/C Ratio	-	-	-	-	3.322
HCM Ctrl Dly (s/v)	0	-	-	-	$ 1151.1
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	28.1

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

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	485	11	100	434	14	70
Future Vol, veh/h	485	11	100	434	14	70
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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	557	13	115	499	16	80

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	570	0	1293	564
Stage 1	-	-	-	-	564	-
Stage 2	-	-	-	-	729	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1012	-	182	529
Stage 1	-	-	-	-	574	-
Stage 2	-	-	-	-	481	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1012	-	153	529
Mov Cap-2 Maneuver	-	-	-	-	153	-
Stage 1	-	-	-	-	574	-
Stage 2	-	-	-	-	406	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.69	17.88
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	375	-	-	337	-
HCM Lane V/C Ratio	0.257	-	-	0.114	-
HCM Control Delay (s/veh)	17.9	-	-	9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1	-	-	0.4	-

Intersection	
Int Delay, s/veh	1812.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	411	144	345	417	0	0	0	0	551	3	117
Future Vol, veh/h	0	411	144	345	417	0	0	0	0	551	3	117
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	437	153	367	444	0	0	0	0	586	3	124

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	590	0	0	1615	1768	444
Stage 1	-	-	-	-	-	-	1178	1178	-
Stage 2	-	-	-	-	-	-	437	590	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	995	-	0	~ 116	84	618
Stage 1	0	-	-	-	-	0	~ 295	267	-
Stage 2	0	-	-	-	-	0	655	498	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	995	-	-	~ 73	0	618
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 39	0	-
Stage 1	-	-	-	-	-	-	~ 295	0	-
Stage 2	-	-	-	-	-	-	~ 414	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	4.85	$ 5363.76
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	995	-	39	618
HCM Lane V/C Ratio	-	-	0.369	-	15.001	0.201
HCM Control Delay (s/veh)	-	-	10.7	-	$ 6493.9	12.3
HCM Lane LOS	-	-	B	-	F	B
HCM 95th %tile Q(veh)	-	-	1.7	-	71.8	0.7

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

Intersection	
Int Delay, s/veh	28.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	216	746	0	0	600	388	162	2	337	0	0	0
Future Vol, veh/h	216	746	0	0	600	388	162	2	337	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	230	794	0	0	638	413	172	2	359	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1051	0	-	-	-	0	1891	2304	794
Stage 1	-	-	-	-	-	-	1253	1253	-
Stage 2	-	-	-	-	-	-	638	1051	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	670	-	0	0	-	-	~ 78	39	391
Stage 1	-	-	0	0	-	-	272	246	-
Stage 2	-	-	0	0	-	-	530	306	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	670	-	-	-	-	-	~ 51	0	391
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 124	0	-
Stage 1	-	-	-	-	-	-	178	0	-
Stage 2	-	-	-	-	-	-	530	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	2.95	0	135.52
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	124	391	670	-	-	-
HCM Lane V/C Ratio	1.412	0.916	0.343	-	-	-
HCM Control Delay (s/veh)	291.3	59.7	13.2	-	-	-
HCM Lane LOS	F	F	B	-	-	-
HCM 95th %tile Q(veh)	11.9	9.7	1.5	-	-	-

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

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	82	12	32	93	0	6	0	105	0	0	0
Future Vol, veh/h	0	82	12	32	93	0	6	0	105	0	0	0
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	108	16	42	122	0	8	0	138	0	0	0
Number of Lanes	1	1	0	1	1	1	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	2
HCM Control Delay, s/veh	9	8.9	8.3	0
HCM LOS	A	A	A	-

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	100%	0%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	0%	100%	87%	0%	100%	100%	100%
Vol Right, %	0%	100%	0%	13%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	105	0	94	32	93	0	0
LT Vol	6	0	0	0	32	0	0	0
Through Vol	0	0	0	82	0	93	0	0
RT Vol	0	105	0	12	0	0	0	0
Lane Flow Rate	8	138	0	124	42	122	0	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.013	0.177	0	0.177	0.066	0.175	0	0
Departure Headway (Hd)	5.822	4.617	5.231	5.141	5.644	5.142	5.142	5.605
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	615	776	0	696	634	696	0	0
Service Time	3.556	2.35	2.97	2.88	3.382	2.88	2.88	3.358
HCM Lane V/C Ratio	0.013	0.178	0	0.178	0.066	0.175	0	0
HCM Control Delay, s/veh	8.6	8.3	8	9	8.8	9	7.9	8.4
HCM Lane LOS	A	A	N	A	A	A	N	N
HCM 95th-tile Q	0	0.6	0	0.6	0.2	0.6	0	0

Intersection	
Intersection Delay, s/veh	19.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	138	49	398	75	0	0	0	0	287	6	51
Future Vol, veh/h	0	138	49	398	75	0	0	0	0	287	6	51
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	145	52	419	79	0	0	0	0	302	6	54
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

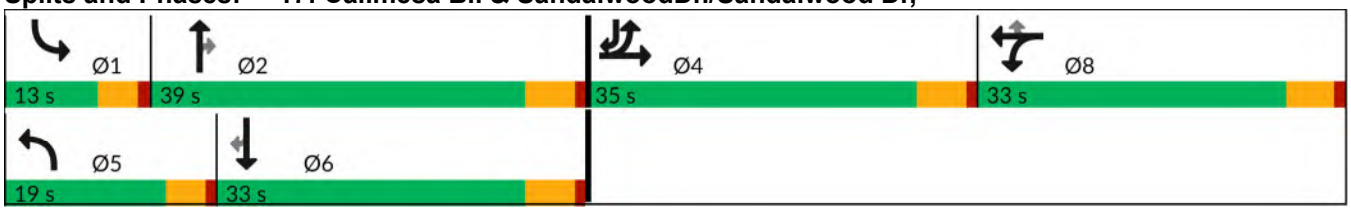
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	11.3	24.3	17.1
HCM LOS	B	C	C

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	84%	83%
Vol Thru, %	74%	16%	2%
Vol Right, %	26%	0%	15%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	187	473	344
LT Vol	0	398	287
Through Vol	138	75	6
RT Vol	49	0	51
Lane Flow Rate	197	498	362
Geometry Grp	1	1	1
Degree of Util (X)	0.31	0.764	0.59
Departure Headway (Hd)	5.667	5.521	5.861
Convergence, Y/N	Yes	Yes	Yes
Cap	632	652	616
Service Time	3.732	3.571	3.915
HCM Lane V/C Ratio	0.312	0.764	0.588
HCM Control Delay, s/veh	11.3	24.3	17.1
HCM Lane LOS	B	C	C
HCM 95th-tile Q	1.3	7.1	3.8

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	142	176	34	174	28	85	442	237	37	502
Future Volume (vph)	142	176	34	174	28	85	442	237	37	502
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	8	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	4	4	8	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	14.8	14.8	14.2	14.2	14.2	8.8	32.8	32.8	6.5	28.4
Actuated g/C Ratio	0.17	0.17	0.17	0.17	0.17	0.10	0.39	0.39	0.08	0.33
v/c Ratio	0.47	0.49	0.12	0.58	0.07	0.48	0.33	0.33	0.28	0.83
Control Delay (s/veh)	39.3	28.4	33.9	42.5	0.4	48.0	22.0	4.7	47.1	42.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.3	28.4	33.9	42.5	0.4	48.0	22.0	4.7	47.1	42.9
LOS	D	C	C	D	A	D	C	A	D	D
Approach Delay (s/veh)		31.7		36.4			19.5			27.6
Approach LOS		C		D			B			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 85	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 26.5	Intersection LOS: C
Intersection Capacity Utilization 66.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations										
Traffic Volume (veh/h)	142	176	100	34	174	28	85	442	237	37
Future Volume (veh/h)	142	176	100	34	174	28	85	442	237	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	137	202	78	36	183	14	89	465	226	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	269	392	146	273	286	242	116	1276	568	70
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.06	0.35	0.35	0.04
Sat Flow, veh/h	1810	2639	984	1810	1900	1604	1810	3610	1606	1810
Grp Volume(v), veh/h	137	143	137	36	183	14	89	465	226	39
Grp Sat Flow(s),veh/h/ln	1810	1900	1723	1810	1900	1604	1810	1805	1606	1810
Q Serve(g_s), s	4.7	4.7	4.9	1.2	6.1	0.5	3.3	6.4	7.1	1.4
Cycle Q Clear(g_c), s	4.7	4.7	4.9	1.2	6.1	0.5	3.3	6.4	7.1	1.4
Prop In Lane	1.00		0.57	1.00		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	269	282	256	273	286	242	116	1276	568	70
V/C Ratio(X)	0.51	0.51	0.53	0.13	0.64	0.06	0.77	0.36	0.40	0.56
Avail Cap(c_a), veh/h	796	835	758	742	779	658	387	1802	802	226
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	26.4	26.5	24.8	26.9	24.5	31.0	16.2	16.4	31.8
Incr Delay (d2), s/veh	1.5	1.4	1.7	0.2	2.4	0.1	4.0	0.2	0.5	2.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	2.1	2.0	0.5	2.7	0.2	1.5	2.4	2.4	0.6
Unsig. Movement Delay, s/veh										
LnGrp Delay(d), s/veh	27.9	27.8	28.2	25.0	29.2	24.6	35.0	16.3	16.8	34.4
LnGrp LOS	C	C	C	C	C	C	C	B	B	C
Approach Vol, veh/h		417			233			780		
Approach Delay, s/veh		28.0			28.3			18.6		
Approach LOS		C			C			B		

Timer - Assigned Phs	1	2		4	5	6		8		
Phs Duration (G+Y+Rc), s	7.2	29.2		15.4	8.9	27.5		15.5		
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4		
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6		
Max Q Clear Time (g_c+I1), s	3.4	9.1		6.9	5.3	19.4		8.1		
Green Ext Time (p_c), s	0.0	3.7		1.8	0.1	2.7		1.0		

Intersection Summary		
HCM 7th Control Delay, s/veh	23.0	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	64.1
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	345	290	52	358	406	30
Future Vol, veh/h	345	290	52	358	406	30
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	356	299	54	369	419	31
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	103	30.3	39.1
HCM LOS	F	D	E

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	93%	0%	13%
Vol Thru, %	0%	54%	87%
Vol Right, %	7%	46%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	436	635	410
LT Vol	406	0	52
Through Vol	0	345	358
RT Vol	30	290	0
Lane Flow Rate	449	655	423
Geometry Grp	1	1	1
Degree of Util (X)	0.853	1.133	0.778
Departure Headway (Hd)	7.179	6.232	6.964
Convergence, Y/N	Yes	Yes	Yes
Cap	508	589	524
Service Time	5.179	4.232	4.964
HCM Lane V/C Ratio	0.884	1.112	0.807
HCM Control Delay, s/veh	39.1	103	30.3
HCM Lane LOS	E	F	D
HCM 95th-tile Q	8.9	21.2	7

Intersection	
Intersection Delay, s/veh	282
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	186	404	158	202	355	105
Future Vol, veh/h	186	404	158	202	355	105
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	310	673	263	337	592	175
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	393.8	110.8	272.6
HCM LOS	F	F	F

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	32%	77%
Vol Thru, %	44%	0%	23%
Vol Right, %	56%	68%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	360	590	460
LT Vol	0	186	355
Through Vol	158	0	105
RT Vol	202	404	0
Lane Flow Rate	600	983	767
Geometry Grp	1	1	1
Degree of Util (X)	1.11	1.816	1.523
Departure Headway (Hd)	9.573	7.525	9.429
Convergence, Y/N	Yes	Yes	Yes
Cap	384	492	391
Service Time	7.573	5.525	7.429
HCM Lane V/C Ratio	1.563	1.998	1.962
HCM Control Delay, s/veh	110.8	393.8	272.6
HCM Lane LOS	F	F	F
HCM 95th-tile Q	15.4	54.7	31.8

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	643	397	395	1050	0	0	0	0	0	0	0
Future Vol, veh/h	0	643	397	395	1050	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	691	427	425	1129	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1118	0	0	2670	3097	1129
Stage 1	-	-	-	-	-	-	1978	1978	-
Stage 2	-	-	-	-	-	-	691	1118	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	632	-	0	25	12	251
Stage 1	0	-	-	-	-	0	119	108	-
Stage 2	0	-	-	-	-	0	501	285	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	632	-	-	0	0	251
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	119	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	5.89	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 236	-	-
HCM Lane V/C Ratio	-	-	0.672	-	-
HCM Control Delay (s/veh)	-	-	21.6	0	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	5.1	-	-

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

Intersection	
Int Delay, s/veh	1111.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	643	0	0	960	0	486	0	567	0	0	0
Future Vol, veh/h	0	643	0	0	960	0	486	0	567	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	707	0	0	1055	0	534	0	623	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1055	0	-	-	-	0	1762	1762	707
Stage 1	-	-	-	-	-	-	707	707	-
Stage 2	-	-	-	-	-	-	1055	1055	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	668	-	0	0	-	-	~ 94	85	~ 439
Stage 1	-	-	0	0	-	-	~ 493	441	-
Stage 2	-	-	0	0	-	-	~ 338	305	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	668	-	-	-	-	-	~ 94	0	~ 439
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 94	0	-
Stage 1	-	-	-	-	-	-	~ 493	0	-
Stage 2	-	-	-	-	-	-	~ 338	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	$ 2803.39
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	163	668	-	-	-
HCM Lane V/C Ratio	7.113	-	-	-	-
HCM Control Delay (s/veh)	$ 2803.4	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	127.7	0	-	-	-

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

Intersection	
Intersection Delay, s/veh	620.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	137	1001	72	79	737	107	0	68	60	205	127	223
Future Vol, veh/h	137	1001	72	79	737	107	0	68	60	205	127	223
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	151	1100	79	87	810	118	0	75	66	225	140	245
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	899.3	588.4	36.3	199.8
HCM LOS	F	F	E	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	11%	9%	37%
Vol Thru, %	53%	83%	80%	23%
Vol Right, %	47%	6%	12%	40%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	128	1210	923	555
LT Vol	0	137	79	205
Through Vol	68	1001	737	127
RT Vol	60	72	107	223
Lane Flow Rate	141	1330	1014	610
Geometry Grp	1	1	1	1
Degree of Util (X)	0.364	2.929	2.223	1.318
Departure Headway (Hd)	21.457	11.356	12.744	12.71
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	170	332	294	293
Service Time	19.457	9.356	10.744	10.71
HCM Lane V/C Ratio	0.829	4.006	3.449	2.082
HCM Control Delay, s/veh	36.3	899.3	588.4	199.8
HCM Lane LOS	E	F	F	F
HCM 95th-tile Q	1.5	80.8	48.1	18.7

APPENDIX 9.2: OPENING YEAR CUMULATIVE (2040) WITH PROJECT (PHASE 4) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Intersection Delay, s/veh	4.3
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	329	85	57
Demand Flow Rate, veh/h	329	85	57
Vehicles Circulating, veh/h	13	0	329
Vehicles Exiting, veh/h	72	386	13
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.7	3.1	4.2
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	329	85	57
Cap Entry Lane, veh/h	1362	1380	987
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	329	85	57
Cap Entry, veh/h	1362	1380	987
V/C Ratio	0.242	0.062	0.058
Control Delay, s/veh	4.7	3.1	4.2
LOS	A	A	A
95th %tile Queue, veh	1	0	0

Intersection	
Intersection Delay, s/veh	4.1
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	271	113	79
Demand Flow Rate, veh/h	271	113	79
Vehicles Circulating, veh/h	79	0	78
Vehicles Exiting, veh/h	78	350	35
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.7	3.3	3.3
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	271	113	79
Cap Entry Lane, veh/h	1273	1380	1274
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	271	113	79
Cap Entry, veh/h	1273	1380	1274
V/C Ratio	0.213	0.082	0.062
Control Delay, s/veh	4.7	3.3	3.3
LOS	A	A	A
95th %tile Queue, veh	1	0	0

Intersection	
Intersection Delay, s/veh	5.8
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	483	80	234
Demand Flow Rate, veh/h	483	80	234
Vehicles Circulating, veh/h	26	51	382
Vehicles Exiting, veh/h	105	565	127
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.0	3.2	6.4
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	483	80	234
Cap Entry Lane, veh/h	1344	1310	935
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	483	80	234
Cap Entry, veh/h	1344	1310	935
V/C Ratio	0.359	0.061	0.250
Control Delay, s/veh	6.0	3.2	6.4
LOS	A	A	A
95th %tile Queue, veh	2	0	1

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	117	37	202	177	2
Future Vol, veh/h	17	117	37	202	177	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	127	40	220	192	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	493	193	195	0	-	0
Stage 1	193	-	-	-	-	-
Stage 2	300	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	539	853	1391	-	-	-
Stage 1	844	-	-	-	-	-
Stage 2	756	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	523	853	1391	-	-	-
Mov Cap-2 Maneuver	523	-	-	-	-	-
Stage 1	820	-	-	-	-	-
Stage 2	756	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.59	1.19	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1391	-	790	-	-
HCM Lane V/C Ratio	0.029	-	0.184	-	-
HCM Control Delay (s/veh)	7.7	-	10.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-

Intersection	
Intersection Delay, s/veh	5.2
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	448	291	319
Demand Flow Rate, veh/h	448	291	319
Vehicles Circulating, veh/h	302	88	120
Vehicles Exiting, veh/h	137	662	259
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.2	3.7	5.3
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.196	0.804	0.412	0.588	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	88	360	120	171	319
Cap Entry Lane, veh/h	1079	1079	1311	1311	1221
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	88	360	120	171	319
Cap Entry, veh/h	1079	1079	1311	1311	1221
V/C Ratio	0.082	0.334	0.092	0.130	0.261
Control Delay, s/veh	4.0	6.7	3.5	3.8	5.3
LOS	A	A	A	A	A
95th %tile Queue, veh	0	1	0	0	1

Intersection	
Int Delay, s/veh	51.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1008	372	252	110	0
Future Vol, veh/h	0	1008	372	252	110	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1381	510	345	151	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	855	0	-	0	2063	682
Stage 1	-	-	-	-	682	-
Stage 2	-	-	-	-	1381	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	794	-	-	-	~ 61	453
Stage 1	-	-	-	-	506	-
Stage 2	-	-	-	-	236	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	794	-	-	-	~ 61	453
Mov Cap-2 Maneuver	-	-	-	-	~ 61	-
Stage 1	-	-	-	-	506	-
Stage 2	-	-	-	-	236	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	$ 815.63
HCM LOS			F

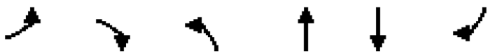
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	794	-	-	-	61
HCM Lane V/C Ratio	-	-	-	-	2.475
HCM Ctrl Dly (s/v)	0	-	-	-	$ 815.6
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	15

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

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	972	656		
Future Volume (vph)	972	656		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	40.0	49.0	80.0	31.0
Total Split (%)	33.3%	40.8%	67%	26%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min
Act Effct Green (s)	10.0	14.0		
Actuated g/C Ratio	0.20	0.29		
v/c Ratio	0.50	0.71		
Control Delay (s/veh)	0.9	20.0		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.9	20.0		
LOS	A	B		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 48.9	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay (s/veh): 8.5	Intersection LOS: A
Intersection Capacity Utilization 38.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	972	656	0	0	0
Future Volume (veh/h)	0	972	656	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	948	713	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	819	1283	980	504	5	0
Arrive On Green	0.00	0.45	0.28	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	-96900	0
Grp Volume(v), veh/h	0	948	713	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	9.9	6.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.9	6.6	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	819	1283	980	504	5	0
V/C Ratio(X)	0.00	0.74	0.73	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1746	2735	4310	3935	1361	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.1	11.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.4	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.5	2.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	9.0	12.2	0.0	0.0	0.0
LnGrp LOS		A	B			
Approach Vol, veh/h	948			713	0	
Approach Delay, s/veh	9.0			12.2	0.0	
Approach LOS	A			B		

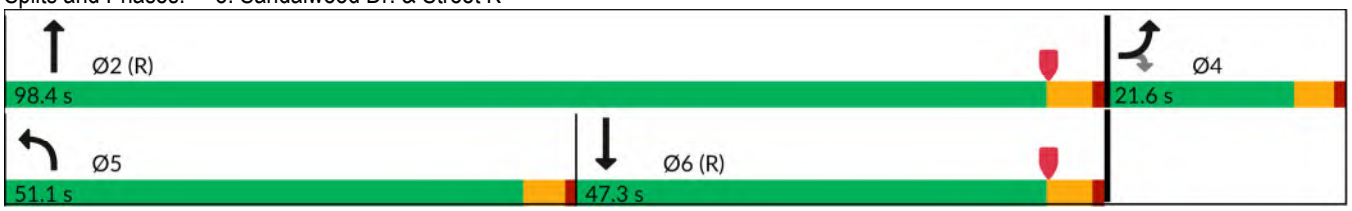
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		14.7		21.5	14.7	0.0
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		74.9		34.9	44.4	25.9
Max Q Clear Time (g_c+I1), s		0.0		11.9	8.6	0.0
Green Ext Time (p_c), s		0.0		4.4	1.5	0.0

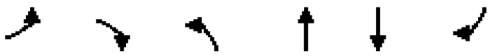
Intersection Summary		
HCM 7th Control Delay, s/veh		10.4
HCM 7th LOS		B

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	2	147	877	654	961
Future Volume (vph)	2	147	877	654	961
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	21.6	21.6	9.6	15.1	22.1
Total Split (s)	21.6	21.6	51.1	98.4	47.3
Total Split (%)	18.0%	18.0%	42.6%	82.0%	39.4%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.5	10.5	38.0	99.8	57.2
Actuated g/C Ratio	0.09	0.09	0.32	0.83	0.48
v/c Ratio	0.01	0.56	0.86	0.24	0.62
Control Delay (s/veh)	49.5	15.6	43.7	3.2	26.3
Queue Delay	0.0	0.0	0.0	0.0	0.6
Total Delay (s/veh)	49.5	15.6	43.7	3.2	26.9
LOS	D	B	D	A	C
Approach Delay (s/veh)	16.0			26.4	26.9
Approach LOS	B			C	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 93.3 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 26.0	Intersection LOS: C
Intersection Capacity Utilization 72.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	147	877	654	961	11
Future Volume (veh/h)	2	147	877	654	961	11
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	160	953	711	1045	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	208	185	1015	2903	1743	20
Arrive On Green	0.11	0.11	0.48	1.00	0.48	0.48
Sat Flow, veh/h	1810	1610	3510	3705	3750	42
Grp Volume(v), veh/h	2	160	953	711	516	541
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1892
Q Serve(g_s), s	0.1	11.7	30.8	0.0	25.1	25.1
Cycle Q Clear(g_c), s	0.1	11.7	30.8	0.0	25.1	25.1
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	208	185	1015	2903	861	902
V/C Ratio(X)	0.01	0.86	0.94	0.24	0.60	0.60
Avail Cap(c_a), veh/h	256	228	1360	2903	861	902
HCM Platoon Ratio	1.00	1.00	1.67	1.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93	0.86	0.86
Uniform Delay (d), s/veh	47.1	52.2	30.0	0.0	23.0	23.0
Incr Delay (d2), s/veh	0.0	23.8	8.7	0.2	2.7	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	11.3	12.1	0.1	11.1	11.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	47.1	75.9	38.7	0.2	25.7	25.5
LnGrp LOS	D	E	D	A	C	C
Approach Vol, veh/h	162			1664	1057	
Approach Delay, s/veh	75.6			22.2	25.6	
Approach LOS	E			C	C	

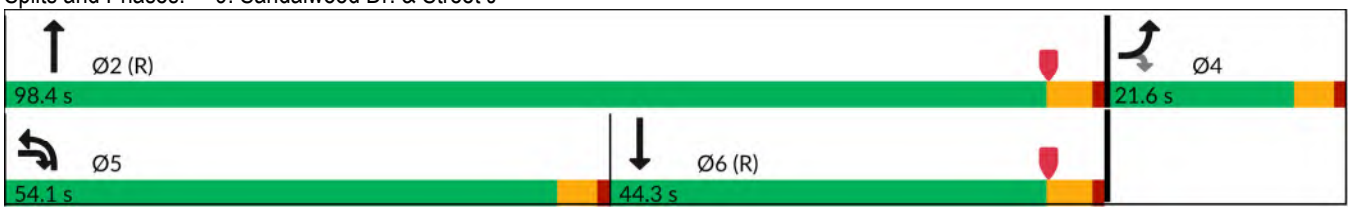
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		101.6		18.4	39.3	62.3
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	46.5	42.2
Max Q Clear Time (g_c+I1), s		2.0		13.7	32.8	27.1
Green Ext Time (p_c), s		5.9		0.1	1.9	6.2

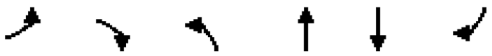
Intersection Summary	
HCM 7th Control Delay, s/veh	26.5
HCM 7th LOS	C

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	2	232	1350	1529	1108
Future Volume (vph)	2	232	1350	1529	1108
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	21.6	9.6	9.6	15.1	22.1
Total Split (s)	21.6	54.1	54.1	98.4	44.3
Total Split (%)	18.0%	45.1%	45.1%	82.0%	36.9%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	58.1	55.2	116.1	52.2
Actuated g/C Ratio	0.08	0.48	0.46	0.97	0.44
v/c Ratio	0.01	0.32	0.91	0.48	0.78
Control Delay (s/veh)	51.0	19.0	40.0	1.3	51.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.0	19.0	40.0	1.3	51.4
LOS	D	B	D	A	D
Approach Delay (s/veh)	19.3			19.4	51.4
Approach LOS	B			B	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 48 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay (s/veh): 27.9	Intersection LOS: C
Intersection Capacity Utilization 89.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	232	1350	1529	1108	11
Future Volume (veh/h)	2	232	1350	1529	1108	11
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	252	1467	1662	1204	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	196	839	1448	2927	1318	13
Arrive On Green	0.11	0.11	0.41	0.81	0.72	0.72
Sat Flow, veh/h	1810	1610	3510	3705	3757	36
Grp Volume(v), veh/h	2	252	1467	1662	593	623
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1893
Q Serve(g_s), s	0.1	10.7	49.5	19.4	32.2	32.3
Cycle Q Clear(g_c), s	0.1	10.7	49.5	19.4	32.2	32.3
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	196	839	1448	2927	650	682
V/C Ratio(X)	0.01	0.30	1.01	0.57	0.91	0.91
Avail Cap(c_a), veh/h	256	892	1448	2927	650	682
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.49	0.49	0.76	0.76
Uniform Delay (d), s/veh	47.8	16.3	35.2	4.0	15.3	15.3
Incr Delay (d2), s/veh	0.0	0.2	19.9	0.4	15.8	15.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	12.5	24.0	4.7	9.0	9.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	47.8	16.5	55.1	4.4	31.0	30.5
LnGrp LOS	D	B	F	A	C	C
Approach Vol, veh/h	254			3129	1216	
Approach Delay, s/veh	16.8			28.2	30.8	
Approach LOS	B			C	C	

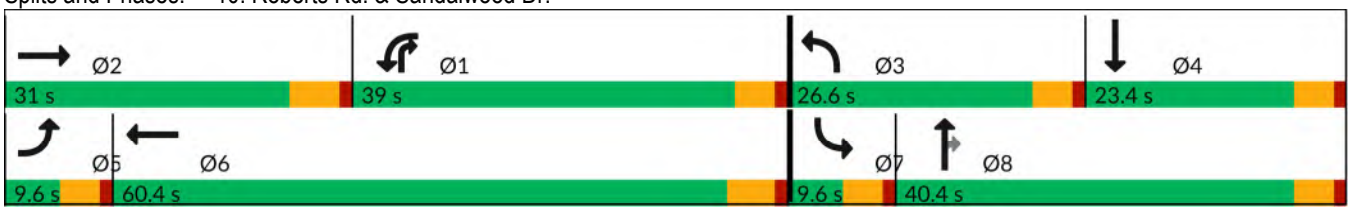
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		102.4		17.6	54.1	48.3
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.3		17.0	49.5	39.2
Max Q Clear Time (g_c+I1), s		21.4		12.7	51.5	34.3
Green Ext Time (p_c), s		21.4		0.3	0.0	3.2

Intersection Summary	
HCM 7th Control Delay, s/veh	28.2
HCM 7th LOS	C

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBL	SBT	Ø8
Lane Configurations									
Traffic Volume (vph)	5	1427	1078	2972	11	132	31	0	
Future Volume (vph)	5	1427	1078	2972	11	132	31	0	
Turn Type	Prot	NA	Prot	NA	Prot	pm+ov	Prot	NA	
Protected Phases	5	2	1	6	3	1	7	4	8
Permitted Phases						8			
Detector Phase	5	2	1	6	3	1	7	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	10.0	10.0
Minimum Split (s)	9.6	22.4	9.6	22.4	26.6	9.6	9.6	22.0	22.0
Total Split (s)	9.6	31.0	39.0	60.4	26.6	39.0	9.6	23.4	40.4
Total Split (%)	8.0%	25.8%	32.5%	50.3%	22.2%	32.5%	8.0%	19.5%	34%
Yellow Time (s)	3.6	4.4	3.6	4.4	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	5.4	4.6	5.4	4.6	4.6	4.6	4.6	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	None	None	Min
Act Effct Green (s)	5.0	25.7	34.6	63.2	10.1	47.9	5.0	11.3	
Actuated g/C Ratio	0.05	0.28	0.38	0.69	0.11	0.52	0.05	0.12	
v/c Ratio	0.05	0.95	0.83	0.81	0.03	0.13	0.17	0.01	
Control Delay (s/veh)	45.8	47.3	33.7	14.5	42.4	3.0	46.1	0.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	45.8	47.3	33.7	14.5	42.4	3.0	46.1	0.0	
LOS	D	D	C	B	D	A	D	A	
Approach Delay (s/veh)		47.3		19.6				41.2	
Approach LOS		D		B				D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 91.8	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay (s/veh): 26.4	Intersection LOS: C
Intersection Capacity Utilization 83.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1427	19	1078	2972	43	11	0	132	31	0	4
Future Volume (veh/h)	5	1427	19	1078	2972	43	11	0	132	31	0	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1976	1900	1976	1976	1900	1900	1900	1976	1900	1900	1900
Adj Flow Rate, veh/h	5	1551	0	1172	3230	25	12	0	89	34	0	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	12	1666	0	1272	3650	28	199	245	782	115	0	170
Arrive On Green	0.01	0.28	0.00	0.34	0.62	0.62	0.06	0.00	0.13	0.03	0.00	0.11
Sat Flow, veh/h	1810	5928	0	3764	5874	45	3619	1900	1675	3619	0	1610
Grp Volume(v), veh/h	5	1551	0	1172	2170	1085	12	0	89	34	0	4
Grp Sat Flow(s),veh/h/ln	1810	1976	0	1882	1976	1968	1810	1900	1675	1810	0	1610
Q Serve(g_s), s	0.2	23.1	0.0	27.2	41.9	42.3	0.3	0.0	0.4	0.8	0.0	0.2
Cycle Q Clear(g_c), s	0.2	23.1	0.0	27.2	41.9	42.3	0.3	0.0	0.4	0.8	0.0	0.2
Prop In Lane	1.00		0.00	1.00		0.02	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	12	1666	0	1272	2456	1223	199	245	782	115	0	170
V/C Ratio(X)	0.42	0.93	0.00	0.92	0.88	0.89	0.06	0.00	0.11	0.30	0.00	0.02
Avail Cap(c_a), veh/h	100	1671	0	1426	2456	1223	877	749	1226	199	0	333
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.9	31.8	0.0	28.9	14.4	14.5	40.7	0.0	5.9	43.0	0.0	36.4
Incr Delay (d2), s/veh	8.7	9.8	0.0	8.9	4.2	8.2	0.0	0.0	0.1	0.5	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	11.9	0.0	12.9	16.4	17.8	0.1	0.0	0.5	0.4	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.6	41.6	0.0	37.8	18.7	22.7	40.7	0.0	5.9	43.5	0.0	36.5
LnGrp LOS	D	D		D	B	C	D		A	D		D
Approach Vol, veh/h		1556			4427			101			38	
Approach Delay, s/veh		41.6			24.7			10.1			42.8	
Approach LOS		D			C			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.1	30.9	9.6	14.2	5.2	61.8	7.5	16.3
Change Period (Y+Rc), s	5.4	* 5.4	4.6	4.6	4.6	5.4	4.6	4.6
Max Green Setting (Gmax), s	34.4	* 26	22.0	18.8	5.0	55.0	5.0	35.8
Max Q Clear Time (g_c+I1), s	29.2	25.1	2.3	2.2	2.2	44.3	2.8	2.4
Green Ext Time (p_c), s	1.5	0.4	0.0	0.0	0.0	10.4	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	28.9
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	10.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1058	16	126	632	22	149
Future Vol, veh/h	1058	16	126	632	22	149
Conflicting Peds, #/hr	0	2	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	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1216	18	145	726	25	171

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1236	0	2243	1227
Stage 1	-	-	-	-	1227	-
Stage 2	-	-	-	-	1016	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	570	-	47	220
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	353	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	569	-	27	219
Mov Cap-2 Maneuver	-	-	-	-	119	-
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	202	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.24	112.23
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	198	-	-	299	-
HCM Lane V/C Ratio	0.994	-	-	0.254	-
HCM Control Delay (s/veh)	112.2	-	-	13.5	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	8.5	-	-	1	-

Intersection	
Int Delay, s/veh	63.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	824	383	435	444	0	0	0	0	396	6	315
Future Vol, veh/h	0	824	383	435	444	0	0	0	0	396	6	315
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	969	451	512	522	0	0	0	0	466	7	371

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1421	0	0	2515	2967	522
Stage 1	-	-	-	-	-	-	1546	1546	-
Stage 2	-	-	-	-	-	-	969	1421	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	~ 485	-	0	~ 31	15	558
Stage 1	0	-	-	-	-	0	~ 196	178	-
Stage 2	0	-	-	-	-	0	~ 371	204	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	~ 485	-	-	0	0	558
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 289	0	-
Stage 1	-	-	-	-	-	-	~ 196	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	42.19	196.83
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	~ 485	-	289	558
HCM Lane V/C Ratio	-	-	1.054	-	1.636	0.664
HCM Control Delay (s/veh)	-	-	85.2	-	$ 332.8	23.2
HCM Lane LOS	-	-	F	-	F	C
HCM 95th %tile Q(veh)	-	-	15.6	-	29.1	4.9

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

Intersection	
Int Delay, s/veh	26.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	618	603	0	0	633	485	247	0	107	0	0	0
Future Vol, veh/h	618	603	0	0	633	485	247	0	107	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	665	648	0	0	681	522	266	0	115	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1202	0	-	-	-	0	2658	3180	648
Stage 1	-	-	-	-	-	-	1977	1977	-
Stage 2	-	-	-	-	-	-	681	1202	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	~ 588	-	0	0	-	-	~ 25	11	474
Stage 1	-	-	0	0	-	-	~ 119	108	-
Stage 2	-	-	0	0	-	-	507	260	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	~ 588	-	-	-	-	-	0	0	474
Mov Cap-2 Maneuver	-	-	-	-	-	-	445	0	-
Stage 1	-	-	-	-	-	-	~ 119	0	-
Stage 2	-	-	-	-	-	-	507	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v52.49		0	21.56
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	445	474	~ 588	-	-	-
HCM Lane V/C Ratio	0.597	0.243	1.131	-	-	-
HCM Control Delay (s/veh)	24.4	15	103.7	-	-	-
HCM Lane LOS	C	C	F	-	-	-
HCM 95th %tile Q(veh)	3.8	0.9	21.3	-	-	-

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

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	1665	4000	129	0	93
Future Vol, veh/h	0	1665	4000	129	0	93
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1810	4348	140	0	101

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	2174
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	3.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	228
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	228
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	32.81
HCM LOS			D

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	228
HCM Lane V/C Ratio	-	-	-	0.444
HCM Control Delay (s/veh)	-	-	-	32.8
HCM Lane LOS	-	-	-	D
HCM 95th %tile Q(veh)	-	-	-	2.1

Intersection	
Intersection Delay, s/veh	1725.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1105	561	237	2462	0	0	0	0	180	10	1668
Future Vol, veh/h	0	1105	561	237	2462	0	0	0	0	180	10	1668
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1364	693	293	3040	0	0	0	0	222	12	2059
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

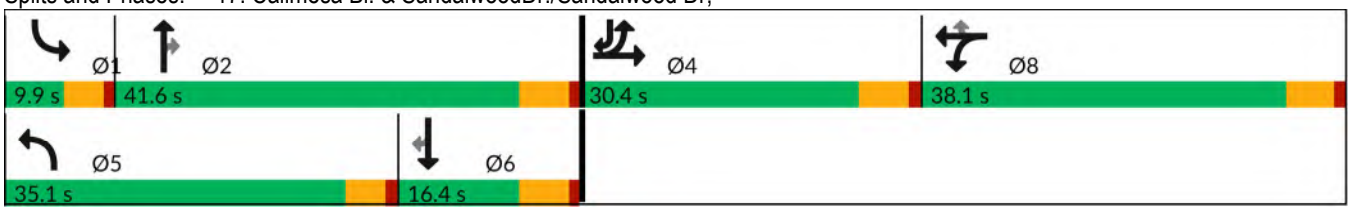
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	713.2	2544.1	1444.6
HCM LOS	F	F	F

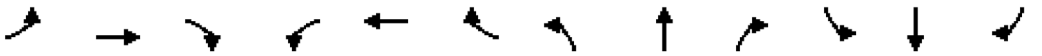
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	9%	10%
Vol Thru, %	100%	0%	91%	1%
Vol Right, %	0%	100%	0%	90%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1105	561	2699	1858
LT Vol	0	0	237	180
Through Vol	1105	0	2462	10
RT Vol	0	561	0	1668
Lane Flow Rate	1364	693	3332	2294
Geometry Grp	5	5	4a	2
Degree of Util (X)	2.879	1.327	6.583	4.126
Departure Headway (Hd)	36.038	35.142	13.252	15.162
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	123	111	333	275
Service Time	33.738	32.842	11.252	13.162
HCM Lane V/C Ratio	11.089	6.243	10.006	8.342
HCM Control Delay, s/veh	936.3	273.9	2544.1	1444.6
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	27.4	9.5	193.1	96.6

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	377	321	51	431	61	1776	847	175	23	197	668
Future Volume (vph)	377	321	51	431	61	1776	847	175	23	197	668
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4	30.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	25.0	25.0	32.2	32.2	32.2	30.5	40.2	40.2	5.2	11.0	41.4
Actuated g/C Ratio	0.21	0.21	0.27	0.27	0.27	0.26	0.34	0.34	0.04	0.09	0.35
v/c Ratio	1.12	1.17	0.12	0.96	0.13	4.39	0.79	0.31	0.33	1.28	1.21
Control Delay (s/veh)	128.8	119.2	33.7	74.5	0.5	Error	42.6	10.4	67.3	206.5	139.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	128.8	119.2	33.7	74.5	0.5	Error	42.6	10.4	67.3	206.5	139.6
LOS	F	F	C	E	A	F	D	B	E	F	F
Approach Delay (s/veh)		121.8		62.4			991.6			152.6	
Approach LOS		F		E			F			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.5	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 4.39	
Intersection Signal Delay (s/veh): 564.5	Intersection LOS: F
Intersection Capacity Utilization 175.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	321	560	51	431	61	1776	847	175	23	197	668
Future Volume (veh/h)	377	321	560	51	431	61	1776	847	175	23	197	668
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	428	365	618	58	490	59	2018	962	169	26	224	682
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	378	397	336	491	515	431	461	1164	518	44	174	484
Arrive On Green	0.21	0.21	0.21	0.27	0.27	0.27	0.25	0.32	0.32	0.02	0.09	0.09
Sat Flow, veh/h	1810	1900	1610	1810	1900	1588	1810	3610	1607	1810	1900	1610
Grp Volume(v), veh/h	428	365	618	58	490	59	2018	962	169	26	224	682
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1588	1810	1805	1607	1810	1900	1610
Q Serve(g_s), s	25.0	22.5	25.0	2.9	30.3	3.4	30.5	29.5	9.5	1.7	11.0	11.0
Cycle Q Clear(g_c), s	25.0	22.5	25.0	2.9	30.3	3.4	30.5	29.5	9.5	1.7	11.0	11.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	378	397	336	491	515	431	461	1164	518	44	174	484
V/C Ratio(X)	1.13	0.92	1.84	0.12	0.95	0.14	4.38	0.83	0.33	0.59	1.28	1.41
Avail Cap(c_a), veh/h	378	397	336	494	519	434	461	1164	518	80	174	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	46.4	47.4	32.9	42.9	33.0	44.6	37.5	30.7	57.9	54.4	33.1
Incr Delay (d2), s/veh	87.7	26.4	388.9	0.1	27.6	0.1	1525.8	5.1	0.4	4.7	164.0	196.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.2	13.3	46.1	1.3	17.7	1.3	208.6	13.4	3.7	0.8	13.1	40.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	135.0	72.8	436.2	33.0	70.4	33.2	1570.4	42.5	31.1	62.6	218.4	229.3
LnGrp LOS	F	E	F	C	E	C	F	D	C	E	F	F
Approach Vol, veh/h		1411			607			3149			932	
Approach Delay, s/veh		250.9			63.2			1021.1			222.0	
Approach LOS		F			E			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	44.0		30.4	35.1	16.4		37.9				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7				
Max Q Clear Time (g_c+I1), s	3.7	31.5		27.0	32.5	13.0		32.3				
Green Ext Time (p_c), s	0.0	2.7		0.0	0.0	0.0		0.1				

Intersection Summary		
HCM 7th Control Delay, s/veh		625.4
HCM 7th LOS		F

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	1146.2
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	174	634	193	1005	1791	23
Future Vol, veh/h	174	634	193	1005	1791	23
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	205	746	227	1182	2107	27
Number of Lanes	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	391	835.7	1687.6
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	100%	0%	0%	16%
Vol Thru, %	0%	0%	22%	84%
Vol Right, %	0%	100%	78%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1791	23	808	1198
LT Vol	1791	0	0	193
Through Vol	0	0	174	1005
RT Vol	0	23	634	0
Lane Flow Rate	2107	27	951	1409
Geometry Grp	5	5	2	2
Degree of Util (X)	4.739	0.052	1.723	2.751
Departure Headway (Hd)	10.572	9.29	20.149	17.781
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	379	388	190	226
Service Time	8.272	6.99	18.149	15.781
HCM Lane V/C Ratio	5.559	0.07	5.005	6.235
HCM Control Delay, s/veh	1709.1	12.5	391	835.7
HCM Lane LOS	F	B	F	F
HCM 95th-tile Q	162.9	0.2	21.5	48.6

Intersection	
Intersection Delay, s/veh	78
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	275	132	166	336	149
Future Vol, veh/h	67	275	132	166	336	149
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	94	387	186	234	473	210
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	33.4	25.5	141.8
HCM LOS	D	D	F

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	20%	69%
Vol Thru, %	44%	0%	31%
Vol Right, %	56%	80%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	298	342	485
LT Vol	0	67	336
Through Vol	132	0	149
RT Vol	166	275	0
Lane Flow Rate	420	482	683
Geometry Grp	1	1	1
Degree of Util (X)	0.73	0.822	1.233
Departure Headway (Hd)	6.635	6.662	6.5
Convergence, Y/N	Yes	Yes	Yes
Cap	550	549	560
Service Time	4.635	4.662	4.527
HCM Lane V/C Ratio	0.764	0.878	1.22
HCM Control Delay, s/veh	25.5	33.4	141.8
HCM Lane LOS	D	D	F
HCM 95th-tile Q	6.1	8.2	25.9

Intersection	
Int Delay, s/veh	11.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	509	378	531	747	0	0	0	0	0	0	0
Future Vol, veh/h	0	509	378	531	747	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	606	450	632	889	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1056	0	0	2760	3210	889
Stage 1	-	-	-	-	-	-	2154	2154	-
Stage 2	-	-	-	-	-	-	606	1056	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	667	-	0	22	10	345
Stage 1	0	-	-	-	-	0	97	88	-
Stage 2	0	-	-	-	-	0	548	305	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	667	-	-	0	0	345
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	97	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	19.94	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 338	-	-
HCM Lane V/C Ratio	-	-	0.948	-	-
HCM Control Delay (s/veh)	-	-	48	0	0
HCM Lane LOS	-	-	E	A	A
HCM 95th %tile Q(veh)	-	-	13.4	-	-

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

Intersection	
Int Delay, s/veh	317

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	509	0	0	1022	0	255	0	324	0	0	0
Future Vol, veh/h	0	509	0	0	1022	0	255	0	324	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	566	0	0	1136	0	283	0	360	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1136	0	-	-	-	0	1701	1701	566
Stage 1	-	-	-	-	-	-	566	566	-
Stage 2	-	-	-	-	-	-	1136	1136	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	623	-	0	0	-	-	~ 102	93	528
Stage 1	-	-	0	0	-	-	572	511	-
Stage 2	-	-	0	0	-	-	309	279	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	623	-	-	-	-	-	~ 102	0	528
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 102	0	-
Stage 1	-	-	-	-	-	-	572	0	-
Stage 2	-	-	-	-	-	-	309	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	$ 1155.05
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	186	623	-	-	-
HCM Lane V/C Ratio	3.454	-	-	-	-
HCM Control Delay (s/veh)	$ 1155	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	61.1	0	-	-	-

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

Intersection	
Intersection Delay, s/veh	592.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	185	606	42	38	812	216	51	364	187	92	47	159
Future Vol, veh/h	185	606	42	38	812	216	51	364	187	92	47	159
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	197	645	45	40	864	230	54	387	199	98	50	169
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	611.6	868.2	326.9	88.8
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	22%	4%	31%
Vol Thru, %	60%	73%	76%	16%
Vol Right, %	31%	5%	20%	53%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	602	833	1066	298
LT Vol	51	185	38	92
Through Vol	364	606	812	47
RT Vol	187	42	216	159
Lane Flow Rate	640	886	1134	317
Geometry Grp	1	1	1	1
Degree of Util (X)	1.595	2.252	2.841	0.822
Departure Headway (Hd)	16.818	16.67	14.682	23.806
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	224	230	261	155
Service Time	14.818	14.67	12.682	21.806
HCM Lane V/C Ratio	2.857	3.852	4.345	2.045
HCM Control Delay, s/veh	326.9	611.6	868.2	88.8
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	21.8	38.5	60.7	5.3

Intersection	
Intersection Delay, s/veh	5.0
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	188	448	42
Demand Flow Rate, veh/h	188	448	42
Vehicles Circulating, veh/h	74	0	188
Vehicles Exiting, veh/h	374	230	74
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.0	5.5	3.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	188	448	42
Cap Entry Lane, veh/h	1280	1380	1139
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	188	448	42
Cap Entry, veh/h	1280	1380	1139
V/C Ratio	0.147	0.325	0.037
Control Delay, s/veh	4.0	5.5	3.5
LOS	A	A	A
95th %tile Queue, veh	1	1	0

Intersection	
Intersection Delay, s/veh	4.6
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	160	385	58
Demand Flow Rate, veh/h	160	385	58
Vehicles Circulating, veh/h	58	0	297
Vehicles Exiting, veh/h	297	218	88
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.8	5.0	4.0
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	160	385	58
Cap Entry Lane, veh/h	1301	1380	1019
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	160	385	58
Cap Entry, veh/h	1301	1380	1019
V/C Ratio	0.123	0.279	0.057
Control Delay, s/veh	3.8	5.0	4.0
LOS	A	A	A
95th %tile Queue, veh	0	1	0

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	282	700	191
Demand Flow Rate, veh/h	282	700	191
Vehicles Circulating, veh/h	226	79	235
Vehicles Exiting, veh/h	553	347	273
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.7	9.0	4.9
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	282	700	191
Cap Entry Lane, veh/h	1096	1273	1086
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	282	700	191
Cap Entry, veh/h	1096	1273	1086
V/C Ratio	0.257	0.550	0.176
Control Delay, s/veh	5.7	9.0	4.9
LOS	A	A	A
95th %tile Queue, veh	1	3	1

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	70	127	227	251	21
Future Vol, veh/h	10	70	127	227	251	21
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	76	138	247	273	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	807	284	296	0	-	0
Stage 1	284	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	354	760	1277	-	-	-
Stage 1	769	-	-	-	-	-
Stage 2	599	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	315	760	1277	-	-	-
Mov Cap-2 Maneuver	315	-	-	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	599	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.44	2.93	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1277	-	646	-	-
HCM Lane V/C Ratio	0.108	-	0.135	-	-
HCM Control Delay (s/veh)	8.2	-	11.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.5	-	-

Intersection	
Intersection Delay, s/veh	5.6
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	265	694	349
Demand Flow Rate, veh/h	265	694	349
Vehicles Circulating, veh/h	235	63	371
Vehicles Exiting, veh/h	485	437	386
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.4	4.9	7.9
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.238	0.762	0.535	0.465	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	63	202	371	323	349
Cap Entry Lane, veh/h	1147	1147	1341	1341	945
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	63	202	371	323	349
Cap Entry, veh/h	1147	1147	1341	1341	945
V/C Ratio	0.055	0.176	0.277	0.241	0.369
Control Delay, s/veh	3.6	4.7	5.1	4.7	7.9
LOS	A	A	A	A	A
95th %tile Queue, veh	0	1	1	1	2

Intersection	
Int Delay, s/veh	1467.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↱		⋔	
Traffic Vol, veh/h	0	742	1216	113	156	0
Future Vol, veh/h	0	742	1216	113	156	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1325	2171	202	279	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2373	0	-	0	3597	2272
Stage 1	-	-	-	-	2272	-
Stage 2	-	-	-	-	1325	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	208	-	-	-	~ 6	52
Stage 1	-	-	-	-	~ 84	-
Stage 2	-	-	-	-	~ 251	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	208	-	-	-	~ 6	52
Mov Cap-2 Maneuver	-	-	-	-	~ 6	-
Stage 1	-	-	-	-	~ 84	-
Stage 2	-	-	-	-	~ 251	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	$ 20955.04
HCM LOS			F

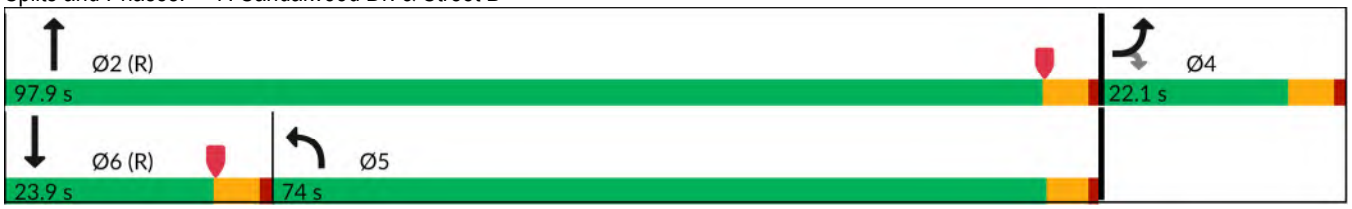
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	208	-	-	-	6
HCM Lane V/C Ratio	-	-	-	-	44.98
HCM Ctrl Dly (s/v)	0	-	-	-	$ 20955
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	36.9

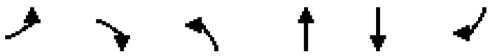
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBR	NBL	Ø2	Ø6
Lane Configurations				
Traffic Volume (vph)	474	744		
Future Volume (vph)	474	744		
Turn Type	Perm	Prot		
Protected Phases		5	2	6
Permitted Phases	4			
Detector Phase	4	5		
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	15.1	22.1
Total Split (s)	22.1	74.0	97.9	23.9
Total Split (%)	18.4%	61.7%	82%	20%
Yellow Time (s)	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		
Total Lost Time (s)	5.1	4.6		
Lead/Lag		Lag		Lead
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	35.3		
Actuated g/C Ratio	0.08	0.29		
v/c Ratio	0.26	0.79		
Control Delay (s/veh)	0.3	26.8		
Queue Delay	0.0	0.0		
Total Delay (s/veh)	0.3	26.8		
LOS	A	C		
Approach Delay (s/veh)				
Approach LOS				

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116.9 (97%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 16.5	Intersection LOS: B
Intersection Capacity Utilization 25.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	474	744	0	0	0
Future Volume (veh/h)	0	474	744	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	412	809	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	256	401	2016	1469	298	0
Arrive On Green	0.00	0.14	0.57	0.00	0.00	0.00
Sat Flow, veh/h	1810	2834	3510	1900	1900	0
Grp Volume(v), veh/h	0	412	809	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	1900	0
Q Serve(g_s), s	0.0	17.0	15.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.0	15.3	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	256	401	2016	1469	298	0
V/C Ratio(X)	0.00	1.03	0.40	0.00	0.00	0.00
Avail Cap(c_a), veh/h	256	401	2030	1469	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.91	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	51.5	14.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	51.8	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.3	5.9	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	103.3	14.2	0.0	0.0	0.0
LnGrp LOS		F	B			
Approach Vol, veh/h	412			809	0	
Approach Delay, s/veh	103.3			14.2	0.0	
Approach LOS	F			B		

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		97.9		22.1	74.0	23.9
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	69.4	* 19
Max Q Clear Time (g_c+I1), s		0.0		19.0	17.3	0.0
Green Ext Time (p_c), s		0.0		0.0	1.7	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	44.2
HCM 7th LOS	D

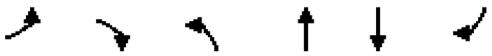
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	13	777	272	730	467
Future Volume (vph)	13	777	272	730	467
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	22.1	9.6	15.1	22.1
Total Split (s)	63.0	63.0	20.0	57.0	37.0
Total Split (%)	52.5%	52.5%	16.7%	47.5%	30.8%
Yellow Time (s)	4.1	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	49.1	49.1	13.8	60.7	42.3
Actuated g/C Ratio	0.41	0.41	0.12	0.51	0.35
v/c Ratio	0.02	0.93	0.73	0.43	0.41
Control Delay (s/veh)	16.5	33.9	61.1	20.9	33.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.5	33.9	61.1	20.9	33.5
LOS	B	C	E	C	C
Approach Delay (s/veh)	33.6			31.8	33.5
Approach LOS	C			C	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 24.1 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay (s/veh): 32.8	Intersection LOS: C
Intersection Capacity Utilization 69.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	777	272	730	467	7
Future Volume (veh/h)	13	777	272	730	467	7
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	845	296	793	508	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	873	777	355	1561	1066	17
Arrive On Green	0.48	0.48	0.10	0.43	0.59	0.59
Sat Flow, veh/h	1810	1610	3510	3705	3732	57
Grp Volume(v), veh/h	14	845	296	793	252	264
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1890
Q Serve(g_s), s	0.5	57.9	9.9	19.2	9.6	9.6
Cycle Q Clear(g_c), s	0.5	57.9	9.9	19.2	9.6	9.6
Prop In Lane	1.00	1.00	1.00			0.03
Lane Grp Cap(c), veh/h	873	777	355	1561	529	554
V/C Ratio(X)	0.02	1.09	0.83	0.51	0.48	0.48
Avail Cap(c_a), veh/h	873	777	451	1561	529	554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.98	0.98	0.98	0.98
Uniform Delay (d), s/veh	16.2	31.0	52.9	24.8	19.6	19.6
Incr Delay (d2), s/veh	0.0	58.7	8.3	1.2	3.0	2.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	52.0	4.8	8.4	3.8	3.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.2	89.8	61.2	25.9	22.6	22.4
LnGrp LOS	B	F	E	C	C	C
Approach Vol, veh/h	859			1089	516	
Approach Delay, s/veh	88.6			35.5	22.5	
Approach LOS	F			D	C	

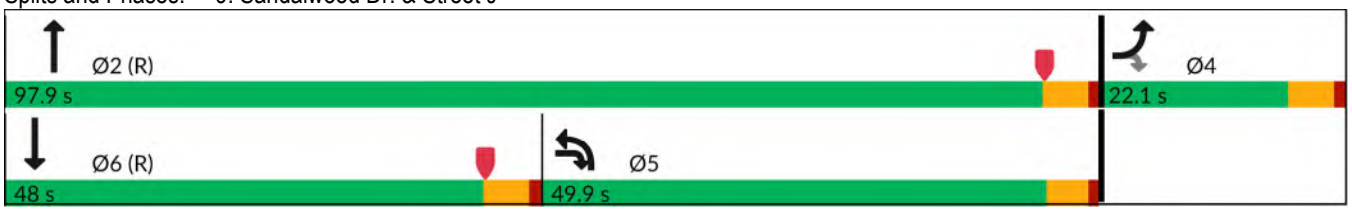
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		57.0		63.0	16.7	40.3
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		51.9		57.9	15.4	31.9
Max Q Clear Time (g_c+I1), s		21.2		59.9	11.9	11.6
Green Ext Time (p_c), s		6.3		0.0	0.2	3.0

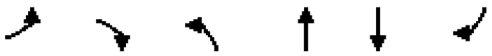
Intersection Summary	
HCM 7th Control Delay, s/veh	51.3
HCM 7th LOS	D

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	13	1193	422	989	1309
Future Volume (vph)	13	1193	422	989	1309
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	9.6	15.1	22.1
Total Split (s)	22.1	49.9	49.9	97.9	48.0
Total Split (%)	18.4%	41.6%	41.6%	81.6%	40.0%
Yellow Time (s)	4.1	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.6	4.6	5.1	5.1
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	51.3	45.3	111.9	59.0
Actuated g/C Ratio	0.08	0.43	0.38	0.93	0.49
v/c Ratio	0.09	1.76	0.35	0.32	0.81
Control Delay (s/veh)	52.5	371.2	27.7	1.4	28.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.5	371.2	27.7	1.4	28.8
LOS	D	F	C	A	C
Approach Delay (s/veh)	367.8			9.3	28.8
Approach LOS	F			A	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74 (62%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.76	
Intersection Signal Delay (s/veh): 125.7	Intersection LOS: F
Intersection Capacity Utilization 118.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	1193	422	989	1309	7
Future Volume (veh/h)	13	1193	422	989	1309	7
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.00	1.00	1.00
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	1900	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	754	459	1075	1423	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	151	862	1515	3002	1316	7
Arrive On Green	0.08	0.08	0.43	0.83	0.12	0.12
Sat Flow, veh/h	1810	1675	3510	3705	3776	21
Grp Volume(v), veh/h	14	754	459	1075	698	733
Grp Sat Flow(s),veh/h/ln	1810	1675	1755	1805	1805	1896
Q Serve(g_s), s	0.9	0.0	10.3	8.6	42.9	42.9
Cycle Q Clear(g_c), s	0.9	0.0	10.3	8.6	42.9	42.9
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	151	862	1515	3002	645	678
V/C Ratio(X)	0.09	0.87	0.30	0.36	1.08	1.08
Avail Cap(c_a), veh/h	256	960	1515	3002	645	678
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.95	0.95	0.60	0.60
Uniform Delay (d), s/veh	50.8	25.7	22.3	2.4	52.9	52.9
Incr Delay (d2), s/veh	0.3	8.4	0.0	0.3	52.2	51.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	27.1	4.1	1.9	30.2	31.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.1	34.1	22.3	2.7	105.1	104.7
LnGrp LOS	D	C	C	A	F	F
Approach Vol, veh/h	768			1534	1431	
Approach Delay, s/veh	34.4			8.6	104.9	
Approach LOS	C			A	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		104.9		15.1	56.9	48.0
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	45.3	* 43
Max Q Clear Time (g_c+I1), s		10.6		2.9	12.3	44.9
Green Ext Time (p_c), s		9.6		2.9	0.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	50.8
HCM 7th LOS	D

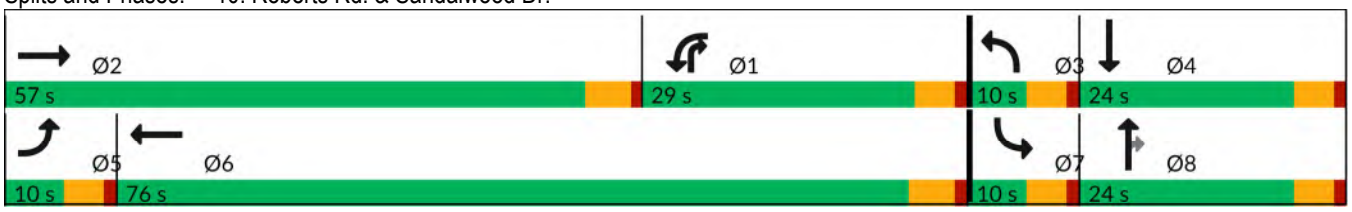
Notes

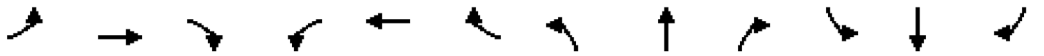
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBL	SBT	Ø8
Lane Configurations									
Traffic Volume (vph)	12	2791	751	1317	60	743	132	0	
Future Volume (vph)	12	2791	751	1317	60	743	132	0	
Turn Type	Prot	NA	Prot	NA	Prot	pm+ov	Prot	NA	
Protected Phases	5	2	1	6	3	1	7	4	8
Permitted Phases						8			
Detector Phase	5	2	1	6	3	1	7	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	10.0	10.0
Minimum Split (s)	10.0	22.1	10.0	22.1	10.0	10.0	10.0	21.6	21.6
Total Split (s)	10.0	57.0	29.0	76.0	10.0	29.0	10.0	24.0	24.0
Total Split (%)	8.3%	47.5%	24.2%	63.3%	8.3%	24.2%	8.3%	20.0%	20%
Yellow Time (s)	3.6	4.1	3.6	4.1	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	5.1	4.6	5.1	4.6	4.6	4.6	4.6	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	None	None	None	None
Act Effct Green (s)	5.2	52.3	24.6	79.7	5.4	27.6	9.1	11.3	
Actuated g/C Ratio	0.05	0.50	0.24	0.76	0.05	0.26	0.09	0.11	
v/c Ratio	0.14	1.05	0.93	0.35	0.35	1.56	0.45	0.04	
Control Delay (s/veh)	54.8	57.2	57.5	5.5	55.4	287.8	51.5	0.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	54.8	57.2	57.5	5.5	55.4	287.8	51.5	0.3	
LOS	D	E	E	A	E	F	D	A	
Approach Delay (s/veh)		57.2		23.4				47.2	
Approach LOS		E		C				D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 104.2	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.56	
Intersection Signal Delay (s/veh): 73.2	Intersection LOS: E
Intersection Capacity Utilization 117.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	2791	55	751	1317	115	60	0	743	132	0	12
Future Volume (veh/h)	12	2791	55	751	1317	115	60	0	743	132	0	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1976	1900	1976	1976	1900	1900	1900	1976	1900	1900	1900
Adj Flow Rate, veh/h	13	3034	33	816	1432	71	65	0	482	143	0	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	27	2734	30	827	3788	188	163	171	519	176	0	151
Arrive On Green	0.02	0.70	0.70	0.33	1.00	1.00	0.07	0.00	0.14	0.07	0.00	0.14
Sat Flow, veh/h	1810	5853	63	3764	5600	278	3619	1900	1675	3619	0	1610
Grp Volume(v), veh/h	13	2045	1022	816	1011	492	65	0	482	143	0	13
Grp Sat Flow(s),veh/h/ln	1810	1976	1965	1882	1976	1926	1810	1900	1675	1810	0	1610
Q Serve(g_s), s	0.8	51.9	51.9	23.9	0.0	0.0	1.9	0.0	4.8	4.3	0.0	0.8
Cycle Q Clear(g_c), s	0.8	51.9	51.9	23.9	0.0	0.0	1.9	0.0	4.8	4.3	0.0	0.8
Prop In Lane	1.00		0.03	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	27	1846	918	827	2673	1303	163	171	519	176	0	151
V/C Ratio(X)	0.48	1.11	1.11	0.99	0.38	0.38	0.40	0.00	0.93	0.81	0.00	0.09
Avail Cap(c_a), veh/h	88	1846	918	827	2673	1303	176	332	660	176	0	281
HCM Platoon Ratio	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.9	16.6	16.6	37.1	0.0	0.0	50.4	0.0	19.8	51.0	0.0	43.6
Incr Delay (d2), s/veh	4.9	56.9	66.1	28.0	0.1	0.2	0.6	0.0	17.2	22.9	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	27.6	29.9	12.7	0.0	0.1	0.9	0.0	10.3	2.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.8	73.5	82.8	65.1	0.1	0.2	50.9	0.0	36.9	73.9	0.0	43.9
LnGrp LOS	E	F	F	E	A	A	D		D	E		D
Approach Vol, veh/h		3080			2319			547			156	
Approach Delay, s/veh		76.5			23.0			38.6			71.4	
Approach LOS		E			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.5	57.0	9.6	15.0	6.3	80.2	10.0	14.6
Change Period (Y+Rc), s	5.1	* 5.1	4.6	4.6	4.6	5.1	4.6	4.6
Max Green Setting (Gmax), s	24.4	* 52	5.4	19.4	5.4	70.9	5.4	19.4
Max Q Clear Time (g_c+I1), s	25.9	53.9	3.9	2.8	2.8	2.0	6.3	6.8
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	14.7	0.0	1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	52.7
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	811	11	100	1092	14	70
Future Vol, veh/h	811	11	100	1092	14	70
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	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	932	13	115	1255	16	80

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	945	0	2424	939
Stage 1	-	-	-	-	939	-
Stage 2	-	-	-	-	1485	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	734	-	36	323
Stage 1	-	-	-	-	384	-
Stage 2	-	-	-	-	210	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	734	-	17	323
Mov Cap-2 Maneuver	-	-	-	-	78	-
Stage 1	-	-	-	-	384	-
Stage 2	-	-	-	-	101	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.91	35.4
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	212	-	-	151	-
HCM Lane V/C Ratio	0.455	-	-	0.157	-
HCM Control Delay (s/veh)	35.4	-	-	10.8	0
HCM Lane LOS	E	-	-	B	A
HCM 95th %tile Q(veh)	2.2	-	-	0.6	-

Intersection	
Int Delay, s/veh	36.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	698	182	345	616	0	0	0	0	551	3	576
Future Vol, veh/h	0	698	182	345	616	0	0	0	0	551	3	576
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	743	194	367	655	0	0	0	0	586	3	613

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	936	0	0	2132	2326	655
Stage 1	-	-	-	-	-	-	1389	1389	-
Stage 2	-	-	-	-	-	-	743	936	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	740	-	0	~ 55	38	~ 469
Stage 1	0	-	-	-	-	0	~ 233	212	-
Stage 2	0	-	-	-	-	0	~ 474	346	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	740	-	-	~ 28	0	~ 469
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ -563	0	-
Stage 1	-	-	-	-	-	-	~ 233	0	-
Stage 2	-	-	-	-	-	-	~ 239	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	5.23	91.35
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	740	-	+	469
HCM Lane V/C Ratio	-	-	0.496	-	-	1.305
HCM Control Delay (s/veh)	-	-	14.6	-	1.9	177.4
HCM Lane LOS	-	-	B	-	A	F
HCM 95th %tile Q(veh)	-	-	2.8	-	-	26.6

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

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	443	806	0	0	722	388	239	2	337	0	0	0
Future Vol, veh/h	443	806	0	0	722	388	239	2	337	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	471	857	0	0	768	413	254	2	359	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1181	0	-	-	-	0	2568	2981	857
Stage 1	-	-	-	-	-	-	1800	1800	-
Stage 2	-	-	-	-	-	-	768	1181	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	599	-	0	0	-	-	~ 29	14	360
Stage 1	-	-	0	0	-	-	~ 146	133	-
Stage 2	-	-	0	0	-	-	461	266	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	599	-	-	-	-	-	~ 6	0	360
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ -36	0	-
Stage 1	-	-	-	-	-	-	~ 31	0	-
Stage 2	-	-	-	-	-	-	461	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	10.52	0	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	+	360	599	-	-	-
HCM Lane V/C Ratio	-	0.997	0.787	-	-	-
HCM Control Delay (s/veh)	-	81.2	29.6	-	-	-
HCM Lane LOS	-	F	D	-	-	-
HCM 95th %tile Q(veh)	-	11.5	7.5	-	-	-

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

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	4020	2166	103	0	17
Future Vol, veh/h	0	4020	2166	103	0	17
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	5507	2967	141	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1484
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	236
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	236
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	21.89
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	236
HCM Lane V/C Ratio	-	-	-	0.099
HCM Control Delay (s/veh)	-	-	-	21.9
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.3

Intersection	
Intersection Delay, s/veh	1324
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2322	1698	398	1385	0	0	0	0	287	6	884
Future Vol, veh/h	0	2322	1698	398	1385	0	0	0	0	287	6	884
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2444	1787	419	1458	0	0	0	0	302	6	931
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	1582.8	1208.9	614.3
HCM LOS	F	F	F

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	22%	24%
Vol Thru, %	100%	0%	78%	1%
Vol Right, %	0%	100%	0%	75%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2322	1698	1783	1177
LT Vol	0	0	398	287
Through Vol	2322	0	1385	6
RT Vol	0	1698	0	884
Lane Flow Rate	2444	1787	1877	1239
Geometry Grp	5	5	4a	2
Degree of Util (X)	5.158	3.424	-	2.27
Departure Headway (Hd)	17.17	16.385	-	14.662
Convergence, Y/N	Yes	Yes	-	Yes
Cap	244	250	-	260
Service Time	14.87	14.085	-	12.662
HCM Lane V/C Ratio	10.016	7.148	-	4.765
HCM Control Delay, s/veh	1912	1132.6	+	614.3
HCM Lane LOS	F	F	-	F
HCM 95th-tile Q	112.6	70.6	-	43.8

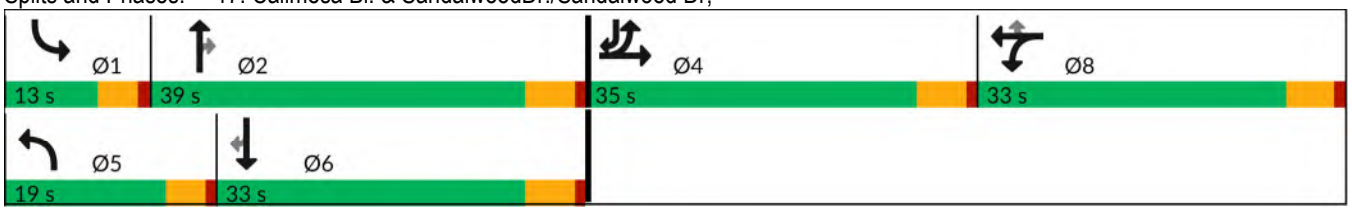
Notes
HCM 7th Edition AWSC methodology error - negative departure headway

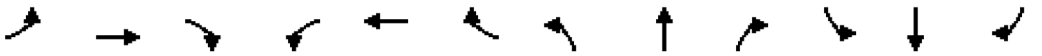
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	617	245	34	236	28	1004	442	237	37	502	681
Future Volume (vph)	617	245	34	236	28	1004	442	237	37	502	681
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0	35.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%	29.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	29.6	29.6	19.7	19.7	19.7	14.4	39.5	39.5	6.7	27.6	57.3
Actuated g/C Ratio	0.26	0.26	0.18	0.18	0.18	0.13	0.35	0.35	0.06	0.25	0.51
v/c Ratio	1.35	2.23dr	0.11	0.74	0.07	4.58	0.37	0.35	0.36	1.13	0.79
Control Delay (s/veh)	205.4	376.7	38.7	57.7	0.4	Error	30.4	5.5	61.5	121.9	22.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	205.4	376.7	38.7	57.7	0.4	Error	30.4	5.5	61.5	121.9	22.4
LOS	F	F	D	E	A	F	C	A	E	F	C
Approach Delay (s/veh)		340.2		50.2			980.4			64.5	
Approach LOS		F		D			F			E	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 112.3		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 4.58		
Intersection Signal Delay (s/veh): 453.0	Intersection LOS: F	
Intersection Capacity Utilization 166.2%	ICU Level of Service H	
Analysis Period (min) 15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	617	245	1740	34	236	28	1004	442	237	37	502	681
Future Volume (veh/h)	617	245	1740	34	236	28	1004	442	237	37	502	681
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	649	258	1815	36	248	20	1057	465	222	39	528	645
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	489	513	435	284	298	248	238	1269	565	57	479	840
Arrive On Green	0.27	0.27	0.27	0.16	0.16	0.16	0.13	0.35	0.35	0.03	0.25	0.25
Sat Flow, veh/h	1810	1900	1610	1810	1900	1580	1810	3610	1606	1810	1900	1607
Grp Volume(v), veh/h	649	258	1815	36	248	20	1057	465	222	39	528	645
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1580	1810	1805	1606	1810	1900	1607
Q Serve(g_s), s	29.6	12.6	29.6	1.9	13.9	1.2	14.4	10.5	11.4	2.3	27.6	27.6
Cycle Q Clear(g_c), s	29.6	12.6	29.6	1.9	13.9	1.2	14.4	10.5	11.4	2.3	27.6	27.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	489	513	435	284	298	248	238	1269	565	57	479	840
V/C Ratio(X)	1.33	0.50	4.17	0.13	0.83	0.08	4.45	0.37	0.39	0.68	1.10	0.77
Avail Cap(c_a), veh/h	489	513	435	456	479	398	238	1269	565	139	479	840
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	33.8	40.0	39.7	44.8	39.5	47.6	26.4	26.7	52.5	41.0	19.1
Incr Delay (d2), s/veh	161.2	0.8	1433.4	0.2	6.7	0.1	1560.1	0.2	0.4	5.2	72.3	4.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	34.5	5.7	184.4	0.8	6.9	0.5	109.4	4.4	4.3	1.1	22.0	18.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	201.2	34.6	1473.3	39.9	51.5	39.6	1607.7	26.6	27.2	57.7	113.3	23.5
LnGrp LOS	F	C	F	D	D	D	F	C	C	E	F	C
Approach Vol, veh/h		2722			304			1744			1212	
Approach Delay, s/veh		1033.7			49.4			984.9			63.7	
Approach LOS		F			D			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	43.9		35.0	19.0	33.0		22.6				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6				
Max Q Clear Time (g_c+I1), s	4.3	13.4		31.6	16.4	29.6		15.9				
Green Ext Time (p_c), s	0.0	3.5		0.0	0.0	0.0		1.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	772.9
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	113.4
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	365	1910	52	391	1292	30
Future Vol, veh/h	365	1910	52	391	1292	30
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	376	1969	54	403	1332	31
Number of Lanes	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	1443.5	85.5	889.8
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	100%	0%	0%	12%
Vol Thru, %	0%	0%	16%	88%
Vol Right, %	0%	100%	84%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1292	30	2275	443
LT Vol	1292	0	0	52
Through Vol	0	0	365	391
RT Vol	0	30	1910	0
Lane Flow Rate	1332	31	2345	457
Geometry Grp	5	5	2	2
Degree of Util (X)	2.948	0.058	4.146	0.89
Departure Headway (Hd)	12.398	11.105	10.767	18.243
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	306	325	375	206
Service Time	10.098	8.805	8.767	16.243
HCM Lane V/C Ratio	4.353	0.095	6.253	2.218
HCM Control Delay, s/veh	910.1	14.5	1443.5	85.5
HCM Lane LOS	F	B	F	F
HCM 95th-tile Q	75	0.2	135.3	6.9

Intersection	
Intersection Delay, s/veh	282
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	186	404	158	202	355	105
Future Vol, veh/h	186	404	158	202	355	105
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	310	673	263	337	592	175
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	393.8	110.8	272.6
HCM LOS	F	F	F

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	32%	77%
Vol Thru, %	44%	0%	23%
Vol Right, %	56%	68%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	360	590	460
LT Vol	0	186	355
Through Vol	158	0	105
RT Vol	202	404	0
Lane Flow Rate	600	983	767
Geometry Grp	1	1	1
Degree of Util (X)	1.11	1.816	1.523
Departure Headway (Hd)	9.573	7.525	9.429
Convergence, Y/N	Yes	Yes	Yes
Cap	384	492	391
Service Time	7.573	5.525	7.429
HCM Lane V/C Ratio	1.563	1.998	1.962
HCM Control Delay, s/veh	110.8	393.8	272.6
HCM Lane LOS	F	F	F
HCM 95th-tile Q	15.4	54.7	31.8

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	643	397	395	1050	0	0	0	0	0	0	0
Future Vol, veh/h	0	643	397	395	1050	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	691	427	425	1129	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1118	0	0	2670	3097	1129
Stage 1	-	-	-	-	-	-	1978	1978	-
Stage 2	-	-	-	-	-	-	691	1118	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	632	-	0	25	12	251
Stage 1	0	-	-	-	-	0	119	108	-
Stage 2	0	-	-	-	-	0	501	285	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	632	-	-	0	0	251
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	119	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	5.89	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 236	-	-
HCM Lane V/C Ratio	-	-	0.672	-	-
HCM Control Delay (s/veh)	-	-	21.6	0	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	5.1	-	-

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

Intersection	
Int Delay, s/veh	1111.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	643	0	0	960	0	486	0	567	0	0	0
Future Vol, veh/h	0	643	0	0	960	0	486	0	567	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	707	0	0	1055	0	534	0	623	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1055	0	-	-	-	0	1762	1762	707
Stage 1	-	-	-	-	-	-	707	707	-
Stage 2	-	-	-	-	-	-	1055	1055	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	668	-	0	0	-	-	~ 94	85	~ 439
Stage 1	-	-	0	0	-	-	~ 493	441	-
Stage 2	-	-	0	0	-	-	~ 338	305	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	668	-	-	-	-	-	~ 94	0	~ 439
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 94	0	-
Stage 1	-	-	-	-	-	-	~ 493	0	-
Stage 2	-	-	-	-	-	-	~ 338	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	$ 2803.39
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	163	668	-	-	-
HCM Lane V/C Ratio	7.113	-	-	-	-
HCM Control Delay (s/veh)	$ 2803.4	0	-	-	-
HCM Lane LOS	F	A	-	-	-
HCM 95th %tile Q(veh)	127.7	0	-	-	-

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

Intersection	
Intersection Delay, s/veh	642.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	137	1001	72	79	737	120	0	88	60	212	140	223
Future Vol, veh/h	137	1001	72	79	737	120	0	88	60	212	140	223
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	151	1100	79	87	810	132	0	97	66	233	154	245
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	926.6	622.8	41.5	232.3
HCM LOS	F	F	E	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	11%	8%	37%
Vol Thru, %	59%	83%	79%	24%
Vol Right, %	41%	6%	13%	39%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	148	1210	936	575
LT Vol	0	137	79	212
Through Vol	88	1001	737	140
RT Vol	60	72	120	223
Lane Flow Rate	163	1330	1029	632
Geometry Grp	1	1	1	1
Degree of Util (X)	0.423	2.986	2.296	1.393
Departure Headway (Hd)	22.749	12.065	13.525	13.448
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	161	319	278	278
Service Time	20.749	10.065	11.525	11.448
HCM Lane V/C Ratio	1.012	4.169	3.701	2.273
HCM Control Delay, s/veh	41.5	926.6	622.8	232.3
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	1.9	78.3	47.9	20.1

APPENDIX 9.3: OPENING YEAR CUMULATIVE (2036) WITHOUT PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	24	210	364	756	100
Average Queue (ft)	4	112	28	753	60
95th Queue (ft)	15	194	175	764	139
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)			1	100	
Queuing Penalty (veh)			5	0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		7		100	3
Queuing Penalty (veh)		31		262	12

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	WB	WB	NB	NB
Directions Served	L	T	R	LT	R
Maximum Queue (ft)	142	176	147	779	100
Average Queue (ft)	57	8	9	740	85
95th Queue (ft)	108	72	69	933	144
Link Distance (ft)		560	560	764	
Upstream Blk Time (%)				82	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)	160				50
Storage Blk Time (%)	0			100	3
Queuing Penalty (veh)	1			107	6

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	WB	SB
Directions Served	TR	LT	LTR
Maximum Queue (ft)	208	455	137
Average Queue (ft)	84	353	66
95th Queue (ft)	159	544	109
Link Distance (ft)	247	451	732
Upstream Blk Time (%)	0	4	
Queuing Penalty (veh)	1	29	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	146	830	111
Average Queue (ft)	78	830	55
95th Queue (ft)	123	830	87
Link Distance (ft)	570	815	524
Upstream Blk Time (%)		100	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	339	567
Average Queue (ft)	156	310
95th Queue (ft)	423	672
Link Distance (ft)	530	615
Upstream Blk Time (%)		6
Queuing Penalty (veh)		72
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	WB	NB
Directions Served	LT	TR	LTR
Maximum Queue (ft)	620	85	720
Average Queue (ft)	478	20	713
95th Queue (ft)	784	95	726
Link Distance (ft)	615	136	712
Upstream Blk Time (%)	15	2	100
Queuing Penalty (veh)	77	23	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 626

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	10	133	5	756	100
Average Queue (ft)	1	62	0	755	58
95th Queue (ft)	5	105	4	760	138
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)				100	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		0		100	1
Queuing Penalty (veh)		1		117	4

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	WB	WB	NB	NB
Directions Served	L	T	R	LT	R
Maximum Queue (ft)	83	30	82	728	100
Average Queue (ft)	40	2	5	412	95
95th Queue (ft)	69	17	40	889	117
Link Distance (ft)		560	560	764	
Upstream Blk Time (%)				27	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)	160				50
Storage Blk Time (%)				79	26
Queuing Penalty (veh)				265	43

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	WB	SB
Directions Served	TR	LT	LTR
Maximum Queue (ft)	80	239	129
Average Queue (ft)	38	99	65
95th Queue (ft)	65	180	109
Link Distance (ft)	247	451	732
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	317	152	201
Average Queue (ft)	202	78	87
95th Queue (ft)	309	127	152
Link Distance (ft)	566	815	524
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	443	545
Average Queue (ft)	260	201
95th Queue (ft)	501	527
Link Distance (ft)	530	615
Upstream Blk Time (%)	0	4
Queuing Penalty (veh)	0	54
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	WB	NB
Directions Served	LT	TR	LTR
Maximum Queue (ft)	628	56	710
Average Queue (ft)	556	10	706
95th Queue (ft)	788	66	712
Link Distance (ft)	615	136	712
Upstream Blk Time (%)	20	3	100
Queuing Penalty (veh)	129	28	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 642

APPENDIX 9.4: OPENING YEAR CUMULATIVE (2036) WITH PROJECT (PHASE 3) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	112	210	392	749	60
Average Queue (ft)	37	183	309	738	4
95th Queue (ft)	124	286	540	752	34
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)	13		39	100	
Queuing Penalty (veh)	152		340	0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		77	2	100	0
Queuing Penalty (veh)		342	7	315	2

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	209	379	575	575	779	40
Average Queue (ft)	150	135	425	400	767	2
95th Queue (ft)	255	419	816	829	777	21
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		13	53	52	100	
Queuing Penalty (veh)		161	0	0	0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	34	0			100	
Queuing Penalty (veh)	204	2			107	

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	338	360	464	703
Average Queue (ft)	317	315	456	703
95th Queue (ft)	332	374	462	703
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	33	20	17	100
Queuing Penalty (veh)	276	170	463	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB	NB
Directions Served	TR	LT	L	R
Maximum Queue (ft)	119	818	538	100
Average Queue (ft)	66	818	537	9
95th Queue (ft)	96	822	540	57
Link Distance (ft)	581	803	522	
Upstream Blk Time (%)		100	100	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)				50
Storage Blk Time (%)			100	
Queuing Penalty (veh)			23	

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	342	570
Average Queue (ft)	154	261
95th Queue (ft)	427	559
Link Distance (ft)	530	615
Upstream Blk Time (%)		3
Queuing Penalty (veh)		38
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	WB	NB
Directions Served	LT	TR	LTR
Maximum Queue (ft)	625	55	720
Average Queue (ft)	495	9	717
95th Queue (ft)	767	61	727
Link Distance (ft)	615	136	712
Upstream Blk Time (%)	15	1	100
Queuing Penalty (veh)	74	14	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 2691

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	7	130	16	756	100
Average Queue (ft)	0	58	1	755	89
95th Queue (ft)	4	99	8	761	139
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)				100	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		0		99	12
Queuing Penalty (veh)		0		606	73

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	168	91	22	68	779	100
Average Queue (ft)	76	5	2	4	778	77
95th Queue (ft)	138	59	16	36	783	145
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)					100	
Queuing Penalty (veh)					0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	1	0			99	9
Queuing Penalty (veh)	11	0			356	22

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	337	364	464	703
Average Queue (ft)	315	323	456	703
95th Queue (ft)	330	377	462	703
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	32	24	19	100
Queuing Penalty (veh)	883	662	384	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB	NB
Directions Served	TR	LT	L	R
Maximum Queue (ft)	569	818	538	80
Average Queue (ft)	318	815	535	9
95th Queue (ft)	561	826	546	57
Link Distance (ft)	572	803	522	
Upstream Blk Time (%)	0	100	100	
Queuing Penalty (veh)	5	0	0	
Storage Bay Dist (ft)				50
Storage Blk Time (%)			100	0
Queuing Penalty (veh)			31	0

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	519	346
Average Queue (ft)	343	125
95th Queue (ft)	570	340
Link Distance (ft)	530	615
Upstream Blk Time (%)	0	1
Queuing Penalty (veh)	3	14
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	WB	NB
Directions Served	LT	TR	LTR
Maximum Queue (ft)	628	27	711
Average Queue (ft)	603	4	711
95th Queue (ft)	720	38	725
Link Distance (ft)	615	136	712
Upstream Blk Time (%)	25	0	100
Queuing Penalty (veh)	173	3	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 3227

APPENDIX 9.5: OPENING YEAR CUMULATIVE (2036) WITH PROJECT (PHASE 4) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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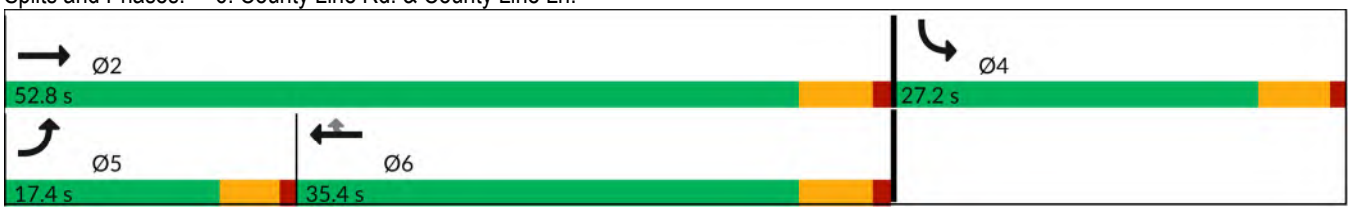
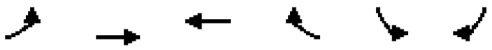
Lane Group	EBT	WBT	WBR	SBL	Ø5
Lane Configurations					
Traffic Volume (vph)	1008	372	252	110	
Future Volume (vph)	1008	372	252	110	
Turn Type	NA	NA	Perm	Prot	
Protected Phases	2	6		4	5
Permitted Phases			6		
Detector Phase	2	6	6	4	
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.4	22.4	22.4	27.2	9.6
Total Split (s)	52.8	35.4	35.4	27.2	17.4
Total Split (%)	66.0%	44.3%	44.3%	34.0%	22%
Yellow Time (s)	4.4	4.4	4.4	4.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4	5.4	5.4	5.2	
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	47.6	47.6	47.6	12.9	
Actuated g/C Ratio	0.67	0.67	0.67	0.18	
v/c Ratio	1.09	0.40	0.29	0.46	
Control Delay (s/veh)	68.4	7.2	1.5	30.4	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	68.4	7.2	1.5	30.4	
LOS	E	A	A	C	
Approach Delay (s/veh)	68.4	4.9		30.4	
Approach LOS	E	A		C	

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 71.1	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay (s/veh): 43.3	Intersection LOS: D
Intersection Capacity Utilization 70.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: County Line Rd. & County Line Ln.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1008	372	252	110	0
Future Volume (veh/h)	0	1008	372	252	110	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	1381	510	345	0	0
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	4	1650	1650	1398	0	0
Arrive On Green	0.00	0.87	0.87	0.87	0.00	0.00
Sat Flow, veh/h	1810	1900	1900	1610	0	0
Grp Volume(v), veh/h	0	1381	510	345	0	0
Grp Sat Flow(s),veh/h/ln	1810	1900	1900	1610	0	0
Q Serve(g_s), s	0.0	14.4	2.0	1.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.4	2.0	1.5	0.0	0.0
Prop In Lane	1.00			1.00	0.00	0.00
Lane Grp Cap(c), veh/h	4	1650	1650	1398	0	0
V/C Ratio(X)	0.00	0.84	0.31	0.25	0.00	0.00
Avail Cap(c_a), veh/h	564	2193	1650	1398	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	1.3	0.5	0.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.3	0.1	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	3.6	0.6	0.5	0.0	0.0
LnGrp LOS		A	A	A		
Approach Vol, veh/h		1381	855		0	
Approach Delay, s/veh		3.6	0.6		0.0	
Approach LOS		A	A			

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		41.1		0.0	0.0	41.1
Change Period (Y+Rc), s		5.4		5.2	4.6	5.4
Max Green Setting (Gmax), s		47.4		22.0	12.8	30.0
Max Q Clear Time (g_c+I1), s		16.4		0.0	0.0	4.0
Green Ext Time (p_c), s		19.3		0.0	0.0	4.9

Intersection Summary	
HCM 7th Control Delay, s/veh	2.4
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1058	16	126	632	22	149
Future Vol, veh/h	1058	16	126	632	22	149
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1150	17	137	687	24	162

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1169	0	1778	586
Stage 1	-	-	-	-	1161	-
Stage 2	-	-	-	-	617	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	605	-	75	459
Stage 1	-	-	-	-	264	-
Stage 2	-	-	-	-	506	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	603	-	58	458
Mov Cap-2 Maneuver	-	-	-	-	169	-
Stage 1	-	-	-	-	264	-
Stage 2	-	-	-	-	391	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.11	23.63
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	375	-	-	603	-
HCM Lane V/C Ratio	0.495	-	-	0.227	-
HCM Control Delay (s/veh)	23.6	-	-	12.7	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	2.6	-	-	0.9	-

Intersection	
Intersection Delay, s/veh	21.6
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	2
Conflicting Circle Lanes	2	2	1	2
Adj Approach Flow, veh/h	1420	1034	0	844
Demand Flow Rate, veh/h	1420	1034	0	844
Vehicles Circulating, veh/h	985	0	1435	1034
Vehicles Exiting, veh/h	893	1435	519	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	27.3	6.0	0.0	31.1
Approach LOS	D	A	-	D

Lane	Left	Right	Bypass	Left	Right	Left	Left	Right
Designated Moves	LT	TR	R	LT	TR	R	L	LTR
Assumed Moves	LT	TR		LT	TR	R	L	LTR
RT Channelized			Yield					
Lane Util	0.470	0.530		0.470	0.530	1.000	0.530	0.470
Follow-Up Headway, s	2.667	2.535	2.609	2.667	2.535	2.609	2.667	2.535
Critical Headway, s	4.645	4.328	4.976	4.645	4.328	4.976	4.645	4.328
A (Intercept)	1350	1420	1380	1350	1420	1380	1350	1420
B (Slope)	9.199e-4	8.501e-4	1.02e-3	9.199e-4	8.501e-4	1.02e-3	9.199e-4	8.501e-4
Entry Flow, veh/h	455	514	451	486	548	0	447	397
Cap Entry Lane, veh/h	545	615	813	1350	1420	319	521	590
Entry HV Adj Factor	1.001	0.999	1.000	1.000	1.000	1.000	1.001	0.999
Flow Entry, veh/h	455	514	451	486	548	0	447	397
Cap Entry, veh/h	546	614	813	1350	1420	319	522	589
V/C Ratio	0.834	0.836	0.555	0.360	0.386	0.000	0.857	0.673
Control Delay, s/veh	35.6	32.9	12.6	6.0	6.0	11.3	39.8	21.1
LOS	E	D	B	A	A	B	E	C
95th %tile Queue, veh	9	9	3	2	2	0	9	5

Intersection	
Intersection Delay, s/veh	12.9
Intersection LOS	B

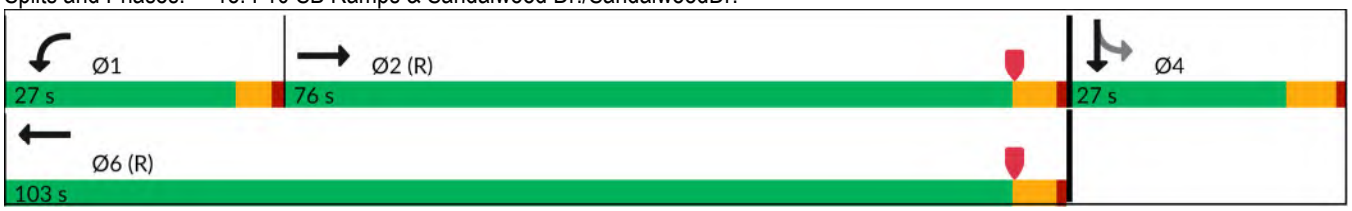
Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1313	1203	381	0
Demand Flow Rate, veh/h	1313	1203	381	0
Vehicles Circulating, veh/h	0	931	1313	947
Vehicles Exiting, veh/h	947	763	0	665
Ped Vol Crossing Leg, #/h	0	0	2	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.3	15.8	22.9	0.0
Approach LOS	A	C	C	-

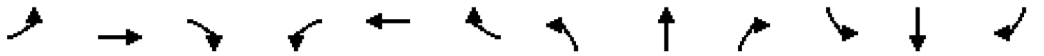
Lane	Left	Right	Left	Right	Bypass	Left	Right	Left
Designated Moves	LT	TR	LT	TR	R	LT	R	R
Assumed Moves	L	TR	LT	TR		LT	R	R
RT Channelized					Yield			
Lane Util	0.506	0.494	0.470	0.530		0.698	0.302	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.327	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.499e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	665	648	320	361	522	266	115	0
Cap Entry Lane, veh/h	1350	1420	573	644	807	403	465	635
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	665	648	320	361	522	266	115	0
Cap Entry, veh/h	1350	1420	573	643	807	403	465	635
V/C Ratio	0.493	0.456	0.558	0.561	0.647	0.659	0.247	0.000
Control Delay, s/veh	7.7	6.9	16.7	15.3	15.5	27.9	11.5	5.7
LOS	A	A	C	C	C	D	B	A
95th %tile Queue, veh	3	2	3	3	5	5	1	0

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1105	561	237	2462	180	10	1668
Future Volume (vph)	1105	561	237	2462	180	10	1668
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	76.0		27.0	103.0	27.0	27.0	
Total Split (%)	58.5%		20.8%	79.2%	20.8%	20.8%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	Max	Max	
Act Effct Green (s)	77.8	130.0	15.2	97.6	21.2	21.2	130.0
Actuated g/C Ratio	0.60	1.00	0.12	0.75	0.16	0.16	1.00
v/c Ratio	0.44	0.43	0.72	0.78	0.42	0.41	1.27
Control Delay (s/veh)	15.1	0.8	60.9	7.9	54.2	53.9	138.8
Queue Delay	0.0	0.0	0.0	17.9	0.0	0.0	0.0
Total Delay (s/veh)	15.1	0.8	60.9	25.7	54.2	53.9	138.8
LOS	B	A	E	C	D	D	F
Approach Delay (s/veh)	10.3			28.8		130.2	
Approach LOS	B			C		F	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.27	
Intersection Signal Delay (s/veh): 54.1	Intersection LOS: D
Intersection Capacity Utilization 65.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↰	↱
Traffic Volume (veh/h)	0	1105	561	237	2462	0	0	0	0	180	10	1668
Future Volume (veh/h)	0	1105	561	237	2462	0	0	0	0	180	10	1668
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	1364	0	293	3040	0				231	0	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	3191		352	3894	0				590	0	
Arrive On Green	0.00	0.62	0.00	0.10	0.75	0.00				0.16	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	1364	0	293	3040	0				231	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	17.9	0.0	10.7	45.9	0.0				7.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.9	0.0	10.7	45.9	0.0				7.4	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3191		352	3894	0				590	0	
V/C Ratio(X)	0.00	0.43		0.83	0.78	0.00				0.39	0.00	
Avail Cap(c_a), veh/h	0	3191		605	3894	0				590	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	13.1	0.0	57.4	9.8	0.0				48.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	2.0	1.6	0.0				1.9	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.6	0.0	4.8	14.4	0.0				3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	13.5	0.0	59.4	11.4	0.0				50.6	0.0	0.0
LnGrp LOS		B		E	B					D		
Approach Vol, veh/h		1364			3333						231	
Approach Delay, s/veh		13.5			15.6						50.6	
Approach LOS		B			B						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.6	85.4		27.0		103.0
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	22.4	70.6		21.2		97.6
Max Q Clear Time (g_c+I1), s	12.7	19.9		9.4		47.9
Green Ext Time (p_c), s	0.4	13.1		0.6		43.0

Intersection Summary		
HCM 7th Control Delay, s/veh		16.7
HCM 7th LOS		B

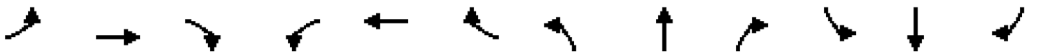
Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	377	321	560	51	431	61	1776	847	175	23	197	668
Future Volume (vph)	377	321	560	51	431	61	1776	847	175	23	197	668
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.4	22.4		10.4	22.4	22.4	10.0	22.4	22.4	10.0	22.4	10.4
Total Split (s)	24.5	34.0		14.1	23.6	23.6	69.5	77.4	77.4	14.5	22.4	24.5
Total Split (%)	17.5%	24.3%		10.1%	16.9%	16.9%	49.6%	55.3%	55.3%	10.4%	16.0%	17.5%
Yellow Time (s)	4.4	4.4		4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4		5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	None	None
Act Effct Green (s)	19.1	35.9	140.0	7.6	22.3	22.3	64.9	75.3	75.3	6.3	12.9	32.0
Actuated g/C Ratio	0.14	0.26	1.00	0.05	0.16	0.16	0.46	0.54	0.54	0.05	0.09	0.23
v/c Ratio	0.72	0.33	0.29	0.49	0.70	0.15	1.00	0.41	0.16	0.26	0.56	1.25
Control Delay (s/veh)	66.1	44.9	0.4	79.0	62.5	0.7	56.9	20.2	2.5	71.1	66.3	154.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	38.4	0.4	0.0	0.0	0.0	0.0
Total Delay (s/veh)	66.1	44.9	0.4	79.0	62.5	0.7	95.3	20.6	2.5	71.1	66.3	154.6
LOS	E	D	A	E	E	A	F	C	A	E	E	F
Approach Delay (s/veh)		31.4			57.2			66.9			132.9	
Approach LOS		C			E			E			F	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 36.3 (26%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay (s/veh): 68.5	Intersection LOS: E
Intersection Capacity Utilization 116.8%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	321	560	51	431	61	1776	847	175	23	197	668
Future Volume (veh/h)	377	321	560	51	431	61	1776	847	175	23	197	668
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976
Adj Flow Rate, veh/h	397	338	0	54	454	55	1869	892	184	24	207	326
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	513	884		80	514	214	1745	2226	942	41	480	432
Arrive On Green	0.14	0.22	0.00	0.04	0.13	0.13	0.46	0.56	0.56	0.02	0.12	0.12
Sat Flow, veh/h	3764	3952	1675	1882	3952	1649	3764	3952	1673	1882	3952	1675
Grp Volume(v), veh/h	397	338	0	54	454	55	1869	892	184	24	207	326
Grp Sat Flow(s),veh/h/ln	1882	1976	1675	1882	1976	1649	1882	1976	1673	1882	1976	1675
Q Serve(g_s), s	14.3	10.2	0.0	4.0	15.8	3.8	64.9	17.8	7.6	1.8	6.8	16.8
Cycle Q Clear(g_c), s	14.3	10.2	0.0	4.0	15.8	3.8	64.9	17.8	7.6	1.8	6.8	16.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	513	884		80	514	214	1745	2226	942	41	480	432
V/C Ratio(X)	0.77	0.38		0.67	0.88	0.26	1.07	0.40	0.20	0.59	0.43	0.75
Avail Cap(c_a), veh/h	513	884		117	514	214	1745	2226	942	133	480	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.24	0.24	0.24	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.4	46.1	0.0	66.1	59.9	43.7	37.5	17.2	15.0	67.9	57.0	23.9
Incr Delay (d2), s/veh	6.5	1.3	0.0	3.6	19.4	2.9	35.4	0.0	0.0	4.9	0.6	7.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	5.1	0.0	2.0	9.2	1.9	37.1	7.9	0.0	0.9	3.4	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	64.9	47.4	0.0	69.7	79.3	46.6	73.0	17.3	15.0	72.8	57.6	31.3
LnGrp LOS	E	D		E	E	D	F	B	B	E	E	C
Approach Vol, veh/h		735			563			2945			557	
Approach Delay, s/veh		56.8			75.2			52.5			42.9	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	36.7	69.5	22.4	24.5	23.6	7.6	84.3
Change Period (Y+Rc), s	5.4	5.4	4.6	5.4	5.4	5.4	4.6	5.4
Max Green Setting (Gmax), s	8.7	28.6	64.9	17.0	19.1	18.2	9.9	72.0
Max Q Clear Time (g_c+I1), s	6.0	12.2	66.9	18.8	16.3	17.8	3.8	19.8
Green Ext Time (p_c), s	0.0	1.8	0.0	0.0	0.3	0.1	0.0	8.0

Intersection Summary	
HCM 7th Control Delay, s/veh	54.7
HCM 7th LOS	D

Notes

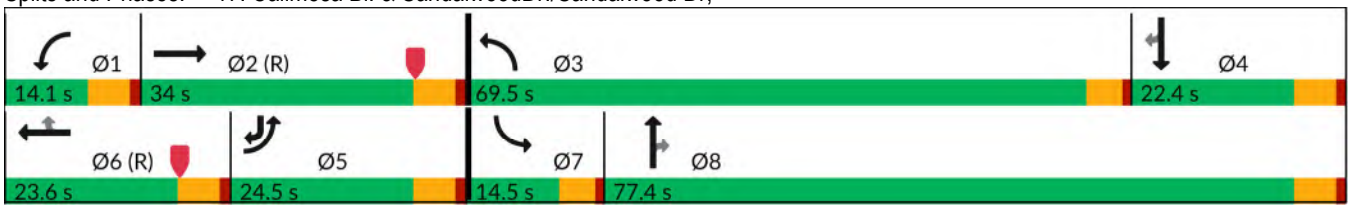
User approved pedestrian interval to be less than phase max green.

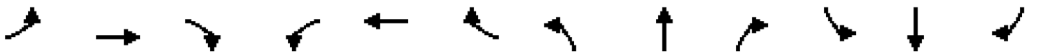
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	377	321	560	51	431	61	1776	847	175	23	197	668
Future Volume (vph)	377	321	560	51	431	61	1776	847	175	23	197	668
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.4	22.4		10.4	22.4	22.4	10.0	22.4	22.4	10.0	22.4	10.4
Total Split (s)	24.5	34.0		14.1	23.6	23.6	69.5	77.4	77.4	14.5	22.4	24.5
Total Split (%)	17.5%	24.3%		10.1%	16.9%	16.9%	49.6%	55.3%	55.3%	10.4%	16.0%	17.5%
Yellow Time (s)	4.4	4.4		4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4		5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	None	None
Act Effct Green (s)	19.1	35.9	140.0	7.6	22.3	22.3	64.9	75.3	75.3	6.3	12.9	32.0
Actuated g/C Ratio	0.14	0.26	1.00	0.05	0.16	0.16	0.46	0.54	0.54	0.05	0.09	0.23
v/c Ratio	0.72	0.65	0.29	0.49	0.70	0.15	1.00	0.41	0.16	0.26	0.56	1.25
Control Delay (s/veh)	66.1	55.0	0.4	79.0	62.5	0.7	56.9	20.2	2.6	71.1	66.3	154.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	38.4	0.4	0.0	0.0	0.0	0.0
Total Delay (s/veh)	66.1	55.0	0.4	79.0	62.5	0.7	95.3	20.6	2.6	71.1	66.3	154.6
LOS	E	D	A	E	E	A	F	C	A	E	E	F
Approach Delay (s/veh)		34.0			57.2			66.9			132.9	
Approach LOS		C			E			E			F	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 36.3 (26%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay (s/veh): 69.1	Intersection LOS: E
Intersection Capacity Utilization 116.8%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	321	560	51	431	61	1776	847	175	23	197	668
Future Volume (veh/h)	377	321	560	51	431	61	1776	847	175	23	197	668
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976
Adj Flow Rate, veh/h	397	338	0	54	454	55	1869	892	184	24	207	326
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	513	442		80	514	214	1745	2226	942	41	480	432
Arrive On Green	0.14	0.22	0.00	0.04	0.13	0.13	0.46	0.56	0.56	0.02	0.12	0.12
Sat Flow, veh/h	3764	1976	1675	1882	3952	1649	3764	3952	1672	1882	3952	1675
Grp Volume(v), veh/h	397	338	0	54	454	55	1869	892	184	24	207	326
Grp Sat Flow(s),veh/h/ln	1882	1976	1675	1882	1976	1649	1882	1976	1672	1882	1976	1675
Q Serve(g_s), s	14.3	22.4	0.0	4.0	15.8	3.8	64.9	17.8	7.6	1.8	6.8	16.8
Cycle Q Clear(g_c), s	14.3	22.4	0.0	4.0	15.8	3.8	64.9	17.8	7.6	1.8	6.8	16.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	513	442		80	514	214	1745	2226	942	41	480	432
V/C Ratio(X)	0.77	0.76		0.67	0.88	0.26	1.07	0.40	0.20	0.59	0.43	0.75
Avail Cap(c_a), veh/h	513	442		117	514	214	1745	2226	942	133	480	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.24	0.24	0.24	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.4	50.9	0.0	66.1	59.9	43.7	37.5	17.2	15.0	67.9	57.0	23.9
Incr Delay (d2), s/veh	6.5	11.9	0.0	3.6	19.4	2.9	35.4	0.0	0.0	4.9	0.6	7.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	12.4	0.0	2.0	9.2	1.9	37.1	7.9	0.0	0.9	3.4	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	64.9	62.7	0.0	69.7	79.3	46.6	73.0	17.3	15.0	72.8	57.6	31.3
LnGrp LOS	E	E		E	E	D	F	B	B	E	E	C
Approach Vol, veh/h		735			563			2945			557	
Approach Delay, s/veh		63.9			75.2			52.5			42.9	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	36.7	69.5	22.4	24.5	23.6	7.6	84.3
Change Period (Y+Rc), s	5.4	5.4	4.6	5.4	5.4	5.4	4.6	5.4
Max Green Setting (Gmax), s	8.7	28.6	64.9	17.0	19.1	18.2	9.9	72.0
Max Q Clear Time (g_c+I1), s	6.0	24.4	66.9	18.8	16.3	17.8	3.8	19.8
Green Ext Time (p_c), s	0.0	0.7	0.0	0.0	0.3	0.1	0.0	8.0

Intersection Summary	
HCM 7th Control Delay, s/veh	55.8
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	174	634	193	1005	1791
Future Volume (vph)	174	634	193	1005	1791
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.4		9.6	22.4	22.8
Total Split (s)	25.0		25.0	50.0	80.0
Total Split (%)	19.2%		19.2%	38.5%	61.5%
Yellow Time (s)	4.4		3.6	4.4	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.4		4.6	5.4	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	20.9	130.0	18.4	43.9	74.9
Actuated g/C Ratio	0.16	1.00	0.14	0.34	0.58
v/c Ratio	0.35	0.39	0.85	0.92	0.94
Control Delay (s/veh)	51.0	0.6	80.8	53.9	35.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.0	0.6	80.8	53.9	35.7
LOS	D	A	F	D	D
Approach Delay (s/veh)	11.5			58.2	35.7
Approach LOS	B			E	D

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay (s/veh): 37.6	Intersection LOS: D
Intersection Capacity Utilization 88.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	174	634	193	1005	1791	23
Future Volume (veh/h)	174	634	193	1005	1791	23
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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	1900	1900	1900	1900	1976	1900
Adj Flow Rate, veh/h	205	0	227	1182	2077	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	575		252	1269	2183	934
Arrive On Green	0.16	0.00	0.14	0.33	0.58	0.00
Sat Flow, veh/h	3705	1610	1810	3800	3764	1610
Grp Volume(v), veh/h	205	0	227	1182	2077	0
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1900	1882	1610
Q Serve(g_s), s	6.6	0.0	16.0	39.1	67.2	0.0
Cycle Q Clear(g_c), s	6.6	0.0	16.0	39.1	67.2	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	575		252	1269	2183	934
V/C Ratio(X)	0.36		0.90	0.93	0.95	0.00
Avail Cap(c_a), veh/h	575		284	1304	2183	934
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.7	0.0	55.0	41.9	25.6	0.0
Incr Delay (d2), s/veh	0.4	0.0	25.8	11.9	10.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	9.0	19.8	30.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	49.1	0.0	80.8	53.7	36.4	0.0
LnGrp LOS	D		F	D	D	
Approach Vol, veh/h	205			1409	2077	
Approach Delay, s/veh	49.1			58.1	36.4	
Approach LOS	D			E	D	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		81.2	22.7	26.1		48.8
Change Period (Y+Rc), s		5.8	4.6	5.4		5.4
Max Green Setting (Gmax), s		74.2	20.4	19.6		44.6
Max Q Clear Time (g_c+I1), s		69.2	18.0	8.6		41.1
Green Ext Time (p_c), s		3.7	0.1	0.8		2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	45.4
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	437
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	185	606	42	38	812	216	51	364	187	92	47	159
Future Vol, veh/h	185	606	42	38	812	216	51	364	187	92	47	159
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	197	645	45	40	864	230	54	387	199	98	50	169
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

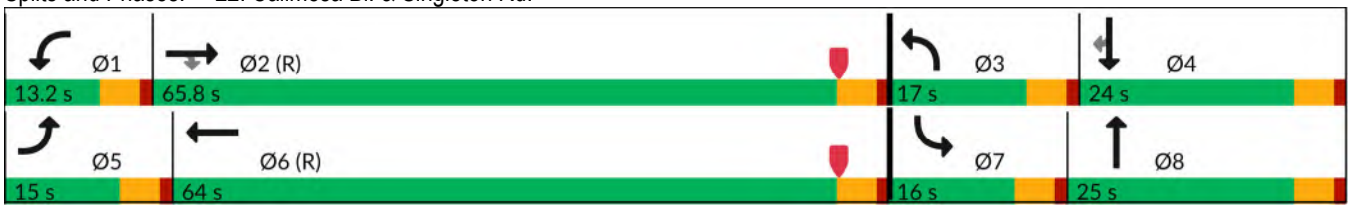
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	295.3	779.1	228.4	31.2
HCM LOS	F	F	F	D

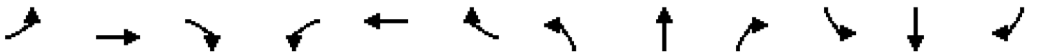
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	66%	0%	94%	0%	79%	0%	23%
Vol Right, %	0%	34%	0%	6%	0%	21%	0%	77%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	51	551	185	648	38	1028	92	206
LT Vol	51	0	185	0	38	0	92	0
Through Vol	0	364	0	606	0	812	0	47
RT Vol	0	187	0	42	0	216	0	159
Lane Flow Rate	54	586	197	689	40	1094	98	219
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.145	1.444	0.521	1.723	0.108	2.727	0.278	0.558
Departure Headway (Hd)	12.798	11.993	14.032	13.434	11.46	10.77	15.729	14.577
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	282	311	260	276	315	350	230	250
Service Time	10.498	9.693	11.732	11.134	9.16	8.47	13.429	12.277
HCM Lane V/C Ratio	0.191	1.884	0.758	2.496	0.127	3.126	0.426	0.876
HCM Control Delay, s/veh	17.7	247.9	31	370.8	15.5	807.3	24.4	34.2
HCM Lane LOS	C	F	D	F	C	F	C	D
HCM 95th-tile Q	0.5	23.6	2.8	30	0.4	76.6	1.1	3.1

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	185	606	42	38	812	51	364	92	47	159
Future Volume (vph)	185	606	42	38	812	51	364	92	47	159
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	21.6	21.6	9.6	21.6	9.6	21.6	9.6	21.6	21.6
Total Split (s)	15.0	65.8	65.8	13.2	64.0	17.0	25.0	16.0	24.0	24.0
Total Split (%)	12.5%	54.8%	54.8%	11.0%	53.3%	14.2%	20.8%	13.3%	20.0%	20.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	9.7	64.8	64.8	7.0	60.1	6.4	22.0	9.8	27.3	27.3
Actuated g/C Ratio	0.08	0.54	0.54	0.06	0.50	0.05	0.18	0.08	0.23	0.23
v/c Ratio	0.69	0.33	0.05	0.38	0.62	0.29	0.86	0.67	0.06	0.34
Control Delay (s/veh)	48.5	22.9	6.3	64.6	22.8	58.2	56.1	74.9	38.7	8.0
Queue Delay	4.5	1.5	0.5	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.0	24.4	6.8	64.6	23.5	58.2	56.1	74.9	38.7	8.0
LOS	D	C	A	E	C	E	E	E	D	A
Approach Delay (s/veh)		29.9			24.9		56.3		33.5	
Approach LOS		C			C		E		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 77 (64%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 34.1	Intersection LOS: C
Intersection Capacity Utilization 71.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 22: Calimesa Bl. & Singleton Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	606	42	38	812	216	51	364	187	92	47	159
Future Volume (veh/h)	185	606	42	38	812	216	51	364	187	92	47	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	197	645	45	40	864	230	54	387	199	98	50	169
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	250	2088	931	56	1516	403	122	394	200	122	732	327
Arrive On Green	0.14	1.00	1.00	0.03	0.54	0.54	0.03	0.17	0.17	0.07	0.20	0.20
Sat Flow, veh/h	3510	3610	1610	1810	2820	750	3510	2318	1176	1810	3610	1610
Grp Volume(v), veh/h	197	645	45	40	553	541	54	300	286	98	50	169
Grp Sat Flow(s),veh/h/ln	1755	1805	1610	1810	1805	1765	1755	1805	1688	1810	1805	1610
Q Serve(g_s), s	6.5	0.0	0.0	2.6	24.5	24.5	1.8	19.9	20.3	6.4	1.3	11.2
Cycle Q Clear(g_c), s	6.5	0.0	0.0	2.6	24.5	24.5	1.8	19.9	20.3	6.4	1.3	11.2
Prop In Lane	1.00		1.00	1.00		0.43	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	250	2088	931	56	971	949	122	307	287	122	732	327
V/C Ratio(X)	0.79	0.31	0.05	0.72	0.57	0.57	0.44	0.98	1.00	0.80	0.07	0.52
Avail Cap(c_a), veh/h	304	2088	931	130	971	949	363	307	287	172	732	327
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.6	0.0	0.0	57.6	18.5	18.5	56.8	49.6	49.8	55.1	38.7	42.6
Incr Delay (d2), s/veh	8.3	0.4	0.1	6.4	2.4	2.5	0.9	46.2	52.1	11.0	0.2	5.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.1	0.0	1.3	10.5	10.2	0.8	12.8	12.7	3.3	0.6	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.9	0.4	0.1	64.0	20.9	21.0	57.7	95.7	101.8	66.2	38.8	48.4
LnGrp LOS	E	A	A	E	C	C	E	F	F	E	D	D
Approach Vol, veh/h		887			1134			640			317	
Approach Delay, s/veh		13.4			22.5			95.3			52.4	
Approach LOS		B			C			F			D	

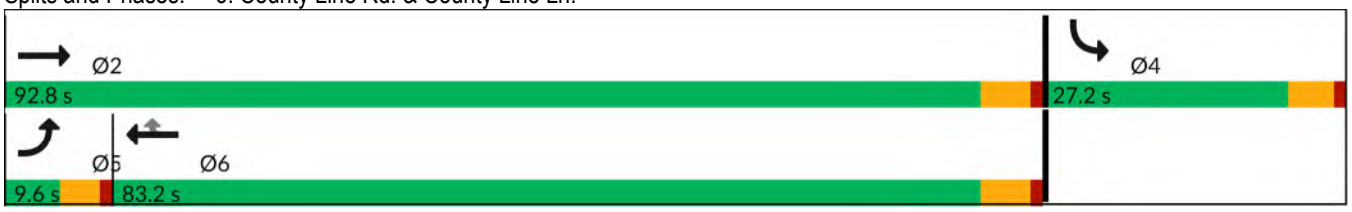
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	74.0	8.8	28.9	13.2	69.1	12.7	25.0
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	8.6	61.2	12.4	19.4	10.4	59.4	11.4	20.4
Max Q Clear Time (g_c+I1), s	4.6	2.0	3.8	13.2	8.5	26.5	8.4	22.3
Green Ext Time (p_c), s	0.0	3.1	0.0	0.2	0.1	5.1	0.0	0.0

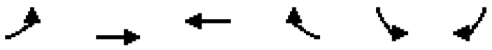
Intersection Summary	
HCM 7th Control Delay, s/veh	38.6
HCM 7th LOS	D

Lane Group	EBT	WBT	WBR	SBL	Ø5
Lane Configurations					
Traffic Volume (vph)	742	1216	113	156	
Future Volume (vph)	742	1216	113	156	
Turn Type	NA	NA	Perm	Prot	
Protected Phases	2	6		4	5
Permitted Phases			6		
Detector Phase	2	6	6	4	
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.4	22.4	22.4	27.2	9.6
Total Split (s)	92.8	83.2	83.2	27.2	9.6
Total Split (%)	77.3%	69.3%	69.3%	22.7%	8%
Yellow Time (s)	4.4	4.4	4.4	4.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4	5.4	5.4	5.2	
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	83.6	83.6	83.6	19.9	
Actuated g/C Ratio	0.73	0.73	0.73	0.17	
v/c Ratio	0.92	1.51	0.14	0.85	
Control Delay (s/veh)	25.4	253.4	3.3	69.1	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	25.4	253.4	3.3	69.1	
LOS	C	F	A	E	
Approach Delay (s/veh)	25.4	232.1		69.1	
Approach LOS	C	F		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 114.1	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.51	
Intersection Signal Delay (s/veh): 151.8	Intersection LOS: F
Intersection Capacity Utilization 81.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 6: County Line Rd. & County Line Ln.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	742	1216	113	156	0
Future Volume (veh/h)	0	742	1216	113	156	0
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.04	1.00	1.00	1.00
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	1900	1976	1976	1900	1900	1900
Adj Flow Rate, veh/h	0	1325	2171	202	0	0
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2	1848	1848	1506	0	0
Arrive On Green	0.00	0.94	0.94	0.94	0.00	0.00
Sat Flow, veh/h	1810	1976	1976	1610	0	0
Grp Volume(v), veh/h	0	1325	2171	202	0	0
Grp Sat Flow(s),veh/h/ln	1810	1976	1976	1610	0	0
Q Serve(g_s), s	0.0	11.0	77.8	0.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.0	77.8	0.8	0.0	0.0
Prop In Lane	1.00			1.00	0.00	0.00
Lane Grp Cap(c), veh/h	2	1848	1848	1506	0	0
V/C Ratio(X)	0.00	0.72	1.17	0.13	0.00	0.00
Avail Cap(c_a), veh/h	109	2076	1848	1506	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.5	2.7	0.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	84.8	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.5	43.5	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	1.6	87.5	0.2	0.0	0.0
LnGrp LOS		A	F	A		
Approach Vol, veh/h		1325	2373		0	
Approach Delay, s/veh		1.6	80.1		0.0	
Approach LOS		A	F			

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		83.2		0.0	0.0	83.2
Change Period (Y+Rc), s		5.4		5.2	4.6	5.4
Max Green Setting (Gmax), s		87.4		22.0	5.0	77.8
Max Q Clear Time (g_c+I1), s		13.0		0.0	0.0	79.8
Green Ext Time (p_c), s		26.0		0.0	0.0	0.0

Intersection Summary		
HCM 7th Control Delay, s/veh	52.0	
HCM 7th LOS	D	

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	811	11	100	1092	14	70
Future Vol, veh/h	811	11	100	1092	14	70
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	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	882	12	109	1187	15	76

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	893	0	1698	447
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	811	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	768	-	85	565
Stage 1	-	-	-	-	367	-
Stage 2	-	-	-	-	403	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	768	-	73	565
Mov Cap-2 Maneuver	-	-	-	-	196	-
Stage 1	-	-	-	-	367	-
Stage 2	-	-	-	-	346	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.88	15.62
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	430	-	-	768	-
HCM Lane V/C Ratio	0.212	-	-	0.142	-
HCM Control Delay (s/veh)	15.6	-	-	10.5	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.8	-	-	0.5	-

Intersection	
Intersection Delay, s/veh	13.7
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	2
Conflicting Circle Lanes	2	2	1	2
Adj Approach Flow, veh/h	937	1022	0	1202
Demand Flow Rate, veh/h	937	1022	0	1202
Vehicles Circulating, veh/h	956	0	1329	1022
Vehicles Exiting, veh/h	655	1329	370	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	15.9	6.0	0.0	18.5
Approach LOS	C	A	-	C

Lane	Left	Right	Bypass	Left	Right	Left	Left	Right	Bypass
Designated Moves	LT	TR	R	LT	TR	R	L	LTR	R
Assumed Moves	LT	TR		LT	TR	R	L	LTR	
RT Channelized			Yield						Yield
Lane Util	0.470	0.530		0.470	0.530	1.000	0.530	0.470	
Follow-Up Headway, s	2.667	2.535	2.535	2.667	2.535	2.609	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.327	4.645	4.328	4.976	4.645	4.328	4.327
A (Intercept)	1350	1420	1420	1350	1420	1380	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	8.499e-4	9.199e-4	8.501e-4	1.02e-3	9.199e-4	8.501e-4	8.499e-4
Entry Flow, veh/h	349	394	194	480	542	0	312	277	613
Cap Entry Lane, veh/h	560	630	1037	1350	1420	356	527	596	814
Entry HV Adj Factor	1.001	0.999	1.000	1.001	0.999	1.000	1.001	0.999	1.000
Flow Entry, veh/h	349	394	194	480	542	0	312	277	613
Cap Entry, veh/h	561	630	1037	1351	1419	356	528	595	814
V/C Ratio	0.623	0.625	0.187	0.356	0.382	0.000	0.592	0.465	0.753
Control Delay, s/veh	19.6	17.9	5.2	5.9	6.0	10.1	19.2	13.5	20.4
LOS	C	C	A	A	A	B	C	B	C
95th %tile Queue, veh	4	4	1	2	2	0	4	2	7

Intersection	
Intersection Delay, s/veh	13.7
Intersection LOS	B

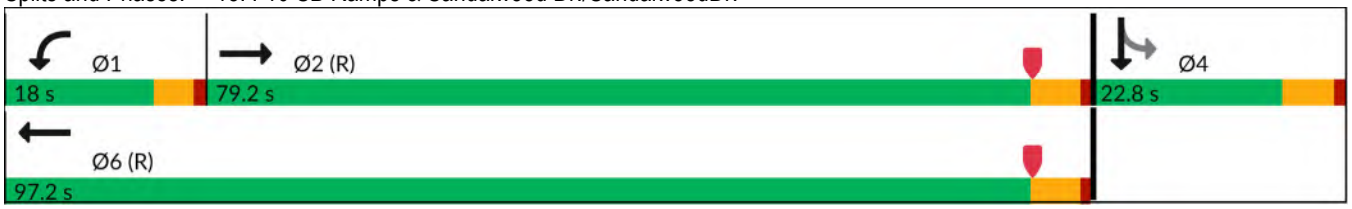
Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1328	1181	615	0
Demand Flow Rate, veh/h	1328	1181	615	0
Vehicles Circulating, veh/h	0	727	1328	1022
Vehicles Exiting, veh/h	1022	1216	0	473
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.4	11.5	31.5	0.0
Approach LOS	A	B	D	-

Lane	Left	Right	Left	Right	Bypass	Left	Right	Left
Designated Moves	LT	TR	LT	TR	R	LT	R	R
Assumed Moves	LT	TR	LT	TR		LT	R	R
RT Channelized					Yield			
Lane Util	0.470	0.530	0.470	0.530		0.416	0.584	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.327	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.499e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	624	704	361	407	413	256	359	0
Cap Entry Lane, veh/h	1350	1420	692	765	950	398	459	596
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	624	704	361	407	413	256	359	0
Cap Entry, veh/h	1350	1420	692	766	950	398	459	596
V/C Ratio	0.462	0.496	0.522	0.532	0.435	0.643	0.782	0.000
Control Delay, s/veh	7.2	7.5	13.4	12.6	8.8	27.2	34.5	6.0
LOS	A	A	B	B	A	D	D	A
95th %tile Queue, veh	3	3	3	3	2	4	7	0

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	2322	1698	398	1385	287	6	884
Future Volume (vph)	2322	1698	398	1385	287	6	884
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	79.2		18.0	97.2	22.8	22.8	
Total Split (%)	66.0%		15.0%	81.0%	19.0%	19.0%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	Min	Min	
Act Effct Green (s)	73.8	120.0	15.7	94.1	14.7	14.7	120.0
Actuated g/C Ratio	0.62	1.00	0.13	0.78	0.12	0.12	1.00
v/c Ratio	0.77	1.11	0.91	0.36	0.74	0.73	0.58
Control Delay (s/veh)	18.9	63.5	69.3	2.3	71.1	70.7	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.9	63.5	69.3	2.3	71.1	70.7	1.5
LOS	B	E	E	A	E	E	A
Approach Delay (s/veh)	37.8			17.2		18.7	
Approach LOS	D			B		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay (s/veh): 29.3	Intersection LOS: C
Intersection Capacity Utilization 77.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2322	1698	398	1385	0	0	0	0	287	6	884
Future Volume (veh/h)	0	2322	1698	398	1385	0	0	0	0	287	6	884
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	2444	0	419	1458	0				306	0	0
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	0	0	0	0	0				0	0	0
Cap, veh/h	0	3389		392	4167	0				374	0	
Arrive On Green	0.00	0.65	0.00	0.22	1.00	0.00				0.10	0.00	0.00
Sat Flow, veh/h	0	5358	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	2444	0	419	1458	0				306	0	0
Grp Sat Flow(s),veh/h/ln	0	1729	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	37.1	0.0	13.4	0.0	0.0				9.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	37.1	0.0	13.4	0.0	0.0				9.9	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3389		392	4167	0				374	0	
V/C Ratio(X)	0.00	0.72		1.07	0.35	0.00				0.82	0.00	
Avail Cap(c_a), veh/h	0	3389		392	4167	0				513	0	
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	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	13.6	0.0	46.6	0.0	0.0				52.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	65.0	0.2	0.0				7.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	13.1	0.0	8.5	0.1	0.0				4.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	15.0	0.0	111.6	0.2	0.0				60.0	0.0	0.0
LnGrp LOS		B		F	A					E		
Approach Vol, veh/h		2444			1877						306	
Approach Delay, s/veh		15.0			25.1						60.0	
Approach LOS		B			C						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	18.0	83.8		18.2		101.8
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	13.4	73.8		17.0		91.8
Max Q Clear Time (g_c+I1), s	15.4	39.1		11.9		2.0
Green Ext Time (p_c), s	0.0	26.0		0.5		15.5

Intersection Summary		
HCM 7th Control Delay, s/veh		22.1
HCM 7th LOS		C

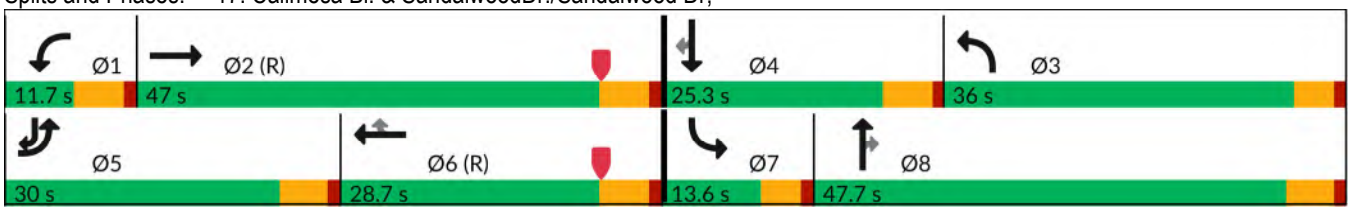
Notes

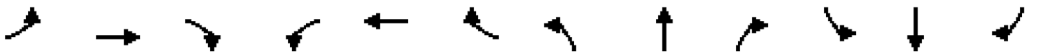
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	617	245	1740	34	236	28	1004	442	237	37	502	681
Future Volume (vph)	617	245	1740	34	236	28	1004	442	237	37	502	681
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.4	30.4		10.4	28.0	28.0	10.0	27.4	27.4	10.0	22.4	10.4
Total Split (s)	30.0	47.0		11.7	28.7	28.7	36.0	47.7	47.7	13.6	25.3	30.0
Total Split (%)	25.0%	39.2%		9.8%	23.9%	23.9%	30.0%	39.8%	39.8%	11.3%	21.1%	25.0%
Yellow Time (s)	4.4	4.4		4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4		5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	24.6	46.3	120.0	5.9	23.3	23.3	31.9	48.4	48.4	6.9	19.4	44.0
Actuated g/C Ratio	0.21	0.39	1.00	0.05	0.19	0.19	0.27	0.40	0.40	0.06	0.16	0.37
v/c Ratio	0.78	0.18	0.93	0.39	0.34	0.05	0.98	0.30	0.28	0.36	0.86	0.96
Control Delay (s/veh)	60.5	35.3	24.9	67.4	43.2	0.2	73.3	30.4	7.8	62.8	63.9	42.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.5	35.3	24.9	67.4	43.2	0.2	73.3	30.4	7.8	62.8	63.9	42.8
LOS	E	D	C	E	D	A	E	C	A	E	E	D
Approach Delay (s/veh)		34.3			42.0			52.8			52.1	
Approach LOS		C			D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74.6 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay (s/veh): 43.8	Intersection LOS: D
Intersection Capacity Utilization 102.1%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	617	245	1740	34	236	28	1004	442	237	37	502	681
Future Volume (veh/h)	617	245	1740	34	236	28	1004	442	237	37	502	681
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	649	258	0	36	248	20	1057	465	116	39	528	330
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	704	1360		75	807	336	985	1508	638	55	604	556
Arrive On Green	0.31	0.60	0.00	0.04	0.21	0.21	0.26	0.40	0.40	0.03	0.16	0.16
Sat Flow, veh/h	3764	3800	1675	1810	3800	1583	3764	3800	1607	1810	3800	1607
Grp Volume(v), veh/h	649	258	0	36	248	20	1057	465	116	39	528	330
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1583	1882	1900	1607	1810	1900	1607
Q Serve(g_s), s	20.0	3.7	0.0	2.3	6.6	1.2	31.4	10.1	5.6	2.6	16.3	8.0
Cycle Q Clear(g_c), s	20.0	3.7	0.0	2.3	6.6	1.2	31.4	10.1	5.6	2.6	16.3	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	704	1360		75	807	336	985	1508	638	55	604	556
V/C Ratio(X)	0.92	0.19		0.48	0.31	0.06	1.07	0.31	0.18	0.71	0.87	0.59
Avail Cap(c_a), veh/h	772	1360		95	807	336	985	1508	638	136	630	568
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	16.2	0.0	56.2	39.8	37.7	44.3	24.9	23.5	57.7	49.3	12.1
Incr Delay (d2), s/veh	15.0	0.3	0.0	1.7	1.0	0.3	48.6	0.1	0.1	6.2	12.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	1.6	0.0	1.1	3.1	0.5	20.8	4.5	2.1	1.2	8.6	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.4	16.6	0.0	58.0	40.8	38.0	92.9	25.0	23.6	63.8	62.0	13.7
LnGrp LOS	E	B		E	D	D	F	C	C	E	E	B
Approach Vol, veh/h		907			304			1638			897	
Approach Delay, s/veh		44.4			42.6			68.7			44.3	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	48.3	36.8	24.5	27.8	30.9	8.2	53.0
Change Period (Y+Rc), s	5.4	5.4	5.4	* 5.4	5.4	5.4	4.6	5.4
Max Green Setting (Gmax), s	6.3	41.6	31.4	* 20	24.6	23.3	9.0	42.3
Max Q Clear Time (g_c+I1), s	4.3	5.7	33.4	18.3	22.0	8.6	4.6	12.1
Green Ext Time (p_c), s	0.0	1.6	0.0	0.8	0.5	1.2	0.0	3.4

Intersection Summary	
HCM 7th Control Delay, s/veh	54.9
HCM 7th LOS	D

Notes

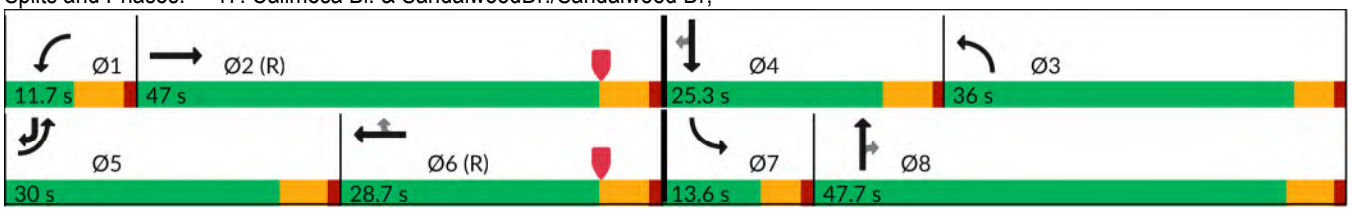
User approved pedestrian interval to be less than phase max green.

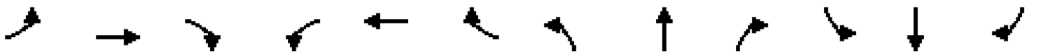
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	617	245	1740	34	236	28	1004	442	237	37	502	681
Future Volume (vph)	617	245	1740	34	236	28	1004	442	237	37	502	681
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			Free			6			8			4
Detector Phase	5	2		1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.4	30.4		10.4	28.0	28.0	10.0	27.4	27.4	10.0	22.4	10.4
Total Split (s)	30.0	47.0		11.7	28.7	28.7	36.0	47.7	47.7	13.6	25.3	30.0
Total Split (%)	25.0%	39.2%		9.8%	23.9%	23.9%	30.0%	39.8%	39.8%	11.3%	21.1%	25.0%
Yellow Time (s)	4.4	4.4		4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4		5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min	Min	None	Min	None
Act Effct Green (s)	24.6	46.3	120.0	5.9	23.3	23.3	31.9	48.4	48.4	6.9	19.4	44.0
Actuated g/C Ratio	0.21	0.39	1.00	0.05	0.19	0.19	0.27	0.40	0.40	0.06	0.16	0.37
v/c Ratio	0.78	0.35	0.93	0.39	0.34	0.05	0.98	0.30	0.28	0.36	0.86	0.96
Control Delay (s/veh)	60.5	38.6	24.9	67.4	43.2	0.2	73.3	30.4	7.8	62.8	63.9	42.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.5	38.6	24.9	67.4	43.2	0.2	73.3	30.4	7.8	62.8	63.9	42.8
LOS	E	D	C	E	D	A	E	C	A	E	E	D
Approach Delay (s/veh)		34.6			42.0			52.8			52.1	
Approach LOS		C			D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74.6 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay (s/veh): 43.9	Intersection LOS: D
Intersection Capacity Utilization 102.1%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	617	245	1740	34	236	28	1004	442	237	37	502	681
Future Volume (veh/h)	617	245	1740	34	236	28	1004	442	237	37	502	681
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	649	258	0	36	248	20	1057	465	116	39	528	330
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	704	680		75	807	336	985	1508	637	55	604	556
Arrive On Green	0.31	0.60	0.00	0.04	0.21	0.21	0.26	0.40	0.40	0.03	0.16	0.16
Sat Flow, veh/h	3764	1900	1675	1810	3800	1583	3764	3800	1604	1810	3800	1607
Grp Volume(v), veh/h	649	258	0	36	248	20	1057	465	116	39	528	330
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1583	1882	1900	1604	1810	1900	1607
Q Serve(g_s), s	20.0	8.5	0.0	2.3	6.6	1.2	31.4	10.1	5.6	2.6	16.3	8.0
Cycle Q Clear(g_c), s	20.0	8.5	0.0	2.3	6.6	1.2	31.4	10.1	5.6	2.6	16.3	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	704	680		75	807	336	985	1508	637	55	604	556
V/C Ratio(X)	0.92	0.38		0.48	0.31	0.06	1.07	0.31	0.18	0.71	0.87	0.59
Avail Cap(c_a), veh/h	772	680		95	807	336	985	1508	637	136	630	568
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	17.2	0.0	56.2	39.8	37.7	44.3	24.9	23.5	57.7	49.3	12.1
Incr Delay (d2), s/veh	15.0	1.6	0.0	1.7	1.0	0.3	48.6	0.1	0.1	6.2	12.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	3.5	0.0	1.1	3.1	0.5	20.8	4.5	2.1	1.2	8.6	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.4	18.8	0.0	58.0	40.8	38.0	92.9	25.0	23.6	63.8	62.0	13.7
LnGrp LOS	E	B		E	D	D	F	C	C	E	E	B
Approach Vol, veh/h		907			304			1638			897	
Approach Delay, s/veh		45.0			42.6			68.7			44.3	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	48.3	36.8	24.5	27.8	30.9	8.2	53.0
Change Period (Y+Rc), s	5.4	5.4	5.4	* 5.4	5.4	5.4	4.6	5.4
Max Green Setting (Gmax), s	6.3	41.6	31.4	* 20	24.6	23.3	9.0	42.3
Max Q Clear Time (g_c+I1), s	4.3	10.5	33.4	18.3	22.0	8.6	4.6	12.1
Green Ext Time (p_c), s	0.0	1.4	0.0	0.8	0.5	1.2	0.0	3.4

Intersection Summary	
HCM 7th Control Delay, s/veh	55.0
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	365	1910	52	391	1292
Future Volume (vph)	365	1910	52	391	1292
Turn Type	NA	Free	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		Free			
Detector Phase	4		3	8	2
Switch Phase					
Minimum Initial (s)	10.0		5.0	10.0	10.0
Minimum Split (s)	22.4		9.6	22.4	22.8
Total Split (s)	30.0		16.0	46.0	74.0
Total Split (%)	25.0%		13.3%	38.3%	61.7%
Yellow Time (s)	4.4		3.6	4.4	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.4		4.6	5.4	5.8
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None		None	None	C-Max
Act Effct Green (s)	17.8	120.0	7.9	28.3	80.5
Actuated g/C Ratio	0.15	1.00	0.07	0.24	0.67
v/c Ratio	0.70	1.04	0.44	0.45	0.52
Control Delay (s/veh)	48.5	38.7	63.9	39.6	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.5	38.7	63.9	39.6	12.0
LOS	D	D	E	D	B
Approach Delay (s/veh)	40.3			42.5	12.0
Approach LOS	D			D	B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay (s/veh): 31.2	Intersection LOS: C
Intersection Capacity Utilization 65.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	365	1910	52	391	1292	30
Future Volume (veh/h)	365	1910	52	391	1292	30
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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	1900	1900	1900	1900	1976	1900
Adj Flow Rate, veh/h	376	0	54	403	1313	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	473		70	791	2629	1125
Arrive On Green	0.13	0.00	0.04	0.21	0.70	0.00
Sat Flow, veh/h	3705	1610	1810	3800	3764	1610
Grp Volume(v), veh/h	376	0	54	403	1313	0
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1900	1882	1610
Q Serve(g_s), s	12.1	0.0	3.5	11.3	19.4	0.0
Cycle Q Clear(g_c), s	12.1	0.0	3.5	11.3	19.4	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	473		70	791	2629	1125
V/C Ratio(X)	0.79		0.77	0.51	0.50	0.00
Avail Cap(c_a), veh/h	740		172	1286	2629	1125
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.29	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.6	0.0	57.1	42.1	8.4	0.0
Incr Delay (d2), s/veh	1.0	0.0	6.5	0.5	0.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	1.7	5.3	6.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.5	0.0	63.7	42.6	9.1	0.0
LnGrp LOS	D		E	D	A	
Approach Vol, veh/h	376			457	1313	
Approach Delay, s/veh	51.5			45.1	9.1	
Approach LOS	D			D	A	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	89.6	9.2	21.1		30.4
Change Period (Y+Rc), s	5.8	4.6	5.4		5.4
Max Green Setting (Gmax), s	68.2	11.4	24.6		40.6
Max Q Clear Time (g_c+I1), s	21.4	5.5	14.1		13.3
Green Ext Time (p_c), s	6.2	0.0	1.6		2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	24.2
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	500
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	137	1001	72	79	737	120	0	88	60	212	140	223
Future Vol, veh/h	137	1001	72	79	737	120	0	88	60	212	140	223
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	151	1100	79	87	810	132	0	97	66	233	154	245
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	741.1	539.3	26	50.8
HCM LOS	F	F	D	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	100%	59%	0%	93%	0%	86%	0%	39%
Vol Right, %	0%	41%	0%	7%	0%	14%	0%	61%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	148	137	1073	79	857	212	363
LT Vol	0	0	137	0	79	0	212	0
Through Vol	0	88	0	1001	0	737	0	140
RT Vol	0	60	0	72	0	120	0	223
Lane Flow Rate	0	163	151	1179	87	942	233	399
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0	0.427	0.379	2.788	0.22	2.234	0.589	0.905
Departure Headway (Hd)	13.857	13.545	10.821	10.239	11.324	10.686	12.031	11.016
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	268	334	366	319	348	303	331
Service Time	11.557	11.245	8.521	7.939	9.024	8.386	9.731	8.716
HCM Lane V/C Ratio	0	0.608	0.452	3.221	0.273	2.707	0.769	1.205
HCM Control Delay, s/veh	16.6	26	20	833.2	17.2	587.4	30.6	62.6
HCM Lane LOS	N	D	C	F	C	F	D	F
HCM 95th-tile Q	0	2	1.7	83	0.8	56.9	3.5	8.8

Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBL	SBT	SBR	Ø3
Lane Configurations										
Traffic Volume (vph)	137	1001	72	79	737	88	212	140	223	
Future Volume (vph)	137	1001	72	79	737	88	212	140	223	
Turn Type	Prot	NA	Perm	Prot	NA	NA	Prot	NA	Perm	
Protected Phases	5	2		1	6	8	7	4		3
Permitted Phases			2						4	
Detector Phase	5	2	2	1	6	8	7	4	4	
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	21.6	21.6	9.6	21.6	21.6	9.6	21.6	21.6	9.6
Total Split (s)	13.8	62.4	62.4	12.0	60.6	21.6	24.0	25.8	25.8	19.8
Total Split (%)	11.5%	52.0%	52.0%	10.0%	50.5%	18.0%	20.0%	21.5%	21.5%	17%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	Max	None	Max	Max	None
Act Effct Green (s)	8.5	57.9	57.9	7.3	56.7	18.5	17.9	41.0	41.0	
Actuated g/C Ratio	0.07	0.48	0.48	0.06	0.47	0.15	0.15	0.34	0.34	
v/c Ratio	0.61	0.63	0.10	0.80	0.56	0.28	0.87	0.12	0.34	
Control Delay (s/veh)	61.2	19.3	3.3	99.6	23.9	28.5	79.5	27.5	4.8	
Queue Delay	1.1	8.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	62.2	27.4	4.4	99.6	23.9	28.5	79.5	27.5	4.8	
LOS	E	C	A	F	C	C	E	C	A	
Approach Delay (s/veh)		29.9			30.3	28.5		37.9		
Approach LOS		C			C	C		D		

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay (s/veh): 31.6	Intersection LOS: C
Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 22: Calimesa Bl. & Singleton Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	1001	72	79	737	120	0	88	60	212	140	223
Future Volume (veh/h)	137	1001	72	79	737	120	0	88	60	212	140	223
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	151	1100	79	87	810	132	0	97	66	233	154	245
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	205	1807	806	110	1563	255	3	301	190	260	1169	521
Arrive On Green	0.12	1.00	1.00	0.06	0.50	0.50	0.00	0.14	0.14	0.14	0.32	0.32
Sat Flow, veh/h	3510	3610	1610	1810	3107	506	3510	2126	1338	1810	3610	1610
Grp Volume(v), veh/h	151	1100	79	87	470	472	0	81	82	233	154	245
Grp Sat Flow(s),veh/h/ln	1755	1805	1610	1810	1805	1809	1755	1805	1659	1810	1805	1610
Q Serve(g_s), s	5.0	0.0	0.0	5.7	21.0	21.0	0.0	4.9	5.3	15.2	3.6	14.6
Cycle Q Clear(g_c), s	5.0	0.0	0.0	5.7	21.0	21.0	0.0	4.9	5.3	15.2	3.6	14.6
Prop In Lane	1.00		1.00	1.00		0.28	1.00		0.81	1.00		1.00
Lane Grp Cap(c), veh/h	205	1807	806	110	908	910	3	256	235	260	1169	521
V/C Ratio(X)	0.74	0.61	0.10	0.79	0.52	0.52	0.00	0.32	0.35	0.90	0.13	0.47
Avail Cap(c_a), veh/h	269	1807	806	112	908	910	445	256	235	293	1169	521
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.1	0.0	0.0	55.6	20.1	20.1	0.0	46.3	46.5	50.5	28.7	32.4
Incr Delay (d2), s/veh	4.2	1.4	0.2	28.7	2.1	2.1	0.0	3.2	4.0	24.4	0.2	3.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.4	0.0	3.5	9.1	9.1	0.0	2.4	2.5	8.6	1.6	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.4	1.4	0.2	84.3	22.2	22.2	0.0	49.5	50.5	74.9	28.9	35.4
LnGrp LOS	E	A	A	F	C	C		D	D	E	C	D
Approach Vol, veh/h		1330			1029			163			632	
Approach Delay, s/veh		7.6			27.4			50.0			48.4	
Approach LOS		A			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	64.7	0.0	43.5	11.6	64.9	21.9	21.6
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	7.4	57.8	15.2	21.2	9.2	56.0	19.4	17.0
Max Q Clear Time (g_c+I1), s	7.7	2.0	0.0	16.6	7.0	23.0	17.2	7.3
Green Ext Time (p_c), s	0.0	6.3	0.0	0.5	0.1	4.1	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	24.4
HCM 7th LOS	C

APPENDIX 10.1: HORIZON YEAR (2045) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	506.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	103	701	394	255	252	7
Future Vol, veh/h	103	701	394	255	252	7
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	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	141	960	540	349	345	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	889	0	-	0	1957	714
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	1242	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	771	-	-	-	~ 71	434
Stage 1	-	-	-	-	489	-
Stage 2	-	-	-	-	~ 275	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	771	-	-	-	~ 43	434
Mov Cap-2 Maneuver	-	-	-	-	~ 43	-
Stage 1	-	-	-	-	~ 297	-
Stage 2	-	-	-	-	~ 275	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1.37	0	$ 3341.62
HCM LOS			F

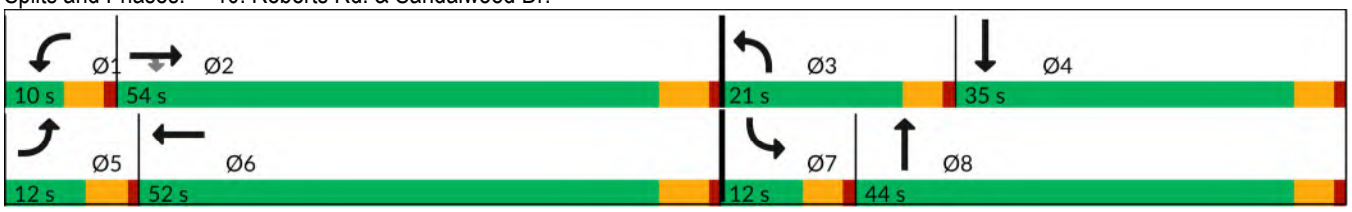
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	231	-	-	-	44
HCM Lane V/C Ratio	0.183	-	-	-	8.032
HCM Ctrl Dly (s/v)	10.7	0	-	-	$ 3341.6
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.7	-	-	-	42

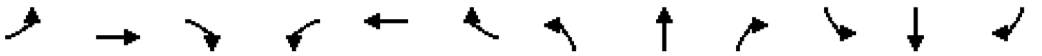
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	39	976	248	42	944	100	46	54	39	35
Future Volume (vph)	39	976	248	42	944	100	46	54	39	35
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Free	Prot	NA
Protected Phases	5	2		1	6	3	8		7	4
Permitted Phases			2					Free		
Detector Phase	5	2	2	1	6	3	8		7	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0		5.0	10.0
Minimum Split (s)	9.6	27.4	27.4	9.6	27.4	9.6	31.6		9.6	31.6
Total Split (s)	12.0	54.0	54.0	10.0	52.0	21.0	44.0		12.0	35.0
Total Split (%)	10.0%	45.0%	45.0%	8.3%	43.3%	17.5%	36.7%		10.0%	29.2%
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4	3.6	3.6		3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4	4.6	4.6		4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min		None	None
Act Effct Green (s)	7.0	31.2	31.2	6.1	30.4	12.1	19.3	73.1	7.0	13.9
Actuated g/C Ratio	0.10	0.43	0.43	0.08	0.42	0.17	0.26	1.00	0.10	0.19
v/c Ratio	0.25	0.65	0.33	0.15	0.66	0.37	0.05	0.03	0.25	0.11
Control Delay (s/veh)	44.7	20.7	5.3	43.0	21.6	39.9	26.6	0.0	44.7	19.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.7	20.7	5.3	43.0	21.6	39.9	26.6	0.0	44.7	19.6
LOS	D	C	A	D	C	D	C	A	D	B
Approach Delay (s/veh)		18.4			22.5		26.1			28.7
Approach LOS		B			C		C			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 73.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay (s/veh): 21.0	Intersection LOS: C
Intersection Capacity Utilization 53.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	976	248	42	944	15	100	46	54	39	35	33
Future Volume (veh/h)	39	976	248	42	944	15	100	46	54	39	35	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	42	1061	227	46	1026	16	109	50	0	42	38	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	75	1564	663	159	1546	24	165	721		75	280	233
Arrive On Green	0.04	0.41	0.41	0.04	0.41	0.41	0.09	0.20	0.00	0.04	0.15	0.15
Sat Flow, veh/h	1810	3800	1610	3619	3731	58	1810	3610	1610	1810	1869	1556
Grp Volume(v), veh/h	42	1061	227	46	522	520	109	50	0	42	37	37
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1890	1810	1805	1610	1810	1805	1620
Q Serve(g_s), s	1.4	14.4	6.1	0.8	14.0	14.0	3.7	0.7	0.0	1.4	1.1	1.3
Cycle Q Clear(g_c), s	1.4	14.4	6.1	0.8	14.0	14.0	3.7	0.7	0.0	1.4	1.1	1.3
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		0.96
Lane Grp Cap(c), veh/h	75	1564	663	159	787	783	165	721		75	270	242
V/C Ratio(X)	0.56	0.68	0.34	0.29	0.66	0.66	0.66	0.07		0.56	0.14	0.15
Avail Cap(c_a), veh/h	212	2921	1238	309	1400	1393	469	2249		212	868	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	15.2	12.7	29.3	15.0	15.0	27.8	20.5	0.0	29.8	23.3	23.4
Incr Delay (d2), s/veh	2.5	0.5	0.3	0.4	1.0	1.0	1.7	0.0	0.0	2.5	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	5.3	2.0	0.3	5.2	5.2	1.6	0.3	0.0	0.7	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.2	15.7	13.0	29.6	15.9	15.9	29.5	20.6	0.0	32.2	23.6	23.7
LnGrp LOS	C	B	B	C	B	B	C	C		C	C	C
Approach Vol, veh/h		1330			1088			159			116	
Approach Delay, s/veh		15.8			16.5			26.7			26.7	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	31.4	10.4	14.1	7.2	31.6	7.2	17.2
Change Period (Y+Rc), s	4.6	5.4	4.6	4.6	4.6	5.4	4.6	4.6
Max Green Setting (Gmax), s	5.4	48.6	16.4	30.4	7.4	46.6	7.4	39.4
Max Q Clear Time (g_c+I1), s	2.8	16.4	5.7	3.3	3.4	16.0	3.4	2.7
Green Ext Time (p_c), s	0.0	9.6	0.1	0.4	0.0	7.3	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	17.2
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	23.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	937	16	125	626	22	148
Future Vol, veh/h	937	16	125	626	22	148
Conflicting Peds, #/hr	0	2	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1077	18	144	720	25	170

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1097	0	2095	1088
Stage 1	-	-	-	-	1088	-
Stage 2	-	-	-	-	1007	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	644	-	58	265
Stage 1	-	-	-	-	326	-
Stage 2	-	-	-	-	356	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	642	-	36	264
Mov Cap-2 Maneuver	-	-	-	-	36	-
Stage 1	-	-	-	-	325	-
Stage 2	-	-	-	-	223	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.03	249.74
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	146	-	-	300	-
HCM Lane V/C Ratio	1.339	-	-	0.224	-
HCM Control Delay (s/veh)	249.7	-	-	12.2	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	12.2	-	-	0.9	-

Intersection	
Int Delay, s/veh	165.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	834	251	475	437	0	0	0	0	536	5	316
Future Vol, veh/h	0	834	251	475	437	0	0	0	0	536	5	316
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	981	295	559	514	0	0	0	0	631	6	372

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1277	0	0	2613	2909	514
Stage 1	-	-	-	-	-	-	1632	1632	-
Stage 2	-	-	-	-	-	-	981	1277	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	~ 550	-	0	~ 27	16	564
Stage 1	0	-	-	-	-	0	~ 177	161	-
Stage 2	0	-	-	-	-	0	~ 366	239	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	~ 550	-	-	0	0	564
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 237	0	-
Stage 1	-	-	-	-	-	-	~ 177	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	36.37	$ 513.61
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	~ 550	-	237	564
HCM Lane V/C Ratio	-	-	1.016	-	2.681	0.659
HCM Control Delay (s/veh)	-	-	69.8	-	$ 800.3	22.8
HCM Lane LOS	-	-	F	-	F	C
HCM 95th %tile Q(veh)	-	-	15	-	54.3	4.8

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

Intersection	
Int Delay, s/veh	75.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	679	690	0	0	664	388	248	0	97	0	0	0
Future Vol, veh/h	679	690	0	0	664	388	248	0	97	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	730	742	0	0	714	417	267	0	104	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1131	0	-	-	-	0	2916	3333	742
Stage 1	-	-	-	-	-	-	2202	2202	-
Stage 2	-	-	-	-	-	-	714	1131	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	~ 625	-	0	0	-	-	~ 17	8	419
Stage 1	-	-	0	0	-	-	~ 92	83	-
Stage 2	-	-	0	0	-	-	489	281	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	~ 625	-	-	-	-	-	0	0	419
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 135	0	-
Stage 1	-	-	-	-	-	-	~ 92	0	-
Stage 2	-	-	-	-	-	-	489	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v57.23		0	$ 377.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	135	419	~ 625	-	-	-
HCM Lane V/C Ratio	1.973	0.249	1.168	-	-	-
HCM Control Delay (s/veh)	$ 518.3	16.4	115.4	-	-	-
HCM Lane LOS	F	C	F	-	-	-
HCM 95th %tile Q(veh)	21.2	1	24.4	-	-	-

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

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1069	989	103	0	12
Future Vol, veh/h	0	1069	989	103	0	12
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	0	0	0	0	0
Mvmt Flow	0	1125	1041	108	0	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	575
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	*791
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		0
Mov Cap-1 Maneuver	-	-	-	-	-	*791
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	9.62
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	791
HCM Lane V/C Ratio	-	-	-	0.016
HCM Control Delay (s/veh)	-	-	-	9.6
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

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

Intersection	
Intersection Delay, s/veh	620.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	603	467	268	833	0	0	0	0	205	7	258
Future Vol, veh/h	0	603	467	268	833	0	0	0	0	205	7	258
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	744	577	331	1028	0	0	0	0	253	9	319
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

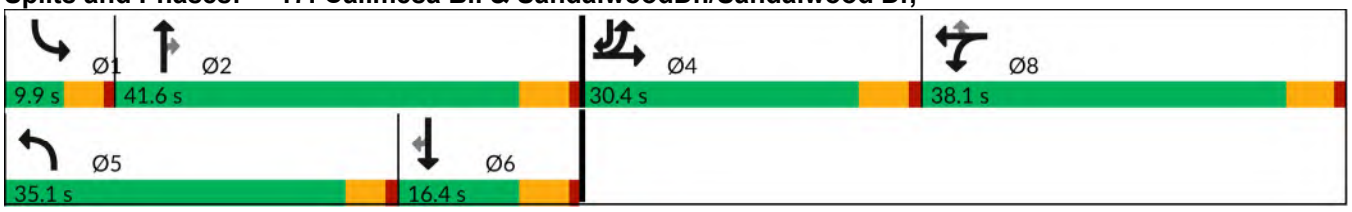
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	689.3	773.9	102.1
HCM LOS	F	F	F

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	24%	44%
Vol Thru, %	56%	76%	1%
Vol Right, %	44%	0%	55%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	1070	1101	470
LT Vol	0	268	205
Through Vol	603	833	7
RT Vol	467	0	258
Lane Flow Rate	1321	1359	580
Geometry Grp	1	1	1
Degree of Util (X)	2.471	2.66	1.089
Departure Headway (Hd)	9.222	9.305	9.166
Convergence, Y/N	Yes	Yes	Yes
Cap	410	408	400
Service Time	7.222	7.305	7.166
HCM Lane V/C Ratio	3.222	3.331	1.45
HCM Control Delay, s/veh	689.3	773.9	102.1
HCM Lane LOS	F	F	F
HCM 95th-tile Q	76.5	84.8	15

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	323	402	190	509	80	444	967	207	28	253
Future Volume (vph)	323	402	190	509	80	444	967	207	28	253
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	8	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	4	4	8	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	24.7	24.7	32.7	32.7	32.7	30.5	40.2	40.2	5.2	11.0
Actuated g/C Ratio	0.21	0.21	0.27	0.27	0.27	0.25	0.34	0.34	0.04	0.09
v/c Ratio	0.89	0.87	0.44	1.12	0.17	1.10	0.91	0.37	0.41	1.66
Control Delay (s/veh)	74.2	59.4	39.4	115.8	0.9	113.9	50.6	13.0	71.4	351.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	74.2	59.4	39.4	115.8	0.9	113.9	50.6	13.0	71.4	351.5
LOS	E	E	D	F	A	F	D	B	E	F
Approach Delay (s/veh)		64.2		85.4			63.2			151.7
Approach LOS		E		F			E			F

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 119.7		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 1.66		
Intersection Signal Delay (s/veh): 83.7	Intersection LOS: F	
Intersection Capacity Utilization 97.5%	ICU Level of Service F	
Analysis Period (min) 15		

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations										
Traffic Volume (veh/h)	323	402	83	190	509	80	444	967	207	28
Future Volume (veh/h)	323	402	83	190	509	80	444	967	207	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	300	551	76	216	578	81	505	1099	205	32
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	352	636	87	502	527	440	468	1171	521	50
Arrive On Green	0.19	0.19	0.19	0.28	0.28	0.28	0.26	0.32	0.32	0.03
Sat Flow, veh/h	1810	3270	450	1810	1900	1588	1810	3610	1607	1810
Grp Volume(v), veh/h	300	319	308	216	578	81	505	1099	205	32
Grp Sat Flow(s),veh/h/ln	1810	1900	1819	1810	1900	1588	1810	1805	1607	1810
Q Serve(g_s), s	18.9	19.2	19.3	11.6	32.7	4.6	30.5	34.9	11.7	2.1
Cycle Q Clear(g_c), s	18.9	19.2	19.3	11.6	32.7	4.6	30.5	34.9	11.7	2.1
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	352	370	354	502	527	440	468	1171	521	50
V/C Ratio(X)	0.85	0.86	0.87	0.43	1.10	0.18	1.08	0.94	0.39	0.64
Avail Cap(c_a), veh/h	384	403	386	502	527	440	468	1171	521	81
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.9	46.0	46.0	35.0	42.6	32.5	43.7	38.7	30.9	56.8
Incr Delay (d2), s/veh	15.7	16.5	17.7	0.6	68.4	0.2	64.6	14.1	0.5	5.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	10.5	10.3	5.1	24.8	1.8	21.6	17.1	4.5	1.0
Unsig. Movement Delay, s/veh										
LnGrp Delay(d), s/veh	61.5	62.5	63.7	35.6	111.1	32.7	108.3	52.8	31.3	61.8
LnGrp LOS	E	E	E	D	F	C	F	D	C	E
Approach Vol, veh/h		927			875			1809		
Approach Delay, s/veh		62.6			85.2			65.9		
Approach LOS		E			F			E		

Timer - Assigned Phs	1	2		4	5	6		8		
Phs Duration (G+Y+Rc), s	7.8	43.7		28.4	35.1	16.4		38.1		
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4		
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7		
Max Q Clear Time (g_c+I1), s	4.1	36.9		21.3	32.5	13.0		34.7		
Green Ext Time (p_c), s	0.0	0.0		1.6	0.0	0.0		0.0		

Intersection Summary		
HCM 7th Control Delay, s/veh	87.0	
HCM 7th LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	667.6
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	407	119	237	1195	423	104
Future Vol, veh/h	407	119	237	1195	423	104
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	479	140	279	1406	498	122
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	138.9	1052.7	148.7
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	80%	0%	17%
Vol Thru, %	0%	77%	83%
Vol Right, %	20%	23%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	527	526	1432
LT Vol	423	0	237
Through Vol	0	407	1195
RT Vol	104	119	0
Lane Flow Rate	620	619	1685
Geometry Grp	1	1	1
Degree of Util (X)	1.212	1.179	3.29
Departure Headway (Hd)	10.021	10.586	7.916
Convergence, Y/N	Yes	Yes	Yes
Cap	366	347	472
Service Time	8.021	8.586	5.916
HCM Lane V/C Ratio	1.694	1.784	3.57
HCM Control Delay, s/veh	148.7	138.9	1052.7
HCM Lane LOS	F	F	F
HCM 95th-tile Q	18.4	16.6	134.4

Intersection	
Intersection Delay, s/veh	1310.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	76	449	118	261	523	309	419	452	371	331	570	158
Future Vol, veh/h	76	449	118	261	523	309	419	452	371	331	570	158
Peak Hour Factor	0.92	0.92	0.92	0.71	0.92	0.71	0.92	0.71	0.71	0.71	0.71	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	83	488	128	368	568	435	455	637	523	466	803	172
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	594.4	1281.6	1572.3	1392.4
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	34%	12%	24%	31%
Vol Thru, %	36%	70%	48%	54%
Vol Right, %	30%	18%	28%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1242	643	1093	1059
LT Vol	419	76	261	331
Through Vol	452	449	523	570
RT Vol	371	118	309	158
Lane Flow Rate	1615	699	1371	1441
Geometry Grp	1	1	1	1
Degree of Util (X)	4.254	1.846	3.609	3.83
Departure Headway (Hd)	46.535	80.252	45.124	50.68
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	97	56	96	86
Service Time	44.535	78.252	43.124	48.68
HCM Lane V/C Ratio	16.649	12.482	14.281	16.756
HCM Control Delay, s/veh	1572.3	594.4	1281.6	1392.4
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	35	8.4	29.7	28.7

Intersection	
Int Delay, s/veh	424.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	704	447	670	683	0	0	0	0	735	0	410
Future Vol, veh/h	0	704	447	670	683	0	0	0	0	735	0	410
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	838	532	798	813	0	0	0	0	875	0	488

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1370	0	0	3246	3779	813
Stage 1	-	-	-	-	-	-	2408	2408	-
Stage 2	-	-	-	-	-	-	838	1370	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	~ 507	-	0	~ 11	4	~ 381
Stage 1	0	-	-	-	-	0	~ 72	65	-
Stage 2	0	-	-	-	-	0	~ 428	216	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	~ 507	-	-	0	0	~ 381
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	~ 72	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	142.46	$ 1185.32
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 278	-	381
HCM Lane V/C Ratio	-	-	1.572	-	3.573
HCM Control Delay (s/veh)	-	-	287.7	$	1185.3
HCM Lane LOS	-	-	F	A	F
HCM 95th %tile Q(veh)	-	-	43.2	-	126.7

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

Intersection	
Int Delay, s/veh	239.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	411	1028	0	0	1044	983	309	0	431	0	0	0
Future Vol, veh/h	411	1028	0	0	1044	983	309	0	431	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	457	1142	0	0	1160	1092	343	0	479	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	2252	0	-	-	-	0	3216	4308	1142
Stage 1	-	-	-	-	-	-	2056	2056	-
Stage 2	-	-	-	-	-	-	1160	2252	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	~ 232	-	0	0	-	-	~ 11	2	~ 246
Stage 1	-	-	0	0	-	-	~ 109	99	-
Stage 2	-	-	0	0	-	-	~ 301	79	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	~ 232	-	-	-	-	-	0	0	~ 246
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	~ 109	0	-
Stage 2	-	-	-	-	-	-	~ 301	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	39.04	0	$ 1093.38
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	246	~ 85	-	-	-
HCM Lane V/C Ratio	3.341	1.971	-	-	-
HCM Control Delay (s/veh)	$ 1093.4	$ 486.8	0	-	-
HCM Lane LOS	F	F	A	-	-
HCM 95th %tile Q(veh)	76.1	33.3	-	-	-

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

Intersection	
Intersection Delay, s/veh	1259.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	188	732	539	65	1177	236	649	323	193	88	57	200
Future Vol, veh/h	188	732	539	65	1177	236	649	323	193	88	57	200
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	200	779	573	69	1252	251	690	344	205	94	61	213
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	1426	1469.7	1086.4	241.9
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	56%	13%	4%	26%
Vol Thru, %	28%	50%	80%	17%
Vol Right, %	17%	37%	16%	58%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1165	1459	1478	345
LT Vol	649	188	65	88
Through Vol	323	732	1177	57
RT Vol	193	539	236	200
Lane Flow Rate	1239	1552	1572	367
Geometry Grp	1	1	1	1
Degree of Util (X)	3.262	3.995	4.095	0.948
Departure Headway (Hd)	27.413	32.827	32.386	73.349
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	149	140	142	55
Service Time	25.413	30.827	30.386	71.349
HCM Lane V/C Ratio	8.315	11.086	11.07	6.673
HCM Control Delay, s/veh	1086.4	1426	1469.7	241.9
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	41	44.7	46.7	4

Intersection	
Int Delay, s/veh	310853.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	69	642	915	105	179	41
Future Vol, veh/h	69	642	915	105	179	41
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	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	123	1146	1634	188	320	73

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1821	0	-	0	3121	1728
Stage 1	-	-	-	-	1728	-
Stage 2	-	-	-	-	1393	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	341	-	-	-	~ 13	111
Stage 1	-	-	-	-	~ 159	-
Stage 2	-	-	-	-	~ 232	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	341	-	-	-	~ 0	111
Mov Cap-2 Maneuver	-	-	-	-	~ 0	-
Stage 1	-	-	-	-	~ 1	-
Stage 2	-	-	-	-	~ 232	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	2.08	0	$ 2756696.92
HCM LOS			F

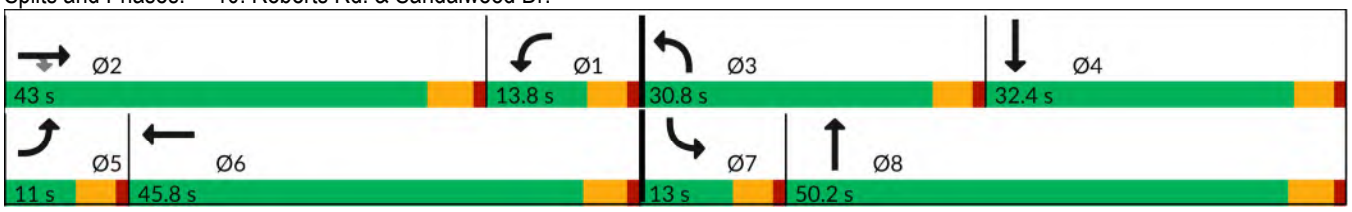
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	124	-	-	-	-
HCM Lane V/C Ratio	0.362	-	-	5889.449	
HCM Ctrl Dly (s/v)	21.4	0	-	$ 2756696.9	
HCM Lane LOS	C	A	-	-	F
HCM 95th %tile Q(veh)	1.6	-	-	-	51.9

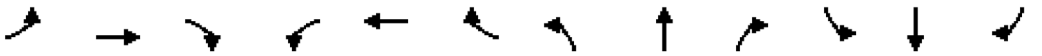
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	49	495	170	138	1061	289	99	130	41	107
Future Volume (vph)	49	495	170	138	1061	289	99	130	41	107
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Free	Prot	NA
Protected Phases	5	2		1	6	3	8		7	4
Permitted Phases			2					Free		
Detector Phase	5	2	2	1	6	3	8		7	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0		5.0	10.0
Minimum Split (s)	9.6	27.1	27.1	9.6	27.1	9.6	32.1		9.6	31.6
Total Split (s)	11.0	43.0	43.0	13.8	45.8	30.8	50.2		13.0	32.4
Total Split (%)	9.2%	35.8%	35.8%	11.5%	38.2%	25.7%	41.8%		10.8%	27.0%
Yellow Time (s)	3.6	4.1	4.1	3.6	4.1	3.6	4.1		3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	4.6	5.1	4.6	5.1		4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	Max	Max	None	None	None	None		None	None
Act Effct Green (s)	6.1	38.3	38.3	8.1	42.4	21.1	31.2	99.5	6.8	12.9
Actuated g/C Ratio	0.06	0.38	0.38	0.08	0.43	0.21	0.31	1.00	0.07	0.13
v/c Ratio	0.48	0.36	0.25	0.50	0.72	0.82	0.10	0.07	0.37	0.34
Control Delay (s/veh)	63.4	24.4	4.9	51.7	29.1	56.6	25.7	0.1	56.2	27.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.4	24.4	4.9	51.7	29.1	56.6	25.7	0.1	56.2	27.6
LOS	E	C	A	D	C	E	C	A	E	C
Approach Delay (s/veh)		22.4			31.6		36.5			33.4
Approach LOS		C			C		D			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 99.5	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay (s/veh): 30.3	Intersection LOS: C
Intersection Capacity Utilization 75.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	495	170	138	1061	58	289	99	130	41	107	56
Future Volume (veh/h)	49	495	170	138	1061	58	289	99	130	41	107	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1976	1900	1976	1976	1900	1900	1900	1976	1900	1900	1900
Adj Flow Rate, veh/h	53	538	131	150	1153	9	314	108	0	45	116	61
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	73	1646	671	227	1730	14	352	964		68	257	127
Arrive On Green	0.04	0.45	0.45	0.07	0.48	0.44	0.20	0.27	0.00	0.04	0.11	0.11
Sat Flow, veh/h	1810	3952	1610	3764	3916	31	1810	3610	1675	1810	2337	1159
Grp Volume(v), veh/h	53	538	131	150	582	580	314	108	0	45	88	89
Grp Sat Flow(s),veh/h/ln	1810	1976	1610	1882	1976	1970	1810	1805	1675	1810	1805	1691
Q Serve(g_s), s	2.6	8.0	2.2	3.5	20.5	20.5	15.4	2.1	0.0	2.2	4.2	4.5
Cycle Q Clear(g_c), s	2.6	8.0	2.2	3.5	20.5	20.5	15.4	2.1	0.0	2.2	4.2	4.5
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	73	1646	671	227	873	871	352	964		68	198	186
V/C Ratio(X)	0.72	0.33	0.20	0.66	0.67	0.67	0.89	0.11		0.67	0.44	0.48
Avail Cap(c_a), veh/h	127	1646	671	381	884	881	521	1789		167	551	517
HCM Platoon Ratio	1.00	1.08	1.08	1.08	1.08	1.00	1.04	1.00	1.04	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	16.8	3.7	41.6	18.6	18.7	35.4	25.2	0.0	43.2	37.9	38.0
Incr Delay (d2), s/veh	4.9	0.5	0.7	1.2	1.9	1.9	9.5	0.1	0.0	4.2	1.6	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	3.4	1.6	1.6	8.7	8.6	7.5	0.9	0.0	1.1	1.9	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.1	17.3	4.4	42.8	20.5	20.6	44.9	25.2	0.0	47.4	39.4	40.0
LnGrp LOS	D	B	A	D	C	C	D	C		D	D	D
Approach Vol, veh/h		722			1312			422			222	
Approach Delay, s/veh		17.2			23.1			39.9			41.3	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	43.0	22.3	15.1	8.3	45.3	8.0	29.4
Change Period (Y+Rc), s	5.1	* 5.1	4.6	* 5.1	4.6	5.1	4.6	5.1
Max Green Setting (Gmax), s	9.2	* 38	26.2	* 28	6.4	40.7	8.4	45.1
Max Q Clear Time (g_c+I1), s	5.5	10.0	17.4	6.5	4.6	22.5	4.2	4.1
Green Ext Time (p_c), s	0.1	4.0	0.3	0.9	0.0	7.0	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	25.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	810	11	99	1006	14	69
Future Vol, veh/h	810	11	99	1006	14	69
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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	931	13	114	1156	16	79

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	944	0	2321	937
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	1384	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	735	-	42	324
Stage 1	-	-	-	-	384	-
Stage 2	-	-	-	-	235	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	735	-	24	324
Mov Cap-2 Maneuver	-	-	-	-	24	-
Stage 1	-	-	-	-	384	-
Stage 2	-	-	-	-	133	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.97	144.14
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	103	-	-	161	-
HCM Lane V/C Ratio	0.923	-	-	0.155	-
HCM Control Delay (s/veh)	144.1	-	-	10.8	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	5.5	-	-	0.5	-

Intersection	
Int Delay, s/veh	21.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	750	130	387	624	0	0	0	0	604	3	481
Future Vol, veh/h	0	750	130	387	624	0	0	0	0	604	3	481
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	798	138	412	664	0	0	0	0	643	3	512

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	936	0	0	2285	2423	664
Stage 1	-	-	-	-	-	-	1487	1487	-
Stage 2	-	-	-	-	-	-	798	936	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	740	-	0	~ 44	33	~ 464
Stage 1	0	-	-	-	-	0	~ 209	190	-
Stage 2	0	-	-	-	-	0	~ 447	346	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	740	-	-	~ 20	0	~ 464
Mov Cap-2 Maneuver	-	-	-	-	-	-	941	0	-
Stage 1	-	-	-	-	-	-	~ 209	0	-
Stage 2	-	-	-	-	-	-	~ 198	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	6.05	54.39
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	740	-	941	464
HCM Lane V/C Ratio	-	-	0.556	-	0.686	1.102
HCM Control Delay (s/veh)	-	-	15.8	-	16.7	101.9
HCM Lane LOS	-	-	C	-	C	F
HCM 95th %tile Q(veh)	-	-	3.5	-	5.7	17.1

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

Intersection	
Int Delay, s/veh	9748.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	499	855	0	0	833	401	179	3	369	0	0	0
Future Vol, veh/h	499	855	0	0	833	401	179	3	369	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	531	910	0	0	886	427	190	3	393	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1313	0	-	-	-	0	2857	3284	910
Stage 1	-	-	-	-	-	-	1971	1971	-
Stage 2	-	-	-	-	-	-	886	1313	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	534	-	0	0	-	-	~ 19	9	~ 336
Stage 1	-	-	0	0	-	-	~ 120	109	-
Stage 2	-	-	0	0	-	-	406	230	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	534	-	-	-	-	-	~ 0	0	~ 336
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 1	0	-
Stage 1	-	-	-	-	-	-	~ 1	0	-
Stage 2	-	-	-	-	-	-	406	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	24.17	0	$ 55479.46
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	1	336	534	-	-	-
HCM Lane V/C Ratio	345.569	1.169	0.995	-	-	-
HCM Control Delay (s/veh)	$ 167682.8	138	65.6	-	-	-
HCM Lane LOS	F	F	F	-	-	-
HCM 95th %tile Q(veh)	26.8	16.2	13.9	-	-	-

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

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	666	1184	67	0	73
Future Vol, veh/h	0	666	1184	67	0	73
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	0	0	0	0	0
Mvmt Flow	0	701	1246	71	0	77

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	658
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	*768
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		0
Mov Cap-1 Maneuver	-	-	-	-	-	*768
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	10.21
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	768
HCM Lane V/C Ratio	-	-	-	0.1
HCM Control Delay (s/veh)	-	-	-	10.2
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3

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

Intersection	
Intersection Delay, s/veh	458.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	322	345	442	801	0	0	0	0	294	5	450
Future Vol, veh/h	0	322	345	442	801	0	0	0	0	294	5	450
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	339	363	465	843	0	0	0	0	309	5	474
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

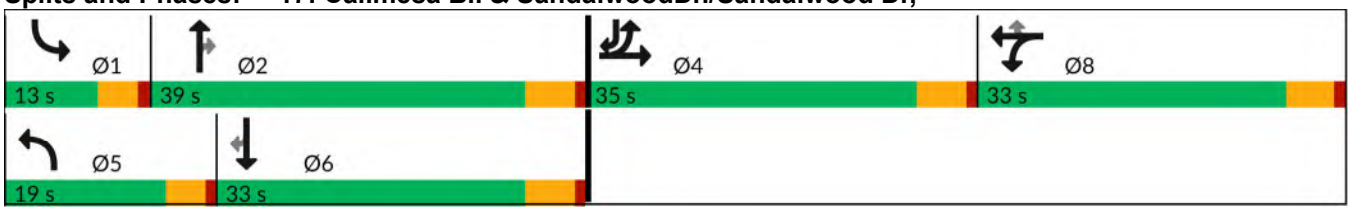
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	184.9	731.9	248.6
HCM LOS	F	F	F

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	36%	39%
Vol Thru, %	48%	64%	1%
Vol Right, %	52%	0%	60%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	667	1243	749
LT Vol	0	442	294
Through Vol	322	801	5
RT Vol	345	0	450
Lane Flow Rate	702	1308	788
Geometry Grp	1	1	1
Degree of Util (X)	1.304	2.569	1.471
Departure Headway (Hd)	10.221	8.781	8.875
Convergence, Y/N	Yes	Yes	Yes
Cap	365	432	418
Service Time	8.221	6.781	6.875
HCM Lane V/C Ratio	1.923	3.028	1.885
HCM Control Delay, s/veh	184.9	731.9	248.6
HCM Lane LOS	F	F	F
HCM 95th-tile Q	21.4	85.1	31.1

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	223	295	92	354	28	567	495	285	40	560
Future Volume (vph)	223	295	92	354	28	567	495	285	40	560
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	8	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	4	4	8	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	23.3	23.3	25.0	25.0	25.0	14.5	39.8	39.8	6.9	27.8
Actuated g/C Ratio	0.21	0.21	0.22	0.22	0.22	0.13	0.36	0.36	0.06	0.25
v/c Ratio	0.62	0.61	0.24	0.88	0.06	2.55	0.40	0.40	0.38	1.25
Control Delay (s/veh)	48.5	40.9	38.3	64.8	0.3	731.2	31.3	5.5	62.7	164.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.5	40.9	38.3	64.8	0.3	731.2	31.3	5.5	62.7	164.0
LOS	D	D	D	E	A	F	C	A	E	F
Approach Delay (s/veh)		43.4		55.9			320.5			94.7
Approach LOS		D		E			F			F

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 111.5	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 2.55	
Intersection Signal Delay (s/veh): 166.3	Intersection LOS: F
Intersection Capacity Utilization 108.8%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations										
Traffic Volume (veh/h)	223	295	98	92	354	28	567	495	285	40
Future Volume (veh/h)	223	295	98	92	354	28	567	495	285	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	207	350	76	97	373	14	597	521	277	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	285	478	103	403	423	358	257	1372	611	62
Arrive On Green	0.16	0.16	0.16	0.22	0.22	0.22	0.14	0.38	0.38	0.03
Sat Flow, veh/h	1810	3032	650	1810	1900	1606	1810	3610	1606	1810
Grp Volume(v), veh/h	207	218	208	97	373	14	597	521	277	42
Grp Sat Flow(s),veh/h/ln	1810	1900	1783	1810	1900	1606	1810	1805	1606	1810
Q Serve(g_s), s	11.0	11.0	11.3	4.5	19.2	0.7	14.4	10.6	13.1	2.3
Cycle Q Clear(g_c), s	11.0	11.0	11.3	4.5	19.2	0.7	14.4	10.6	13.1	2.3
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	285	300	281	403	423	358	257	1372	611	62
V/C Ratio(X)	0.73	0.73	0.74	0.24	0.88	0.04	2.32	0.38	0.45	0.68
Avail Cap(c_a), veh/h	528	555	521	493	517	437	257	1372	611	150
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.6	40.6	40.7	32.3	38.1	30.9	43.5	22.8	23.5	48.4
Incr Delay (d2), s/veh	3.5	3.4	3.8	0.3	14.0	0.0	607.2	0.2	0.5	4.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	5.3	5.1	1.9	10.3	0.3	49.6	4.3	4.8	1.1
Unsig. Movement Delay, s/veh										
LnGrp Delay(d), s/veh	44.1	44.0	44.6	32.7	52.1	30.9	650.6	22.9	24.1	53.2
LnGrp LOS	D	D	D	C	D	C	F	C	C	D
Approach Vol, veh/h		633			484			1395		
Approach Delay, s/veh		44.2			47.6			291.8		
Approach LOS		D			D			F		

Timer - Assigned Phs	1	2		4	5	6		8		
Phs Duration (G+Y+Rc), s	8.1	43.9		21.4	19.0	33.0		28.0		
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4		
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6		
Max Q Clear Time (g_c+I1), s	4.3	15.1		13.3	16.4	29.6		21.2		
Green Ext Time (p_c), s	0.0	4.0		2.7	0.0	0.0		1.3		

Intersection Summary		
HCM 7th Control Delay, s/veh	150.9	
HCM 7th LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	332.4
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	475	274	71	477	871	158
Future Vol, veh/h	475	274	71	477	871	158
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	490	282	73	492	898	163
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	244.3	112.4	513.8
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	85%	0%	13%
Vol Thru, %	0%	63%	87%
Vol Right, %	15%	37%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	1029	749	548
LT Vol	871	0	71
Through Vol	0	475	477
RT Vol	158	274	0
Lane Flow Rate	1061	772	565
Geometry Grp	1	1	1
Degree of Util (X)	2.085	1.454	1.102
Departure Headway (Hd)	7.877	9.678	10.545
Convergence, Y/N	Yes	Yes	Yes
Cap	477	386	350
Service Time	5.877	7.678	8.545
HCM Lane V/C Ratio	2.224	2	1.614
HCM Control Delay, s/veh	513.8	244.3	112.4
HCM Lane LOS	F	F	F
HCM 95th-tile Q	67.3	28.3	14.3

Intersection	
Intersection Delay, s/veh	2642.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	205	809	161	494	832	478	200	817	722	480	610	121
Future Vol, veh/h	205	809	161	494	832	478	200	817	722	480	610	121
Peak Hour Factor	0.92	0.92	0.92	0.60	0.92	0.60	0.92	0.60	0.60	0.60	0.60	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	223	879	175	823	904	797	217	1362	1203	800	1017	132
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	1672.4	2854.7	3120.6	2319.6
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	17%	27%	40%
Vol Thru, %	47%	69%	46%	50%
Vol Right, %	42%	14%	26%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1739	1175	1804	1211
LT Vol	200	205	494	480
Through Vol	817	809	832	610
RT Vol	722	161	478	121
Lane Flow Rate	2782	1277	2524	1948
Geometry Grp	1	1	1	1
Degree of Util (X)	7.243	3.388	6.657	5.204
Departure Headway (Hd)	146.996	283.264	145.249	201.6
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	56	26	50	39
Service Time	144.996	281.264	143.249	199.6
HCM Lane V/C Ratio	49.679	49.115	50.48	49.949
HCM Control Delay, s/veh	3120.6	1672.4	2854.7	2319.6
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	22.1	6.3	20.5	12.2

Intersection	
Int Delay, s/veh	1101.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1359	652	533	1160	0	0	0	0	1019	0	644
Future Vol, veh/h	0	1359	652	533	1160	0	0	0	0	1019	0	644
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1461	701	573	1247	0	0	0	0	1096	0	692

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	2162	0	0	3855	4556	1247
Stage 1	-	-	-	-	-	-	2394	2394	-
Stage 2	-	-	-	-	-	-	1461	2162	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	~ 251	-	0	~ 4	1	~ 214
Stage 1	0	-	-	-	-	0	~ 73	66	-
Stage 2	0	-	-	-	-	0	~ 215	87	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	~ 251	-	-	0	0	~ 214
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	~ 73	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	195.25	$ 3356.93
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 77	-	214
HCM Lane V/C Ratio	-	-	2.281	-	8.369
HCM Control Delay (s/veh)	-	-	$ 620.2	-	$ 3356.9
HCM Lane LOS	-	-	F	A	F
HCM 95th %tile Q(veh)	-	-	45	-	200.2

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

Intersection	
Int Delay, s/veh	2051.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	679	1699	0	0	975	854	717	0	752	0	0	0
Future Vol, veh/h	679	1699	0	0	975	854	717	0	752	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	746	1867	0	0	1071	938	788	0	826	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	2010	0	-	-	-	0	4431	5369	1867
Stage 1	-	-	-	-	-	-	3359	3359	-
Stage 2	-	-	-	-	-	-	1071	2010	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	~ 288	-	0	0	-	-	~ 2	0	~ 91
Stage 1	-	-	0	0	-	-	~ 23	20	-
Stage 2	-	-	0	0	-	-	~ 332	104	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	~ 288	-	-	-	-	-	0	0	~ 91
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	~ 23	0	-
Stage 2	-	-	-	-	-	-	~ 332	0	-

Approach	EB	WB	NB
HCM Control Delay, s/veh	$ 14.96	0	$ 7578.87
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	91	~ 288	-	-	-
HCM Lane V/C Ratio	17.651	2.59	-	-	-
HCM Control Delay (s/veh)	$ 7578.9	$ 752.8	0	-	-
HCM Lane LOS	F	F	A	-	-
HCM 95th %tile Q(veh)	193.5	61.8	-	-	-

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

Intersection	
Intersection Delay, s/veh	1840.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	174	1446	831	118	1010	112	551	92	68	225	174	268
Future Vol, veh/h	174	1446	831	118	1010	112	551	92	68	225	174	268
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	191	1589	913	130	1110	123	605	101	75	247	191	295
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	2789.6	1306.6	666.2	600.4
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	77%	7%	10%	34%
Vol Thru, %	13%	59%	81%	26%
Vol Right, %	10%	34%	9%	40%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	711	2451	1240	667
LT Vol	551	174	118	225
Through Vol	92	1446	1010	174
RT Vol	68	831	112	268
Lane Flow Rate	781	2693	1363	733
Geometry Grp	1	1	1	1
Degree of Util (X)	2.104	7.039	3.619	1.919
Departure Headway (Hd)	64.445	32.111	54.307	69.724
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	70	162	82	66
Service Time	62.445	30.111	52.307	67.724
HCM Lane V/C Ratio	11.157	16.623	16.622	11.106
HCM Control Delay, s/veh	666.2	2789.6	1306.6	600.4
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	11.5	88	25.3	9.7

APPENDIX 10.2: HORIZON YEAR (2045) WITH PROJECT (PROJECT BUILDOUT) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Intersection Delay, s/veh	4.3
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	305	19	38
Demand Flow Rate, veh/h	305	19	38
Vehicles Circulating, veh/h	3	10	295
Vehicles Exiting, veh/h	26	323	13
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.5	2.7	3.8
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	305	19	38
Cap Entry Lane, veh/h	1376	1366	1021
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	305	19	38
Cap Entry, veh/h	1376	1366	1021
V/C Ratio	0.222	0.014	0.037
Control Delay, s/veh	4.5	2.7	3.8
LOS	A	A	A
95th %tile Queue, veh	1	0	0

Intersection	
Intersection Delay, s/veh	6.0
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	520	74	96
Demand Flow Rate, veh/h	520	74	96
Vehicles Circulating, veh/h	96	0	35
Vehicles Exiting, veh/h	35	616	39
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.0	3.0	3.3
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	520	74	96
Cap Entry Lane, veh/h	1251	1380	1331
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	520	74	96
Cap Entry, veh/h	1251	1380	1331
V/C Ratio	0.416	0.054	0.072
Control Delay, s/veh	7.0	3.0	3.3
LOS	A	A	A
95th %tile Queue, veh	2	0	0

Intersection	
Intersection Delay, s/veh	5.6
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	480	53	139
Demand Flow Rate, veh/h	480	53	139
Vehicles Circulating, veh/h	32	24	389
Vehicles Exiting, veh/h	45	504	123
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.0	3.0	5.3
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	480	53	139
Cap Entry Lane, veh/h	1336	1346	928
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	480	53	139
Cap Entry, veh/h	1336	1346	928
V/C Ratio	0.359	0.039	0.150
Control Delay, s/veh	6.0	3.0	5.3
LOS	A	A	A
95th %tile Queue, veh	2	0	1

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	27	104	29	111	168	3
Future Vol, veh/h	27	104	29	111	168	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	29	113	32	121	183	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	368	184	186	0	-	0
Stage 1	184	-	-	-	-	-
Stage 2	184	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	636	863	1401	-	-	-
Stage 1	852	-	-	-	-	-
Stage 2	853	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	622	863	1401	-	-	-
Mov Cap-2 Maneuver	622	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	853	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.48	1.58	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1401	-	799	-	-
HCM Lane V/C Ratio	0.023	-	0.178	-	-
HCM Control Delay (s/veh)	7.6	-	10.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	713	190	296
Demand Flow Rate, veh/h	713	190	296
Vehicles Circulating, veh/h	293	53	91
Vehicles Exiting, veh/h	94	953	152
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	10.7	3.2	4.9
Approach LOS	B	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.074	0.926	0.479	0.521	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	53	660	91	99	296
Cap Entry Lane, veh/h	1088	1088	1353	1353	1258
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	53	660	91	99	296
Cap Entry, veh/h	1088	1088	1353	1353	1258
V/C Ratio	0.049	0.607	0.067	0.073	0.235
Control Delay, s/veh	3.7	11.3	3.2	3.2	4.9
LOS	A	B	A	A	A
95th %tile Queue, veh	0	4	0	0	1

Intersection	
Int Delay, s/veh	635.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	103	843	309	255	252	7
Future Vol, veh/h	103	843	309	255	252	7
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	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	141	1155	423	349	345	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	773	0	-	0	2035	598
Stage 1	-	-	-	-	598	-
Stage 2	-	-	-	-	1437	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	852	-	-	-	~ 63	506
Stage 1	-	-	-	-	553	-
Stage 2	-	-	-	-	~ 221	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	852	-	-	-	~ 34	506
Mov Cap-2 Maneuver	-	-	-	-	~ 34	-
Stage 1	-	-	-	-	~ 297	-
Stage 2	-	-	-	-	~ 221	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1.1	0	$ 4334.09
HCM LOS			F

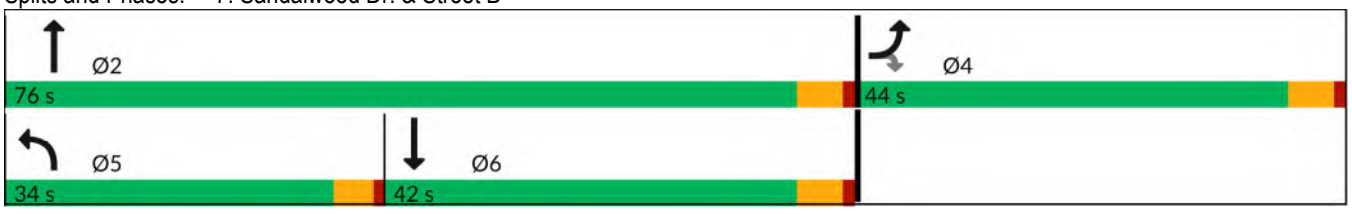
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	196	-	-	-	35
HCM Lane V/C Ratio	0.166	-	-	-	10.144
HCM Ctrl Dly (s/v)	10.1	0	-	-	$ 4334.1
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.6	-	-	-	43.1

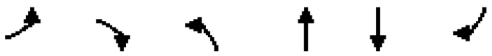
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	195	1071	603	161	356
Future Volume (vph)	195	1071	603	161	356
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	22.1	9.6	15.1	22.1
Total Split (s)	44.0	44.0	34.0	76.0	42.0
Total Split (%)	36.7%	36.7%	28.3%	63.3%	35.0%
Yellow Time (s)	4.1	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	Min	Min
Act Effct Green (s)	19.5	19.5	20.6	50.8	25.3
Actuated g/C Ratio	0.24	0.24	0.25	0.63	0.31
v/c Ratio	0.49	0.78	0.74	0.15	0.75
Control Delay (s/veh)	33.1	8.1	35.3	7.2	35.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.1	8.1	35.3	7.2	35.6
LOS	C	A	D	A	D
Approach Delay (s/veh)	12.0			29.4	35.6
Approach LOS	B			C	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 81.2	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 21.4	Intersection LOS: C
Intersection Capacity Utilization 67.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	195	1071	603	161	356	51
Future Volume (veh/h)	195	1071	603	161	356	51
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	212	593	655	175	387	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	487	763	789	1106	472	67
Arrive On Green	0.27	0.27	0.22	0.58	0.29	0.29
Sat Flow, veh/h	1810	2834	3510	1900	1627	231
Grp Volume(v), veh/h	212	593	655	175	0	442
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1900	0	1858
Q Serve(g_s), s	6.7	13.3	12.2	2.9	0.0	15.2
Cycle Q Clear(g_c), s	6.7	13.3	12.2	2.9	0.0	15.2
Prop In Lane	1.00	1.00	1.00			0.12
Lane Grp Cap(c), veh/h	487	763	789	1106	0	539
V/C Ratio(X)	0.43	0.78	0.83	0.16	0.00	0.82
Avail Cap(c_a), veh/h	1025	1605	1503	1962	0	999
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	0.00	1.00
Uniform Delay (d), s/veh	20.8	23.2	25.4	6.6	0.0	22.7
Incr Delay (d2), s/veh	0.6	1.7	0.9	0.1	0.0	3.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	10.0	4.9	1.0	0.0	6.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.4	24.9	26.3	6.7	0.0	25.8
LnGrp LOS	C	C	C	A		C
Approach Vol, veh/h	805			830	442	
Approach Delay, s/veh	24.0			22.1	25.8	
Approach LOS	C			C	C	

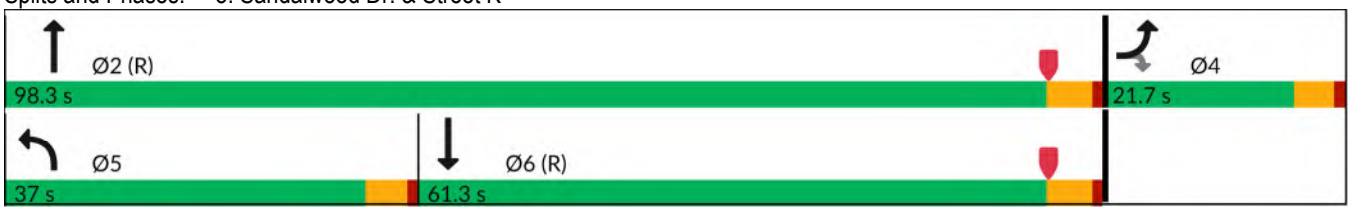
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		45.1		23.6	20.0	25.0
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		70.9		38.9	29.4	36.9
Max Q Clear Time (g_c+I1), s		4.9		15.3	14.2	17.2
Green Ext Time (p_c), s		1.1		3.2	1.2	2.7

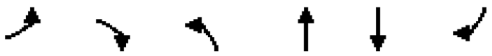
Intersection Summary	
HCM 7th Control Delay, s/veh	23.6
HCM 7th LOS	C

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	1	140	788	763	1415
Future Volume (vph)	1	140	788	763	1415
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	21.6	21.6	9.6	15.1	22.1
Total Split (s)	21.7	21.7	37.0	98.3	61.3
Total Split (%)	18.1%	18.1%	30.8%	81.9%	51.1%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.5	10.5	33.6	99.8	61.7
Actuated g/C Ratio	0.09	0.09	0.28	0.83	0.51
v/c Ratio	0.01	0.54	0.88	0.28	0.84
Control Delay (s/veh)	49.0	15.7	48.6	5.0	30.8
Queue Delay	0.0	0.0	0.0	0.0	14.9
Total Delay (s/veh)	49.0	15.7	48.6	5.0	45.7
LOS	D	B	D	A	D
Approach Delay (s/veh)	15.9			27.2	45.7
Approach LOS	B			C	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 93.3 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay (s/veh): 35.1	Intersection LOS: D
Intersection Capacity Utilization 82.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	140	788	763	1415	12
Future Volume (veh/h)	1	140	788	763	1415	12
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	38	857	829	1538	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	110	98	902	3099	2075	11
Arrive On Green	0.06	0.06	0.43	1.00	0.56	0.56
Sat Flow, veh/h	1810	1610	3510	3705	3777	19
Grp Volume(v), veh/h	1	38	857	829	754	792
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1897
Q Serve(g_s), s	0.1	2.7	28.2	0.0	37.6	37.6
Cycle Q Clear(g_c), s	0.1	2.7	28.2	0.0	37.6	37.6
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	110	98	902	3099	1017	1068
V/C Ratio(X)	0.01	0.39	0.95	0.27	0.74	0.74
Avail Cap(c_a), veh/h	258	229	948	3099	1017	1068
HCM Platoon Ratio	1.00	1.00	1.67	1.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93	0.54	0.54
Uniform Delay (d), s/veh	53.0	54.2	33.5	0.0	19.6	19.6
Incr Delay (d2), s/veh	0.0	2.5	16.8	0.2	2.7	2.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.5	12.4	0.1	15.8	16.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	53.0	56.7	50.3	0.2	22.3	22.2
LnGrp LOS	D	E	D	A	C	C
Approach Vol, veh/h	39			1686	1546	
Approach Delay, s/veh	56.6			25.7	22.3	
Approach LOS	E			C	C	

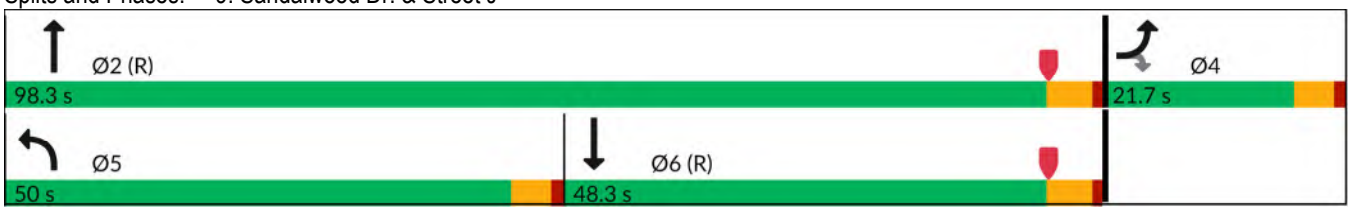
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		108.1		11.9	35.4	72.7
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.2		17.1	32.4	56.2
Max Q Clear Time (g_c+I1), s		2.0		4.7	30.2	39.6
Green Ext Time (p_c), s		7.3		0.0	0.6	10.1

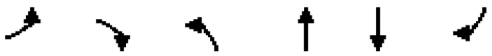
Intersection Summary	
HCM 7th Control Delay, s/veh	24.4
HCM 7th LOS	C

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	1	206	1134	1550	1542
Future Volume (vph)	1	206	1134	1550	1542
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	21.6	21.6	9.6	15.1	22.1
Total Split (s)	21.7	21.7	50.0	98.3	48.3
Total Split (%)	18.1%	18.1%	41.7%	81.9%	40.3%
Yellow Time (s)	3.6	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.9	10.9	46.4	99.4	48.4
Actuated g/C Ratio	0.09	0.09	0.39	0.83	0.40
v/c Ratio	0.01	0.64	0.91	0.39	0.81
Control Delay (s/veh)	48.0	15.5	45.5	3.0	53.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.0	15.5	45.5	3.0	53.3
LOS	D	B	D	A	D
Approach Delay (s/veh)	15.6			20.9	53.3
Approach LOS	B			C	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 48 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay (s/veh): 32.0	Intersection LOS: C
Intersection Capacity Utilization 82.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	206	1134	1550	1542	12
Future Volume (veh/h)	1	206	1134	1550	1542	12
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	224	1233	1685	1676	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	258	229	1288	4029	1973	15
Arrive On Green	0.14	0.14	0.37	0.78	0.74	0.74
Sat Flow, veh/h	1810	1610	3510	5358	5480	41
Grp Volume(v), veh/h	1	224	1233	1685	1092	597
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1729	1729	1893
Q Serve(g_s), s	0.1	16.6	41.1	12.9	26.4	26.4
Cycle Q Clear(g_c), s	0.1	16.6	41.1	12.9	26.4	26.4
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	258	229	1288	4029	1285	703
V/C Ratio(X)	0.00	0.98	0.96	0.42	0.85	0.85
Avail Cap(c_a), veh/h	258	229	1328	4029	1285	703
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.73	0.73	0.48	0.48
Uniform Delay (d), s/veh	44.1	51.2	37.1	4.4	13.1	13.1
Incr Delay (d2), s/veh	0.0	52.5	12.2	0.2	3.6	6.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	17.2	19.1	3.5	5.3	6.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	44.1	103.8	49.3	4.7	16.7	19.4
LnGrp LOS	D	F	D	A	B	B
Approach Vol, veh/h	225			2918	1689	
Approach Delay, s/veh	103.5			23.5	17.7	
Approach LOS	F			C	B	

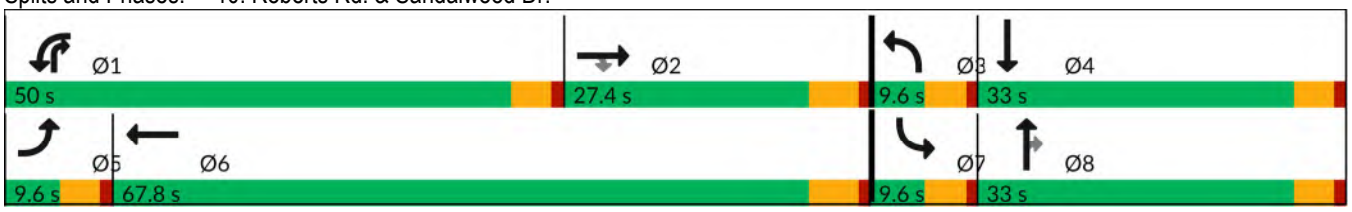
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		98.3		21.7	48.6	49.7
Change Period (Y+Rc), s		5.1		4.6	4.6	5.1
Max Green Setting (Gmax), s		93.2		17.1	45.4	43.2
Max Q Clear Time (g_c+I1), s		14.9		18.6	43.1	28.4
Green Ext Time (p_c), s		20.2		0.0	0.9	9.8

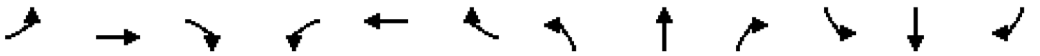
Intersection Summary	
HCM 7th Control Delay, s/veh	25.2
HCM 7th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	5	958	178	1280	2348	84	11	588	33	6
Future Volume (vph)	5	958	178	1280	2348	84	11	588	33	6
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6	3	8	1	7	4
Permitted Phases			2					8		
Detector Phase	5	2	2	1	6	3	8	1	7	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	27.4	27.4	9.6	27.4	9.6	31.6	9.6	9.6	31.6
Total Split (s)	9.6	27.4	27.4	50.0	67.8	9.6	33.0	50.0	9.6	33.0
Total Split (%)	8.0%	22.8%	22.8%	41.7%	56.5%	8.0%	27.5%	41.7%	8.0%	27.5%
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	None	None
Act Effct Green (s)	5.0	22.2	22.2	45.7	70.9	10.2	13.1	63.5	5.0	13.1
Actuated g/C Ratio	0.05	0.22	0.22	0.45	0.70	0.10	0.13	0.63	0.05	0.13
v/c Ratio	0.06	0.83	0.39	0.85	0.65	0.25	0.69	0.28	0.20	0.05
Control Delay (s/veh)	52.4	45.7	9.2	32.6	11.9	48.0	13.6	7.7	52.5	30.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.4	45.7	9.2	32.6	11.9	48.0	13.6	7.7	52.5	30.3
LOS	D	D	A	C	B	D	B	A	D	C
Approach Delay (s/veh)		40.0			19.1		15.2			46.9
Approach LOS		D			B		B			D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 101.2	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay (s/veh): 23.2	Intersection LOS: C
Intersection Capacity Utilization 81.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	958	178	1280	2348	39	84	11	588	33	6	5
Future Volume (veh/h)	5	958	178	1280	2348	39	84	11	588	33	6	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	5	1041	150	1391	2552	42	91	0	593	36	7	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	12	1226	346	1489	3467	57	186	0	1790	116	129	92
Arrive On Green	0.01	0.22	0.22	0.41	0.62	0.62	0.05	0.00	0.14	0.03	0.13	0.13
Sat Flow, veh/h	1810	5700	1610	3619	5592	92	3619	0	3220	3619	1031	736
Grp Volume(v), veh/h	5	1041	150	1391	1731	863	91	0	593	36	0	12
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1883	1810	0	1610	1810	0	1767
Q Serve(g_s), s	0.3	17.1	7.9	35.8	31.0	31.3	2.4	0.0	9.8	0.9	0.0	0.6
Cycle Q Clear(g_c), s	0.3	17.1	7.9	35.8	31.0	31.3	2.4	0.0	9.8	0.9	0.0	0.6
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	12	1226	346	1489	2356	1168	186	0	1790	116	0	221
V/C Ratio(X)	0.43	0.85	0.43	0.93	0.73	0.74	0.49	0.00	0.33	0.31	0.00	0.05
Avail Cap(c_a), veh/h	93	1287	363	1686	2433	1206	186	0	2263	186	0	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.2	36.7	33.1	27.4	12.9	13.0	45.0	0.0	11.8	46.1	0.0	37.6
Incr Delay (d2), s/veh	8.8	5.4	0.9	8.9	1.1	2.4	0.7	0.0	0.1	0.6	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	8.2	3.1	16.1	11.5	11.9	1.1	0.0	3.3	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.0	42.1	34.0	36.4	14.1	15.3	45.7	0.0	11.9	46.7	0.0	37.7
LnGrp LOS	E	D	C	D	B	B	D		B	D		D
Approach Vol, veh/h		1196			3985			684			48	
Approach Delay, s/veh		41.1			22.1			16.4			44.4	
Approach LOS		D			C			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	44.7	26.4	9.6	16.8	5.2	65.8	7.7	18.7
Change Period (Y+Rc), s	4.6	5.4	4.6	4.6	4.6	5.4	4.6	4.6
Max Green Setting (Gmax), s	45.4	22.0	5.0	28.4	5.0	62.4	5.0	28.4
Max Q Clear Time (g_c+I1), s	37.8	19.1	4.4	2.6	2.3	33.3	2.9	11.8
Green Ext Time (p_c), s	2.3	1.9	0.0	0.0	0.0	23.1	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	25.5
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	10.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1079	16	125	541	22	148
Future Vol, veh/h	1079	16	125	541	22	148
Conflicting Peds, #/hr	0	2	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	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1240	18	144	622	25	170

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1261	0	2161	1251
Stage 1	-	-	-	-	1251	-
Stage 2	-	-	-	-	909	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	558	-	53	212
Stage 1	-	-	-	-	272	-
Stage 2	-	-	-	-	396	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	557	-	32	212
Mov Cap-2 Maneuver	-	-	-	-	131	-
Stage 1	-	-	-	-	272	-
Stage 2	-	-	-	-	240	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.57	112.93
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	196	-	-	338	-
HCM Lane V/C Ratio	0.995	-	-	0.258	-
HCM Control Delay (s/veh)	112.9	-	-	13.7	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	8.5	-	-	1	-

Intersection	
Int Delay, s/veh	113.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	881	346	475	453	0	0	0	0	426	5	214
Future Vol, veh/h	0	881	346	475	453	0	0	0	0	426	5	214
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1036	407	559	533	0	0	0	0	501	6	252

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1445	0	0	2687	3095	533
Stage 1	-	-	-	-	-	-	1651	1651	-
Stage 2	-	-	-	-	-	-	1036	1445	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	~ 475	-	0	~ 24	12	551
Stage 1	0	-	-	-	-	0	~ 174	158	-
Stage 2	0	-	-	-	-	0	~ 345	199	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	~ 475	-	-	0	0	551
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 230	0	-
Stage 1	-	-	-	-	-	-	~ 174	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	64.82	$ 399.68
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	~ 475	-	230	551
HCM Lane V/C Ratio	-	-	1.175	-	2.204	0.457
HCM Control Delay (s/veh)	-	-	126.6	-	$ 589.7	16.9
HCM Lane LOS	-	-	F	-	F	C
HCM 95th %tile Q(veh)	-	-	20.6	-	39.4	2.4

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

Intersection	
Int Delay, s/veh	71.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	676	631	0	0	666	388	262	0	97	0	0	0
Future Vol, veh/h	676	631	0	0	666	388	262	0	97	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	727	678	0	0	716	417	282	0	104	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1133	0	-	-	-	0	2848	3266	678
Stage 1	-	-	-	-	-	-	2132	2132	-
Stage 2	-	-	-	-	-	-	716	1133	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	~ 624	-	0	0	-	-	~ 19	9	455
Stage 1	-	-	0	0	-	-	~ 100	91	-
Stage 2	-	-	0	0	-	-	488	280	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	~ 624	-	-	-	-	-	0	0	455
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 156	0	-
Stage 1	-	-	-	-	-	-	~ 100	0	-
Stage 2	-	-	-	-	-	-	488	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	59.13	0	$ 323.75
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	156	455	~ 624	-	-	-
HCM Lane V/C Ratio	1.809	0.229	1.165	-	-	-
HCM Control Delay (s/veh)	$ 438	15.2	114.3	-	-	-
HCM Lane LOS	F	C	F	-	-	-
HCM 95th %tile Q(veh)	20.8	0.9	24.2	-	-	-

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

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	1679	3561	220	0	106
Future Vol, veh/h	0	1679	3561	220	0	106
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1767	3748	232	0	112

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1874
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	269
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	269
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	27.57
HCM LOS			D

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	269
HCM Lane V/C Ratio	-	-	-	0.415
HCM Control Delay (s/veh)	-	-	-	27.6
HCM Lane LOS	-	-	-	D
HCM 95th %tile Q(veh)	-	-	-	1.9

Intersection	
Intersection Delay, s/veh	1570.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1128	551	218	2282	0	0	0	0	205	7	1498
Future Vol, veh/h	0	1128	551	218	2282	0	0	0	0	205	7	1498
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1393	680	269	2817	0	0	0	0	253	9	1849
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

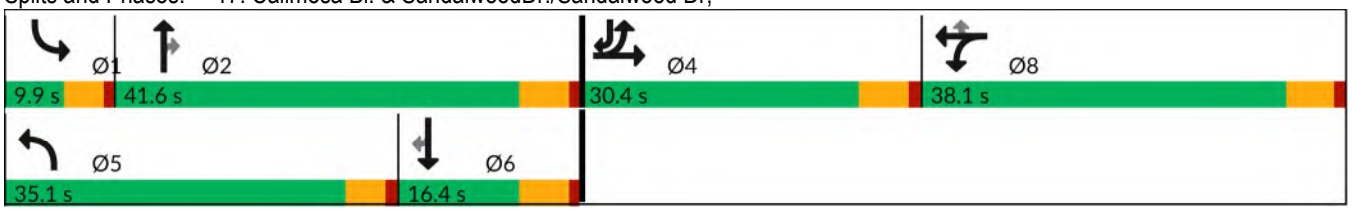
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	724.3	2324.3	1300
HCM LOS	F	F	F

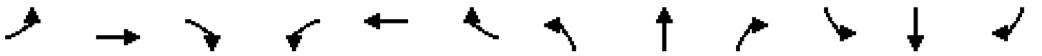
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	9%	12%
Vol Thru, %	100%	0%	91%	0%
Vol Right, %	0%	100%	0%	88%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1128	551	2500	1710
LT Vol	0	0	218	205
Through Vol	1128	0	2282	7
RT Vol	0	551	0	1498
Lane Flow Rate	1393	680	3086	2111
Geometry Grp	5	5	4a	2
Degree of Util (X)	2.939	1.303	6.097	3.808
Departure Headway (Hd)	32.269	31.394	12.633	14.314
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	139	122	340	274
Service Time	29.969	29.094	10.633	12.314
HCM Lane V/C Ratio	10.022	5.574	9.076	7.704
HCM Control Delay, s/veh	954	254.1	2324.3	1300
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	31	10	185.1	92.2

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	401	353	190	520	80	1523	977	207	28	253	667
Future Volume (vph)	401	353	190	520	80	1523	977	207	28	253	667
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	30.4	30.4	38.1	38.1	38.1	35.1	41.6	41.6	9.9	16.4	30.4
Total Split (%)	25.3%	25.3%	31.8%	31.8%	31.8%	29.3%	34.7%	34.7%	8.3%	13.7%	25.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	25.0	25.0	32.7	32.7	32.7	30.5	40.2	40.2	5.2	11.0	41.4
Actuated g/C Ratio	0.21	0.21	0.27	0.27	0.27	0.25	0.34	0.34	0.04	0.09	0.35
v/c Ratio	1.20	1.26	0.44	1.14	0.17	3.78	0.92	0.37	0.41	1.66	1.21
Control Delay (s/veh)	155.7	157.0	39.5	125.4	0.9	Error	52.0	13.1	71.5	353.2	141.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	155.7	157.0	39.5	125.4	0.9	Error	52.0	13.1	71.5	353.2	141.0
LOS	F	F	D	F	A	F	D	B	E	F	F
Approach Delay (s/veh)		156.6		92.1			734.9			195.6	
Approach LOS		F		F			F			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 3.78	
Intersection Signal Delay (s/veh): 425.1	Intersection LOS: F
Intersection Capacity Utilization 169.1%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	401	353	579	190	520	80	1523	977	207	28	253	667
Future Volume (veh/h)	401	353	579	190	520	80	1523	977	207	28	253	667
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	456	401	640	216	591	81	1731	1110	205	32	288	681
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	377	396	335	493	518	433	460	1150	512	49	174	483
Arrive On Green	0.21	0.21	0.21	0.27	0.27	0.27	0.25	0.32	0.32	0.03	0.09	0.09
Sat Flow, veh/h	1810	1900	1610	1810	1900	1588	1810	3610	1607	1810	1900	1610
Grp Volume(v), veh/h	456	401	640	216	591	81	1731	1110	205	32	288	681
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1588	1810	1805	1607	1810	1900	1610
Q Serve(g_s), s	25.0	25.0	25.0	11.8	32.7	4.7	30.5	36.3	12.0	2.1	11.0	11.0
Cycle Q Clear(g_c), s	25.0	25.0	25.0	11.8	32.7	4.7	30.5	36.3	12.0	2.1	11.0	11.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	377	396	335	493	518	433	460	1150	512	49	174	483
V/C Ratio(X)	1.21	1.01	1.91	0.44	1.14	0.19	3.76	0.97	0.40	0.65	1.65	1.41
Avail Cap(c_a), veh/h	377	396	335	493	518	433	460	1150	512	80	174	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	47.5	47.5	36.1	43.6	33.5	44.8	40.2	31.9	57.8	54.5	33.3
Incr Delay (d2), s/veh	116.6	48.6	419.5	0.6	84.7	0.2	1249.0	18.7	0.5	5.2	318.3	196.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.2	16.9	48.9	5.2	27.1	1.8	172.8	18.5	4.6	1.0	20.6	40.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	164.1	96.1	467.0	36.7	128.4	33.7	1293.7	59.0	32.4	63.0	372.8	229.7
LnGrp LOS	F	F	F	D	F	C	F	E	C	E	F	F
Approach Vol, veh/h		1497			888			3046			1001	
Approach Delay, s/veh		275.4			97.4			758.9			265.5	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	43.6		30.4	35.1	16.4		38.1				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	5.3	36.2		25.0	30.5	11.0		32.7				
Max Q Clear Time (g_c+I1), s	4.1	38.3		27.0	32.5	13.0		34.7				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh	478.3	
HCM 7th LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	1168.4
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	433	589	537	1189	1518	104
Future Vol, veh/h	433	589	537	1189	1518	104
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	509	693	632	1399	1786	122
Number of Lanes	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	604.7	1380.1	1298.3
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	100%	0%	0%	31%
Vol Thru, %	0%	0%	42%	69%
Vol Right, %	0%	100%	58%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1518	104	1022	1726
LT Vol	1518	0	0	537
Through Vol	0	0	433	1189
RT Vol	0	104	589	0
Lane Flow Rate	1786	122	1202	2031
Geometry Grp	5	5	2	2
Degree of Util (X)	4.017	0.234	2.221	3.98
Departure Headway (Hd)	11.17	9.857	19.229	15.61
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	357	367	204	264
Service Time	8.87	7.557	17.229	13.61
HCM Lane V/C Ratio	5.003	0.332	5.892	7.693
HCM Control Delay, s/veh	1386.2	15.5	604.7	1380.1
HCM Lane LOS	F	C	F	F
HCM 95th-tile Q	125.4	0.9	33.3	89.7

Intersection	
Intersection Delay, s/veh	1068.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	76	425	118	261	496	315	419	281	371	335	322	158
Future Vol, veh/h	76	425	118	261	496	315	419	281	371	335	322	158
Peak Hour Factor	0.92	0.92	0.92	0.71	0.92	0.71	0.92	0.71	0.71	0.71	0.71	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	83	462	128	368	539	444	455	396	523	472	454	172
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	508.5	1229.8	1263.8	968.4
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	39%	12%	24%	41%
Vol Thru, %	26%	69%	46%	40%
Vol Right, %	35%	19%	29%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1071	619	1072	815
LT Vol	419	76	261	335
Through Vol	281	425	496	322
RT Vol	371	118	315	158
Lane Flow Rate	1374	673	1350	1097
Geometry Grp	1	1	1	1
Degree of Util (X)	3.613	1.765	3.552	2.914
Departure Headway (Hd)	36.481	58.093	33.523	42.967
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	124	74	122	99
Service Time	34.481	56.093	31.523	40.967
HCM Lane V/C Ratio	11.081	9.095	11.066	11.081
HCM Control Delay, s/veh	1263.8	508.5	1229.8	968.4
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	36	10	38	23.9

Intersection	
Int Delay, s/veh	250.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	684	447	580	662	0	0	0	0	485	0	410
Future Vol, veh/h	0	684	447	580	662	0	0	0	0	485	0	410
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	814	532	690	788	0	0	0	0	577	0	488

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1346	0	0	2983	3515	788
Stage 1	-	-	-	-	-	-	2169	2169	-
Stage 2	-	-	-	-	-	-	814	1346	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	~ 518	-	0	~ 16	6	~ 394
Stage 1	0	-	-	-	-	0	~ 95	87	-
Stage 2	0	-	-	-	-	0	~ 439	222	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	~ 518	-	-	0	0	~ 394
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	~ 95	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	86.7	$ 794.42
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 291	-	394
HCM Lane V/C Ratio	-	-	1.333	-	2.702
HCM Control Delay (s/veh)	-	-	185.7	0	$ 794.4
HCM Lane LOS	-	-	F	A	F
HCM 95th %tile Q(veh)	-	-	30.1	-	88.4

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

Intersection	
Int Delay, s/veh	114.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	411	758	0	0	933	692	309	0	349	0	0	0
Future Vol, veh/h	411	758	0	0	933	692	309	0	349	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	457	842	0	0	1037	769	343	0	388	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1806	0	-	-	-	0	2792	3561	842
Stage 1	-	-	-	-	-	-	1756	1756	-
Stage 2	-	-	-	-	-	-	1037	1806	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	~ 346	-	0	0	-	-	~ 21	6	~ 367
Stage 1	-	-	0	0	-	-	~ 154	140	-
Stage 2	-	-	0	0	-	-	345	132	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	~ 346	-	-	-	-	-	0	0	~ 367
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	~ 154	0	-
Stage 2	-	-	-	-	-	-	345	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	68.4	0	$ 479.97
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	367	~ 184	-	-	-
HCM Lane V/C Ratio	1.992	1.321	-	-	-
HCM Control Delay (s/veh)	$ 480	194.5	0	-	-
HCM Lane LOS	F	F	A	-	-
HCM 95th %tile Q(veh)	50.9	21.8	-	-	-

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

Intersection	
Intersection Delay, s/veh	994.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	188	736	183	42	1183	237	242	297	167	100	47	200
Future Vol, veh/h	188	736	183	42	1183	237	242	297	167	100	47	200
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	200	783	195	45	1259	252	257	316	178	106	50	213
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	997.4	1424.8	505.6	164.7
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	34%	17%	3%	29%
Vol Thru, %	42%	66%	81%	14%
Vol Right, %	24%	17%	16%	58%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	706	1107	1462	347
LT Vol	242	188	42	100
Through Vol	297	736	1183	47
RT Vol	167	183	237	200
Lane Flow Rate	751	1178	1555	369
Geometry Grp	1	1	1	1
Degree of Util (X)	1.963	3.08	4.056	0.955
Departure Headway (Hd)	24.342	24.06	20.229	40.12
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	158	165	202	96
Service Time	22.342	22.06	18.229	38.12
HCM Lane V/C Ratio	4.753	7.139	7.698	3.844
HCM Control Delay, s/veh	505.6	997.4	1424.8	164.7
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	22.6	42.9	71.8	5.4

Intersection	
Intersection Delay, s/veh	5.0
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	216	440	42
Demand Flow Rate, veh/h	216	440	42
Vehicles Circulating, veh/h	40	21	195
Vehicles Exiting, veh/h	421	216	61
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.1	5.6	3.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	216	440	42
Cap Entry Lane, veh/h	1325	1351	1131
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	216	440	42
Cap Entry, veh/h	1325	1351	1131
V/C Ratio	0.163	0.326	0.037
Control Delay, s/veh	4.1	5.6	3.5
LOS	A	A	A
95th %tile Queue, veh	1	1	0

Intersection	
Intersection Delay, s/veh	8.0
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	363	817	58
Demand Flow Rate, veh/h	363	817	58
Vehicles Circulating, veh/h	58	0	720
Vehicles Exiting, veh/h	720	421	97
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.2	9.3	6.4
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	363	817	58
Cap Entry Lane, veh/h	1301	1380	662
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	363	817	58
Cap Entry, veh/h	1301	1380	662
V/C Ratio	0.279	0.592	0.088
Control Delay, s/veh	5.2	9.3	6.4
LOS	A	A	A
95th %tile Queue, veh	1	4	0

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	314	660	171
Demand Flow Rate, veh/h	314	660	171
Vehicles Circulating, veh/h	132	104	257
Vehicles Exiting, veh/h	632	324	189
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.3	8.8	4.8
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	314	660	171
Cap Entry Lane, veh/h	1206	1241	1062
Entry HV Adj Factor	1.000	1.000	1.000
Flow Entry, veh/h	314	660	171
Cap Entry, veh/h	1206	1241	1062
V/C Ratio	0.260	0.532	0.161
Control Delay, s/veh	5.3	8.8	4.8
LOS	A	A	A
95th %tile Queue, veh	1	3	1

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	60	113	194	156	37
Future Vol, veh/h	20	60	113	194	156	37
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	65	123	211	170	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	646	190	210	0	-	0
Stage 1	190	-	-	-	-	-
Stage 2	457	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	439	857	1373	-	-	-
Stage 1	847	-	-	-	-	-
Stage 2	642	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	400	857	1373	-	-	-
Mov Cap-2 Maneuver	400	-	-	-	-	-
Stage 1	772	-	-	-	-	-
Stage 2	642	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.2	1	2.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1373	-	667	-	-
HCM Lane V/C Ratio	0.089	-	0.13	-	-
HCM Control Delay (s/veh)	7.9	-	11.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.4	-	-

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	473	1151	236
Demand Flow Rate, veh/h	473	1151	236
Vehicles Circulating, veh/h	163	35	852
Vehicles Exiting, veh/h	925	601	334
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.1	8.5	12.5
Approach LOS	A	A	B

Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LR
Assumed Moves	L	TR	LT	R	LR
RT Channelized					
Lane Util	0.074	0.926	0.740	0.260	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
A (Intercept)	1420	1420	1420	1420	1380
B (Slope)	9.101e-4	9.101e-4	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	35	438	852	299	236
Cap Entry Lane, veh/h	1224	1224	1376	1376	579
Entry HV Adj Factor	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	35	438	852	299	236
Cap Entry, veh/h	1224	1224	1376	1376	579
V/C Ratio	0.029	0.358	0.619	0.217	0.408
Control Delay, s/veh	3.2	6.4	9.9	4.4	12.5
LOS	A	A	A	A	B
95th %tile Queue, veh	0	2	5	1	2

Intersection	
Int Delay, s/veh	275.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	69	724	1193	105	179	41
Future Vol, veh/h	69	724	1193	105	179	41
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	56	56	56	56	56	56
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	123	1293	2130	188	320	73

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2318	0	-	0	3763	2224
Stage 1	-	-	-	-	2224	-
Stage 2	-	-	-	-	1539	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	218	-	-	-	~ 5	~ 55
Stage 1	-	-	-	-	~ 89	-
Stage 2	-	-	-	-	~ 197	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	218	-	-	-	0	~ 55
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	~ 89	-
Stage 2	-	-	-	-	~ 197	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	3.56	0	$ 2879.41
HCM LOS			F

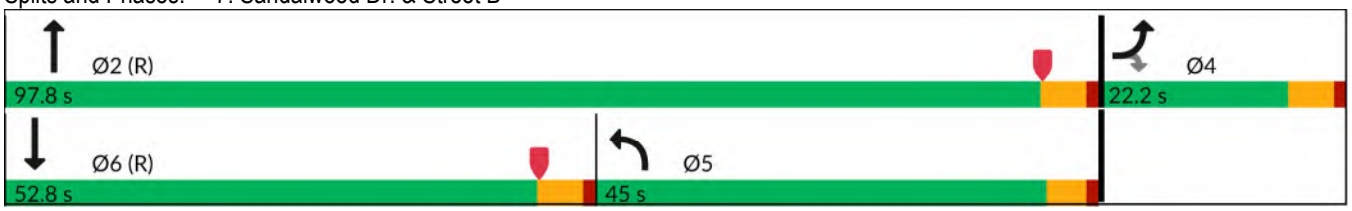
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	~ 62	-	-	-	55
HCM Lane V/C Ratio	0.564	-	-	-	7.08
HCM Ctrl Dly (s/v)	40.9	0	-		$ 2879.4
HCM Lane LOS	E	A	-	-	F
HCM 95th %tile Q(veh)	3.1	-	-	-	45.4

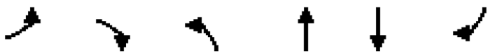
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	122	555	939	399	282
Future Volume (vph)	122	555	939	399	282
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	22.1	9.6	15.1	22.1
Total Split (s)	22.2	22.2	45.0	97.8	52.8
Total Split (%)	18.5%	18.5%	37.5%	81.5%	44.0%
Yellow Time (s)	4.1	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.6	5.1	5.1
Lead/Lag			Lag		Lead
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	14.2	14.2	38.1	95.6	52.9
Actuated g/C Ratio	0.12	0.12	0.32	0.80	0.44
v/c Ratio	0.62	0.66	0.92	0.29	0.74
Control Delay (s/veh)	62.8	7.5	25.7	1.0	33.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	62.8	7.5	25.7	1.0	33.3
LOS	E	A	C	A	C
Approach Delay (s/veh)	17.5			18.3	33.3
Approach LOS	B			B	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116.9 (97%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 21.3	Intersection LOS: C
Intersection Capacity Utilization 78.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 7: Sandalwood Dr. & Street B





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	122	555	939	399	282	264
Future Volume (veh/h)	122	555	939	399	282	264
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	133	141	1021	434	307	97
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	168	299	1856	1562	347	110
Arrive On Green	0.09	0.09	0.88	1.00	0.25	0.25
Sat Flow, veh/h	1810	3220	3510	1900	1384	437
Grp Volume(v), veh/h	133	141	1021	434	0	404
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1900	0	1821
Q Serve(g_s), s	8.6	5.0	7.9	0.0	0.0	25.6
Cycle Q Clear(g_c), s	8.6	5.0	7.9	0.0	0.0	25.6
Prop In Lane	1.00	1.00	1.00			0.24
Lane Grp Cap(c), veh/h	168	299	1856	1562	0	457
V/C Ratio(X)	0.79	0.47	0.55	0.28	0.00	0.88
Avail Cap(c_a), veh/h	258	459	1856	1562	0	724
HCM Platoon Ratio	1.00	1.00	1.67	1.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.54	0.54	0.00	1.00
Uniform Delay (d), s/veh	53.3	51.7	3.8	0.0	0.0	43.3
Incr Delay (d2), s/veh	9.0	1.2	0.1	0.2	0.0	21.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	4.5	1.8	0.1	0.0	14.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	62.3	52.8	3.9	0.2	0.0	64.6
LnGrp LOS	E	D	A	A		E
Approach Vol, veh/h	274			1455	404	
Approach Delay, s/veh	57.4			2.8	64.6	
Approach LOS	E			A	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		103.8		16.2	68.6	35.2
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.7		17.1	40.4	* 48
Max Q Clear Time (g_c+I1), s		2.0		10.6	9.9	27.6
Green Ext Time (p_c), s		3.1		0.5	2.2	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	21.5
HCM 7th LOS	C

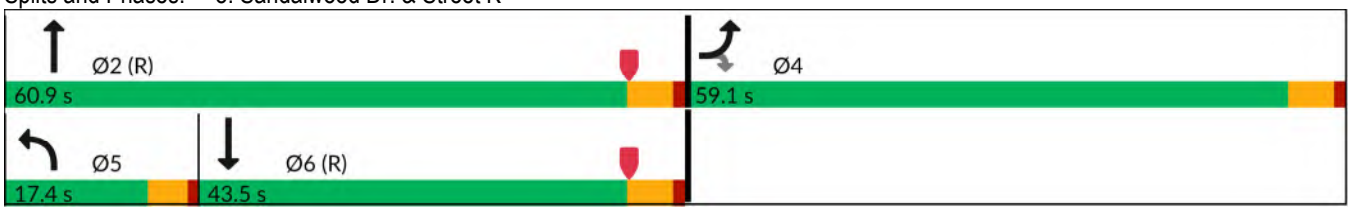
Notes

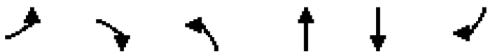
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	17	726	260	1321	829
Future Volume (vph)	17	726	260	1321	829
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.1	22.1	9.6	15.1	22.1
Total Split (s)	59.1	59.1	17.4	60.9	43.5
Total Split (%)	49.3%	49.3%	14.5%	50.8%	36.3%
Yellow Time (s)	4.1	4.1	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.6	5.1	5.1
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	48.9	48.9	12.4	60.9	43.8
Actuated g/C Ratio	0.41	0.41	0.10	0.51	0.37
v/c Ratio	0.02	0.95	0.78	0.78	0.69
Control Delay (s/veh)	18.9	42.5	66.0	28.3	33.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.9	42.5	66.0	28.3	33.3
LOS	B	D	E	C	C
Approach Delay (s/veh)	42.0			34.5	33.3
Approach LOS	D			C	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 24.1 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay (s/veh): 36.0	Intersection LOS: D
Intersection Capacity Utilization 76.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 8: Sandalwood Dr. & Street K





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	726	260	1321	829	8
Future Volume (veh/h)	17	726	260	1321	829	8
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	18	789	283	1436	901	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	814	725	337	1679	1210	12
Arrive On Green	0.45	0.45	0.13	0.62	0.33	0.33
Sat Flow, veh/h	1810	1610	3510	3705	3757	37
Grp Volume(v), veh/h	18	789	283	1436	444	466
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1805	1805	1893
Q Serve(g_s), s	0.7	54.0	9.5	38.7	26.2	26.2
Cycle Q Clear(g_c), s	0.7	54.0	9.5	38.7	26.2	26.2
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	814	725	337	1679	597	626
V/C Ratio(X)	0.02	1.09	0.84	0.86	0.74	0.74
Avail Cap(c_a), veh/h	814	725	374	1679	597	626
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.95	0.95	0.65	0.65
Uniform Delay (d), s/veh	18.3	33.0	51.4	19.6	35.7	35.7
Incr Delay (d2), s/veh	0.0	60.2	12.4	5.6	5.5	5.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	49.5	4.6	14.8	12.4	12.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	18.3	93.2	63.8	25.2	41.1	40.9
LnGrp LOS	B	F	E	C	D	D
Approach Vol, veh/h	807			1719	910	
Approach Delay, s/veh	91.6			31.5	41.0	
Approach LOS	F			C	D	

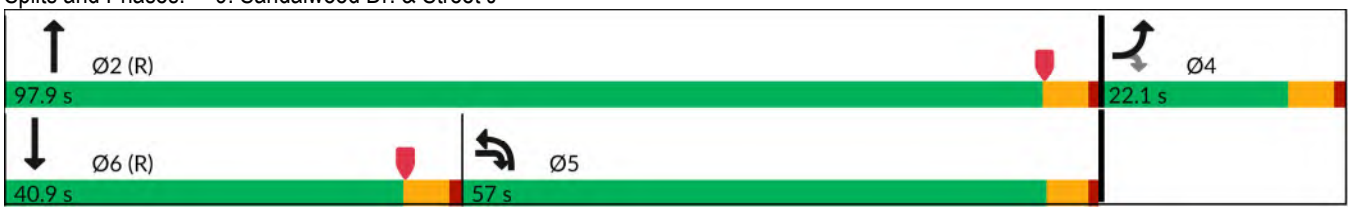
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		60.9		59.1	16.1	44.8
Change Period (Y+Rc), s		5.1		5.1	4.6	5.1
Max Green Setting (Gmax), s		55.8		54.0	12.8	38.4
Max Q Clear Time (g_c+I1), s		40.7		56.0	11.5	28.2
Green Ext Time (p_c), s		9.2		0.0	0.1	4.2

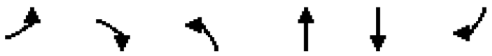
Intersection Summary	
HCM 7th Control Delay, s/veh	48.1
HCM 7th LOS	D

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	17	1043	376	1564	1547
Future Volume (vph)	17	1043	376	1564	1547
Turn Type	Prot	pm+ov	Prot	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4			
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	22.1	9.6	9.6	15.1	22.1
Total Split (s)	22.1	57.0	57.0	97.9	40.9
Total Split (%)	18.4%	47.5%	47.5%	81.6%	34.1%
Yellow Time (s)	4.1	3.6	3.6	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.6	4.6	5.1	5.1
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Min	C-Min
Act Effct Green (s)	10.0	58.4	52.4	111.9	51.9
Actuated g/C Ratio	0.08	0.49	0.44	0.93	0.43
v/c Ratio	0.12	1.44	0.27	0.35	0.76
Control Delay (s/veh)	53.1	233.6	22.2	1.4	28.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.1	233.6	22.2	1.4	28.0
LOS	D	F	C	A	C
Approach Delay (s/veh)	230.8			5.4	28.0
Approach LOS	F			A	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74 (62%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.44	
Intersection Signal Delay (s/veh): 65.6	Intersection LOS: E
Intersection Capacity Utilization 102.7%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 9: Sandalwood Dr. & Street J





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	1043	376	1564	1547	8
Future Volume (veh/h)	17	1043	376	1564	1547	8
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	18	699	409	1700	1682	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	151	925	1723	4314	1588	8
Arrive On Green	0.08	0.08	0.49	0.83	0.10	0.10
Sat Flow, veh/h	1810	1610	3510	5358	5495	28
Grp Volume(v), veh/h	18	699	409	1700	1092	599
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1729	1729	1895
Q Serve(g_s), s	1.1	0.0	8.1	9.8	35.8	35.8
Cycle Q Clear(g_c), s	1.1	0.0	8.1	9.8	35.8	35.8
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	151	925	1723	4314	1032	565
V/C Ratio(X)	0.12	0.76	0.24	0.39	1.06	1.06
Avail Cap(c_a), veh/h	256	1018	1723	4314	1032	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.91	0.91	0.48	0.48
Uniform Delay (d), s/veh	50.9	19.2	17.6	2.5	54.1	54.1
Incr Delay (d2), s/veh	0.3	3.0	0.0	0.2	37.2	43.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	24.0	3.2	2.0	22.0	25.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.3	22.2	17.6	2.8	91.3	97.4
LnGrp LOS	D	C	B	A	F	F
Approach Vol, veh/h	717			2109	1691	
Approach Delay, s/veh	22.9			5.7	93.5	
Approach LOS	C			A	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		104.9		15.1	64.0	40.9
Change Period (Y+Rc), s		5.1		5.1	5.1	* 5.1
Max Green Setting (Gmax), s		92.8		17.0	52.4	* 36
Max Q Clear Time (g_c+I1), s		11.8		3.1	10.1	37.8
Green Ext Time (p_c), s		20.7		2.6	0.7	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	41.3
HCM 7th LOS	D

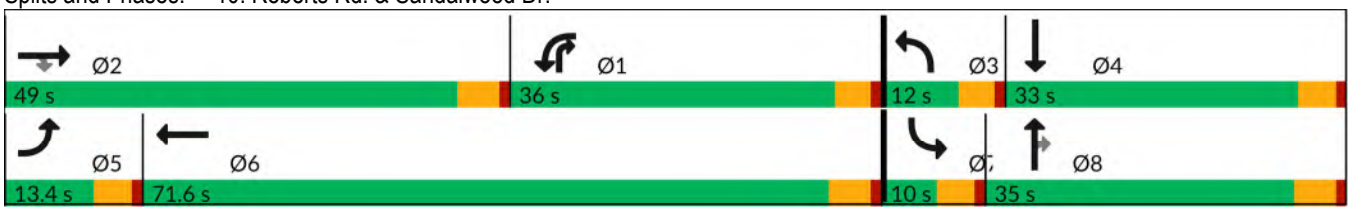
Notes

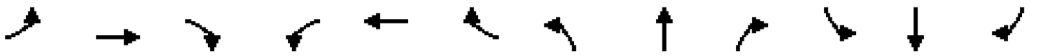
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	49	2266	192	1073	1003	254	9	879	133	12
Future Volume (vph)	49	2266	192	1073	1003	254	9	879	133	12
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6	3	8	1	7	4
Permitted Phases			2					8		
Detector Phase	5	2	2	1	6	3	8	1	7	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	27.1	27.1	9.6	27.1	9.6	32.1	9.6	9.6	31.6
Total Split (s)	13.4	49.0	49.0	36.0	71.6	12.0	35.0	36.0	10.0	33.0
Total Split (%)	10.3%	37.7%	37.7%	27.7%	55.1%	9.2%	26.9%	27.7%	7.7%	25.4%
Yellow Time (s)	3.6	4.1	4.1	3.6	4.1	3.6	4.1	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	4.6	5.1	4.6	5.1	4.6	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	None	None	None	None	None	None
Act Effct Green (s)	7.2	44.1	44.1	31.5	70.3	10.2	15.5	47.5	5.4	14.3
Actuated g/C Ratio	0.06	0.38	0.38	0.27	0.61	0.09	0.13	0.41	0.05	0.12
v/c Ratio	0.44	1.07	0.31	1.11	0.33	0.87	0.82	0.57	0.86	0.26
Control Delay (s/veh)	65.6	74.4	15.3	104.3	12.5	80.5	18.9	16.3	96.5	16.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	65.6	74.4	15.3	104.3	12.5	80.5	18.9	16.3	96.5	16.6
LOS	E	E	B	F	B	F	B	B	F	B
Approach Delay (s/veh)		69.7			57.7		31.6			69.5
Approach LOS		E			E		C			E

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 115.9	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay (s/veh): 58.1	Intersection LOS: E
Intersection Capacity Utilization 113.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 10: Roberts Rd. & Sandalwood Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	2266	192	1073	1003	106	254	9	879	133	12	56
Future Volume (veh/h)	49	2266	192	1073	1003	106	254	9	879	133	12	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1976	1900	1976	1976	1900	1900	1900	1976	1900	1900	1900
Adj Flow Rate, veh/h	53	2463	100	1166	1090	61	276	0	962	145	13	61
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	70	2311	628	1050	3538	198	238	0	1291	174	26	121
Arrive On Green	0.04	0.58	0.58	0.42	0.95	0.64	0.07	0.00	0.12	0.05	0.09	0.09
Sat Flow, veh/h	1882	5928	1610	3764	5561	311	3619	0	3349	3619	291	1364
Grp Volume(v), veh/h	53	2463	100	1166	774	377	276	0	962	145	0	74
Grp Sat Flow(s),veh/h/ln	1882	1976	1610	1882	1976	1920	1810	0	1675	1810	0	1655
Q Serve(g_s), s	3.1	43.9	2.4	31.4	1.4	3.0	7.4	0.0	4.1	4.5	0.0	4.8
Cycle Q Clear(g_c), s	3.1	43.9	2.4	31.4	1.4	3.0	7.4	0.0	4.1	4.5	0.0	4.8
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		0.82
Lane Grp Cap(c), veh/h	70	2311	628	1050	2514	1221	238	0	1291	174	0	147
V/C Ratio(X)	0.76	1.07	0.16	1.11	0.31	0.31	1.16	0.00	0.75	0.84	0.00	0.50
Avail Cap(c_a), veh/h	147	2311	628	1050	2514	1221	238	0	1823	174	0	417
HCM Platoon Ratio	1.00	1.50	1.50	1.50	1.50	1.00	1.10	1.00	1.10	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	23.4	8.4	32.8	1.0	2.1	52.2	0.0	15.3	53.2	0.0	48.9
Incr Delay (d2), s/veh	6.2	39.1	0.5	63.4	0.1	0.1	108.6	0.0	1.0	26.9	0.0	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	23.2	1.2	21.2	0.4	0.9	6.9	0.0	7.3	2.7	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.9	62.5	9.0	96.2	1.0	2.3	160.8	0.0	16.4	80.1	0.0	51.6
LnGrp LOS	E	F	A	F	A	A	F		B	F		D
Approach Vol, veh/h		2616			2317			1238			219	
Approach Delay, s/veh		60.4			49.1			48.6			70.5	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.5	49.0	12.0	15.1	8.8	76.7	10.0	17.1
Change Period (Y+Rc), s	5.1	* 5.1	4.6	* 5.1	4.6	5.1	4.6	5.1
Max Green Setting (Gmax), s	31.4	* 44	7.4	* 28	8.8	66.5	5.4	29.9
Max Q Clear Time (g_c+I1), s	33.4	45.9	9.4	6.8	5.1	5.0	6.5	6.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	9.4	0.0	4.5

Intersection Summary	
HCM 7th Control Delay, s/veh	54.4
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	21.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	892	11	99	1284	14	69
Future Vol, veh/h	892	11	99	1284	14	69
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	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1025	13	114	1476	16	79

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1038	0	2735	1032
Stage 1	-	-	-	-	1032	-
Stage 2	-	-	-	-	1703	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	678	-	23	285
Stage 1	-	-	-	-	347	-
Stage 2	-	-	-	-	164	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	678	-	~ 2	285
Mov Cap-2 Maneuver	-	-	-	-	~ 10	-
Stage 1	-	-	-	-	347	-
Stage 2	-	-	-	-	~ 11	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.81	$ 606.11
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	50	-	-	122	-
HCM Lane V/C Ratio	1.914	-	-	0.168	-
HCM Control Delay (s/veh)	$ 606.1	-	-	11.4	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	9.5	-	-	0.6	-

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

Intersection	
Int Delay, s/veh	106.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	773	189	387	728	0	0	0	0	604	3	655
Future Vol, veh/h	0	773	189	387	728	0	0	0	0	604	3	655
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	160	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	822	201	412	774	0	0	0	0	643	3	697

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1023	0	0	2420	2621	774
Stage 1	-	-	-	-	-	-	1598	1598	-
Stage 2	-	-	-	-	-	-	822	1023	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	686	-	0	~ 36	24	~ 401
Stage 1	0	-	-	-	-	0	~ 184	167	-
Stage 2	0	-	-	-	-	0	~ 435	315	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	686	-	-	~ 14	0	~ 401
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 489	0	-
Stage 1	-	-	-	-	-	-	~ 184	0	-
Stage 2	-	-	-	-	-	-	~ 174	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	6.18	277.07
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	686	-	489	401
HCM Lane V/C Ratio	-	-	0.6	-	1.32	1.736
HCM Control Delay (s/veh)	-	-	17.8	-	182.1$	365.1
HCM Lane LOS	-	-	C	-	F	F
HCM 95th %tile Q(veh)	-	-	4	-	28.2	43

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

Intersection	
Int Delay, s/veh	31.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	531	846	0	0	818	401	298	3	369	0	0	0
Future Vol, veh/h	531	846	0	0	818	401	298	3	369	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	160	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	565	900	0	0	870	427	317	3	393	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1297	0	-	-	-	0	2900	3327	900
Stage 1	-	-	-	-	-	-	2030	2030	-
Stage 2	-	-	-	-	-	-	870	1297	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	~ 541	-	0	0	-	-	~ 18	8	~ 340
Stage 1	-	-	0	0	-	-	~ 112	102	-
Stage 2	-	-	0	0	-	-	413	234	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	~ 541	-	-	-	-	-	0	0	~ 340
Mov Cap-2 Maneuver	-	-	-	-	-	-	394	0	-
Stage 1	-	-	-	-	-	-	~ 112	0	-
Stage 2	-	-	-	-	-	-	413	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	30.21	0	92.37
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	394	340	~ 541	-	-	-
HCM Lane V/C Ratio	0.813	1.154	1.044	-	-	-
HCM Control Delay (s/veh)	43.5	132.2	78.3	-	-	-
HCM Lane LOS	E	F	F	-	-	-
HCM 95th %tile Q(veh)	7.3	15.9	16.1	-	-	-

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

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↱		↱
Traffic Vol, veh/h	0	3682	2161	150	0	21
Future Vol, veh/h	0	3682	2161	150	0	21
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	3876	2275	158	0	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1137
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	5
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	-	0	331
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	331
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	16.66
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	331
HCM Lane V/C Ratio	-	-	-	0.067
HCM Control Delay (s/veh)	-	-	-	16.7
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.2

Intersection	
Intersection Delay, s/veh	1244.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2196	1486	442	1344	0	0	0	0	294	5	967
Future Vol, veh/h	0	2196	1486	442	1344	0	0	0	0	294	5	967
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	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2312	1564	465	1415	0	0	0	0	309	5	1018
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay, s/veh	1447.3	1222.8	686.2
HCM LOS	F	F	F

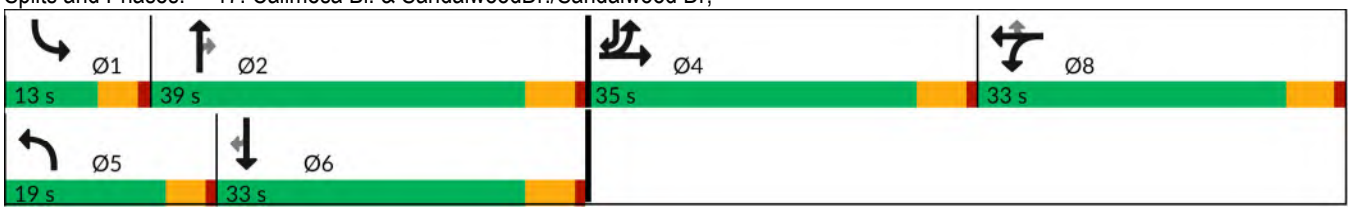
Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	25%	23%
Vol Thru, %	100%	0%	75%	0%
Vol Right, %	0%	100%	0%	76%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2196	1486	1786	1266
LT Vol	0	0	442	294
Through Vol	2196	0	1344	5
RT Vol	0	1486	0	967
Lane Flow Rate	2312	1564	1880	1333
Geometry Grp	5	5	4a	2
Degree of Util (X)	4.878	2.997	-	2.438
Departure Headway (Hd)	17.98	17.191	-	13.681
Convergence, Y/N	Yes	Yes	-	Yes
Cap	231	235	-	280
Service Time	15.68	14.891	-	11.681
HCM Lane V/C Ratio	10.009	6.655	-	4.761
HCM Control Delay, s/veh	1788.1	943.6	+	686.2
HCM Lane LOS	F	F	-	F
HCM 95th-tile Q	100.7	56.4	-	51.9

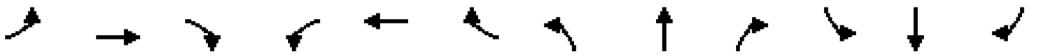
Notes
HCM 7th Edition AWSC methodology error - negative departure headway

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	583	277	92	289	28	939	495	285	40	560	747
Future Volume (vph)	583	277	92	289	28	939	495	285	40	560	747
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	4	4	8	8		5	2		1	6	4
Permitted Phases					8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	4
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.4	30.4	29.4	29.4	29.4	9.6	27.4	27.4	9.6	15.4	30.4
Total Split (s)	35.0	35.0	33.0	33.0	33.0	19.0	39.0	39.0	13.0	33.0	35.0
Total Split (%)	29.2%	29.2%	27.5%	27.5%	27.5%	15.8%	32.5%	32.5%	10.8%	27.5%	29.2%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag						Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	29.7	29.7	22.6	22.6	22.6	14.4	39.4	39.4	6.9	27.6	57.3
Actuated g/C Ratio	0.26	0.26	0.20	0.20	0.20	0.13	0.34	0.34	0.06	0.24	0.50
v/c Ratio	1.31	2.36dr	0.27	0.82	0.07	4.37	0.42	0.41	0.39	1.29	0.91
Control Delay (s/veh)	191.2	413.5	40.9	61.9	0.3	Error	32.6	5.5	63.7	183.9	36.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	191.2	413.5	40.9	61.9	0.3	Error	32.6	5.5	63.7	183.9	36.5
LOS	F	F	D	E	A	F	C	A	E	F	D
Approach Delay (s/veh)		366.6		53.0			853.7			98.6	
Approach LOS		F		D			F			F	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 115.2		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 4.37		
Intersection Signal Delay (s/veh): 425.0	Intersection LOS: F	
Intersection Capacity Utilization 165.9%	ICU Level of Service H	
Analysis Period (min) 15		
dr Defacto Right Lane. Recode with 1 though lane as a right lane.		

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	583	277	1631	92	289	28	939	495	285	40	560	747
Future Volume (veh/h)	583	277	1631	92	289	28	939	495	285	40	560	747
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	614	292	1700	97	304	20	988	521	273	42	589	714
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	473	496	420	334	351	292	230	1221	543	59	463	812
Arrive On Green	0.26	0.26	0.26	0.18	0.18	0.18	0.13	0.34	0.34	0.03	0.24	0.24
Sat Flow, veh/h	1810	1900	1610	1810	1900	1582	1810	3610	1606	1810	1900	1607
Grp Volume(v), veh/h	614	292	1700	97	304	20	988	521	273	42	589	714
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1582	1810	1805	1606	1810	1900	1607
Q Serve(g_s), s	29.6	15.2	29.6	5.2	17.6	1.2	14.4	12.7	15.4	2.6	27.6	27.6
Cycle Q Clear(g_c), s	29.6	15.2	29.6	5.2	17.6	1.2	14.4	12.7	15.4	2.6	27.6	27.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	473	496	420	334	351	292	230	1221	543	59	463	812
V/C Ratio(X)	1.30	0.59	4.04	0.29	0.87	0.07	4.30	0.43	0.50	0.72	1.27	0.88
Avail Cap(c_a), veh/h	473	496	420	441	463	385	230	1221	543	134	463	812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	36.6	41.9	39.8	44.8	38.1	49.5	29.0	29.9	54.3	42.9	20.7
Incr Delay (d2), s/veh	149.6	1.8	1375.0	0.5	12.6	0.1	1494.1	0.2	0.7	6.0	138.9	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	32.4	7.1	171.9	2.3	9.3	0.5	101.8	5.4	5.9	1.3	30.4	22.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	191.5	38.4	1416.8	40.3	57.5	38.2	1543.6	29.2	30.6	60.3	181.8	31.7
LnGrp LOS	F	D	F	D	E	D	F	C	C	E	F	C
Approach Vol, veh/h		2606			421			1782			1345	
Approach Delay, s/veh		973.7			52.6			869.0			98.3	
Approach LOS		F			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	43.7		35.0	19.0	33.0		26.3				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	8.4	33.6		29.6	14.4	27.6		27.6				
Max Q Clear Time (g_c+I1), s	4.6	17.4		31.6	16.4	29.6		19.6				
Green Ext Time (p_c), s	0.0	3.8		0.0	0.0	0.0		1.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	689.0
HCM 7th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	1067.9
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	498	1784	71	517	1203	158
Future Vol, veh/h	498	1784	71	517	1203	158
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	513	1839	73	533	1240	163
Number of Lanes	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	1495	161.4	743.5
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	100%	0%	0%	12%
Vol Thru, %	0%	0%	22%	88%
Vol Right, %	0%	100%	78%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1203	158	2282	588
LT Vol	1203	0	0	71
Through Vol	0	0	498	517
RT Vol	0	158	1784	0
Lane Flow Rate	1240	163	2353	606
Geometry Grp	5	5	2	2
Degree of Util (X)	2.789	0.312	4.265	1.182
Departure Headway (Hd)	12.283	10.983	9.925	16.147
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	310	331	400	230
Service Time	9.983	8.683	7.925	14.147
HCM Lane V/C Ratio	4	0.492	5.883	2.635
HCM Control Delay, s/veh	838.7	18.6	1495	161.4
HCM Lane LOS	F	C	F	F
HCM 95th-tile Q	69.9	1.3	151.9	12.8

Intersection	
Intersection Delay, s/veh	2204.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	205	779	161	494	816	496	200	459	722	500	318	121
Future Vol, veh/h	205	779	161	494	816	496	200	459	722	500	318	121
Peak Hour Factor	0.92	0.92	0.92	0.60	0.92	0.60	0.92	0.60	0.60	0.60	0.60	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	223	847	175	823	887	827	217	765	1203	833	530	132
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	1442.6	2763.8	2339.5	1692.1
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	18%	27%	53%
Vol Thru, %	33%	68%	45%	34%
Vol Right, %	52%	14%	27%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1381	1145	1806	939
LT Vol	200	205	494	500
Through Vol	459	779	816	318
RT Vol	722	161	496	121
Lane Flow Rate	2186	1245	2537	1495
Geometry Grp	1	1	1	1
Degree of Util (X)	5.654	3.301	6.686	3.997
Departure Headway (Hd)	112.941	185.028	94.941	156.616
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	66	37	76	45
Service Time	110.941	183.028	92.941	154.616
HCM Lane V/C Ratio	33.121	33.649	33.382	33.222
HCM Control Delay, s/veh	2339.5	1442.6	2763.8	1692.1
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	21.7	8.4	30.1	11.6

Intersection	
Int Delay, s/veh	737.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1349	652	483	1162	0	0	0	0	675	0	644
Future Vol, veh/h	0	1349	652	483	1162	0	0	0	0	675	0	644
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1451	701	519	1249	0	0	0	0	726	0	692

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	2152	0	0	3739	4440	1249
Stage 1	-	-	-	-	-	-	2288	2288	-
Stage 2	-	-	-	-	-	-	1451	2152	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	~ 254	-	0	~ 5	1	~ 213
Stage 1	0	-	-	-	-	0	~ 83	75	-
Stage 2	0	-	-	-	-	0	~ 218	88	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	~ 254	-	-	0	0	~ 213
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	~ 83	0	-
Stage 2	-	-	-	-	-	-	0	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	151.69	$ 2587.34
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	~ 78	-	213
HCM Lane V/C Ratio	-	-	2.047	-	6.657
HCM Control Delay (s/veh)	-	-	$ 516.6	-	$ 2587.3
HCM Lane LOS	-	-	F	A	F
HCM 95th %tile Q(veh)	-	-	38.3	-	154.1

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

Intersection	
Int Delay, s/veh	1137.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	679	1345	0	0	928	688	717	0	645	0	0	0
Future Vol, veh/h	679	1345	0	0	928	688	717	0	645	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	746	1478	0	0	1020	756	788	0	709	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1776	0	-	-	-	0	3990	4746	1478
Stage 1	-	-	-	-	-	-	2970	2970	-
Stage 2	-	-	-	-	-	-	1020	1776	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	~ 355	-	0	0	-	-	~ 3	1	~ 156
Stage 1	-	-	0	0	-	-	~ 37	33	-
Stage 2	-	-	0	0	-	-	~ 351	137	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	~ 355	-	-	-	-	-	0	0	~ 156
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-
Stage 1	-	-	-	-	-	-	~ 37	0	-
Stage 2	-	-	-	-	-	-	~ 351	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	77.78	0	$ 3914.51
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	156	~ 63	-	-	-
HCM Lane V/C Ratio	9.58	2.103	-	-	-
HCM Control Delay (s/veh)	$ 3914.5	$ 529.9	0	-	-
HCM Lane LOS	F	F	A	-	-
HCM 95th %tile Q(veh)	170.8	54.1	-	-	-

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

Intersection	
Intersection Delay, s/veh	1486.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	174	1466	350	88	1028	129	320	98	53	233	156	268
Future Vol, veh/h	174	1466	350	88	1028	129	320	98	53	233	156	268
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	191	1611	385	97	1130	142	352	108	58	256	171	295
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	2208.6	1269.9	351.1	521.5
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	68%	9%	7%	35%
Vol Thru, %	21%	74%	83%	24%
Vol Right, %	11%	18%	10%	41%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	471	1990	1245	657
LT Vol	320	174	88	233
Through Vol	98	1466	1028	156
RT Vol	53	350	129	268
Lane Flow Rate	518	2187	1368	722
Geometry Grp	1	1	1	1
Degree of Util (X)	1.39	5.776	3.629	1.89
Departure Headway (Hd)	55.051	25.74	36.029	42.356
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	72	175	123	94
Service Time	53.051	23.74	34.029	40.356
HCM Lane V/C Ratio	7.194	12.497	11.122	7.681
HCM Control Delay, s/veh	351.1	2208.6	1269.9	521.5
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	7.6	87	36.6	13.8

APPENDIX 10.3: HORIZON YEAR (2045) WITHOUT PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	131	167	76	756	100
Average Queue (ft)	30	73	3	754	70
95th Queue (ft)	113	130	39	763	144
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)	6			100	
Queuing Penalty (veh)	36			0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		1		99	5
Queuing Penalty (veh)		3		176	14

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	210	388	234	250	779	100
Average Queue (ft)	169	180	9	13	771	19
95th Queue (ft)	253	462	116	124	785	82
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		10	0	0	100	
Queuing Penalty (veh)		71	0	0	0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	53	0			100	1
Queuing Penalty (veh)	275	0			129	1

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	WB	SB
Directions Served	TR	LT	LTR
Maximum Queue (ft)	154	292	119
Average Queue (ft)	71	121	58
95th Queue (ft)	149	233	96
Link Distance (ft)	247	451	732
Upstream Blk Time (%)	1		
Queuing Penalty (veh)	5		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	T	T	LR
Maximum Queue (ft)	71	575	73
Average Queue (ft)	39	288	41
95th Queue (ft)	61	612	64
Link Distance (ft)	582	815	523
Upstream Blk Time (%)		3	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	23	247
Average Queue (ft)	3	99
95th Queue (ft)	15	196
Link Distance (ft)	531	615
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	89	728
Average Queue (ft)	21	631
95th Queue (ft)	70	916
Link Distance (ft)	615	712
Upstream Blk Time (%)		65
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 710

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	90	202	240	756	100
Average Queue (ft)	11	93	16	754	61
95th Queue (ft)	66	170	112	759	141
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)	2		0	100	
Queuing Penalty (veh)	15		0	0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		3	0	100	5
Queuing Penalty (veh)		18	1	479	32

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	209	353	210	218	779	100
Average Queue (ft)	132	67	11	13	773	41
95th Queue (ft)	221	284	109	110	785	121
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		2	0	0	100	
Queuing Penalty (veh)		32	0	0	0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	19	0			100	6
Queuing Penalty (veh)	158	1			368	10

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	WB	SB
Directions Served	TR	LT	LTR
Maximum Queue (ft)	263	459	747
Average Queue (ft)	255	452	744
95th Queue (ft)	287	462	786
Link Distance (ft)	247	451	732
Upstream Blk Time (%)	31	17	98
Queuing Penalty (veh)	205	208	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	250	830	539
Average Queue (ft)	156	829	538
95th Queue (ft)	230	835	543
Link Distance (ft)	566	815	524
Upstream Blk Time (%)		100	100
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB	SB
Directions Served	TR	LT	LTR
Maximum Queue (ft)	350	226	674
Average Queue (ft)	57	73	672
95th Queue (ft)	242	150	680
Link Distance (ft)	531	615	659
Upstream Blk Time (%)	0		100
Queuing Penalty (veh)	2		0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	WB	NB
Directions Served	LT	TR	LTR
Maximum Queue (ft)	629	19	728
Average Queue (ft)	527	5	726
95th Queue (ft)	751	19	735
Link Distance (ft)	615	136	712
Upstream Blk Time (%)	9		100
Queuing Penalty (veh)	216		0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 1745

APPENDIX 10.4: HORIZON YEAR (2045) WITH PROJECT (PROJECT BUILDOUT) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	115	210	393	745	60
Average Queue (ft)	30	186	330	735	2
95th Queue (ft)	108	274	539	747	25
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)	11		50	100	
Queuing Penalty (veh)	169		504	0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)		65	30	100	0
Queuing Penalty (veh)		345	166	252	1

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	R	LT	R
Maximum Queue (ft)	210	379	575	575	774	20
Average Queue (ft)	110	96	517	512	765	1
95th Queue (ft)	232	359	790	797	782	14
Link Distance (ft)		374	560	560	764	
Upstream Blk Time (%)		12	75	74	100	
Queuing Penalty (veh)		205	0	0	0	
Storage Bay Dist (ft)	160					50
Storage Blk Time (%)	23	0			100	
Queuing Penalty (veh)	172	1			104	

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	336	353	464	696
Average Queue (ft)	315	307	456	696
95th Queue (ft)	330	371	461	696
Link Distance (ft)	301	301	454	681
Upstream Blk Time (%)	29	15	17	100
Queuing Penalty (veh)	258	132	490	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB	NB
Directions Served	TR	LT	L	R
Maximum Queue (ft)	130	818	538	100
Average Queue (ft)	70	818	537	31
95th Queue (ft)	110	820	537	108
Link Distance (ft)	581	803	522	
Upstream Blk Time (%)		100	100	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)				50
Storage Blk Time (%)			100	0
Queuing Penalty (veh)			121	1

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB	SB
Directions Served	TR	LT	LTR
Maximum Queue (ft)	16	344	674
Average Queue (ft)	2	136	671
95th Queue (ft)	11	276	682
Link Distance (ft)	531	615	659
Upstream Blk Time (%)			100
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	WB	NB
Directions Served	LT	TR	LTR
Maximum Queue (ft)	257	36	728
Average Queue (ft)	107	5	725
95th Queue (ft)	224	23	736
Link Distance (ft)	615	136	712
Upstream Blk Time (%)			100
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 2919

Intersection: 12: I-10 SB Ramps & County Line Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	R
Maximum Queue (ft)	2	56	4	756	100
Average Queue (ft)	0	17	0	755	96
95th Queue (ft)	1	46	4	757	126
Link Distance (ft)	119		374	740	
Upstream Blk Time (%)				100	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)		160			50
Storage Blk Time (%)				96	27
Queuing Penalty (veh)				669	175

Intersection: 13: I-10 NB Ramps & County Line Rd.

Movement	EB	WB	WB	NB	NB
Directions Served	L	T	R	LT	R
Maximum Queue (ft)	130	37	100	779	100
Average Queue (ft)	43	2	6	778	88
95th Queue (ft)	91	21	50	784	140
Link Distance (ft)		560	560	764	
Upstream Blk Time (%)				100	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)	160				50
Storage Blk Time (%)	0			99	9
Queuing Penalty (veh)	4			388	28

Intersection: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.

Movement	EB	EB	WB	SB
Directions Served	T	R	LT	LTR
Maximum Queue (ft)	339	366	461	703
Average Queue (ft)	320	330	456	703
95th Queue (ft)	334	362	460	703
Link Distance (ft)	301	301	454	688
Upstream Blk Time (%)	40	33	19	100
Queuing Penalty (veh)	768	636	385	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: I-10 NB Ramp & Calimesa Bl.

Movement	EB	WB	NB	NB
Directions Served	TR	LT	L	R
Maximum Queue (ft)	554	818	538	100
Average Queue (ft)	340	814	536	25
95th Queue (ft)	586	827	545	96
Link Distance (ft)	572	803	522	
Upstream Blk Time (%)	0	100	100	
Queuing Penalty (veh)	8	0	0	
Storage Bay Dist (ft)				50
Storage Blk Time (%)			100	0
Queuing Penalty (veh)			162	0

Intersection: 20: I-10 SB Ramps & Singleton Rd.

Movement	EB	WB	SB
Directions Served	TR	LT	LTR
Maximum Queue (ft)	28	414	674
Average Queue (ft)	2	193	672
95th Queue (ft)	13	410	679
Link Distance (ft)	531	615	659
Upstream Blk Time (%)			100
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 21: I-10 NB Ramps & Singleton Rd.

Movement	EB	WB	NB
Directions Served	LT	TR	LTR
Maximum Queue (ft)	436	19	728
Average Queue (ft)	210	5	726
95th Queue (ft)	469	18	736
Link Distance (ft)	615	136	712
Upstream Blk Time (%)	0		100
Queuing Penalty (veh)	8		0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 3232

APPENDIX 10.5: HORIZON YEAR (2045) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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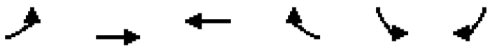
Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations					
Traffic Volume (vph)	103	701	394	255	252
Future Volume (vph)	103	701	394	255	252
Turn Type	Prot	NA	NA	Perm	Prot
Protected Phases	5	2	6		4
Permitted Phases				6	
Detector Phase	5	2	6	6	4
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	27.2
Total Split (s)	19.0	51.0	32.0	32.0	29.0
Total Split (%)	23.8%	63.8%	40.0%	40.0%	36.3%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.2
Lead/Lag	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None
Act Effct Green (s)	9.0	28.3	17.5	17.5	13.0
Actuated g/C Ratio	0.17	0.54	0.33	0.33	0.25
v/c Ratio	0.46	0.50	0.45	0.45	0.41
Control Delay (s/veh)	28.3	8.4	16.8	4.5	20.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.3	8.4	16.8	4.5	20.1
LOS	C	A	B	A	C
Approach Delay (s/veh)		11.0	11.9		20.1
Approach LOS		B	B		C

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 52.8	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.50	
Intersection Signal Delay (s/veh): 12.7	Intersection LOS: B
Intersection Capacity Utilization 37.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: County Line Rd. & County Line Ln.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	103	701	394	255	252	7
Future Volume (veh/h)	103	701	394	255	252	7
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	141	960	540	349	354	0
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	184	1943	1201	535	806	359
Arrive On Green	0.10	0.54	0.33	0.33	0.22	0.00
Sat Flow, veh/h	1810	3705	3705	1610	3619	1610
Grp Volume(v), veh/h	141	960	540	349	354	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1810	1610
Q Serve(g_s), s	3.4	7.4	5.2	8.2	3.7	0.0
Cycle Q Clear(g_c), s	3.4	7.4	5.2	8.2	3.7	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	184	1943	1201	535	806	359
V/C Ratio(X)	0.77	0.49	0.45	0.65	0.44	0.00
Avail Cap(c_a), veh/h	588	3714	2166	966	1943	865
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	0.00
Uniform Delay (d), s/veh	19.4	6.4	11.6	12.6	14.8	0.0
Incr Delay (d2), s/veh	2.5	0.2	0.3	1.3	0.4	0.0
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	1.9	1.7	2.6	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.9	6.6	11.9	14.0	15.2	0.0
LnGrp LOS	C	A	B	B	B	
Approach Vol, veh/h		1101	889		354	
Approach Delay, s/veh		8.6	12.7		15.2	
Approach LOS		A	B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		29.3		15.1	9.1	20.1
Change Period (Y+Rc), s		5.4		5.2	4.6	5.4
Max Green Setting (Gmax), s		45.6		23.8	14.4	26.6
Max Q Clear Time (g_c+I1), s		9.4		5.7	5.4	10.2
Green Ext Time (p_c), s		8.4		1.2	0.1	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	11.1
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	882	16	125	626	22	148
Future Vol, veh/h	882	16	125	626	22	148
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	959	17	136	680	24	161

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	978	0	1581	490
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	612	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	714	-	102	529
Stage 1	-	-	-	-	333	-
Stage 2	-	-	-	-	509	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	712	-	82	528
Mov Cap-2 Maneuver	-	-	-	-	205	-
Stage 1	-	-	-	-	333	-
Stage 2	-	-	-	-	412	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.87	19.05
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	439	-	-	712	-
HCM Lane V/C Ratio	0.421	-	-	0.191	-
HCM Control Delay (s/veh)	19	-	-	11.2	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	2.1	-	-	0.7	-

Intersection	
Intersection Delay, s/veh	24.8
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	2
Conflicting Circle Lanes	2	2	1	2
Adj Approach Flow, veh/h	1211	1073	0	879
Demand Flow Rate, veh/h	1211	1073	0	879
Vehicles Circulating, veh/h	1066	0	1417	1073
Vehicles Exiting, veh/h	886	1417	565	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	30.8	6.2	0.0	39.3
Approach LOS	D	A	-	E

Lane	Left	Right	Bypass	Left	Right	Left	Left	Right
Designated Moves	LT	TR	R	LT	TR	R	L	LTR
Assumed Moves	LT	TR		L	TR	R	L	LTR
RT Channelized			Yield					
Lane Util	0.471	0.529		0.521	0.479	1.000	0.530	0.470
Follow-Up Headway, s	2.667	2.535	2.609	2.667	2.535	2.609	2.667	2.535
Critical Headway, s	4.645	4.328	4.976	4.645	4.328	4.976	4.645	4.328
A (Intercept)	1350	1420	1380	1350	1420	1380	1350	1420
B (Slope)	9.199e-4	8.501e-4	1.02e-3	9.199e-4	8.501e-4	1.02e-3	9.199e-4	8.501e-4
Entry Flow, veh/h	431	485	295	559	514	0	466	413
Cap Entry Lane, veh/h	506	574	775	1350	1420	325	503	570
Entry HV Adj Factor	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000
Flow Entry, veh/h	431	485	295	559	514	0	466	413
Cap Entry, veh/h	506	574	775	1350	1420	325	503	571
V/C Ratio	0.851	0.845	0.380	0.414	0.362	0.000	0.926	0.724
Control Delay, s/veh	39.9	35.6	9.4	6.6	5.8	11.1	52.3	24.7
LOS	E	E	A	A	A	B	F	C
95th %tile Queue, veh	9	9	2	2	2	0	11	6

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

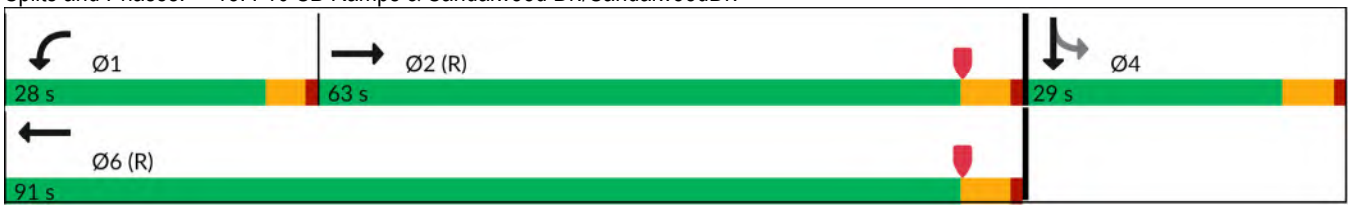
Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1295	1131	371	0
Demand Flow Rate, veh/h	1295	1131	371	0
Vehicles Circulating, veh/h	0	879	1295	981
Vehicles Exiting, veh/h	981	787	0	612
Ped Vol Crossing Leg, #/h	0	0	2	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.2	13.7	22.5	0.0
Approach LOS	A	B	C	-

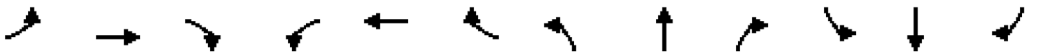
Lane	Left	Right	Left	Right	Bypass	Left	Right	Left
Designated Moves	LT	TR	LT	TR	R	LT	R	R
Assumed Moves	LT	TR	LT	TR		LT	R	R
RT Channelized					Yield			
Lane Util	0.470	0.530	0.471	0.529		0.720	0.280	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.327	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.499e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	609	686	336	378	417	267	104	0
Cap Entry Lane, veh/h	1350	1420	601	673	844	410	472	617
Entry HV Adj Factor	0.999	1.001	0.999	1.001	1.000	1.000	1.000	1.000
Flow Entry, veh/h	609	686	336	378	417	267	104	0
Cap Entry, veh/h	1349	1421	601	673	844	410	472	617
V/C Ratio	0.451	0.483	0.559	0.562	0.494	0.651	0.220	0.000
Control Delay, s/veh	7.1	7.3	16.1	14.8	10.8	27.0	10.9	5.8
LOS	A	A	C	B	B	D	B	A
95th %tile Queue, veh	2	3	3	4	3	4	1	0

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	603	467	268	833	205	7	258
Future Volume (vph)	603	467	268	833	205	7	258
Turn Type	NA	Free	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		Free			4		Free
Detector Phase	2		1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0		5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4		9.6	22.4	22.8	22.8	
Total Split (s)	63.0		28.0	91.0	29.0	29.0	
Total Split (%)	52.5%		23.3%	75.8%	24.2%	24.2%	
Yellow Time (s)	4.4		3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4		4.6	5.4	5.8	5.8	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	C-Max		None	C-Max	Max	Max	
Act Effct Green (s)	65.3	120.0	15.7	85.6	23.2	23.2	120.0
Actuated g/C Ratio	0.54	1.00	0.13	0.71	0.19	0.19	1.00
v/c Ratio	0.50	0.27	0.72	0.28	0.40	0.39	0.20
Control Delay (s/veh)	18.0	0.5	65.9	5.9	46.5	46.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.0	0.5	65.9	5.9	46.5	46.3	0.3
LOS	B	A	E	A	D	D	A
Approach Delay (s/veh)	12.7			20.5		21.1	
Approach LOS	B			C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay (s/veh): 17.4	Intersection LOS: B
Intersection Capacity Utilization 50.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	603	467	268	833	0	0	0	0	205	7	258
Future Volume (veh/h)	0	603	467	268	833	0	0	0	0	205	7	258
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	949	0	331	1028	0				259	0	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	2139		394	3700	0				700	0	
Arrive On Green	0.00	0.56	0.00	0.15	0.95	0.00				0.19	0.00	0.00
Sat Flow, veh/h	0	3800	1610	3510	5358	0				3619	0	1610
Grp Volume(v), veh/h	0	949	0	331	1028	0				259	0	0
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1755	1729	0				1810	0	1610
Q Serve(g_s), s	0.0	17.5	0.0	11.0	1.7	0.0				7.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.5	0.0	11.0	1.7	0.0				7.5	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2139		394	3700	0				700	0	
V/C Ratio(X)	0.00	0.44		0.84	0.28	0.00				0.37	0.00	
Avail Cap(c_a), veh/h	0	2139		685	3700	0				700	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	15.3	0.0	50.0	0.9	0.0				42.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	1.9	0.2	0.0				1.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.3	0.0	4.7	0.5	0.0				3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	16.0	0.0	51.9	1.1	0.0				43.6	0.0	0.0
LnGrp LOS		B		D	A					D		
Approach Vol, veh/h		949			1359						259	
Approach Delay, s/veh		16.0			13.5						43.6	
Approach LOS		B			B						D	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	18.1	72.9		29.0		91.0						
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4						
Max Green Setting (Gmax), s	23.4	57.6		23.2		85.6						
Max Q Clear Time (g_c+I1), s	13.0	19.5		9.5		3.7						
Green Ext Time (p_c), s	0.5	7.6		0.7		8.7						

Intersection Summary		
HCM 7th Control Delay, s/veh	17.4	
HCM 7th LOS	B	

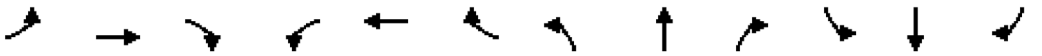
Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	323	402	83	190	509	444	967	28	253	419
Future Volume (vph)	323	402	83	190	509	444	967	28	253	419
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2		1	6	3	8	7	4	5
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	5
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.4	30.4	30.4	10.4	29.4	10.0	27.4	10.0	30.4	10.4
Total Split (s)	31.0	34.9	34.9	26.9	30.8	24.0	48.2	10.0	34.2	31.0
Total Split (%)	25.8%	29.1%	29.1%	22.4%	25.7%	20.0%	40.2%	8.3%	28.5%	25.8%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	4.6	5.4	5.4
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	Min	None	None	None
Act Effct Green (s)	25.6	39.2	39.2	16.6	30.2	17.6	42.0	5.3	25.8	51.4
Actuated g/C Ratio	0.21	0.33	0.33	0.14	0.25	0.15	0.35	0.04	0.22	0.43
v/c Ratio	0.81	0.34	0.12	0.76	0.66	0.81	0.91	0.35	0.65	0.52
Control Delay (s/veh)	50.3	25.0	5.8	67.8	44.4	52.7	39.2	67.2	50.6	13.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Total Delay (s/veh)	50.3	25.0	5.8	67.8	44.4	52.7	40.0	67.2	50.6	13.1
LOS	D	C	A	E	D	D	D	E	D	B
Approach Delay (s/veh)		33.2			50.1		43.5		28.8	
Approach LOS		C			D		D		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay (s/veh): 40.0	Intersection LOS: D
Intersection Capacity Utilization 89.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	323	402	83	190	509	80	444	967	207	28	253	419
Future Volume (veh/h)	323	402	83	190	509	80	444	967	207	28	253	419
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	340	423	45	200	536	31	467	1018	218	29	266	230
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	443	1218	537	229	752	43	531	1096	234	47	454	763
Arrive On Green	0.08	0.11	0.11	0.13	0.21	0.21	0.14	0.35	0.35	0.03	0.24	0.24
Sat Flow, veh/h	1882	3800	1675	1810	3554	205	3764	3156	674	1810	1900	1610
Grp Volume(v), veh/h	340	423	45	200	286	281	467	636	600	29	266	230
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1860	1882	1976	1853	1810	1900	1610
Q Serve(g_s), s	21.3	12.4	2.9	13.0	16.8	16.8	14.6	37.2	37.5	1.9	14.9	3.6
Cycle Q Clear(g_c), s	21.3	12.4	2.9	13.0	16.8	16.8	14.6	37.2	37.5	1.9	14.9	3.6
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	443	1218	537	229	402	394	531	686	644	47	454	763
V/C Ratio(X)	0.77	0.35	0.08	0.87	0.71	0.71	0.88	0.93	0.93	0.62	0.59	0.30
Avail Cap(c_a), veh/h	443	1218	537	324	402	394	608	705	661	81	456	765
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	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	0.15	0.15	0.15	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.1	42.0	37.8	51.5	43.9	43.9	50.5	37.7	37.8	57.9	40.4	6.9
Incr Delay (d2), s/veh	7.2	0.8	0.3	13.1	10.2	10.5	2.1	3.8	4.3	4.9	1.9	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.6	6.4	1.2	6.6	8.9	8.7	6.9	18.0	17.1	0.9	7.1	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.4	42.8	38.1	64.6	54.1	54.5	52.6	41.5	42.1	62.8	42.4	7.1
LnGrp LOS	E	D	D	E	D	D	D	D	D	E	D	A
Approach Vol, veh/h		808			767			1703			525	
Approach Delay, s/veh		49.5			57.0			44.7			28.0	
Approach LOS		D			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.6	43.9	21.5	34.1	33.6	30.8	8.5	47.1
Change Period (Y+Rc), s	5.4	5.4	4.6	5.4	5.4	5.4	5.4	* 5.4
Max Green Setting (Gmax), s	21.5	29.5	19.4	28.8	25.6	25.4	5.4	* 43
Max Q Clear Time (g_c+I1), s	15.0	14.4	16.6	16.9	23.3	18.8	3.9	39.5
Green Ext Time (p_c), s	0.1	2.4	0.3	1.8	0.1	1.7	0.0	2.2

Intersection Summary	
HCM 7th Control Delay, s/veh	45.9
HCM 7th LOS	D

Notes

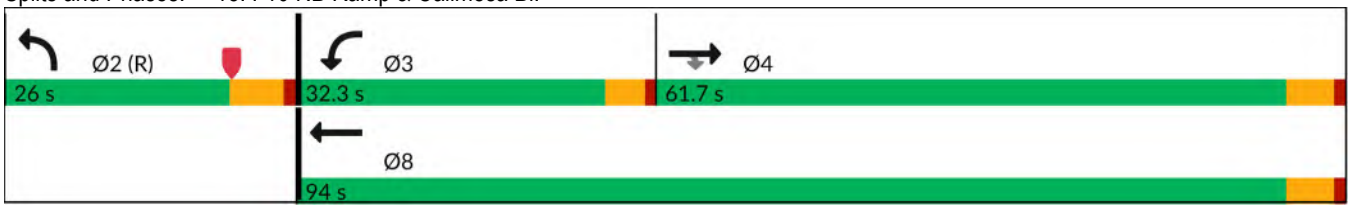
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	407	119	237	1195	423
Future Volume (vph)	407	119	237	1195	423
Turn Type	NA	Perm	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		4			
Detector Phase	4	4	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8
Total Split (s)	61.7	61.7	32.3	94.0	26.0
Total Split (%)	51.4%	51.4%	26.9%	78.3%	21.7%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8
Lead/Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		
Recall Mode	None	None	None	None	C-Max
Act Effct Green (s)	62.4	62.4	21.6	88.6	20.2
Actuated g/C Ratio	0.52	0.52	0.18	0.74	0.17
v/c Ratio	0.49	0.13	0.82	1.00	0.92
Control Delay (s/veh)	23.6	7.7	65.6	41.4	66.7
Queue Delay	0.1	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.7	7.7	65.6	41.4	66.7
LOS	C	A	E	D	E
Approach Delay (s/veh)	20.1			45.4	66.7
Approach LOS	C			D	E

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay (s/veh): 44.5	Intersection LOS: D
Intersection Capacity Utilization 87.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	407	119	237	1195	423	104
Future Volume (veh/h)	407	119	237	1195	423	104
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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	1900	1900	1900	1900	1976	1900
Adj Flow Rate, veh/h	479	-95	279	1406	557	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1007	853	308	1403	634	271
Arrive On Green	1.00	0.00	0.17	0.74	0.17	0.00
Sat Flow, veh/h	1900	1610	1810	1900	3764	1610
Grp Volume(v), veh/h	479	-95	279	1406	557	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1882	1610
Q Serve(g_s), s	0.0	0.0	18.2	88.6	17.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	18.2	88.6	17.3	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1007	853	308	1403	634	271
V/C Ratio(X)	0.48	-0.11	0.91	1.00	0.88	0.00
Avail Cap(c_a), veh/h	1007	853	418	1403	634	271
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	48.9	15.7	48.7	0.0
Incr Delay (d2), s/veh	0.3	0.0	16.0	24.6	16.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	9.4	38.6	9.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.3	0.0	64.9	40.3	64.7	0.0
LnGrp LOS	A		E	F	E	
Approach Vol, veh/h	384			1685	557	
Approach Delay, s/veh	0.3			44.3	64.7	
Approach LOS	A			D	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	26.0	25.0	69.0		94.0
Change Period (Y+Rc), s	5.8	4.6	5.4		5.4
Max Green Setting (Gmax), s	20.2	27.7	56.3		88.6
Max Q Clear Time (g_c+I1), s	19.3	20.2	2.0		90.6
Green Ext Time (p_c), s	0.2	0.2	3.1		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	42.2
HCM 7th LOS	D

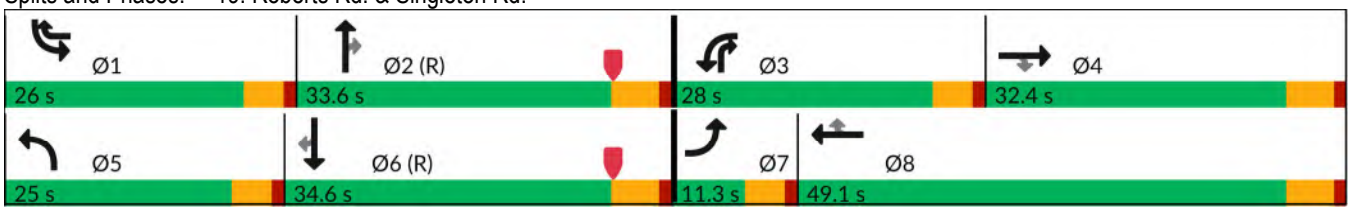
Notes

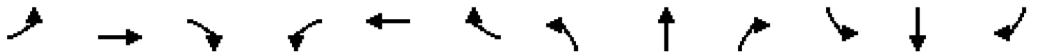
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	449	118	261	523	309	419	452	371	331	570	158
Future Volume (vph)	76	449	118	261	523	309	419	452	371	331	570	158
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	3	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.4	32.4	9.6	32.4	9.6	9.6	32.4	9.6	9.6	32.4	32.4
Total Split (s)	11.3	32.4	32.4	28.0	49.1	26.0	25.0	33.6	28.0	26.0	34.6	34.6
Total Split (%)	9.4%	27.0%	27.0%	23.3%	40.9%	21.7%	20.8%	28.0%	23.3%	21.7%	28.8%	28.8%
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4	3.6	3.6	4.4	3.6	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4	4.6	4.6	5.4	4.6	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	C-Max
Act Effct Green (s)	6.3	22.2	22.2	17.5	35.3	60.3	19.0	40.7	63.6	19.6	41.3	41.3
Actuated g/C Ratio	0.05	0.19	0.19	0.15	0.29	0.50	0.16	0.34	0.53	0.16	0.34	0.34
v/c Ratio	0.45	0.73	0.31	0.72	0.53	0.52	0.82	0.52	0.59	0.82	0.65	0.26
Control Delay (s/veh)	63.1	52.5	6.2	45.1	40.6	25.4	61.6	36.0	21.4	60.6	38.3	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.1	52.5	6.2	45.1	40.6	25.8	61.6	36.0	21.4	60.6	38.3	9.2
LOS	E	D	A	D	D	C	E	D	C	E	D	A
Approach Delay (s/veh)		45.3			37.1			38.5			42.0	
Approach LOS		D			D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay (s/veh): 40.0	Intersection LOS: D
Intersection Capacity Utilization 64.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 19: Roberts Rd. & Singleton Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	449	118	261	523	309	419	452	371	331	570	158
Future Volume (veh/h)	76	449	118	261	523	309	419	452	371	331	570	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	83	488	74	368	568	224	455	637	312	466	803	118
Peak Hour Factor	0.92	0.92	0.92	0.71	0.92	0.71	0.92	0.71	0.71	0.71	0.71	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	137	602	269	439	912	649	515	1413	831	527	1426	636
Arrive On Green	0.04	0.17	0.17	0.04	0.08	0.08	0.15	0.39	0.39	0.15	0.39	0.39
Sat Flow, veh/h	3510	3610	1610	3510	3610	1610	3510	3610	1610	3510	3610	1610
Grp Volume(v), veh/h	83	488	74	368	568	224	455	637	312	466	803	118
Grp Sat Flow(s),veh/h/ln	1755	1805	1610	1755	1805	1610	1755	1805	1610	1755	1805	1610
Q Serve(g_s), s	2.8	15.6	4.8	12.5	18.3	12.8	15.2	15.6	13.9	15.6	20.8	5.7
Cycle Q Clear(g_c), s	2.8	15.6	4.8	12.5	18.3	12.8	15.2	15.6	13.9	15.6	20.8	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	602	269	439	912	649	515	1413	831	527	1426	636
V/C Ratio(X)	0.61	0.81	0.28	0.84	0.62	0.35	0.88	0.45	0.38	0.88	0.56	0.19
Avail Cap(c_a), veh/h	196	812	362	685	1315	828	597	1413	831	626	1426	636
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.94	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.7	48.2	43.7	56.3	49.5	30.9	50.2	27.0	17.4	50.0	28.2	23.7
Incr Delay (d2), s/veh	1.6	4.5	0.5	2.9	0.7	0.3	12.2	1.0	1.3	11.3	1.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	7.4	2.0	6.1	8.9	5.5	7.6	6.9	5.3	7.7	9.3	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.4	52.7	44.2	59.2	50.1	31.2	62.4	28.0	18.7	61.3	29.9	24.3
LnGrp LOS	E	D	D	E	D	C	E	C	B	E	C	C
Approach Vol, veh/h		645			1160			1404			1387	
Approach Delay, s/veh		52.5			49.4			37.1			39.9	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.6	52.4	19.6	25.4	22.2	52.8	9.3	35.7
Change Period (Y+Rc), s	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4
Max Green Setting (Gmax), s	21.4	28.2	23.4	27.0	20.4	29.2	6.7	43.7
Max Q Clear Time (g_c+I1), s	17.6	17.6	14.5	17.6	17.2	22.8	4.8	20.3
Green Ext Time (p_c), s	0.4	4.0	0.5	2.4	0.3	3.1	0.0	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	43.2
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	704	447	670	683	735	0	410
Future Volume (vph)	704	447	670	683	735	0	410
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	2		1	6		4	
Permitted Phases		2			4		4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8	22.8	22.8
Total Split (s)	38.0	38.0	37.0	75.0	45.0	45.0	45.0
Total Split (%)	31.7%	31.7%	30.8%	62.5%	37.5%	37.5%	37.5%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8	5.8	5.8
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	C-Max	C-Max	None	C-Max	Max	Max	Max
Act Effct Green (s)	35.3	35.3	29.7	69.6	39.2	39.2	39.2
Actuated g/C Ratio	0.29	0.29	0.25	0.58	0.33	0.33	0.33
v/c Ratio	0.73	0.63	0.89	0.36	0.78	0.78	0.74
Control Delay (s/veh)	38.6	11.6	62.2	7.3	47.7	47.8	30.3
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.6	11.8	62.2	7.3	47.7	47.8	30.3
LOS	D	B	E	A	D	D	C
Approach Delay (s/veh)	28.2			34.5		41.5	
Approach LOS	C			C		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay (s/veh): 34.7	Intersection LOS: C
Intersection Capacity Utilization 98.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 20: I-10 SB Ramps & Singleton Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	704	447	670	683	0	0	0	0	735	0	410
Future Volume (veh/h)	0	704	447	670	683	0	0	0	0	735	0	410
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.00	1.04	1.00				1.00	1.00	1.04
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	1976	1900	1900	1976	0				1900	1900	1976
Adj Flow Rate, veh/h	0	838	294	798	813	0				875	0	488
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84				0.84	0.84	0.84
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1214	495	848	2292	0				1182	0	547
Arrive On Green	0.00	0.31	0.31	0.47	1.00	0.00				0.33	0.00	0.33
Sat Flow, veh/h	0	3952	1610	3619	3952	0				3619	0	1675
Grp Volume(v), veh/h	0	838	294	798	813	0				875	0	488
Grp Sat Flow(s),veh/h/ln	0	1976	1610	1810	1976	0				1810	0	1675
Q Serve(g_s), s	0.0	22.4	18.6	25.1	0.0	0.0				25.8	0.0	33.2
Cycle Q Clear(g_c), s	0.0	22.4	18.6	25.1	0.0	0.0				25.8	0.0	33.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1214	495	848	2292	0				1182	0	547
V/C Ratio(X)	0.00	0.69	0.59	0.94	0.35	0.00				0.74	0.00	0.89
Avail Cap(c_a), veh/h	0	1214	495	977	2292	0				1182	0	547
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	0.64	0.64	0.72	0.72	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	36.5	35.2	31.1	0.0	0.0				35.9	0.0	38.4
Incr Delay (d2), s/veh	0.0	2.1	3.3	11.3	0.3	0.0				4.2	0.0	19.4
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	11.0	7.6	9.5	0.1	0.0				12.0	0.0	16.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	38.6	38.6	42.4	0.3	0.0				40.1	0.0	57.8
LnGrp LOS		D	D	D	A					D		E
Approach Vol, veh/h		1132			1611						1363	
Approach Delay, s/veh		38.6			21.1						46.4	
Approach LOS		D			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	32.7	42.3		45.0		75.0
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4
Max Green Setting (Gmax), s	32.4	32.6		39.2		69.6
Max Q Clear Time (g_c+I1), s	27.1	24.4		35.2		2.0
Green Ext Time (p_c), s	1.0	4.1		2.1		6.7

Intersection Summary		
HCM 7th Control Delay, s/veh		34.3
HCM 7th LOS		C

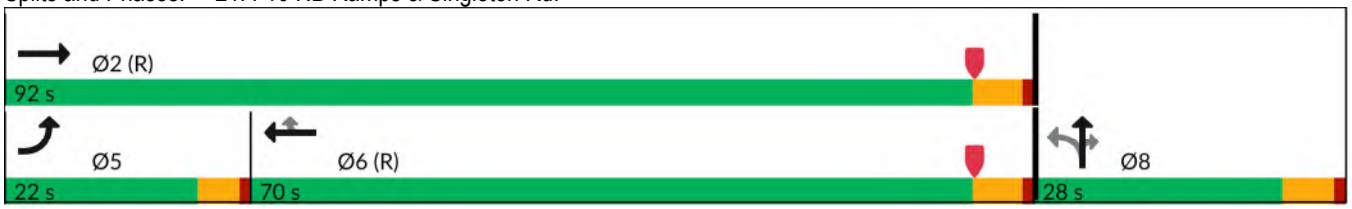
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	411	1028	1044	983	309	0	431
Future Volume (vph)	411	1028	1044	983	309	0	431
Turn Type	Prot	NA	NA	Perm	Perm	NA	Perm
Protected Phases	5	2	6			8	
Permitted Phases				6	8		8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8	22.8
Total Split (s)	22.0	92.0	70.0	70.0	28.0	28.0	28.0
Total Split (%)	18.3%	76.7%	58.3%	58.3%	23.3%	23.3%	23.3%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8	5.8
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	17.1	86.6	64.9	64.9	22.2	22.2	22.2
Actuated g/C Ratio	0.14	0.72	0.54	0.54	0.19	0.19	0.19
v/c Ratio	0.92	0.42	0.58	0.92	0.91	0.70	0.67
Control Delay (s/veh)	51.3	10.0	13.0	16.4	80.3	33.1	31.0
Queue Delay	0.0	0.0	51.0	46.5	0.0	62.4	62.6
Total Delay (s/veh)	51.3	10.0	64.0	62.9	80.3	95.5	93.6
LOS	D	A	E	E	F	F	F
Approach Delay (s/veh)		21.8	63.5			89.6	
Approach LOS		C	E			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 53.8	Intersection LOS: D
Intersection Capacity Utilization 98.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 21: I-10 NB Ramps & Singleton Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	411	1028	0	0	1044	983	309	0	431	0	0	0
Future Volume (veh/h)	411	1028	0	0	1044	983	309	0	431	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.04	1.00	1.00	1.04	1.04	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1976	0	0	1976	1976	1900	1900	1900			
Adj Flow Rate, veh/h	457	1142	0	0	1160	870	513	0	297			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	501	2709	0	0	2030	905	670	0	298			
Arrive On Green	0.29	1.00	0.00	0.00	0.18	0.18	0.19	0.00	0.19			
Sat Flow, veh/h	3510	3853	0	0	3853	1675	3619	0	1610			
Grp Volume(v), veh/h	457	1142	0	0	1160	870	513	0	297			
Grp Sat Flow(s),veh/h/ln	1755	1877	0	0	1877	1675	1810	0	1610			
Q Serve(g_s), s	15.1	0.0	0.0	0.0	33.9	61.8	16.2	0.0	22.1			
Cycle Q Clear(g_c), s	15.1	0.0	0.0	0.0	33.9	61.8	16.2	0.0	22.1			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	501	2709	0	0	2030	905	670	0	298			
V/C Ratio(X)	0.91	0.42	0.00	0.00	0.57	0.96	0.77	0.00	1.00			
Avail Cap(c_a), veh/h	509	2709	0	0	2030	905	670	0	298			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	0.59	0.59	0.00	0.00	0.09	0.09	1.00	0.00	1.00			
Uniform Delay (d), s/veh	42.1	0.0	0.0	0.0	36.6	48.0	46.4	0.0	48.9			
Incr Delay (d2), s/veh	13.3	0.3	0.0	0.0	0.1	3.7	8.2	0.0	51.4			
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	6.4	0.1	0.0	0.0	17.1	28.6	8.0	0.0	13.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.5	0.3	0.0	0.0	36.7	51.7	54.6	0.0	100.3			
LnGrp LOS	E	A			D	D	D		F			
Approach Vol, veh/h		1599			2030			810				
Approach Delay, s/veh		16.1			43.1			71.4				
Approach LOS		B			D			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		92.0			21.7	70.3		28.0				
Change Period (Y+Rc), s		5.4			4.6	5.4		5.8				
Max Green Setting (Gmax), s		86.6			17.4	64.6		22.2				
Max Q Clear Time (g_c+I1), s		2.0			17.1	63.8		24.1				
Green Ext Time (p_c), s		11.2			0.0	0.7		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	38.5
HCM 7th LOS	D

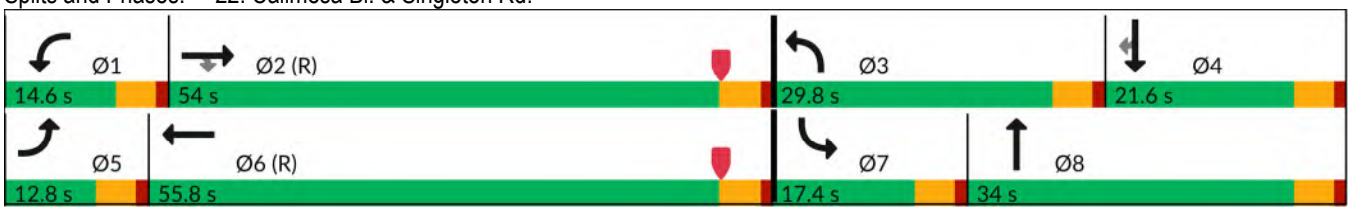
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	188	732	539	65	1177	649	323	88	57	200
Future Volume (vph)	188	732	539	65	1177	649	323	88	57	200
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	21.6	21.6	9.6	21.6	9.6	21.6	9.6	21.6	21.6
Total Split (s)	12.8	54.0	54.0	14.6	55.8	29.8	34.0	17.4	21.6	21.6
Total Split (%)	10.7%	45.0%	45.0%	12.2%	46.5%	24.8%	28.3%	14.5%	18.0%	18.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	8.2	53.0	53.0	8.3	51.2	24.9	32.0	10.2	17.3	17.3
Actuated g/C Ratio	0.07	0.44	0.44	0.07	0.43	0.21	0.27	0.09	0.14	0.14
v/c Ratio	0.84	0.49	0.55	0.55	0.99	0.95	0.56	0.62	0.12	0.61
Control Delay (s/veh)	82.4	17.4	6.0	70.3	55.3	70.4	33.9	69.9	45.7	25.4
Queue Delay	0.0	4.1	0.6	0.0	38.8	0.0	0.0	0.0	0.0	0.4
Total Delay (s/veh)	82.4	21.5	6.5	70.3	94.1	70.4	33.9	69.9	45.7	25.8
LOS	F	C	A	E	F	E	C	E	D	C
Approach Delay (s/veh)		23.9			93.1		54.2		40.4	
Approach LOS		C			F		D		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 77 (64%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay (s/veh): 56.1	Intersection LOS: E
Intersection Capacity Utilization 83.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 22: Calimesa Bl. & Singleton Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	732	539	65	1177	236	649	323	193	88	57	200
Future Volume (veh/h)	188	732	539	65	1177	236	649	323	193	88	57	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	200	779	360	69	1252	251	690	344	205	94	61	213
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	240	1610	718	89	1281	254	737	628	367	118	511	228
Arrive On Green	0.14	0.89	0.89	0.05	0.43	0.43	0.21	0.29	0.29	0.07	0.14	0.14
Sat Flow, veh/h	3510	3610	1610	1810	3002	596	3510	2193	1282	1810	3610	1610
Grp Volume(v), veh/h	200	779	360	69	748	755	690	282	267	94	61	213
Grp Sat Flow(s),veh/h/ln	1755	1805	1610	1810	1805	1793	1755	1805	1669	1810	1805	1610
Q Serve(g_s), s	6.7	4.9	5.2	4.5	48.7	50.1	23.2	15.9	16.3	6.1	1.8	15.7
Cycle Q Clear(g_c), s	6.7	4.9	5.2	4.5	48.7	50.1	23.2	15.9	16.3	6.1	1.8	15.7
Prop In Lane	1.00		1.00	1.00		0.33	1.00		0.77	1.00		1.00
Lane Grp Cap(c), veh/h	240	1610	718	89	770	765	737	517	478	118	511	228
V/C Ratio(X)	0.83	0.48	0.50	0.78	0.97	0.99	0.94	0.55	0.56	0.80	0.12	0.93
Avail Cap(c_a), veh/h	240	1610	718	151	770	765	737	517	478	193	511	228
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	3.9	3.9	56.4	33.7	34.1	46.6	36.2	36.4	55.3	45.0	50.9
Incr Delay (d2), s/veh	18.4	0.9	2.2	5.4	26.0	29.6	19.0	4.1	4.7	4.6	0.5	44.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	1.4	1.6	2.2	26.0	27.2	12.0	7.6	7.3	3.0	0.8	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.6	4.8	6.1	61.8	59.7	63.7	65.6	40.3	41.0	59.9	45.4	95.5
LnGrp LOS	E	A	A	E	E	E	E	D	D	E	D	F
Approach Vol, veh/h		1339			1572			1239			368	
Approach Delay, s/veh		14.8			61.7			54.6			78.1	
Approach LOS		B			E			D			E	

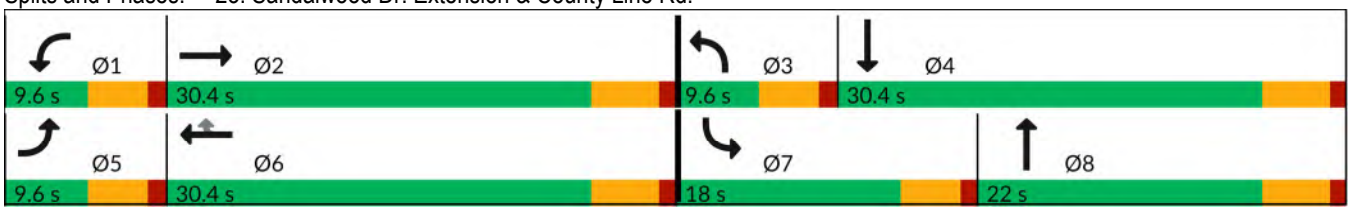
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	58.1	29.8	21.6	12.8	55.8	12.4	39.0
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	10.0	49.4	25.2	17.0	8.2	51.2	12.8	29.4
Max Q Clear Time (g_c+I1), s	6.5	7.2	25.2	17.7	8.7	52.1	8.1	18.3
Green Ext Time (p_c), s	0.0	4.5	0.0	0.0	0.0	0.0	0.0	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	47.2
HCM 7th LOS	D

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	5	475	35	232	133	5	95	225	157
Future Volume (vph)	5	475	35	232	133	5	95	225	157
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	5	2	1	6		3	8	7	4
Permitted Phases					6				
Detector Phase	5	2	1	6	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.0	9.6	27.0	27.0	9.6	22.0	9.6	22.0
Total Split (s)	9.6	30.4	9.6	30.4	30.4	9.6	22.0	18.0	30.4
Total Split (%)	12.0%	38.0%	12.0%	38.0%	38.0%	12.0%	27.5%	22.5%	38.0%
Yellow Time (s)	3.6	4.0	3.6	4.0	4.0	3.6	4.0	3.6	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.0	4.6	5.0	5.0	4.6	5.0	4.6	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	5.2	22.2	5.2	25.6	25.6	5.2	12.7	12.2	24.5
Actuated g/C Ratio	0.08	0.33	0.08	0.38	0.38	0.08	0.19	0.18	0.36
v/c Ratio	0.04	0.83	0.27	0.35	0.19	0.04	0.57	0.75	0.26
Control Delay (s/veh)	35.4	36.2	39.7	17.7	1.5	35.4	25.8	45.2	17.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.4	36.2	39.7	17.7	1.5	35.4	25.8	45.2	17.1
LOS	D	D	D	B	A	D	C	D	B
Approach Delay (s/veh)		36.2		14.2			26.0		33.5
Approach LOS		D		B			C		C

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 67.4	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 28.1	Intersection LOS: C
Intersection Capacity Utilization 65.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 23: Sandalwood Dr. Extension & County Line Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	475	5	35	232	133	5	95	104	225	157	5
Future Volume (veh/h)	5	475	5	35	232	133	5	95	104	225	157	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	5	516	5	38	252	145	5	103	113	245	171	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	12	606	6	70	674	572	12	132	145	296	581	17
Arrive On Green	0.01	0.32	0.32	0.04	0.35	0.35	0.01	0.16	0.16	0.16	0.32	0.32
Sat Flow, veh/h	1810	1879	18	1810	1900	1610	1810	828	908	1810	1837	54
Grp Volume(v), veh/h	5	0	521	38	252	145	5	0	216	245	0	176
Grp Sat Flow(s),veh/h/ln	1810	0	1897	1810	1900	1610	1810	0	1736	1810	0	1890
Q Serve(g_s), s	0.2	0.0	15.6	1.3	6.0	3.9	0.2	0.0	7.3	8.0	0.0	4.3
Cycle Q Clear(g_c), s	0.2	0.0	15.6	1.3	6.0	3.9	0.2	0.0	7.3	8.0	0.0	4.3
Prop In Lane	1.00		0.01	1.00		1.00	1.00		0.52	1.00		0.03
Lane Grp Cap(c), veh/h	12	0	612	70	674	572	12	0	278	296	0	598
V/C Ratio(X)	0.41	0.00	0.85	0.54	0.37	0.25	0.41	0.00	0.78	0.83	0.00	0.29
Avail Cap(c_a), veh/h	149	0	791	149	792	671	149	0	485	398	0	788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.1	0.0	19.3	28.7	14.6	13.9	30.1	0.0	24.6	24.7	0.0	15.7
Incr Delay (d2), s/veh	8.2	0.0	7.1	2.4	0.3	0.2	8.2	0.0	4.7	7.8	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	7.4	0.6	2.4	1.3	0.1	0.0	3.2	3.8	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.4	0.0	26.3	31.1	15.0	14.2	38.4	0.0	29.2	32.5	0.0	16.0
LnGrp LOS	D		C	C	B	B	D		C	C		B
Approach Vol, veh/h		526			435			221			421	
Approach Delay, s/veh		26.5			16.1			29.4			25.6	
Approach LOS		C			B			C			C	

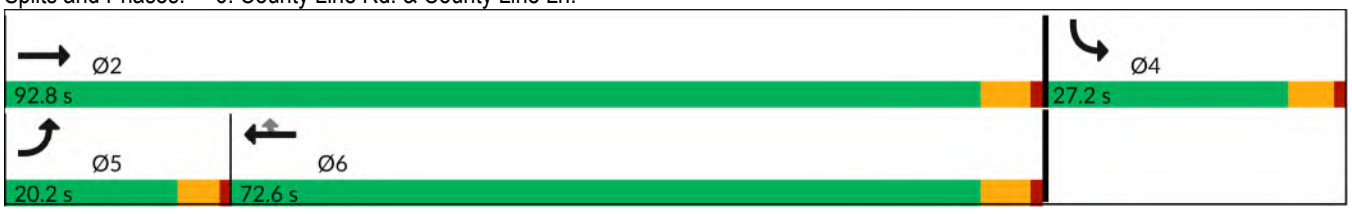
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	24.7	5.0	24.3	5.0	26.6	14.5	14.7
Change Period (Y+Rc), s	4.6	5.0	4.6	5.0	4.6	5.0	4.6	5.0
Max Green Setting (Gmax), s	5.0	25.4	5.0	25.4	5.0	25.4	13.4	17.0
Max Q Clear Time (g_c+I1), s	3.3	17.6	2.2	6.3	2.2	8.0	10.0	9.3
Green Ext Time (p_c), s	0.0	2.0	0.0	0.9	0.0	1.8	0.1	0.7

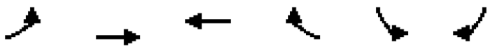
Intersection Summary	
HCM 7th Control Delay, s/veh	23.8
HCM 7th LOS	C

Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations					
Traffic Volume (vph)	69	642	915	105	179
Future Volume (vph)	69	642	915	105	179
Turn Type	Prot	NA	NA	Perm	Prot
Protected Phases	5	2	6		4
Permitted Phases				6	
Detector Phase	5	2	6	6	4
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	27.2
Total Split (s)	20.2	92.8	72.6	72.6	27.2
Total Split (%)	16.8%	77.3%	60.5%	60.5%	22.7%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.2
Lead/Lag	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None
Act Effct Green (s)	11.3	74.4	58.3	58.3	16.7
Actuated g/C Ratio	0.11	0.73	0.57	0.57	0.16
v/c Ratio	0.62	0.44	0.79	0.19	0.68
Control Delay (s/veh)	60.4	6.2	21.3	4.4	46.1
Queue Delay	0.0	0.3	0.0	0.0	0.0
Total Delay (s/veh)	60.4	6.4	21.3	4.4	46.1
LOS	E	A	C	A	D
Approach Delay (s/veh)		11.7	19.5		46.1
Approach LOS		B	B		D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 102.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 19.7	Intersection LOS: B
Intersection Capacity Utilization 50.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: County Line Rd. & County Line Ln.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	69	642	915	105	179	41
Future Volume (veh/h)	69	642	915	105	179	41
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	123	1146	1634	188	388	0
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	156	2649	2140	955	506	225
Arrive On Green	0.09	0.73	0.59	0.59	0.14	0.00
Sat Flow, veh/h	1810	3705	3705	1610	3619	1610
Grp Volume(v), veh/h	123	1146	1634	188	388	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1810	1610
Q Serve(g_s), s	5.6	10.4	28.3	4.5	8.7	0.0
Cycle Q Clear(g_c), s	5.6	10.4	28.3	4.5	8.7	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	156	2649	2140	955	506	225
V/C Ratio(X)	0.79	0.43	0.76	0.20	0.77	0.00
Avail Cap(c_a), veh/h	336	3754	2887	1288	947	422
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	0.00
Uniform Delay (d), s/veh	37.6	4.4	12.7	7.9	34.8	0.0
Incr Delay (d2), s/veh	3.3	0.1	0.9	0.1	2.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.8	10.2	1.4	3.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	41.0	4.5	13.6	8.0	37.3	0.0
LnGrp LOS	D	A	B	A	D	
Approach Vol, veh/h		1269	1822		388	
Approach Delay, s/veh		8.0	13.0		37.3	
Approach LOS		A	B		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		67.1		17.0	11.9	55.2
Change Period (Y+Rc), s		5.4		5.2	4.6	5.4
Max Green Setting (Gmax), s		87.4		22.0	15.6	67.2
Max Q Clear Time (g_c+I1), s		12.4		10.7	7.6	30.3
Green Ext Time (p_c), s		12.0		1.1	0.1	19.5

Intersection Summary	
HCM 7th Control Delay, s/veh	13.9
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	810	11	99	1006	14	69
Future Vol, veh/h	810	11	99	1006	14	69
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	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	880	12	108	1093	15	75

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	892	0	1648	446
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	762	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	768	-	92	565
Stage 1	-	-	-	-	368	-
Stage 2	-	-	-	-	427	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	768	-	79	565
Mov Cap-2 Maneuver	-	-	-	-	204	-
Stage 1	-	-	-	-	368	-
Stage 2	-	-	-	-	367	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.94	15.43
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	435	-	-	768	-
HCM Lane V/C Ratio	0.207	-	-	0.14	-
HCM Control Delay (s/veh)	15.4	-	-	10.4	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.8	-	-	0.5	-

Intersection	
Intersection Delay, s/veh	15.6
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	2
Conflicting Circle Lanes	2	2	1	2
Adj Approach Flow, veh/h	936	1076	0	1158
Demand Flow Rate, veh/h	936	1076	0	1158
Vehicles Circulating, veh/h	1058	0	1441	1076
Vehicles Exiting, veh/h	664	1441	415	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	23.2	6.2	0.0	18.1
Approach LOS	C	A	-	C

Lane	Left	Right	Bypass	Left	Right	Left	Left	Right	Bypass
Designated Moves	LT	TR	R	LT	TR	R	L	LTR	R
Assumed Moves	LT	TR		LT	TR	R	L	LTR	
RT Channelized			Yield						Yield
Lane Util	0.470	0.530		0.470	0.530	1.000	0.529	0.471	
Follow-Up Headway, s	2.667	2.535	2.535	2.667	2.535	2.609	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.327	4.645	4.328	4.976	4.645	4.328	4.327
A (Intercept)	1350	1420	1420	1350	1420	1380	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	8.499e-4	9.199e-4	8.501e-4	1.02e-3	9.199e-4	8.501e-4	8.499e-4
Entry Flow, veh/h	375	423	138	506	570	0	342	304	512
Cap Entry Lane, veh/h	510	578	998	1350	1420	317	502	569	808
Entry HV Adj Factor	1.000	1.000	1.000	0.999	1.000	1.000	1.001	0.999	1.000
Flow Entry, veh/h	375	423	138	506	570	0	342	304	512
Cap Entry, veh/h	510	578	998	1349	1421	317	502	568	808
V/C Ratio	0.735	0.732	0.138	0.375	0.401	0.000	0.682	0.534	0.634
Control Delay, s/veh	27.9	25.0	4.9	6.1	6.2	11.3	24.6	16.0	15.0
LOS	D	D	A	A	A	B	C	C	C
95th %tile Queue, veh	6	6	0	2	2	0	5	3	5

Intersection	
Intersection Delay, s/veh	17.5
Intersection LOS	C

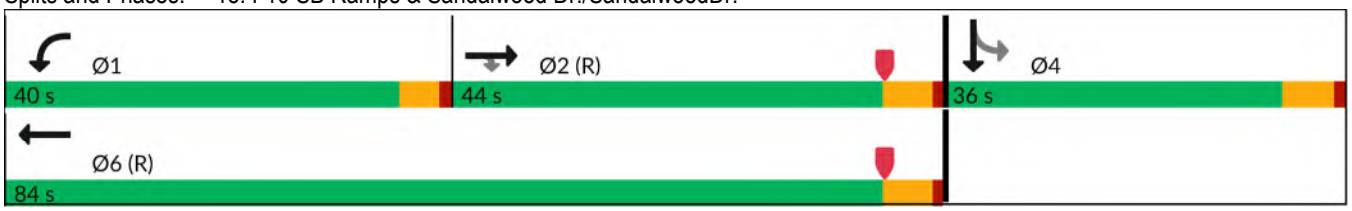
Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1441	1313	586	0
Demand Flow Rate, veh/h	1441	1313	586	0
Vehicles Circulating, veh/h	0	724	1441	1076
Vehicles Exiting, veh/h	1076	1303	0	534
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.0	13.5	49.6	0.0
Approach LOS	A	B	E	-

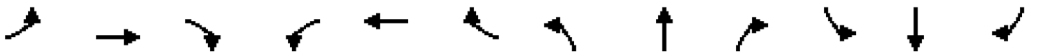
Lane	Left	Right	Left	Right	Bypass	Left	Right	Left
Designated Moves	LT	TR	LT	TR	R	LT	R	R
Assumed Moves	LT	TR	LT	TR		LT	R	R
RT Channelized					Yield			
Lane Util	0.470	0.530	0.470	0.530		0.329	0.671	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.327	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.499e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	677	764	416	470	427	193	393	0
Cap Entry Lane, veh/h	1350	1420	694	767	902	359	417	569
Entry HV Adj Factor	1.000	1.000	1.001	0.999	1.000	1.000	1.000	1.000
Flow Entry, veh/h	677	764	416	470	427	193	393	0
Cap Entry, veh/h	1350	1420	694	767	902	359	417	569
V/C Ratio	0.502	0.538	0.600	0.612	0.473	0.538	0.942	0.000
Control Delay, s/veh	7.8	8.1	15.6	14.9	9.9	23.8	62.2	6.3
LOS	A	A	C	B	A	C	F	A
95th %tile Queue, veh	3	3	4	4	3	3	11	0

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	322	345	442	801	294	5	450
Future Volume (vph)	322	345	442	801	294	5	450
Turn Type	NA	Perm	Prot	NA	Perm	NA	Free
Protected Phases	2		1	6		4	
Permitted Phases		2			4		Free
Detector Phase	2	2	1	6	4	4	
Switch Phase							
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8	22.8	
Total Split (s)	44.0	44.0	40.0	84.0	36.0	36.0	
Total Split (%)	36.7%	36.7%	33.3%	70.0%	30.0%	30.0%	
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8	5.8	
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	C-Max	C-Max	None	C-Max	Min	Min	
Act Effct Green (s)	67.4	67.4	20.5	92.4	16.4	16.4	120.0
Actuated g/C Ratio	0.56	0.56	0.17	0.77	0.14	0.14	1.00
v/c Ratio	0.26	0.24	0.78	0.30	0.68	0.66	0.29
Control Delay (s/veh)	13.6	2.9	55.6	4.5	63.1	62.3	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.6	2.9	55.6	4.5	63.1	62.3	0.5
LOS	B	A	E	A	E	E	A
Approach Delay (s/veh)	10.3			22.7		25.3	
Approach LOS	B			C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 20.3	Intersection LOS: C
Intersection Capacity Utilization 48.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: I-10 SB Ramps & Sandalwood Dr./SandalwoodDr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	322	345	442	801	0	0	0	0	294	5	450
Future Volume (veh/h)	0	322	345	442	801	0	0	0	0	294	5	450
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	299	390	465	843	0				313	0	0
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	0	0	0	0	0				0	0	0
Cap, veh/h	0	1158	1964	525	2880	0				394	0	
Arrive On Green	0.00	0.61	0.61	0.30	1.00	0.00				0.11	0.00	0.00
Sat Flow, veh/h	0	1900	3220	3510	3705	0				3619	0	1610
Grp Volume(v), veh/h	0	299	390	465	843	0				313	0	0
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1755	1805	0				1810	0	1610
Q Serve(g_s), s	0.0	8.7	6.5	15.2	0.0	0.0				10.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.7	6.5	15.2	0.0	0.0				10.1	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1158	1964	525	2880	0				394	0	
V/C Ratio(X)	0.00	0.26	0.20	0.89	0.29	0.00				0.79	0.00	
Avail Cap(c_a), veh/h	0	1158	1964	1036	2880	0				911	0	
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	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	10.8	10.4	41.1	0.0	0.0				52.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.2	2.0	0.3	0.0				3.7	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.6	2.2	5.5	0.1	0.0				4.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	11.4	10.6	43.1	0.3	0.0				55.8	0.0	0.0
LnGrp LOS		B	B	D	A					E		
Approach Vol, veh/h		689			1308						313	
Approach Delay, s/veh		11.0			15.5						55.8	
Approach LOS		B			B						E	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	22.6	78.6		18.9		101.1						
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4						
Max Green Setting (Gmax), s	35.4	38.6		30.2		78.6						
Max Q Clear Time (g_c+I1), s	17.2	10.7		12.1		2.0						
Green Ext Time (p_c), s	0.8	3.4		1.0		6.7						

Intersection Summary			
HCM 7th Control Delay, s/veh		19.6	
HCM 7th LOS		B	

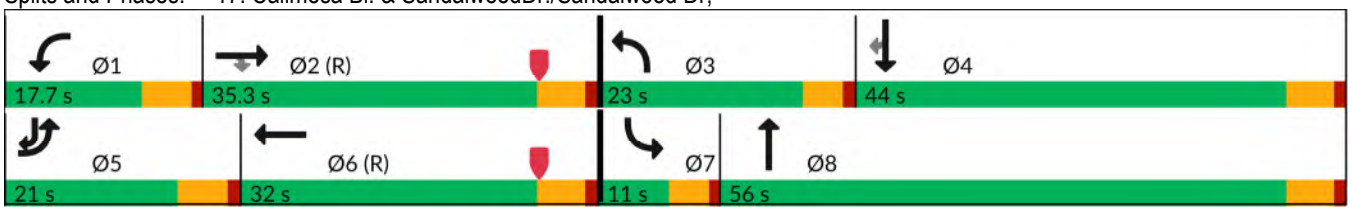
Notes

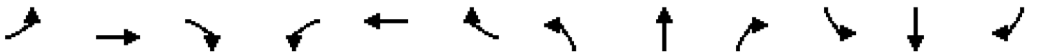
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	223	295	98	92	354	567	495	40	560	511
Future Volume (vph)	223	295	98	92	354	567	495	40	560	511
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2		1	6	3	8	7	4	5
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	5
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	10.4	30.4	30.4	10.4	29.4	10.0	27.4	10.0	22.4	10.4
Total Split (s)	21.0	35.3	35.3	17.7	32.0	23.0	56.0	11.0	44.0	21.0
Total Split (%)	17.5%	29.4%	29.4%	14.8%	26.7%	19.2%	46.7%	9.2%	36.7%	17.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	3.6	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	5.4	4.6	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	Min	None	Min	None
Act Effct Green (s)	15.5	32.6	32.6	10.0	27.1	18.4	52.6	6.0	38.3	53.7
Actuated g/C Ratio	0.13	0.27	0.27	0.08	0.23	0.15	0.44	0.05	0.32	0.45
v/c Ratio	0.93	0.30	0.16	0.61	0.47	0.99	0.50	0.44	0.97	0.60
Control Delay (s/veh)	91.0	33.8	7.5	69.4	42.0	77.5	19.4	69.9	71.2	19.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	91.0	33.8	7.5	69.4	42.0	77.5	19.4	69.9	71.2	19.9
LOS	F	C	A	E	D	E	B	E	E	B
Approach Delay (s/veh)		50.3			47.3		43.9		47.5	
Approach LOS		D			D		D		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 85.5 (71%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay (s/veh): 46.6	Intersection LOS: D
Intersection Capacity Utilization 95.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 17: Calimesa Bl. & SandalwoodDr./Sandalwood Dr,





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	295	98	92	354	28	567	495	285	40	560	511
Future Volume (veh/h)	223	295	98	92	354	28	567	495	285	40	560	511
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1976	1900	1900	1900	1976	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	235	311	50	97	373	20	597	521	195	42	589	327
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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	245	1072	472	126	792	42	577	1170	436	57	611	727
Arrive On Green	0.22	0.47	0.47	0.07	0.22	0.22	0.15	0.44	0.44	0.03	0.32	0.32
Sat Flow, veh/h	1882	3800	1675	1810	3571	191	3764	2638	983	1810	1900	1609
Grp Volume(v), veh/h	235	311	50	97	198	195	597	375	341	42	589	327
Grp Sat Flow(s),veh/h/ln	1882	1900	1675	1810	1900	1862	1882	1900	1721	1810	1900	1609
Q Serve(g_s), s	14.8	6.0	2.0	6.3	10.9	10.9	18.4	16.4	16.5	2.8	36.6	16.8
Cycle Q Clear(g_c), s	14.8	6.0	2.0	6.3	10.9	10.9	18.4	16.4	16.5	2.8	36.6	16.8
Prop In Lane	1.00		1.00	1.00		0.10	1.00		0.57	1.00		1.00
Lane Grp Cap(c), veh/h	245	1072	472	126	421	413	577	843	763	57	611	727
V/C Ratio(X)	0.96	0.29	0.11	0.77	0.47	0.47	1.03	0.44	0.45	0.74	0.96	0.45
Avail Cap(c_a), veh/h	245	1072	472	185	421	413	577	843	763	97	611	727
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	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	0.80	0.80	0.80	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.7	24.4	23.3	54.9	40.6	40.6	50.8	23.1	23.2	57.6	40.0	22.7
Incr Delay (d2), s/veh	46.2	0.7	0.5	5.6	3.7	3.8	42.7	0.3	0.3	6.8	27.6	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	2.6	0.8	3.0	5.4	5.4	11.9	7.2	6.5	1.4	21.2	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	92.8	25.1	23.8	60.4	44.3	44.4	93.5	23.4	23.5	64.4	67.6	23.1
LnGrp LOS	F	C	C	E	D	D	F	C	C	E	E	C
Approach Vol, veh/h		596			490			1313			958	
Approach Delay, s/veh		51.7			47.5			55.3			52.3	
Approach LOS		D			D			E			D	

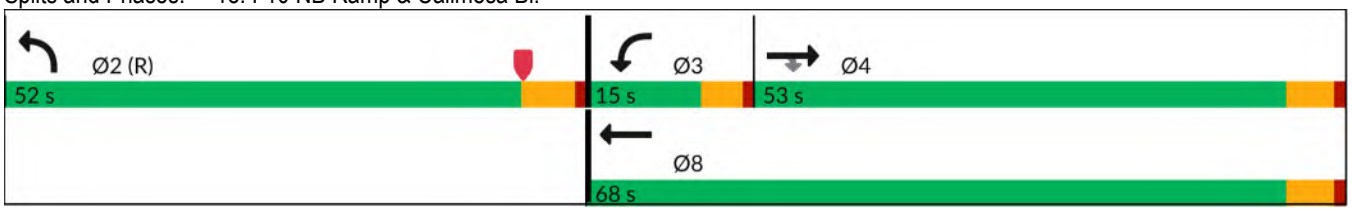
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	39.3	23.0	44.0	21.0	32.0	8.4	58.6
Change Period (Y+Rc), s	5.4	5.4	4.6	5.4	5.4	5.4	4.6	5.4
Max Green Setting (Gmax), s	12.3	29.9	18.4	38.6	15.6	26.6	6.4	50.6
Max Q Clear Time (g_c+I1), s	8.3	8.0	20.4	38.6	16.8	12.9	4.8	18.5
Green Ext Time (p_c), s	0.0	2.0	0.0	0.0	0.0	1.7	0.0	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	52.7
HCM 7th LOS	D

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	475	274	71	477	871
Future Volume (vph)	475	274	71	477	871
Turn Type	NA	Perm	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		4			
Detector Phase	4	4	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8
Total Split (s)	53.0	53.0	15.0	68.0	52.0
Total Split (%)	44.2%	44.2%	12.5%	56.7%	43.3%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8
Lead/Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		
Recall Mode	None	None	None	None	C-Max
Act Effct Green (s)	37.9	37.9	8.5	49.0	59.8
Actuated g/C Ratio	0.32	0.32	0.07	0.41	0.50
v/c Ratio	0.82	0.36	0.54	0.63	0.54
Control Delay (s/veh)	22.3	2.8	68.5	30.9	23.9
Queue Delay	0.2	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.5	2.8	68.5	30.9	23.9
LOS	C	A	E	C	C
Approach Delay (s/veh)	15.3			35.8	23.9
Approach LOS	B			D	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay (s/veh): 23.9	Intersection LOS: C
Intersection Capacity Utilization 72.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 18: I-10 NB Ramp & Calimesa Bl.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	475	274	71	477	871	158
Future Volume (veh/h)	475	274	71	477	871	158
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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	1900	1900	1900	1900	1976	1900
Adj Flow Rate, veh/h	490	-233	73	492	1002	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	555	471	94	727	1973	844
Arrive On Green	0.10	0.00	0.05	0.38	0.52	0.00
Sat Flow, veh/h	1900	1610	1810	1900	3764	1610
Grp Volume(v), veh/h	490	-233	73	492	1002	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1882	1610
Q Serve(g_s), s	30.6	0.0	4.8	25.9	20.7	0.0
Cycle Q Clear(g_c), s	30.6	0.0	4.8	25.9	20.7	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	555	471	94	727	1973	844
V/C Ratio(X)	0.88	-0.50	0.78	0.68	0.51	0.00
Avail Cap(c_a), veh/h	754	639	157	991	1973	844
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.46	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.2	0.0	56.2	30.9	18.5	0.0
Incr Delay (d2), s/veh	4.6	0.0	5.2	1.1	0.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.3	0.0	2.3	11.7	8.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	56.8	0.0	61.4	32.0	19.4	0.0
LnGrp LOS	E		E	C	B	
Approach Vol, veh/h	257			565	1002	
Approach Delay, s/veh	108.3			35.8	19.4	
Approach LOS	F			D	B	

Timer - Assigned Phs	2	3	4	8
Phs Duration (G+Y+Rc), s	68.7	10.8	40.5	51.3
Change Period (Y+Rc), s	5.8	4.6	5.4	5.4
Max Green Setting (Gmax), s	46.2	10.4	47.6	62.6
Max Q Clear Time (g_c+I1), s	22.7	6.8	32.6	27.9
Green Ext Time (p_c), s	4.0	0.0	2.5	3.1

Intersection Summary	
HCM 7th Control Delay, s/veh	37.0
HCM 7th LOS	D

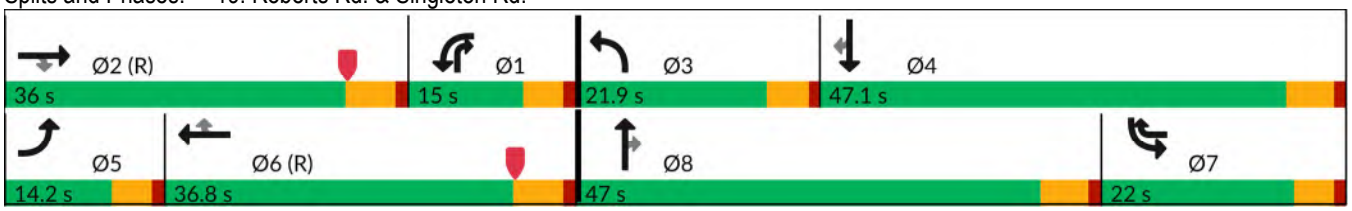
Notes

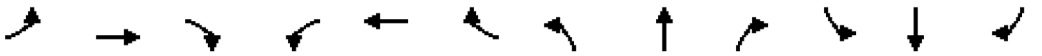
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	205	809	161	494	832	478	200	817	722	480	610	121
Future Volume (vph)	205	809	161	494	832	478	200	817	722	480	610	121
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	1	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.4	32.4	9.6	32.4	9.6	9.6	32.4	9.6	9.6	32.4	32.4
Total Split (s)	14.2	36.0	36.0	15.0	36.8	22.0	21.9	47.0	15.0	22.0	47.1	47.1
Total Split (%)	11.8%	30.0%	30.0%	12.5%	30.7%	18.3%	18.3%	39.2%	12.5%	18.3%	39.3%	39.3%
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4	3.6	3.6	4.4	3.6	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4	4.6	4.6	5.4	4.6	4.6	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max	None	None	Max	Max
Act Effct Green (s)	9.3	30.6	30.6	10.4	31.7	49.9	11.2	41.6	57.4	17.4	47.8	47.8
Actuated g/C Ratio	0.08	0.26	0.26	0.09	0.26	0.42	0.09	0.35	0.48	0.15	0.40	0.40
v/c Ratio	0.75	0.88	0.29	2.50	0.87	0.94	0.61	1.00	1.24	1.45	0.65	0.16
Control Delay (s/veh)	70.7	54.1	8.0	705.7	46.6	36.3	59.6	64.0	145.9	250.6	32.1	2.9
Queue Delay	0.0	49.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Total Delay (s/veh)	70.7	103.5	8.0	705.7	46.6	36.3	59.6	64.0	146.0	250.6	32.1	2.9
LOS	E	F	A	F	D	D	E	E	F	F	C	A
Approach Delay (s/veh)		84.7			258.3			99.1			119.8	
Approach LOS		F			F			F			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 10.2 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.50	
Intersection Signal Delay (s/veh): 148.7	Intersection LOS: F
Intersection Capacity Utilization 92.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 19: Roberts Rd. & Singleton Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	809	161	494	832	478	200	817	722	480	610	121
Future Volume (veh/h)	205	809	161	494	832	478	200	817	722	480	610	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1976	1900	1900	1976	1900	1900	1976	1900	1900	1976	1900
Adj Flow Rate, veh/h	223	879	88	823	904	797	217	1362	1203	800	1017	132
Peak Hour Factor	0.92	0.92	0.92	0.60	0.92	0.60	0.92	0.60	0.60	0.60	0.60	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	280	1008	411	1845	2744	1351	281	1370	1379	525	1663	678
Arrive On Green	0.08	0.25	0.25	0.85	1.00	1.00	0.08	0.35	0.35	0.15	0.42	0.42
Sat Flow, veh/h	3619	3952	1610	3619	3952	1610	3619	3952	1610	3619	3952	1610
Grp Volume(v), veh/h	223	879	88	823	904	797	217	1362	1203	800	1017	132
Grp Sat Flow(s),veh/h/ln	1810	1976	1610	1810	1976	1610	1810	1976	1610	1810	1976	1610
Q Serve(g_s), s	7.3	25.6	7.1	6.5	0.0	0.0	7.1	41.2	0.0	17.4	24.1	6.2
Cycle Q Clear(g_c), s	7.3	25.6	7.1	6.5	0.0	0.0	7.1	41.2	0.0	17.4	24.1	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	280	1008	411	1845	2744	1351	281	1370	1379	525	1663	678
V/C Ratio(X)	0.80	0.87	0.21	0.45	0.33	0.59	0.77	0.99	0.87	1.52	0.61	0.19
Avail Cap(c_a), veh/h	290	1008	411	1845	2744	1351	522	1370	1379	525	1663	678
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.61	0.61	0.61	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	42.8	66.1	4.9	0.0	0.0	54.3	39.1	4.9	51.3	27.1	21.9
Incr Delay (d2), s/veh	12.8	10.3	1.2	0.0	0.2	1.2	1.7	23.0	7.8	245.6	1.7	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	13.8	3.0	1.8	0.1	0.4	3.3	24.0	12.1	25.8	11.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.2	53.2	67.3	4.9	0.2	1.2	56.0	62.0	12.7	296.9	28.8	22.6
LnGrp LOS	E	D	E	A	A	A	E	E	B	F	C	C
Approach Vol, veh/h		1190			2524			2782			1949	
Approach Delay, s/veh		56.8			2.0			40.2			138.4	
Approach LOS		E			A			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	67.1	36.0	13.9	55.9	13.9	89.2	22.8	47.0
Change Period (Y+Rc), s	5.4	* 5.4	4.6	5.4	4.6	5.4	5.4	* 5.4
Max Green Setting (Gmax), s	10.4	* 31	17.3	41.7	9.6	31.4	17.4	* 42
Max Q Clear Time (g_c+I1), s	8.5	27.6	9.1	26.1	9.3	2.0	19.4	43.2
Green Ext Time (p_c), s	0.5	1.7	0.2	7.0	0.0	12.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	53.8
HCM 7th LOS	D

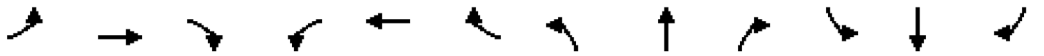
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1359	652	533	1160	1019	0	644
Future Volume (vph)	1359	652	533	1160	1019	0	644
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	2		1	6		4	
Permitted Phases		2			4		4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	22.4	22.4	9.6	22.4	22.8	22.8	22.8
Total Split (s)	49.3	49.3	23.8	73.1	46.9	46.9	46.9
Total Split (%)	41.1%	41.1%	19.8%	60.9%	39.1%	39.1%	39.1%
Yellow Time (s)	4.4	4.4	3.6	4.4	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	4.6	5.4	5.8	5.8	5.8
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	C-Max	C-Max	None	C-Max	Max	Max	Max
Act Effct Green (s)	43.9	43.9	19.2	67.7	41.1	41.1	41.1
Actuated g/C Ratio	0.37	0.37	0.16	0.56	0.34	0.34	0.34
v/c Ratio	1.02	0.77	0.99	0.56	0.93	0.93	1.04
Control Delay (s/veh)	52.9	13.5	89.3	16.0	62.8	62.8	80.0
Queue Delay	31.7	0.6	0.0	0.4	48.9	48.9	0.0
Total Delay (s/veh)	84.6	14.0	89.3	16.4	111.7	111.7	80.0
LOS	F	B	F	B	F	F	F
Approach Delay (s/veh)	61.7			39.3		99.5	
Approach LOS	E			D		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 23.8 (20%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay (s/veh): 66.3	Intersection LOS: E
Intersection Capacity Utilization 112.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 20: I-10 SB Ramps & Singleton Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1359	652	533	1160	0	0	0	0	1019	0	644
Future Volume (veh/h)	0	1359	652	533	1160	0	0	0	0	1019	0	644
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.04	1.00	1.00	1.04	1.00				1.00	1.00	1.04
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	1976	1900	1900	1976	0				1900	1900	1976
Adj Flow Rate, veh/h	0	1461	486	573	1247	0				1096	0	692
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1446	589	579	2230	0				1240	0	574
Arrive On Green	0.00	0.37	0.37	0.32	1.00	0.00				0.34	0.00	0.34
Sat Flow, veh/h	0	3952	1610	3619	3952	0				3619	0	1675
Grp Volume(v), veh/h	0	1461	486	573	1247	0				1096	0	692
Grp Sat Flow(s),veh/h/ln	0	1976	1610	1810	1976	0				1810	0	1675
Q Serve(g_s), s	0.0	43.9	32.9	18.9	0.0	0.0				34.3	0.0	41.1
Cycle Q Clear(g_c), s	0.0	43.9	32.9	18.9	0.0	0.0				34.3	0.0	41.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1446	589	579	2230	0				1240	0	574
V/C Ratio(X)	0.00	1.01	0.83	0.99	0.56	0.00				0.88	0.00	1.21
Avail Cap(c_a), veh/h	0	1446	589	579	2230	0				1240	0	574
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	0.09	0.09	0.30	0.30	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	38.0	34.6	40.7	0.0	0.0				37.2	0.0	39.5
Incr Delay (d2), s/veh	0.0	9.9	1.3	18.0	0.3	0.0				9.4	0.0	108.6
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	22.5	12.8	8.3	0.1	0.0				16.6	0.0	33.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	47.9	35.8	58.7	0.3	0.0				46.6	0.0	148.1
LnGrp LOS		F	D	E	A					D		F
Approach Vol, veh/h		1947			1820						1788	
Approach Delay, s/veh		44.9			18.7						85.9	
Approach LOS		D			B						F	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	23.8	49.3		46.9		73.1						
Change Period (Y+Rc), s	4.6	5.4		5.8		5.4						
Max Green Setting (Gmax), s	19.2	43.9		41.1		67.7						
Max Q Clear Time (g_c+I1), s	20.9	45.9		43.1		2.0						
Green Ext Time (p_c), s	0.0	0.0		0.0		12.9						

Intersection Summary												
HCM 7th Control Delay, s/veh			49.5									
HCM 7th LOS			D									

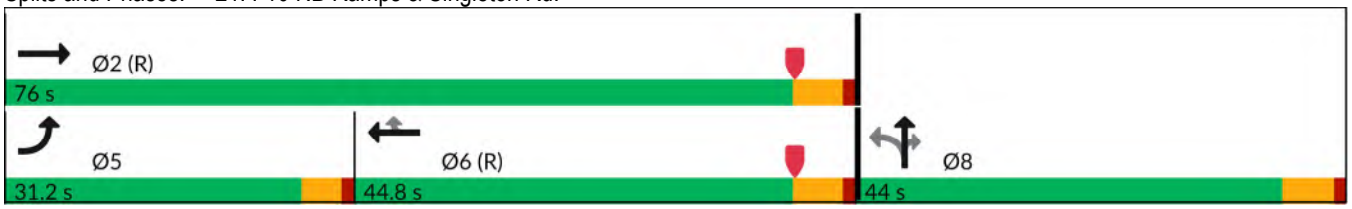
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	679	1699	975	854	717	0	752
Future Volume (vph)	679	1699	975	854	717	0	752
Turn Type	Prot	NA	NA	Perm	Perm	NA	Perm
Protected Phases	5	2	6			8	
Permitted Phases				6	8		8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.4	22.4	22.4	22.8	22.8	22.8
Total Split (s)	31.2	76.0	44.8	44.8	44.0	44.0	44.0
Total Split (%)	26.0%	63.3%	37.3%	37.3%	36.7%	36.7%	36.7%
Yellow Time (s)	3.6	4.4	4.4	4.4	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.4	5.4	5.4	5.8	5.8	5.8
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	26.5	70.6	39.5	39.5	38.2	38.2	38.2
Actuated g/C Ratio	0.22	0.59	0.33	0.33	0.32	0.32	0.32
v/c Ratio	0.96	0.85	0.87	0.95	1.03	1.01	0.96
Control Delay (s/veh)	46.9	36.3	42.5	26.0	86.0	79.0	67.0
Queue Delay	0.0	47.1	49.3	43.1	0.0	39.4	50.2
Total Delay (s/veh)	46.9	83.3	91.8	69.1	86.0	118.5	117.1
LOS	D	F	F	E	F	F	F
Approach Delay (s/veh)		72.9	81.2			106.8	
Approach LOS		E	F			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay (s/veh): 84.4	Intersection LOS: F
Intersection Capacity Utilization 112.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 21: I-10 NB Ramps & Singleton Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	679	1699	0	0	975	854	717	0	752	0	0	0
Future Volume (veh/h)	679	1699	0	0	975	854	717	0	752	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.04	1.00	1.00	1.04	1.04	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1976	0	0	1976	1976	1900	1900	1900			
Adj Flow Rate, veh/h	746	1867	0	0	1071	718	1051	0	544			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	778	2209	0	0	1233	550	1152	0	513			
Arrive On Green	0.29	0.78	0.00	0.00	0.44	0.44	0.32	0.00	0.32			
Sat Flow, veh/h	3510	3853	0	0	3853	1675	3619	0	1610			
Grp Volume(v), veh/h	746	1867	0	0	1071	718	1051	0	544			
Grp Sat Flow(s),veh/h/ln	1755	1877	0	0	1877	1675	1810	0	1610			
Q Serve(g_s), s	25.1	38.3	0.0	0.0	31.1	39.4	33.5	0.0	38.2			
Cycle Q Clear(g_c), s	25.1	38.3	0.0	0.0	31.1	39.4	33.5	0.0	38.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	778	2209	0	0	1233	550	1152	0	513			
V/C Ratio(X)	0.96	0.85	0.00	0.00	0.87	1.31	0.91	0.00	1.06			
Avail Cap(c_a), veh/h	778	2209	0	0	1233	550	1152	0	513			
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.33	1.33	1.00	1.00	1.00			
Upstream Filter(I)	0.10	0.10	0.00	0.00	0.28	0.28	1.00	0.00	1.00			
Uniform Delay (d), s/veh	41.8	9.5	0.0	0.0	31.5	33.8	39.3	0.0	40.9			
Incr Delay (d2), s/veh	4.1	0.4	0.0	0.0	2.6	141.5	12.4	0.0	57.0			
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	10.5	8.7	0.0	0.0	13.1	35.9	16.7	0.0	23.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.8	10.0	0.0	0.0	34.0	175.3	51.7	0.0	97.9			
LnGrp LOS	D	A			C	F	D		F			
Approach Vol, veh/h		2613			1789			1595				
Approach Delay, s/veh		20.2			90.7			67.4				
Approach LOS		C			F			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.0			31.2	44.8		44.0				
Change Period (Y+Rc), s		5.4			4.6	5.4		5.8				
Max Green Setting (Gmax), s		70.6			26.6	39.4		38.2				
Max Q Clear Time (g_c+I1), s		40.3			27.1	41.4		40.2				
Green Ext Time (p_c), s		19.0			0.0	0.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	53.8
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	174	1446	831	118	1010	551	92	225	174	268
Future Volume (vph)	174	1446	831	118	1010	551	92	225	174	268
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2		1	6	3	8	7	4	
Permitted Phases			2							4
Detector Phase	5	2	2	1	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	21.6	21.6	9.6	21.6	9.6	21.6	9.6	21.6	21.6
Total Split (s)	13.8	58.4	58.4	14.0	58.6	26.0	22.3	25.3	21.6	21.6
Total Split (%)	11.5%	48.7%	48.7%	11.7%	48.8%	21.7%	18.6%	21.1%	18.0%	18.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	8.9	53.8	53.8	9.4	54.3	21.4	19.4	19.0	17.0	17.0
Actuated g/C Ratio	0.07	0.45	0.45	0.08	0.45	0.18	0.16	0.16	0.14	0.14
v/c Ratio	0.73	0.98	0.90	0.92	0.76	0.97	0.29	0.87	0.37	0.83
Control Delay (s/veh)	69.7	40.4	14.9	112.7	31.1	78.5	27.1	77.4	49.1	45.1
Queue Delay	3.1	41.1	30.5	0.0	10.4	41.9	0.0	0.0	0.0	62.1
Total Delay (s/veh)	72.8	81.5	45.3	112.7	41.5	120.4	27.1	77.4	49.1	107.2
LOS	E	F	D	F	D	F	C	E	D	F
Approach Delay (s/veh)		68.6			48.3		99.4		82.0	
Approach LOS		E			D		F		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay (s/veh): 69.7	Intersection LOS: E
Intersection Capacity Utilization 82.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 22: Calimesa Bl. & Singleton Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	1446	831	118	1010	112	551	92	68	225	174	268
Future Volume (veh/h)	174	1446	831	118	1010	112	551	92	68	225	174	268
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	191	1589	693	130	1110	123	605	101	75	247	191	295
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	244	1618	722	142	1499	166	626	345	236	274	511	228
Arrive On Green	0.14	0.90	0.90	0.08	0.46	0.46	0.18	0.17	0.17	0.15	0.14	0.14
Sat Flow, veh/h	3510	3610	1610	1810	3277	363	3510	2050	1403	1810	3610	1610
Grp Volume(v), veh/h	191	1589	693	130	611	622	605	88	88	247	191	295
Grp Sat Flow(s),veh/h/ln	1755	1805	1610	1810	1805	1835	1755	1805	1648	1810	1805	1610
Q Serve(g_s), s	6.3	45.6	38.3	8.6	33.3	33.4	20.5	5.1	5.6	16.1	5.8	17.0
Cycle Q Clear(g_c), s	6.3	45.6	38.3	8.6	33.3	33.4	20.5	5.1	5.6	16.1	5.8	17.0
Prop In Lane	1.00		1.00	1.00		0.20	1.00		0.85	1.00		1.00
Lane Grp Cap(c), veh/h	244	1618	722	142	825	839	626	304	277	274	511	228
V/C Ratio(X)	0.78	0.98	0.96	0.92	0.74	0.74	0.97	0.29	0.32	0.90	0.37	1.29
Avail Cap(c_a), veh/h	269	1618	722	142	825	839	626	304	277	312	511	228
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.36	0.36	0.36	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	5.8	5.4	54.9	26.7	26.7	48.9	43.6	43.8	50.0	46.7	51.5
Incr Delay (d2), s/veh	4.3	9.8	12.6	50.6	5.9	5.9	27.5	2.4	3.0	23.9	2.1	160.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	4.7	4.7	5.9	15.2	15.5	11.3	2.5	2.5	9.1	2.7	17.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.1	15.6	18.0	105.5	32.6	32.6	76.5	46.0	46.8	73.9	48.8	212.1
LnGrp LOS	E	B	B	F	C	C	E	D	D	E	D	F
Approach Vol, veh/h		2473			1363			781			733	
Approach Delay, s/veh		19.3			39.6			69.7			122.9	
Approach LOS		B			D			E			F	

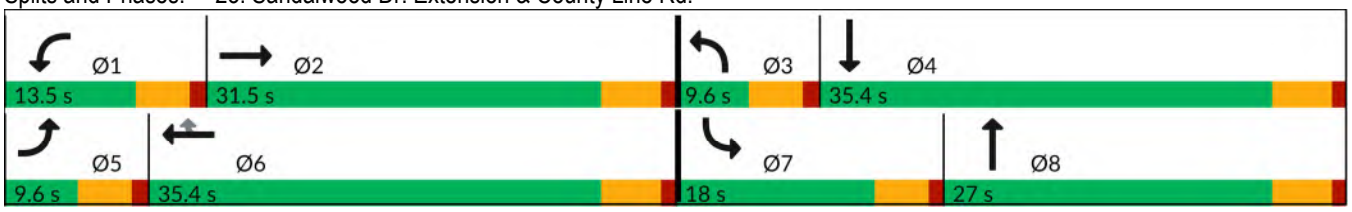
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	58.4	26.0	21.6	12.9	59.5	22.8	24.8
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	9.4	53.8	21.4	17.0	9.2	54.0	20.7	17.7
Max Q Clear Time (g_c+I1), s	10.6	47.6	22.5	19.0	8.3	35.4	18.1	7.6
Green Ext Time (p_c), s	0.0	4.6	0.0	0.0	0.0	5.3	0.1	0.4

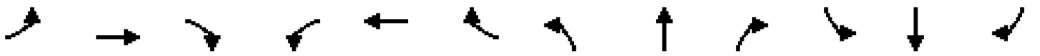
Intersection Summary	
HCM 7th Control Delay, s/veh	46.0
HCM 7th LOS	D

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	5	421	108	576	273	5	192	226	160
Future Volume (vph)	5	421	108	576	273	5	192	226	160
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	5	2	1	6		3	8	7	4
Permitted Phases					6				
Detector Phase	5	2	1	6	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	28.0	9.6	22.0	22.0	9.6	27.0	9.6	27.0
Total Split (s)	9.6	31.5	13.5	35.4	35.4	9.6	27.0	18.0	35.4
Total Split (%)	10.7%	35.0%	15.0%	39.3%	39.3%	10.7%	30.0%	20.0%	39.3%
Yellow Time (s)	3.6	4.0	3.6	4.0	4.0	3.6	4.0	3.6	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.0	4.6	5.0	5.0	4.6	5.0	4.6	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	5.1	26.1	8.2	34.5	34.5	5.1	16.5	13.2	32.6
Actuated g/C Ratio	0.06	0.32	0.10	0.43	0.43	0.06	0.20	0.16	0.40
v/c Ratio	0.04	0.76	0.64	0.77	0.35	0.04	0.72	0.84	0.23
Control Delay (s/veh)	40.6	36.3	54.8	29.8	3.8	40.6	40.0	60.8	18.4
Queue Delay	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.6	36.3	54.8	31.8	3.8	40.6	40.0	60.8	18.4
LOS	D	D	D	C	A	D	D	E	B
Approach Delay (s/veh)		36.4		26.4			40.0		42.9
Approach LOS		D		C			D		D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 80.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay (s/veh): 33.4	Intersection LOS: C
Intersection Capacity Utilization 77.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 23: Sandalwood Dr. Extension & County Line Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	421	5	108	576	273	5	192	64	226	160	5
Future Volume (veh/h)	5	421	5	108	576	273	5	192	64	226	160	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	5	458	5	117	626	297	5	209	70	246	174	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	12	560	6	150	712	604	12	258	86	290	630	18
Arrive On Green	0.01	0.30	0.30	0.08	0.37	0.37	0.01	0.19	0.19	0.16	0.34	0.34
Sat Flow, veh/h	1810	1876	20	1810	1900	1610	1810	1362	456	1810	1838	53
Grp Volume(v), veh/h	5	0	463	117	626	297	5	0	279	246	0	179
Grp Sat Flow(s),veh/h/ln	1810	0	1896	1810	1900	1610	1810	0	1818	1810	0	1890
Q Serve(g_s), s	0.2	0.0	16.2	4.5	21.9	10.1	0.2	0.0	10.5	9.4	0.0	4.9
Cycle Q Clear(g_c), s	0.2	0.0	16.2	4.5	21.9	10.1	0.2	0.0	10.5	9.4	0.0	4.9
Prop In Lane	1.00		0.01	1.00		1.00	1.00		0.25	1.00		0.03
Lane Grp Cap(c), veh/h	12	0	567	150	712	604	12	0	344	290	0	648
V/C Ratio(X)	0.42	0.00	0.82	0.78	0.88	0.49	0.42	0.00	0.81	0.85	0.00	0.28
Avail Cap(c_a), veh/h	127	0	704	226	809	686	127	0	560	340	0	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.3	0.0	23.2	32.1	20.8	17.1	35.3	0.0	27.7	29.2	0.0	17.0
Incr Delay (d2), s/veh	8.4	0.0	6.1	4.7	10.0	0.6	8.4	0.0	4.6	14.3	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	7.7	2.1	10.9	3.6	0.1	0.0	4.8	5.1	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.7	0.0	29.4	36.8	30.8	17.7	43.7	0.0	32.3	43.4	0.0	17.3
LnGrp LOS	D		C	D	C	B	D		C	D		B
Approach Vol, veh/h		468			1040			284			425	
Approach Delay, s/veh		29.5			27.7			32.5			32.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	26.3	5.1	29.5	5.1	31.8	16.0	18.5
Change Period (Y+Rc), s	4.6	5.0	4.6	5.0	4.6	5.0	4.6	5.0
Max Green Setting (Gmax), s	8.9	26.5	5.0	30.4	5.0	30.4	13.4	22.0
Max Q Clear Time (g_c+I1), s	6.5	18.2	2.2	6.9	2.2	23.9	11.4	12.5
Green Ext Time (p_c), s	0.0	1.8	0.0	1.0	0.0	2.8	0.1	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	29.6
HCM 7th LOS	C

APPENDIX 11.1: VEHICLE MILES TRAVELED (VMT) ANALYSIS

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MEMORANDUM

URBAN CROSSROADS

DATE: May 5, 2025
TO: David Graves, Mesa Verde Owner, LLC
FROM: Alex So, Urban Crossroads, Inc.
JOB NO: 15218-01 VMT

MESA VERDE SPECIFIC PLAN AMENDMENT 2 TRANSPORTATION IMPACT ASSESSMENT

Urban Crossroads, Inc. has completed a Transportation Impact Assessment for the Mesa Verde Specific Plan Amendment 2 (**Project, Specific Plan**), which is generally located west of the Sandalwood Drive interchange at the I-10 Freeway in the City of Calimesa.

PROJECT OVERVIEW

The Project includes the development of up 4.44 million square feet of building area with the Business Park zones (allowing for industrial, logistics, office, and/or educational uses. The Project is anticipated to build out over 5 development phases, as presented in Table 1. A land use and phasing map for the Project is included in Attachment A.

TABLE 1: LAND USE SUMMARY BY PHASE

Phase	Year	Land Use	Quantity	Unit[1]
1	2030	General Light Industrial	1,400.00	TSF
		Single Family Detached Residential	709	DU
		Multifamily (Low-Rise) Residential	185	DU
		Fire and Rescue Station/Public Works Facility	16.5	TSF
		Parks	12.7	AC
2	2035	General Light Industrial	700.000	TSF
		High-Cube Fulfillment Center (Sort)	700.000	TSF
		Mixed Use (Commercial)	50.000	TSF
		Single Family Detached Residential	468	DU
		Multifamily (Low-Rise) Residential	81	DU
		Parks	16.2	AC

[1] TSF = Thousand Square Feet; DU = Dwelling Units; AC = Acres

TABLE 1 CONT'D: LAND USE SUMMARY BY PHASE

Phase	Year	Land Use	Quantity	Unit[1]
3	2038	General Light Industrial	700.000	TSF
		High-Cube Fulfillment Center (Sort)	700.000	TSF
		Single Family Detached Residential	447	DU
		Multifamily (Low-Rise) Residential	81	DU
		Mixed Use (Commercial)	250.000	TSF
		Parks	8.9	AC
4	2040	Single Family Detached Residential	689	DU
		Multifamily (Low-Rise) Residential	194	DU
		General Office	240.000	TSF
		Elementary School	600	Students
		Parks	16.5	AC
5	2045	Single Family Detached Residential	547	DU
		Multifamily (Low-Rise) Residential	249	DU
		Elementary School	600	Students
		Parks	12.2	AC

[1] TSF = Thousand Square Feet; DU = Dwelling Units; AC = Acres

BACKGROUND

The California Environmental Quality Act (CEQA) requires all lead agencies to adopt VMT as the measure for identifying transportation impacts for land use projects. To comply with CEQA, the City of Calimesa adopted analytical procedures, screening tools, and impact thresholds for VMT, which are documented in their Final City of Calimesa Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (May 2020) (**City Guidelines**) (1). This analysis has been developed based on these adopted City Guidelines.

PROJECT SCREENING

City Guidelines describe three types of screening that the City of Calimesa will apply to effectively screen projects from project-level assessment. Consistent with screening thresholds identified in the City Guidelines, the Western Riverside Council of Governments (WRCOG) VMT Screening Tool (Screening Tool) was used to aid in the screening process. The City's adopted VMT screening steps are described in Table 2 along with a determination of each screening step's applicability to the Project.

TABLE 2: PROJECT SCREENING SUMMARY

Screening Steps	Description	Result
1. Transit Priority Area (TPA) Screening	Projects located within a TPA (i.e., within a half mile of an existing major transit stop or an existing stop along a high-quality transit corridor) are presumed to have a less than significant impact on VMT.	Does not meet.
2. Low VMT Area Screening	Land use projects located within a low VMT generating zone that can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area are presumed to have a less than significant VMT impact.	Does not meet.
3. Project Type Screening	Local-Serving Retail under 50,000 square feet, Local Essential Services, and projects generating less than 110 daily vehicle trips are presumed to have a less than significant impact on VMT.	Does not meet.

Although the proposed elementary schools and fire rescue station/public works facility are each eligible for Project Type Screening, they have been included in the project-level VMT analysis in order to fully account for project-generated VMT.

TRAFFIC MODELING METHODOLOGY

Projects not screened through the VMT screening steps described previously should complete VMT forecasting and analysis using the Riverside County Model (RIVCOM). RIVCOM was developed by the Western Riverside Council of Governments (WRCOG) and initially released in June 2021. The most current release of RIVCOM is version 4.0.1, released in February 2024, representing the most current sub-regional transportation modeling tool for Western Riverside County. RIVCOM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households, and employment.

VMT ANALYSIS METHODOLOGY

Consistent with City Guidelines, VMT has been estimated using the Origin/Destination method and Boundary method. For both methods, VMT is presented as total VMT and VMT per Service Population (e.g., population plus employment). Total VMT is an estimate of total vehicle travel and considers all vehicle trips and trip purposes; whereas VMT per service population (SP) is an efficiency metric that represents VMT generated on a typical weekday per person who lives and/or works in the City of Calimesa or in the case of the Project, per person who works at the Project site. Total VMT provides an estimate of the total vehicle travel, while VMT per SP measures the efficiency of travel. The City of Calimesa has adopted the efficiency metric VMT per SP for transportation impact assessments.

ORIGIN/DESTINATION VMT

The Origin/Destination (OD) method for calculating VMT sums all weekday VMT generated by trips with at least one trip end in the study area (i.e., City boundary or Project boundary) and tracks those trips to their estimated origins/destinations. Origins are all vehicle trips that start in a specific traffic analysis zone (TAZ) and destinations are all trips that end in a specific TAZ.

BOUNDARY VMT

City Guidelines also require an evaluation of a project's effect on VMT, which can be performed using the boundary method of calculating VMT. The boundary method is the sum of all weekday VMT on the roadway network within a designated boundary (i.e., City boundary or other designated geographic area). The boundary method estimates VMT by multiplying vehicle trips on each roadway segment within the boundary by that segment's length. This approach consists of all trips, including those trips that do not begin or end in the designated boundary. Consistent with City Guidelines, the City of Calimesa was used as the boundary for this assessment. In addition, as the Project is located near the northern edge of the City, an additional assessment of a ten-mile boundary area surrounding the Project site has also been conducted to ensure trips associated with the Project are not omitted.

VMT IMPACT THRESHOLDS

The City of Calimesa has adopted the following thresholds of significance related to VMT for land use projects. The following thresholds are to be applied to determine potential project-generated VMT impacts[1]:

1. The baseline project-generated VMT per service population exceeds the City of Calimesa General Plan Buildout VMT per service population, or
2. The cumulative project-generated VMT per service population exceeds the City of Calimesa General Plan Buildout VMT per service population.

The Project's effect on VMT would be considered significant if it results in the following condition to be satisfied:

1. The cumulative link-level boundary Citywide VMT per service population increases under the plus project condition compared to the no project condition.

The City Guidelines notes that the cumulative no project shall reflect the adopted Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); as such, if a project is consistent with the SCAG RTP/SCS, then the cumulative impacts shall be considered less than significant subject to consideration of other substantial evidence.

CITY OF CALIMESA GENERAL PLAN BUILDOUT VMT PER SERVICE POPULATION

The City of Calimesa General Plan Buildout VMT per SP value has been calculated using RIVCOM. Table 3 presents the resulting City of Calimesa's General Plan Buildout VMT per SP value of 38.4.

TABLE 3: CITY OF CALIMESA VMT PER SERVICE POPULATION

	General Plan Buildout
Service Population	33,143
VMT	1,273,048
VMT per SP[1]	38.4

[1]SP refers to Service Population

[1] City Guidelines; Page 28

VMT ESTIMATES

Project VMT estimates have been calculated using the most current version of RIVCOM based on socio-economic data (SED) inputs presented in Table 4. A breakdown of land use conversion factors used to model the Project by development phase can be found in Attachment B. Project land use information for each development phase was coded into a separate TAZ to isolate Project-generated VMT.

TABLE 4: LAND USE DATA SUMMARY BY PHASE

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5 (Buildout)
Households	894	1,443	1,971	2,854	3,650
Population	2,459	3,969	5,421	7,849	10,038
Employment	2,341	4,775	7,609	8,459	8,509

PROJECT-GENERATED VMT

Project level VMT estimates were extracted from RIVCOM using the OD trip matrices, which includes Project-generated VMT for all vehicle trips (both passenger cars and trucks) and trip purposes. RIVCOM outputs for each development phase are included in Attachment C. The VMT estimates for the Project are presented in Table 5.

TABLE 5: PROJECT-GENERATED VMT SUMMARY

	Total OD VMT	Service Population	VMT per Service Population (SP)	City Threshold	Potentially Significant?
Phase 1					
Baseline	125,009	4,800	26.0	38.4	No
Cumulative	123,690	4,800	25.8	38.4	No
Phase 2 (Phase 1+2)					
Baseline	243,468	8,744	27.8	38.4	No
Cumulative	253,714	8,744	29.0	38.4	No
Phase 3 (Phase 1+2+3)					
Baseline	390,633	13,030	30.0	38.4	No
Cumulative	397,027	13,030	30.5	38.4	No
Phase 4 (Phase 1+2+3+4)					
Baseline	433,049	16,308	26.6	38.4	No
Cumulative	445,410	16,308	27.3	38.4	No
Phase 5 (Buildout) (Phase 1+2+3+4+5)					
Baseline	449,086	18,547	24.2	38.4	No
Cumulative	465,562	18,547	25.1	38.4	No

As shown in Table 5, each development phase along with buildout of the Project are forecast to generate OD VMT per SP below the City's adopted impact threshold for both baseline and cumulative traffic conditions and is considered to have a less than significant impact on Project-generated VMT.

PROJECT EFFECT ON VMT

The Project is proposing to add population and employment above what is included in the existing cumulative year RIVCOM model and would not be consistent with the land uses assumed in the cumulative conditions. Therefore, the Project would not be consistent with RTP/SCS and a cumulative analysis to evaluate the Project's effect on VMT will be required.

The Project's effect on VMT has been calculated using the boundary method. Land use information representing the currently adopted Mesa Verde Specific Plan was coded into the Project's TAZ to correctly represent the Cumulative "No Project" condition, whereas, the proposed land use changes contemplated by the Project were coded into the Project TAZ to represent the Cumulative "With Project" condition. As the Project is located on the northern edge of Calimesa's border, the Project's effect on VMT when considering the City of Calimesa boundary alone may be understated. To evaluate the potential effect on VMT more accurately, an additional 10-mile boundary was also considered. Table 6 presents total VMT and VMT per service population estimates based on the boundary method for the Cumulative conditions.

TABLE 6: PROJECT EFFECT ON VMT SUMMARY

	City Boundary		10-Mile Boundary	
	No Project	With Project	No Project	With Project
SP	58,152	65,655	489,354	496,857
Boundary VMT	944,164	963,857	8,040,230	8,084,534
Boundary VMT per SP[1]	16.3	14.7	16.4	16.3
Change in VMT per SP[1]	-1.5		-0.1	

[1]SP refers to Service Population

Boundary VMT per SP was found to decrease under "with Project" conditions. The Project's cumulative effect on VMT is considered less than significant.

ACTIVE TRANSPORTATION PUBLIC TRANSIT REVIEW

The purpose of this analysis is to evaluate the potential for the Project to conflict with adopted transportation policies, plans, or programs. The analysis specifically addresses potential Project impacts to bicycle facilities and travel, pedestrian facilities and travel, and public transit.

BICYCLE FACILITIES REVIEW

The City of Calimesa has bicycle lanes painted adjacent to existing roadways. There are no facilities in the community for bikes only; however, the City does maintain a series of multi-use trails, which accommodate bicycles as well as pedestrians.[2]

The Project would construct new sidewalk and bicycle lane improvements as part of the frontage improvements along the future internal roadways and along Sandalwood Drive and Roberts Road (as required by City standards). See Attachment D.

[2] City of Calimesa General Plan (August 2014); Page 3-3.

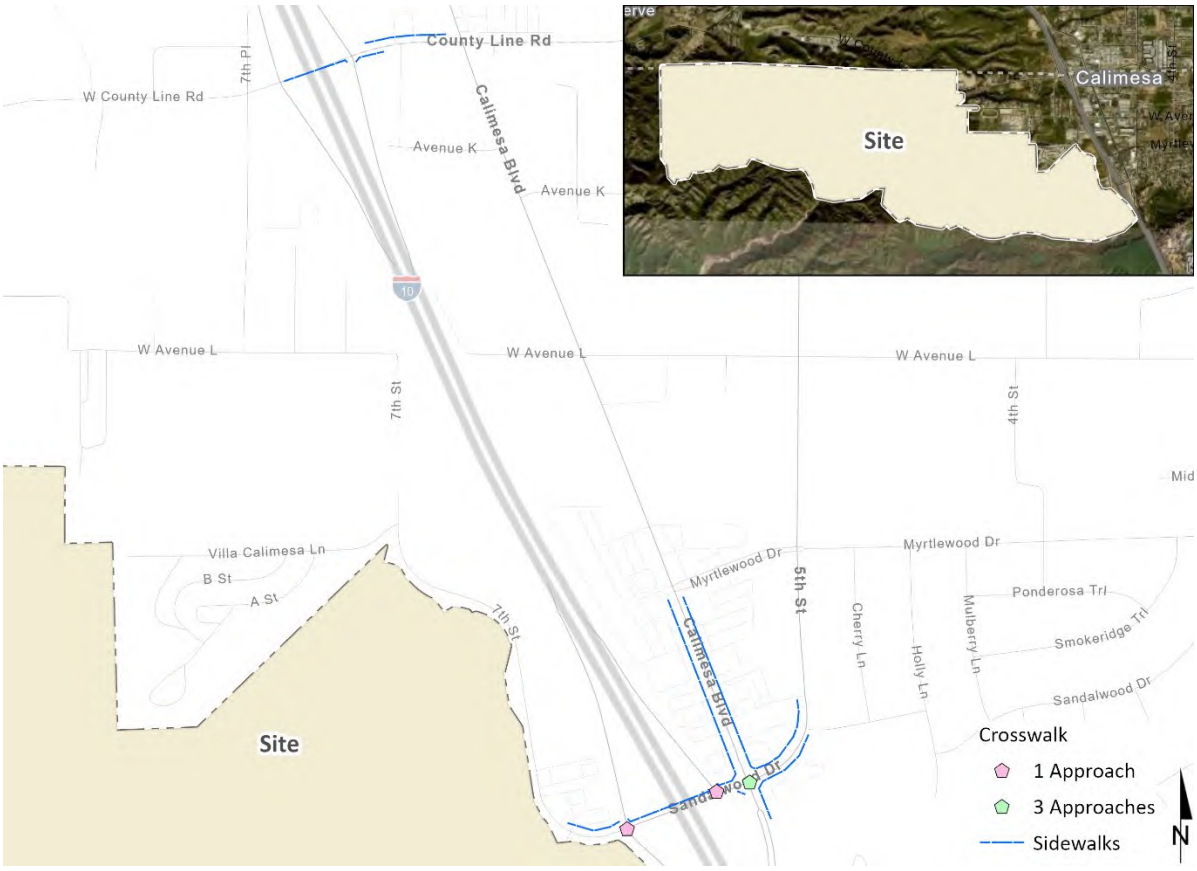
PEDESTRIAN FACILITIES REVIEW

Pedestrian facilities include sidewalks, walkways, bridges, crosswalks, signals, illumination, and benches, among other amenities. Pedestrian facilities provide a vital link between other methods of travel and can make up a considerable portion of short-range trips made in the community. Where pedestrian facilities exist, people will be much more likely to make shorter trips by walking rather than by vehicle. Pedestrian facilities also provide a vital link for commuters who use other transportation facilities such as rail, bus, and park-and-ride lots.

Pedestrian facilities include multi-use trails, pedestrian signals, sidewalks, and crosswalks.

Within the study area, there are currently three crosswalks on Sandalwood Drive, two at the I-10 on/off ramps and one at the intersection of Sandalwood Drive and Calimesa Boulevard. In addition, there are sidewalks along County Line Road at the I-10 on/off ramps, along Sandalwood Drive, and at the intersection of Sandalwood Drive and Calimesa Boulevard (See Exhibit 1).

EXHIBIT 1: PEDESTRIAN FACILITIES WITHIN STUDY AREA



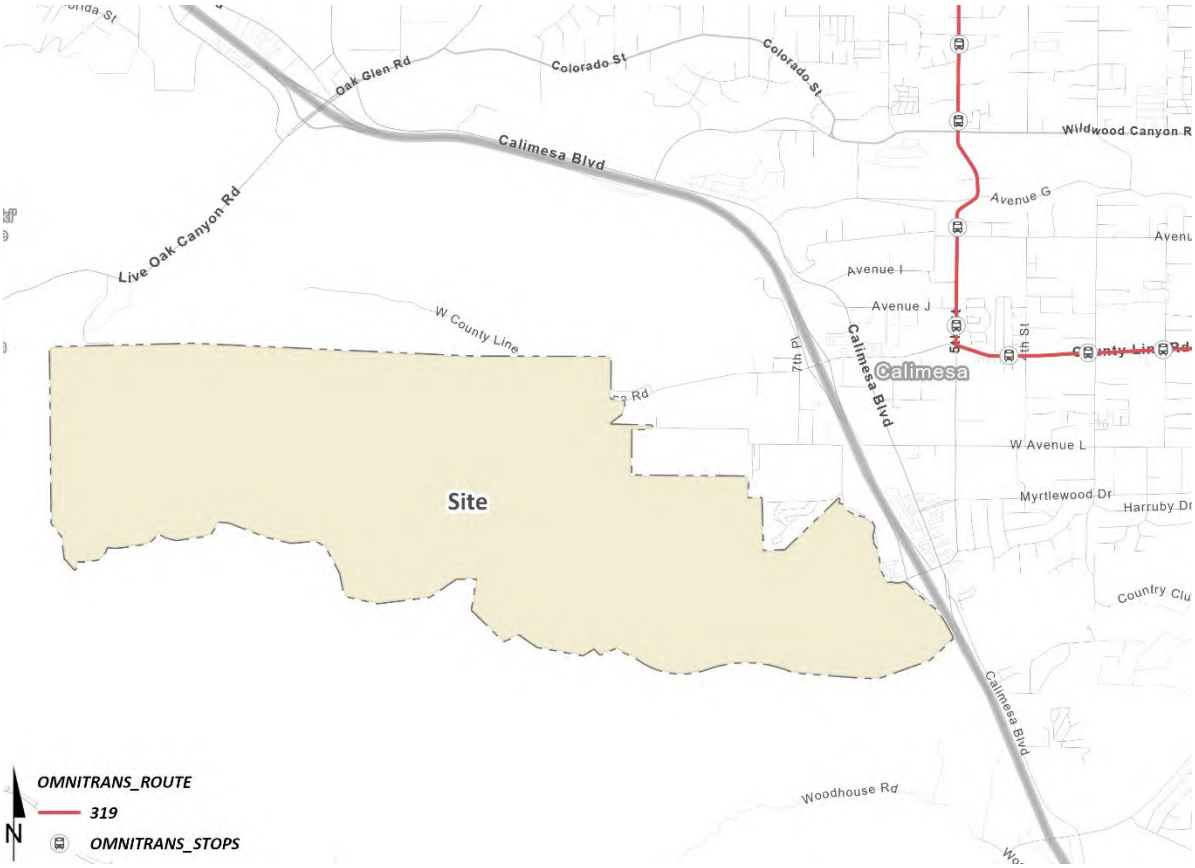
PUBLIC TRANSIT

OMNITRANS

There are bus and regional transit service options available within the City of Calimesa. Omnitrans coordinates transit services throughout San Bernardino County and portions of Riverside County, which includes the City of Calimesa. At present, the only Omnitrans route that provides service

near the Project site is Route 319, located east of the Project site. The nearest bus stops are on County Line Road, approximately one mile northeast of the Project site, and on 54th Street, approximately one mile east of the Project site. Transit service is reviewed and updated by Omnitrans periodically to address ridership, budget, and community demand needs. Existing Omnitrans routes are presented at Exhibit 2.

EXHIBIT 2: EXISTING OMNITRANS ROUTES



METROLINK

Commuter train service does not run in the City of Calimesa; however, the Project is approximately 6.5 miles from the Redlands - University Station located at 1100 East Park Avenue in the City of Redlands. Here, passengers can access the Metrolink Arrow Service.

Arrow Service starts at San Bernardino - Downtown Station and ends at Redlands - University Station. Arrow trains run daily from 5 a.m. to 9 p.m. – every 30 minutes early morning and evening and every 60 minutes mid-morning to mid-afternoon. The Project does not propose or require facilities or operations that would potentially affect Metrolink services or facilities. Given the physical separation (approximately 6.5 miles) between the Project site and the nearest Metrolink facilities, it is unlikely the Project would interact with or otherwise affect Metrolink facilities or operations.

AMTRAK

Amtrak provides medium and long-distance inter-city passenger rail service. The nearest Amtrak station is the Riverside - Downtown station, located approximately 17 miles west of the Project site. The Project does not propose or require facilities or operations that would potentially affect AMTRAK services or facilities. Given the physical separation (approximately 17 miles) between the Project site and the nearest AMTRAK facilities, it is unlikely the Project would interact with or otherwise affect AMTRAK facilities or operations.

TRANSPORTATION IMPACT ANALYSIS

This assessment addresses the following Transportation thresholds stated in CEQA Guidelines Appendix G:

- T-1 Potential to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
- T-2 Potential to conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) regarding policies to reduce vehicle miles traveled (VMT).
- T-3 Potential to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- T-4 Potential to result in inadequate emergency access.

T-1 ASSESSMENT

The analysis presented here evaluates Project consistency with regional goals and City policies addressing the circulation system. Project design features (Bicycle and Pedestrian Access, Transit Access and Amenities) that would support use of alternative transportation modes and thereby further mobility within the City are also discussed.

REGIONAL TRANSPORTATION/MOBILITY GOALS

The Southern California Association of Governments (SCAG) Regional Council formally adopted the Connect SoCal 2024 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal 2024, RTP/SCS) in April 2024. Connect SoCal 2024 is a long-range regional plan that balances future mobility and housing needs with economic, environmental, and public health goals. Regional goals addressing growth and development and related implications on the regional transportation system are presented in Connect SoCal 2024. Table 7 summarizes Project consistency with Connect SoCal 2024 Goals.[3]

[3] **Note:** While Connect SoCal 2024 strives to align with local plans and input, the potential for incompatibilities with existing general plans is acknowledged and expected due to the advisory nature of the regional plan and the ongoing process of local plan updates. SCAG has no land use authority to adopt, approve, implement, or otherwise regulate local land use plans or transportation projects identified in the Plan. Local governments reserve their land use authority and may incorporate, as appropriate, the recommended policies and strategies included in the Plan. See also *Connect SoCal 2024 – 2050 Final Program Environmental Impact Report*, Certified April 4, 2024 (SCAG), SCH # 2022100337.

TABLE 7: PROJECT CONSISTENCY WITH CONNECT SOCAL 2024

Connect SoCal 2024 Goal	Remarks
Mobility: Build and maintain an integrated multimodal transportation network.	***Consistent:*** This Goal would be implemented by counties and cities agencies within the SCAG region. The Project would support this Goal through implementation of multi-modal access serving vehicles, bicycles, and pedestrians. These components are designed to provide safe and efficient access between the Project land uses, and integrated connection of the Project to the area circulation system. Additionally, the Project scope, mix of land uses, and development intensity would provide a potential ridership base that would support future expansion of public transit service to the Project. On this basis, the Project would be consistent with and would support Connect SoCal 2024 Mobility Goals.
Communities: Develop, connect and sustain livable and thriving communities.	***Consistent:*** This Goal would be implemented by cities and counties within the SCAG region as part of comprehensive local and regional planning efforts. The Project supports this Goal through provision of complementary residential and employment-generating land uses. These land uses include: Mixed-Use, Business/Industrial, Commercial, and Residential Land Uses (at varied densities - High; Medium High; Medium; Low Medium; and Low). In this manner, the Project would provide a variety of employment opportunities and housing choices, promoting livability and sustainability. Collocation of residential and employment-generating uses proposed by the Project also promotes reduced commute trips and shorter commute trips, acting generally to reduce environmental effects associated with traffic. On this basis, the Project would be consistent with and would support Connect SoCal 2024 Communities Goals.
Environment: Create a healthy region for the people of today and tomorrow.	***Consistent***: This Goal would be implemented by cities and counties within the SCAG region as part of comprehensive local and regional planning efforts. The Project supports this Goal through establishment of a sustainable Specific Plan development providing compatible and complementary Mixed-Use, Business/Industrial, Commercial, and Residential land uses. Additionally, the Project provides multi-modal access serving vehicles, bicycles, and pedestrians. Alternative transportation modes that are readily available encourage their use, generally correlating with reductions in personal vehicle usage. In this manner, the Project design acts to reduce Project Vehicle Miles Traveled (VMT). VMT impacts are a general proxy that broadly represent relative impacts of development proposals. In this regard, reduction of VMT avoids or diminishes vehicular-source air quality impacts, vehicular-source GHG emissions impacts, and vehicular-source noise impacts. The City has evaluated potential environmental impacts of the Project consistent with CEQA requirements. Potentially significant impacts have been mitigated to the extent feasible. Moreover, the Project would not conflict with applicable City of Calimesa General Plan Policies. On this basis, the Project would be consistent with and would support Connect SoCal 2024 Environment Goals.

TABLE 7: PROJECT CONSISTENCY WITH CONNECT SOCAL 2024

Connect SoCal 2024 Goal	Remarks
Economy: Support a sustainable, efficient and productive regional economic environment that provides opportunities for all people in the region.	***Consistent:*** This Goal would be implemented by cities and counties within the SCAG region as part of comprehensive local and regional planning efforts. The Project would accommodate complementary residential and employment-generating land uses. The collocation of residential and employment-generating uses proposed by the Project provides a variety of employment opportunities and housing choices thereby promoting livability and sustainability. The Project in total represents efficient use of available land, contributes to local and regional economies, and expands and diversifies employment and housing opportunities. On this basis, the Project would be consistent with and would support Connect SoCal 2024 Economy Goals.

Sources: Goals from Connect SoCal 2024; Remarks by Urban Crossroads, Inc.

CITY OF CALIMESA TRANSPORTATION AND MOBILITY POLICIES

The City of Calimesa General Plan Chapter 3, *Transportation and Mobility* presents policies addressing General Circulation, Regional Mobility, Trip Reduction/Transportation Demand Management, and Muli-use Trails. Project consistency with General Plan Transportation and Mobility Policies is presented at Table 8.

TABLE 8: PROJECT CONSISTENCY WITH

GENERAL PLAN TRANSPORTATION AND MOBILITY POLICIES

Policy	Remarks
TM-1: Provide for roadways in accordance with the Circulation Plan.	***Consistent:*** The Project discretionary actions include a proposed General Plan Amendment – Circulation Element. The City will employ the approved Specific Plan Circulation Plan to amend the General Plan Circulation Plan [Circulation Element], thereby providing consistency between the Plans. Roadways constructed pursuant to the approved Specific Plan Circulation Plan would be designed and implemented consistent with requirements of the City, recommendations of the Project Traffic Analysis (Project TA, TA), and design and performance standards articulated in the Specific Plan. The City would ensure compliance with applicable standards through the City's adopted development review processes. With approval of the proposed General Plan Amendment – Circulation Element, the Project would be consistent with Policy TM-1.
TM-3: Strive to construct streets in accordance with the City's standard street classifications	***Consistent:*** The Project TA recommends circulation system improvements that would minimize or avoid potential levels of service (LOS) deficiencies within the TA Study Area (Study Area). Please refer to Project TA Section 1.5, *Recommendations*. The Project would either construct the recommended improvements, or contribute fees that would be assigned to completion of the improvements. All improvements would be designed and implemented consistent with requirements of the City of Calimesa, recommendations of the Project TA, and design and performance standards articulated in the Specific Plan. The City would ensure compliance with applicable standards via the City's adopted development

	review processes. Based on the preceding, the Project would be consistent with Policy TM-3.
TM-4: Maintain and rehabilitate roadways to preserve and improve the quality of city streets and thoroughfares that promote access and mobility between residential neighborhoods, employment centers, shopping, and health services.	***Consistent:*** This Policy supports and promotes City-wide actions and standards that would: remove access barriers, provide safe and efficient access between developments, ensure compliance with state and federal disability access requirements (Americans with Disabilities Act [ADA] Standards), and establish appropriate truck routes. The Project does not propose or require uses or operations that would interfere with or obstruct City implementation of Policy TM-4. Based on the preceding, the Project would be consistent with Policy TM-4.
TM-5: Design each roadway with sufficient width to accommodate projected traffic at acceptable service levels, based on the intensity or density of planned land uses.	***Consistent:*** All Project roadways as approved by the City would be designed to accommodate projected traffic at acceptable service levels. Please refer to remarks at Policy TM-3. Based on the preceding, the Project would be consistent with Policy TM-5.
TM-6: Access points must be located a sufficient distance away from major intersections to allow for safe, efficient operation.	***Consistent:*** The Specific Plan concept provides access points located at sufficient distances from major intersections, allowing for safe and efficient operations. Please refer to Specific Plan Section 6.1, *Circulation*. Ultimate design of all access points, their locations, and any traffic controls would conform to requirements of the City of Calimesa, recommendations of the Project TA, and design and performance standards articulated in the Specific Plan. All proposed access points, their locations, and traffic controls would be subject to review and approval by the City. Based on the preceding, the Project would be consistent with Policy TM-6.
TM-7: Seek to maintain level of service C on all City- maintained roads. A peak-hour level of service of D, or lower, may be allowed on City-maintained road segments in commercial and employment areas or any combination of major highways, urban arterials, secondary highways, or freeway ramp intersections.	***Consistent:*** The Project TA evaluates circulation system facilities that could be affected by Project-related traffic. The Project TA at Table 1-4, *Summary of Improvements* identifies circulation system improvements that would minimize or avoid potential LOS deficiencies within the Study Area. These same improvements would support safe and efficient transportation and access within the Study Area. For those improvements listed at Table 1-4 and not constructed as part of the Project, the Project Applicant's responsibility for the Project's contributions to deficient conditions would be fulfilled through payment of fees or fair share that would be assigned to construction of the recommended improvements. All improvements would be designed and implemented consistent with requirements of the City of Calimesa, recommendations of the Project TA, and design and performance standards articulated in the Specific Plan. The City would ensure compliance with applicable standards through the City's adopted development review processes. Based on the preceding, the Project would be consistent with Policy TM-7.

TM-8: Alternative levels of service may be allowed on intersections in planned development or similar identified mixed-use areas that demonstrate links to transit, trails, and alternative transportation and comfortable walking distance to goods and services.	***Consistent:*** Analysis of potential LOS deficiencies and recommended improvements addressing those potential deficiencies is discussed previously. Please refer to remarks at Policy TM-7. Additionally, the Project collocates compatible residential and employment-generating uses, acting generally to reduce commute trips and commute trip lengths. The Project also provides multi-modal access serving vehicles, bicycles, and pedestrians. In this manner, the Project design acts to diminish potential LOS deficiencies and supports consideration of alternative LOS standards for the Project. Based on the preceding, the Project would be consistent with Policy TM-8.
TM-9: The City will include the public in all aspects of transportation planning and its development process.	***Consistent:*** Implementation of this Policy is beyond the scope of the Project. Nonetheless, the Project supports City efforts to inform and involve the public in transportation planning efforts through the Project CEQA process and all associated analysis, documentation, and public meetings. Based on the preceding, the Project would be consistent with Policy TM-9.
TM-10: Support the development of the Short- and Long-Range Transit Plans.	***Consistent:*** Implementation of this Policy is beyond the scope of the Project. The Project would not interfere with or obstruct City efforts or actions supporting the development of the Short- and Long-Range Transit Plans. Based on the preceding, the Project would be consistent with Policy TM-10.
TM-11: Reduce vehicle trips through design and changes in operations.	***Consistent:*** The Project accommodates complementary residential and employment-generating uses of land uses. These land uses include: Mixed-Use, Business/Industrial, Commercial, and Residential Land Uses (at varied densities - High; Medium High; Medium; Low Medium; and Low). The collocation of residential and employment-generating uses proposed by the Project promotes reduced commute trips and shorter commute trips. Additionally, the Project provides multi-modal access serving vehicles, bicycles, and pedestrians. Alternative transportation modes that are readily available encourage their use, generally correlating with reductions in personal vehicle usage. In this manner the Project design acts to reduce Project Vehicle Miles Traveled (VMT). Further, as substantiated in this Project VMT Analysis, all Project VMT impacts would be less-than-significant. Based on the preceding, the Project would be consistent with Policy TM-11.
TM-12: Provide for the development of multi-use equestrian, pedestrian, and hiking trails that provide a linkage with regional facilities.	***Consistent:*** The Project does not propose or require facilities or operations that would conflict with or obstruct planning, development, or implementation of bicycle access or pedestrian access, or with existing or proposed linkages with regional facilities. As discussed in the Draft SEIR Project Description, "[t]he circulation system for the Specific Plan Area provides multi-modal access serving vehicles, bicycles, and pedestrians. These components are designed to provide safe and efficient access to the residential neighborhoods, Business Park land use, natural open space, and recreational amenities within open space areas. [DSEIR] Figure 3-6, *Roadway Cross-Sections*, provides numerous example cross-sections of roadway widths, sidewalk, curb/gutter, median, and bicycle lane standards for all roadways within the Project area" (Draft SEIR, p.3-12). Based on the preceding, the Project would be consistent with Policy TM-12.
TM-13: Ensure that schoolchildren have safe and adequate	***Consistent:*** Bus service is not currently available in the Project vicinity. However, the Project scope, mix of land uses, and development intensity would provide a potential ridership base that would support future expansion of transit service to the Project. The Project also

transportation routes available, such as pedestrian or bike paths, or local bus service.	collocates school and residential uses, generally facilitating access between these uses. Additionally, the Project design incorporates multi-modal access serving bicycles and pedestrians. Project streets would include sidewalks, allowing for safe and efficient access for schoolchildren. Final designs of all Project improvements, including roadways, pedestrian paths and bicycle amenities would be required to conform to City safety standards. Based on the preceding, the Project would be consistent with Policy TM-13.

Sources: Policies from City of Calimesa General Plan 2014; Remarks by Urban Crossroads

PROJECT DESIGN FEATURES

BICYCLE AND PEDESTRIAN ACCESS

The Project does not propose or require facilities or operations that would conflict with or obstruct planning, development, or implementation of bicycle access or pedestrian access. As discussed in the Draft SEIR Project Description, **"**[t]he circulation system for the Specific Plan Area provides multi-modal access serving vehicles, bicycles, and pedestrians. These components are designed to provide safe and efficient access to the residential neighborhoods, Business Park land use, natural open space, and recreational amenities within open space areas. [DSEIR] Figure 3-6, *Roadway Cross-Sections*, provides numerous example cross-sections of roadway widths, sidewalk, curb/gutter, median, and bicycle lane standards for all roadways within the Project area" (Draft SEIR, p. 3-12).

Additionally, per the Specific Plan Amendment, "larger roadways would be developed with bicycle lanes. 'Enhanced major streets' would include 6-foot-wide Class II bicycle lanes on both sides of the street; "major streets", 'secondary streets,' 'divided collector streets,' and 'modified collector streets' would include 6-foot bike lanes on both sides of the street" (Draft SEIR, p. 3-13).

The Project would construct sidewalks and bicycle access as part of the required improvement of rights-of-way serving the Project facilities. Pedestrian and bicycle access implemented by the Project would be required to conform to standards and specifications identified in the City Municipal Code and the Specific Plan Amendment.

TRANSIT ACCESS AND AMENITIES

The Project does not propose or require facilities or operations that would conflict with or obstruct planning, development, or implementation of area transit services. Bus service to the Project area is currently provided by Omnitrans. At present, the only proximate serving Omnitrans route is Route 319, located east of the Project site. The nearest bus stops are on County Line Road, approximately one mile northeast of the Project site, and on 54th Street, approximately one mile east of the Project site. It is noted here that the Project scope, mix of land uses, and development intensity would provide a potential ridership base that would support future expansion of public transit service to the Project. The Project Applicant would coordinate final Project designs with the City and Omnitrans to potentially accommodate bus service and supporting amenities (e.g., bus stops, bus shelters) serving the Project.

SUMMARY

Based on the preceding discussions and detailed information presented in the Specific Plan Amendment, the potential for the Project to conflict with a program, plan, ordinance or policy

addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities would be **less than significant.**

T-2 ASSESSMENT

The Project is consistent with CEQA Guidelines section 15064.3, subdivision (b) regarding policies to reduce VMT. The City of Calimesa has adopted the following thresholds of significance related to VMT for land use plans:

1. The baseline project-generated VMT per service population exceeds the City of Calimesa General Plan Buildout VMT per service population, or
2. The cumulative project-generated VMT per service population exceeds the City of Calimesa General Plan Buildout VMT per service population.

The Project's effect on VMT would be considered significant if it results in the following condition to be satisfied:

3. The cumulative link-level boundary Citywide VMT per service population increases under the plus project condition compared to the no project condition.

Based on the VMT analysis previously presented in this technical memorandum, Project-generated Buildout (Phase 5) VMT per service population was found to be less than the City of Calimesa VMT per service population under General Plan Buildout Conditions in 1) baseline and 2) cumulative conditions. Additionally, 3) the total daily VMT per service population within the City is forecast to be lower "With Project" for cumulative conditions as compared to the "no project" condition. The Project therefore results in a **less than significant** VMT impact.

T-3 ASSESSMENT

The Project does not propose or require facilities or operations that would substantially increase hazards due to a geometric design feature. Final designs of Project plans and all Project traffic improvements would be subject to review and approval by the City, thereby ensuring conformance of improvements with City and design and safety standards. On-site traffic signing and striping would be implemented in conjunction with detailed construction plans for the Project site. Sight distance at each Project access point would be reviewed to ensure conformance with City sight distance standards at the time of preparation of final grading, landscape and street improvement plans. It is noted here that this analysis is predicated on preliminary Project design concepts. Should final Project designs propose or require non-standard features or designs, this analysis will be revised accordingly.

Traffic generated by the Project, and traffic accessing the Project site would comprise conventional autos and trucks. Uses requiring incompatible vehicle types (e.g., farm equipment) are not proposed by the Project. Further, given the Project's urban context, it is not anticipated that such incompatible vehicle types would comprise a substantial proportion of traffic accessing the Project site.

Based on the preceding, the potential for the Project to substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) would be **less-than-significant.**

T-4 ASSESSMENT

The Project does not propose or require facilities or operations that would restrict or otherwise interfere with emergency access. The Draft SEIR Project Description specifically addresses emergency access provisions, as excerpted below:

EMERGENCY ACCESS

The Specific Plan considers provisions for interim and alternative emergency access. As discussed at Specific Plan Section 6, *Infrastructure*, there is opportunity to use an existing driveway from the proposed Sandalwood Drive alignment that could connect to West Avenue L if agreements could be made. It appears Mesa View Middle School also has a street right of way along its eastern edge of the property. Further investigation would be necessary but it could be a viable option for a permanent emergency access. It may also be a possible road connection between an extended Sandalwood Drive and West Avenue L.

In addition, representatives of the Calimesa Fire Department (CFD) and Riverside County Sheriff's Department would review the Project's plans to ensure that emergency access is provided consistent with Department(s) requirements. Efficient and safe access within, and access to, the Project is provided by the Specific Plan Amendment design concepts, site access improvements, and site adjacent roadway improvements included as components of the Project.

This analysis is predicated on preliminary Project designs. Based on final Project designs, the City of Calimesa may require further analysis and incorporation of additional Project design features. This may include but would not be limited to analysis of truck movements within the Project site and development of truck routing plans to ensure proper routing of traffic.

OTHER CONSIDERATIONS

It is also recognized that temporary and interim traffic detours and traffic disruptions could occur during Project construction. To minimize effects of Project construction on area traffic patterns it is recommended the following or similar Construction Area Traffic Management Plan (Plan) be implemented as a Project Condition of Approval. Typical elements and information incorporated in the Plan would include, but not be limited to:

- Name of on-site construction superintendent and contact phone number.
- Identification of Construction Contract Responsibilities - For example, for excavation and grading activities, describe the approximate depth of excavation, and quantity of soil import/export (if any).
- Identification and Description of Truck Routes - to include the number of trucks and their staging location(s) (if any).
- Identification and Description of Material Storage Locations (if any).
- Location and Description of Construction Trailer (if any).
- Identification and Description of Traffic Controls - Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of-way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the City for review and approval. All right-of-way encroachments would require permitting through the City.

- Identification and Description of Parking - Estimate the number of workers and identify parking areas for their vehicles.
- Identification and Description of Maintenance Measures - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control).

The Plan would be reviewed and approved by the City prior to the issuance of the first building permit. The Plan and its requirements would also be required to be provided to all contractors as one component of building plan/contract document packages.

Based on the preceding, the potential for the Project to result in inadequate emergency access would be **less than significant.**

If you have any questions, please contact me directly at aso@urbanxroads.com.

REFERENCES

1. **City of Calimesa.** *Final City of Calimesa Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment.* City of Calimesa : s.n., May 2020.

ATTACHMENT A
PROJECT LAND USE MAP

EXHIBIT A-1: LAND USE MAP

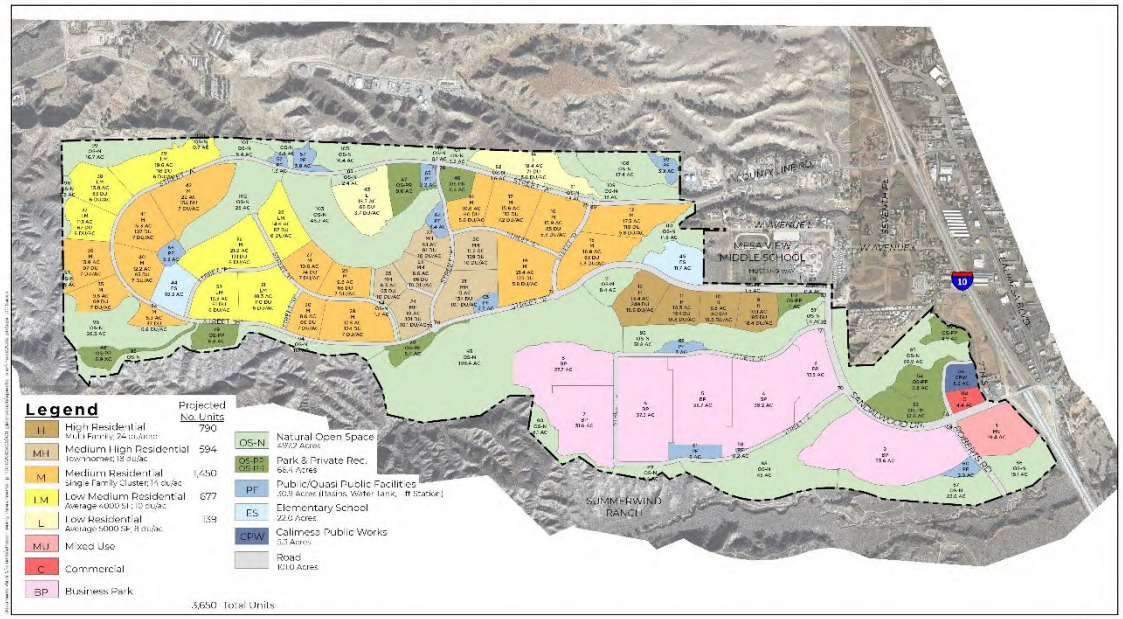


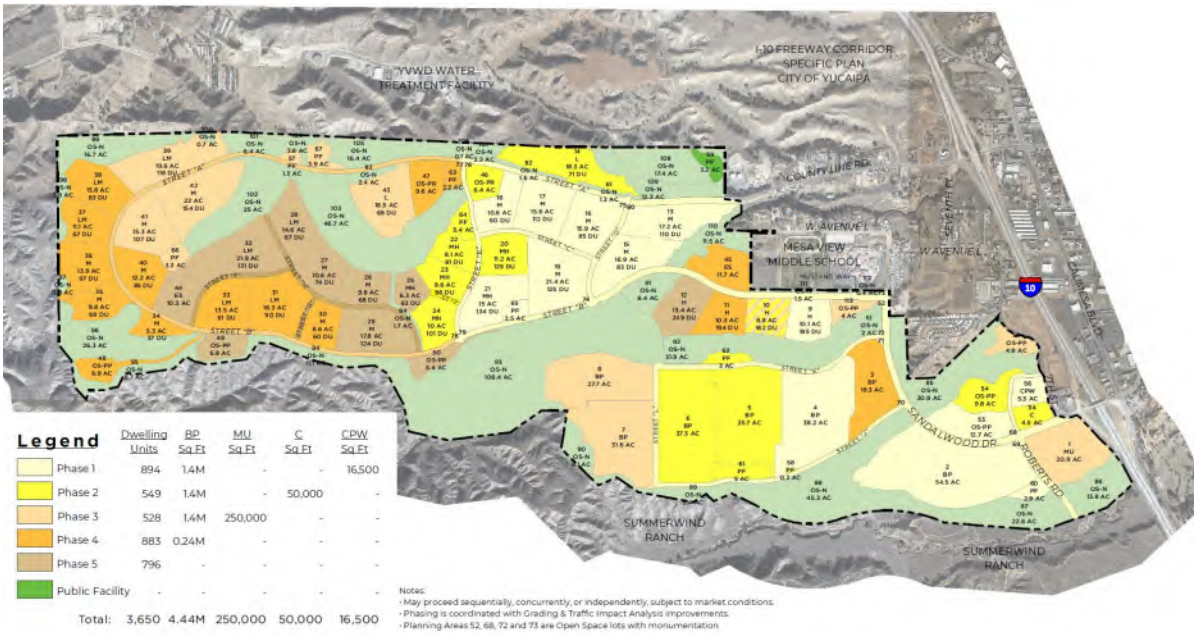
Figure 2-1

MESA VERDE
SPECIFIC PLAN AREA 2 - AMENDMENT 2

Land Use Plan

FORMA
April 2023

EXHIBIT A-2: PHASING MAP



Legend	Dwelling Units	BP Sq Ft	MU Sq Ft	C Sq Ft	CPW Sq Ft
Phase 1	894	1.4M	-	-	16,500
Phase 2	549	1.4M	-	50,000	-
Phase 3	528	1.4M	250,000	-	-
Phase 4	883	0.24M	-	-	-
Phase 5	796	-	-	-	-
Public Facility	-	-	-	-	-
Total:	3,650	4.44M	250,000	50,000	16,500

Notes:
- May proceed sequentially, concurrently, or independently, subject to market conditions.
- Phasing is coordinated with Grading & Traffic Impact Analysis improvements.
- Planning Areas 52, 68, 72 and 73 are Open Space lots with monumentation.

ATTACHMENT B
LAND USE CONVERSION FACTORS

TABLE 4: PHASE 1 LAND USE DATA SUMMARY

Land Use	Quantity	Conversion Factors	Estimated SED
Phase 1			
Industrial	1,400,000 SF	600 SF per employee[1]	2,333 Employees
Residential	894 DU	2.75 Person Per Household[2]	2,459 Population
Public Works Facility	16,500 SF	-	8 Employees[3]
Phase 2 (1+2)			
Industrial	2,800,000 SF	600 SF per employee[1]	4,775 Employees
Residential	1,443 DU	2.75 Person per household[2]	3,969 Population
Public Works Facility	16,500 SF	-	8 Employees[3]
Commercial	50,000 SF	500 SF per employee[1]	100 Employees
Phase 3 (1+2+3)			
Industrial	4,200,000 SF	600 SF per employee[1]	7,001 Employees
Residential	1,971 DU	2.75 Person per household[2]	5,421 Population
Public Works Facility	16,500 SF	-	8 Employees[3]
Commercial	300,000 SF	500 SF per employee[1]	600 Employees
Phase 4 (1+2+3+4)			
Industrial	4,200,000 SF	600 SF per employee[1]	7,001 Employees
Residential	2,854 DU	2.75 Person per household[2]	7,849 Population
Public Works Facility	16,500 SF	-	8 Employees[3]
Commercial	300,000 SF	500 SF per employee[1]	600 Employees
Office	240,000 SF	300 SF per employee[1]	800 Employees
School	600 Students	1 employee per 12 students[3]	50 Employees
Project Buildout (1+2+3+4+5)			
Industrial	4,200,000 SF	600 SF per employee[1]	7,001 Employees
Residential	3,650 DU	2.75 Person per household[2]	10,038 Population
Public Works Facility	16,500 SF	-	8 Employees[3]
Commercial	300,000 SF	500 SF per employee[1]	600 Employees
Office	240,000 SF	300 SF per employee[1]	800 Employees
School	1,200 Students	1 employee per 12 students[3]	100 Employees

[1] County of Riverside General Plan; Appendix E-2.
[2] U.S. Census. 2023a. Households, 2017-2021. Calimesa city, California. Quick Facts. Accessed July 24, 2023. https://www.census.gov/quickfacts/fact/table/calimesacitycalifornia#.
[3] City of Calimesa Fire
[4] Riverside County Education Report

ATTACHMENT C
PROJECT BUILDOUT RIVCOM OUTPUTS

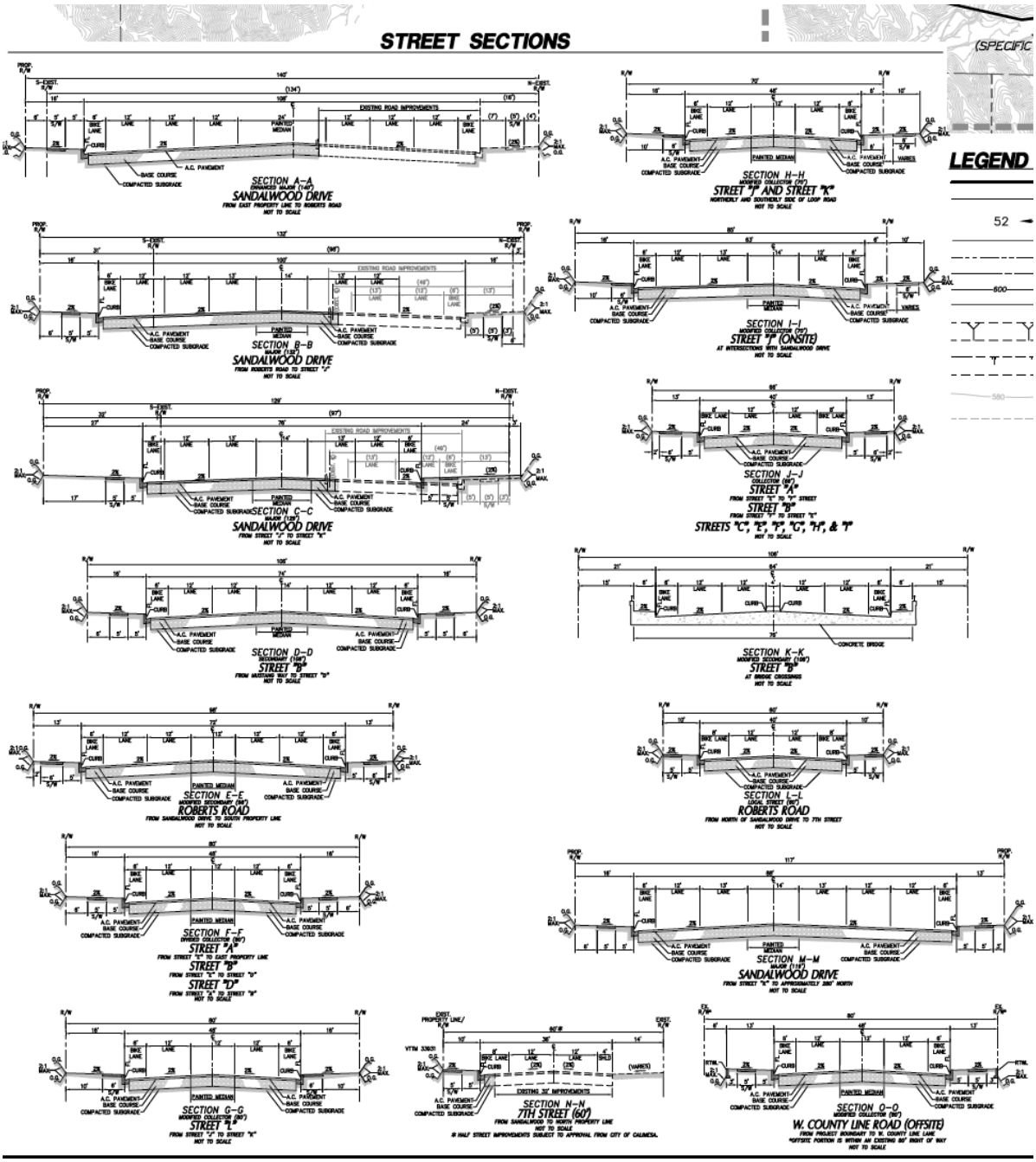
TABLE C-1: RIVCOM 2018

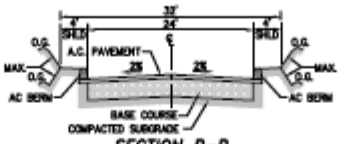
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5 (Buildout)
Daily_Home-Based (incl. IEHB) Prod VMT	4917.068359	7542.564941	8723.085938	11829.22559	14852.90625
Daily_HBW (incl. EIHBW) Attr VMT	76614.91406	154324.5938	236709.8438	261862.0156	263592.25
Daily_Total Auto OD From VMT	48272.96875	97298.125	158880.8594	178440.5313	185547.1406
Daily_Total Auto OD To VMT	52568.17969	105706	174008.2188	195177.375	203179.625
Daily_Total Auto OD Intra VMT	24.645859	131.220749	755.537231	935.568481	1073.742432
Daily_Total Truck OD From VMT	10016.06152	19357.74023	27938.78125	27880.74414	27797.5
Daily_Total Truck OD To VMT	10016.09961	19363.49023	27978.39453	28018.38867	27854.09961
Daily_Total Truck OD Intra VMT	68.759468	252.050659	573.007935	609.532471	627.777771
Daily_Total OD From VMT	58289.02734	116655.875	186819.6563	206321.2813	213344.6406
Daily_Total OD To VMT	62584.27734	125069.5	201986.6406	223195.75	231033.7188
Daily_Total OD Intra VMT	93.405319	383.271423	1328.545166	1545.101074	1701.520264
Daily_Total_TripLen	24.890047	24.204187	21.697842	21.466547	21.051612
Population	2459	3969	5421	7849	10038
Employment	2341	4775	7609	8459	8509
Enrollment	0	0	0	600	1200

TABLE C-2: RIVCOM 2045

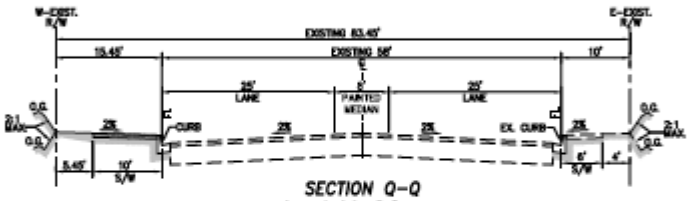
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5 (Buildout)
Daily_Home-Based (incl. IEHB) Prod VMT	27139.63281	28266.79297	29177.14844	33797.91406	38312.9375
Daily_HBW (incl. EIHBW) Attr VMT	74794.91406	148451.4688	235081.0625	263335.3125	267801.125
Daily_Total Auto OD From VMT	59000.41797	102640.5313	162956.3125	185452.7656	194377.8281
Daily_Total Auto OD To VMT	61314.32031	110759.5781	178476	203038.7344	213760.4844
Daily_Total Auto OD Intra VMT	99.991318	269.200592	986.717102	1192.151489	1337.485962
Daily_Total Truck OD From VMT	9588.817383	18044.32422	27745.25586	28456.89063	28667.03906
Daily_Total Truck OD To VMT	9582.394531	18120.69531	27849.75586	28461.75	28756.83008
Daily_Total Truck OD Intra VMT	30.177963	86.706024	200.47052	212.568436	218.396545
Daily_Total OD From VMT	68589.23438	120684.8594	190701.5625	213909.6563	223044.875
Daily_Total OD To VMT	70896.71875	128880.2656	206325.75	231500.4844	242517.3125
Daily_Total OD Intra VMT	130.169281	355.906616	1187.187744	1404.719971	1555.882568
Daily_Total_TripLen	18.405474	18.787962	17.480088	17.344254	17.081203
Population	2459	3969	5421	7849	10038
Employment	2341	4775	7609	8459	8509
Enrollment	0	0	0	600	1200

ATTACHMENT D
PROJECT ROADWAY DESIGN STANDARD

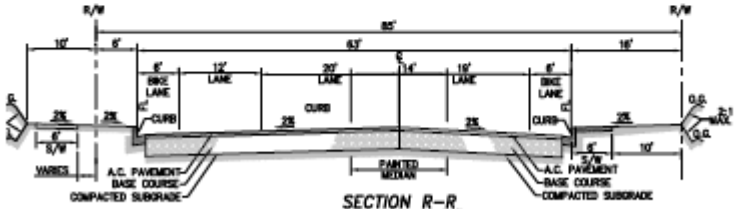

STREET SECTIONS
LEGEND
SECTION A–A
SANDALWOOD DRIVE
SECTION B–B
SANDALWOOD DRIVE
SECTION C–C
SANDALWOOD DRIVE
SECTION D–D
STREET "B"
SECTION E–E
ROBERTS ROAD
SECTION F–F
STREET "A"
STREET "B"
STREET "D"
SECTION G–G
STREET "L"
SECTION H–H
STREET "F" AND STREET "K"
SECTION I–I
STREET "I" (ONSITE)
SECTION J–J
STREET "A"
STREET "B"
STREETS "C", "E", "F", "G", "H", & "I"
SECTION K–K
STREET "B"
SECTION L–L
ROBERTS ROAD
SECTION M–M
SANDALWOOD DRIVE
SECTION N–N
7TH STREET (60')
SECTION O–O
W. COUNTY LINE ROAD (OFFSITE)



SECTION P–P
MAINTENANCE ACCESS ROAD (24')
NOT TO SCALE



SECTION Q–Q
EXISTING SCHOOL ENTRY
NOT TO SCALE



SECTION R–R
MODIFIED COLLECTOR (84')
STREET "K" (ONSITE)
AT INTERSECTIONS WITH SANDALWOOD DRIVE
NOT TO SCALE

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