APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT

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September 19, 2022

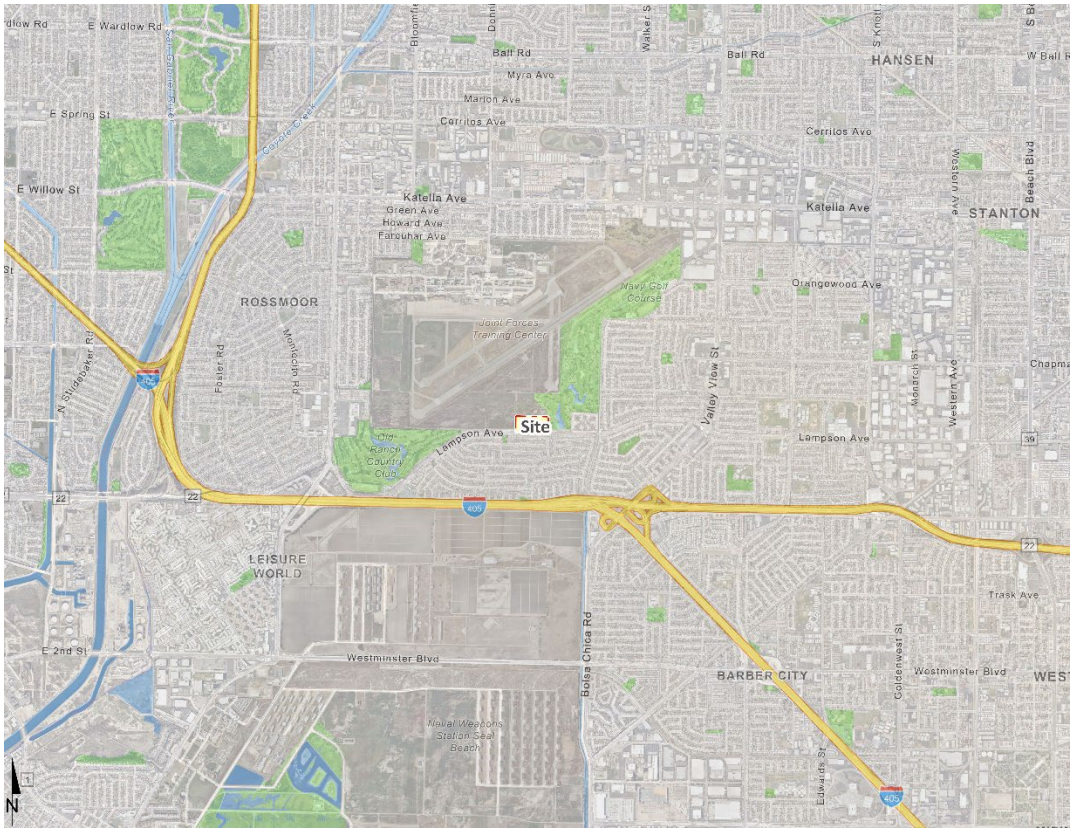
Mr. Tom Oliver
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

4665 LAMPSON AVENUE TRAFFIC ANALYSIS SCOPING AGREEMENT

Mr. Tom Oliver,

The firm of Urban Crossroads, Inc. is pleased to submit this scoping letter regarding the traffic analysis for 4665 Lampson Avenue development (**Project**), which is located in the City of Los Alamitos (see Exhibit 1). This letter describes the proposed Project trip generation, trip distribution, and analysis methodology, which have been used to establish the draft proposed Project study area and analysis locations.

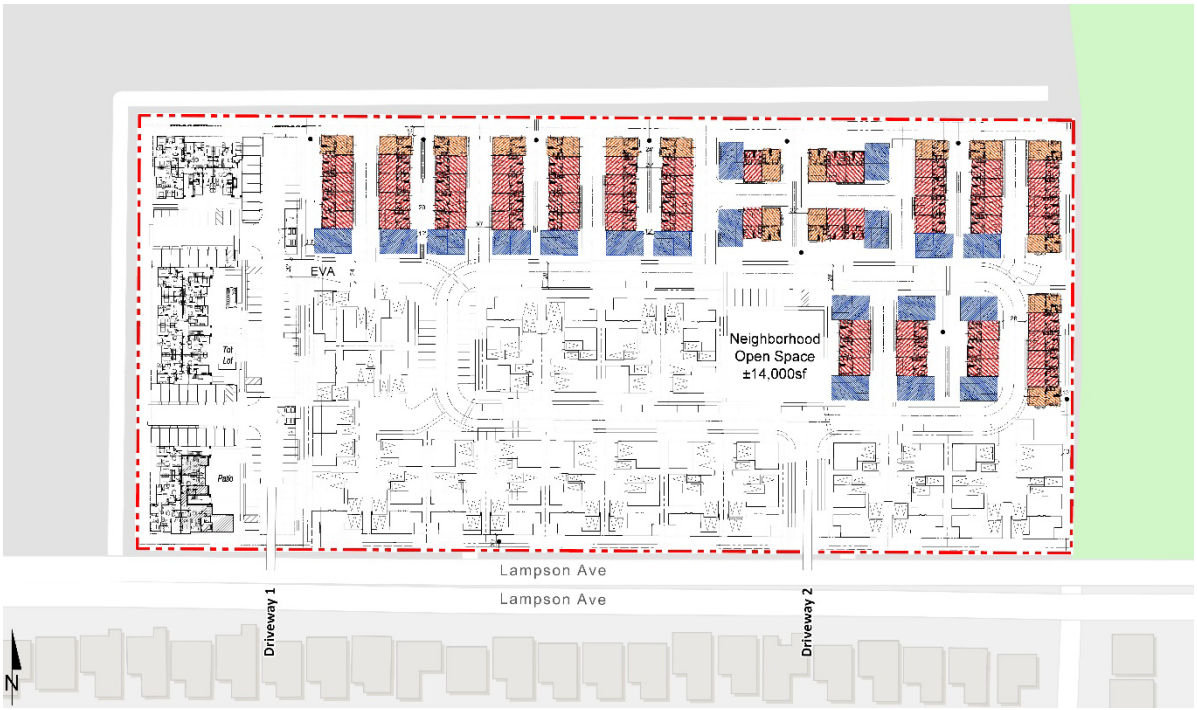
EXHIBIT 1: LOCATION MAP



PROJECT DESCRIPTION

The Project is anticipated to have an Opening Year of 2026. The Project consists of the development of 55 single family detached residential dwelling units (cluster homes), 114 multifamily (low-rise) residential dwelling units, and 77 affordable apartment dwelling units (total of 246 dwelling units). A preliminary site plan for the proposed Project is shown on Exhibit 2. Access to the Project site will be accommodated via Lampson Avenue. The site is currently occupied by the California Department of Fish and Wildlife building and parking lot, however, no credit will be taken for the existing use for the purposes of this analysis. Although the proposed Project is located in the City of Los Alamitos, however, access to the site is via intersections controlled by the City of Seal Beach.

EXHIBIT 2: PRELIMINARY SITE PLAN



TRIP GENERATION

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) for the Single Family Detached Residential Land Use category (ITE Land Use Code 210), Multifamily (Low-Rise) Housing (ITE Land Use Code 220), and Affordable Housing (ITE Land Use Code 223) were used to calculate the trip generation.

TABLE 1: 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									
Single Family Detached	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Multifamily Housing (Low-Rise) (2-3 Floors)	DU	220	0.10	0.30	0.40	0.32	0.19	0.51	6.74
Affordable Housing	DU	223	0.10	0.26	0.36	0.27	0.19	0.46	4.81

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

[2] DU = Dwelling Units

The trip generation summary illustrating daily, and peak hour trip generation estimates for the proposed Project are shown on Table 2. The proposed Project is anticipated to generate 1,658 two-way trip-ends per day with 112 AM peak hour trips and 147PM peak hour trips (see Table 2).

TABLE 2: PROJECT 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
Actual Vehicles:									
Single Family Detached	55	DU	10	28	38	33	19	52	520
Mulifamily Housing	114	DU	11	35	46	37	22	59	768
Affordable Housing	77	DU	8	20	28	21	15	36	370
Project Total Trips			**29**	**83**	**112**	**91**	**56**	**147**	**1,658**

[1] DU = Dwelling Units

ANALYSIS SCENARIOS

Peak hour operations at each of the study area intersections and site access driveways will be assessed for the following analysis scenarios:

- Existing (2022) Conditions
- Opening Year Cumulative (2026) Without Project
- Opening Year Cumulative (2026) With Buildout
- General Plan Buildout (2042) Without Project
- General Plan Buildout (2042) With Project

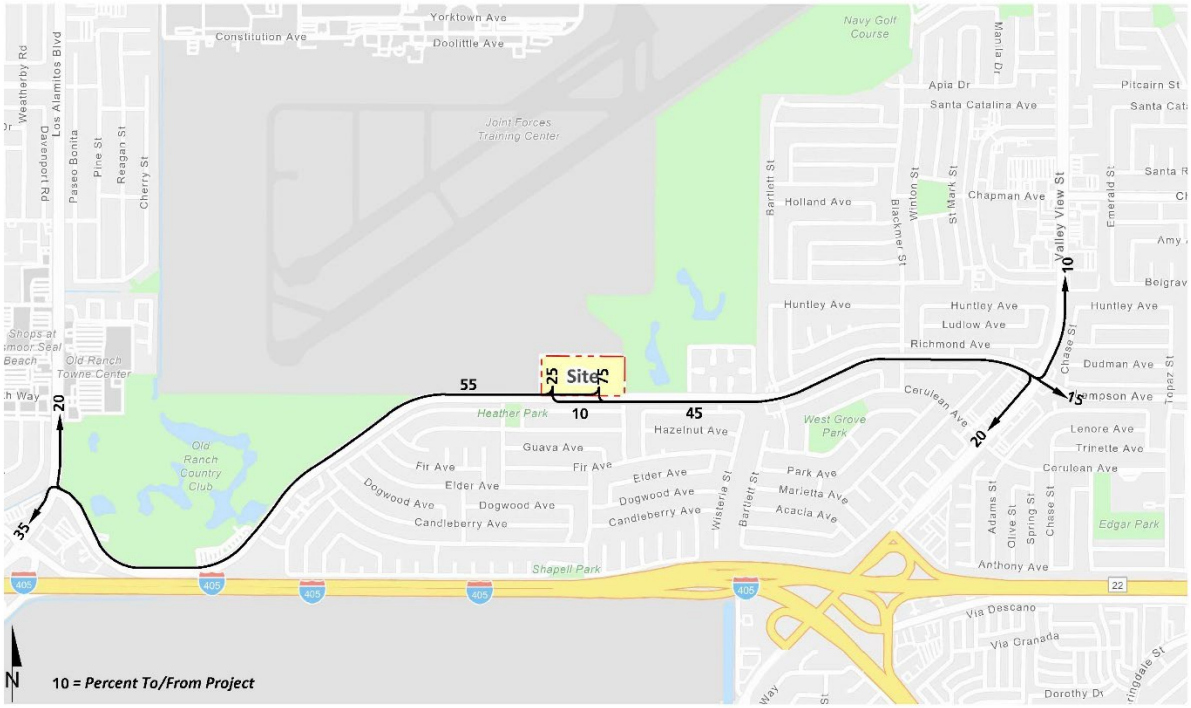
As most of the study area intersections lie within the City of Seal Beach, the City of Seal Beach Transportation Analysis Guidelines (dated June 2020) have been utilized for the purposes of the traffic study. Per the Guidelines, the signalized intersections will be evaluated using the Intersection Capacity Utilization (ICU) methodology while unsignalized intersections will be evaluated using the Highway Capacity Manual (HCM 6th Edition) methodology.

PROJECT TRIP DISTRIBUTIONS

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. The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. The trip distribution patterns are heavily influenced by the geographical location of the site, the location of surrounding land uses, and the proximity to the regional freeway system. The Project trip distribution patterns are graphically depicted on Exhibit 3.

EXHIBIT 3: PROJECT TRIP DISTRIBUTION



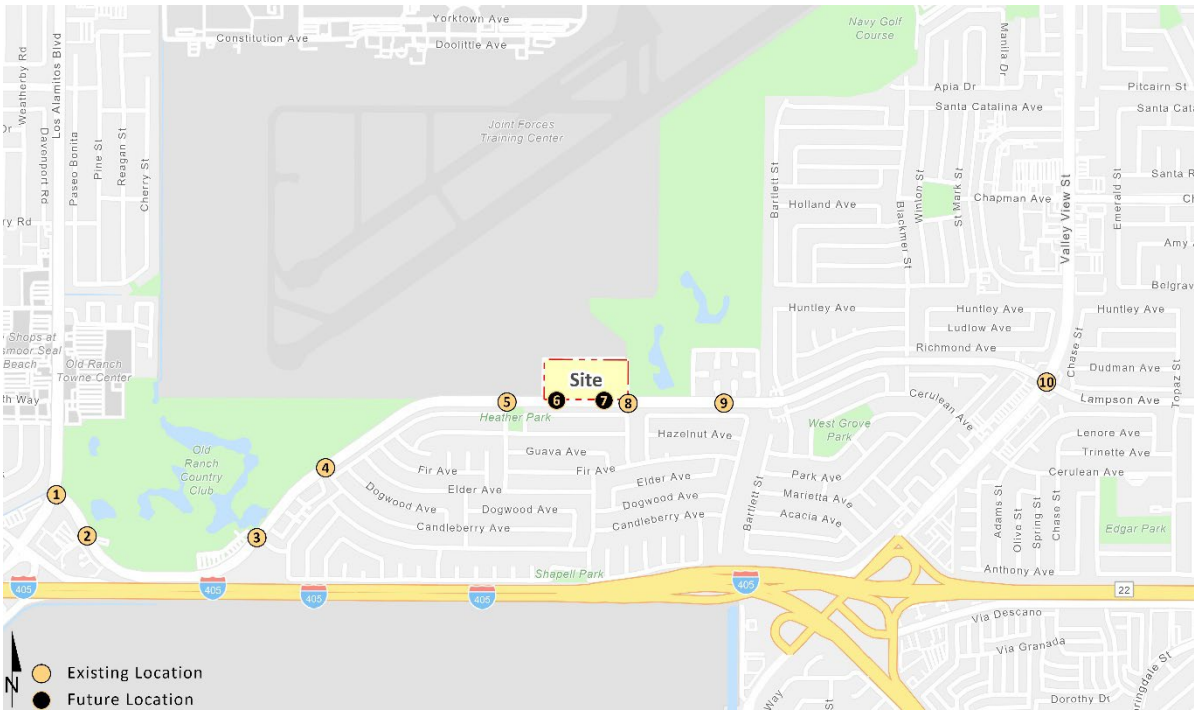
STUDY AREA

Per the City's guidelines, the proposed intersection analysis locations have been identified on Exhibit 4 and listed on Table 3.

TABLE 3: LIST OF STUDY INTERSECTIONS

#	Intersection	#	Intersection
1	Seal Beach Bl. & Lampson Av.	6	Rose St. & Lampson Av.
2	Old Ranch Plaza & Lampson Av.	7	Driveway 1 & Lampson Av.
3	Basswood St. & Lampson Av.	8	Driveway 2 & Lampson Av.
4	Candleberry Av. & Lampson Av.	9	Tulip St. & Lampson Av.
5	Heather St. & Lampson Av.	10	Valley View St. & Lampson Av.

EXHIBIT 4: STUDY AREA



LEVEL OF SERVICE (LOS) CRITERIA

The City of Los Alamitos and City of Seal Beach have established LOS D as the minimum level of service for all roadways/intersections within the City. Therefore, any intersection operating at LOS E or F will be considered deficient for the purposes of this analysis.

EXISTING COUNT DATA

Traffic counts (classified by vehicle type) were conducted in May 2022 during a typical weekday when local schools were in session and operating on a typical bell schedule. Time periods counted were from 7:00-9:00 AM and 4:00-6:00 PM and include pedestrian and bicycle counts at each analysis location. No adjustments are proposed to the new traffic counts for the baseline traffic condition as traffic counts were conducted while local schools were in session (before Summer Break).

AMBIENT GROWTH RATE

Consistent with other City of Los Alamitos traffic studies performed by Urban Crossroads, an ambient growth rate of 2 percent per year, compounded annually, will be used for this analysis (2% per year over 4 years or 8.24% for 2026).

DEFICIENCY CRITERIA

City of Seal Beach:

To determine whether the addition of project traffic at a study intersection result in a deficiency, the following thresholds of significance will be utilized to determine when an intersection requires improvements:

Existing ICU	Project Related Increase in ICU
0.00 - 0.69	0.06
0.70 - 0.79	0.04
0.80 - 0.89	0.02
0.90+	0.01

City of Garden Grove:

To determine whether the addition of project traffic at a study intersection result in a deficiency, the following thresholds of significance will be utilized:

- Any signalized study intersection operating at an acceptable LOS D or better without project in which the addition of project traffic causes the intersection to degrade to LOS E or F shall identify improvements to improve the operations to LOS D or better.
- Any signalized intersection that is operating at LOS E or F without project traffic where the project increases v/c by 0.010 or more shall identify improvements to offset the increase in delay.
- An operational improvement would be required if the study determines that either section a) or both sections b) and c) occur at unsignalized study intersections:

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

  AND

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

CUMULATIVE DEVELOPMENT PROJECTS

It is requested the City provide a list of cumulative projects to be included. The adjacent Cities of Long Beach, Seal Beach, and Garden Grove will be contacted to obtain current lists in their respective agencies as well.

SPECIAL ISSUES

The following special issues will be addressed as part of the TA:

- Traffic signal warrant analyses will be conducted for all unsignalized study area intersections for all applicable analysis scenarios.
- Evaluate the peak hour queuing at the Project driveways located along Lampson Avenue.

- Vehicle Miles Traveled (VMT) will be evaluated under separate cover but concurrently to the Traffic Study.

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

Respectfully submitted,

URBAN CROSSROADS, INC.

Charlene So, PE
Principal

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APPENDIX 1.2: SITE ACCESS QUEUING ANALYSIS WORKSHEETS

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Intersection: 6: Lampson Av. & Driveway 1

Movement	SB
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	14
95th Queue (ft)	39
Link Distance (ft)	175
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Lampson Av. & Driveway 2

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (ft)	29	74
Average Queue (ft)	5	32
95th Queue (ft)	23	58
Link Distance (ft)		154
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	150	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 6: Lampson Av. & Driveway 1

Movement	SB
Directions Served	R
Maximum Queue (ft)	36
Average Queue (ft)	12
95th Queue (ft)	37
Link Distance (ft)	175
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Lampson Av. & Driveway 2

Movement	EB	WB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	52	4	4	76
Average Queue (ft)	15	0	0	29
95th Queue (ft)	42	3	3	60
Link Distance (ft)		522	522	154
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	150			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 0

APPENDIX 3.1: EXISTING TRAFFIC COUNTS

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INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Jun 1, 22

LOCATION: Seal Beach
NORTH & SOUTH: Seal Beach
EAST & WEST: Lampson

PROJECT #: SC3468
LOCATION #: 1
CONTROL: SIGNAL

NOTES:

AM PM MD OTHER OTHER — ▲ N, ◄ W, E ►, S ▼

☐ Add U-Turns to Left Turns

		NORTHBOUND Seal Beach			SOUTHBOUND Seal Beach			EASTBOUND Lampson			WESTBOUND Lampson			
	LANES:	NL X	NT 3	NR 1	SL 2	ST 3	SR X	EL X	ET X	ER X	WL 2	WT X	WR 1	TOTAL
AM	7:00 AM	0	184	37	17	232	0	0	0	0	66	0	76	612
	7:15 AM	0	276	35	33	284	0	0	0	0	84	0	138	850
	7:30 AM	0	261	56	39	249	0	0	0	0	131	0	175	911
	7:45 AM	0	418	72	113	363	0	0	0	0	71	0	182	1,219
	8:00 AM	0	243	67	128	369	0	0	0	0	73	0	93	973
	8:15 AM	0	277	71	84	263	0	0	0	0	56	0	106	857
	8:30 AM	0	251	60	86	286	0	0	0	0	76	0	75	834
	8:45 AM	0	330	63	54	231	0	0	0	0	57	0	82	817
	VOLUMES	0	2,240	461	554	2,277	0	0	0	0	614	0	927	7,074
	APPROACH %	0%	83%	17%	20%	80%	0%	0%	0%	0%	40%	0%	60%	
	APP/DEPART	2,701	/	3,167	2,831	/	2,891	0	/	1,016	1,542	/	0	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	1,199	266	364	1,244	0	0	0	0	331	0	556	3,960
	APPROACH %	0%	82%	18%	23%	77%	0%	0%	0%	0%	37%	0%	63%	
	PEAK HR FACTOR		0.747			0.809			0.000			0.725		0.812
	APP/DEPART	1,465	/	1,755	1,608	/	1,575	0	/	630	887	/	0	0
PM	4:00 PM	0	354	100	109	309	0	0	0	0	82	0	105	1,059
	4:15 PM	0	370	89	107	298	0	0	0	0	58	0	97	1,019
	4:30 PM	0	351	96	110	324	0	0	0	0	81	0	110	1,072
	4:45 PM	0	399	101	129	282	0	0	0	0	67	0	109	1,087
	5:00 PM	0	397	104	116	293	0	0	0	0	92	0	104	1,106
	5:15 PM	0	361	112	92	303	0	0	0	0	71	0	108	1,047
	5:30 PM	0	383	98	99	296	0	0	0	0	84	0	101	1,061
	5:45 PM	0	420	87	101	294	0	0	0	0	85	0	85	1,072
	VOLUMES	0	3,035	787	863	2,399	0	0	0	0	620	0	819	8,526
	APPROACH %	0%	79%	21%	26%	74%	0%	0%	0%	0%	43%	0%	57%	
	APP/DEPART	3,825	/	3,854	3,262	/	3,022	0	/	1,650	1,439	/	0	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	1,508	413	447	1,202	0	0	0	0	311	0	431	4,315
	APPROACH %	0%	78%	21%	27%	73%	0%	0%	0%	0%	42%	0%	58%	
	PEAK HR FACTOR		0.956			0.950			0.000			0.946		0.974
	APP/DEPART	1,924	/	1,939	1,649	/	1,516	0	/	860	742	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
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	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
2	0	0	0	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
3	0	0	0	3

RTOR

NRR	SRR	ERR	WRR
5	0	0	48
7	0	0	77
10	0	0	68
14	0	0	64
4	0	0	48
22	0	0	50
8	0	0	47
10	0	0	40
80	0	0	442
50	0	0	230
34	0	0	42
14	0	0	54
28	0	0	38
27	0	0	42
28	0	0	48
21	0	0	37
47	0	0	44
4	0	0	46
203	0	0	351
104	0	0	165

ALL PED AND BIKE

	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
7:00 AM	0	2	0	1	3
7:15 AM	4	2	0	2	8
7:30 AM	1	1	0	0	2
7:45 AM	1	2	0	0	3
8:00 AM	0	2	0	2	4
8:15 AM	2	3	0	2	7
8:30 AM	2	2	0	0	4
8:45 AM	0	4	0	0	4
TOTAL	10	18	0	7	35
4:00 PM	2	2	0	4	8
4:15 PM	1	0	0	0	1
4:30 PM	0	4	0	2	6
4:45 PM	2	0	0	2	4
5:00 PM	0	2	0	2	4
5:15 PM	0	0	0	0	0
5:30 PM	1	0	0	1	2
5:45 PM	1	3	1	2	7
TOTAL	7	11	1	13	32

PEDESTRIAN CROSSINGS

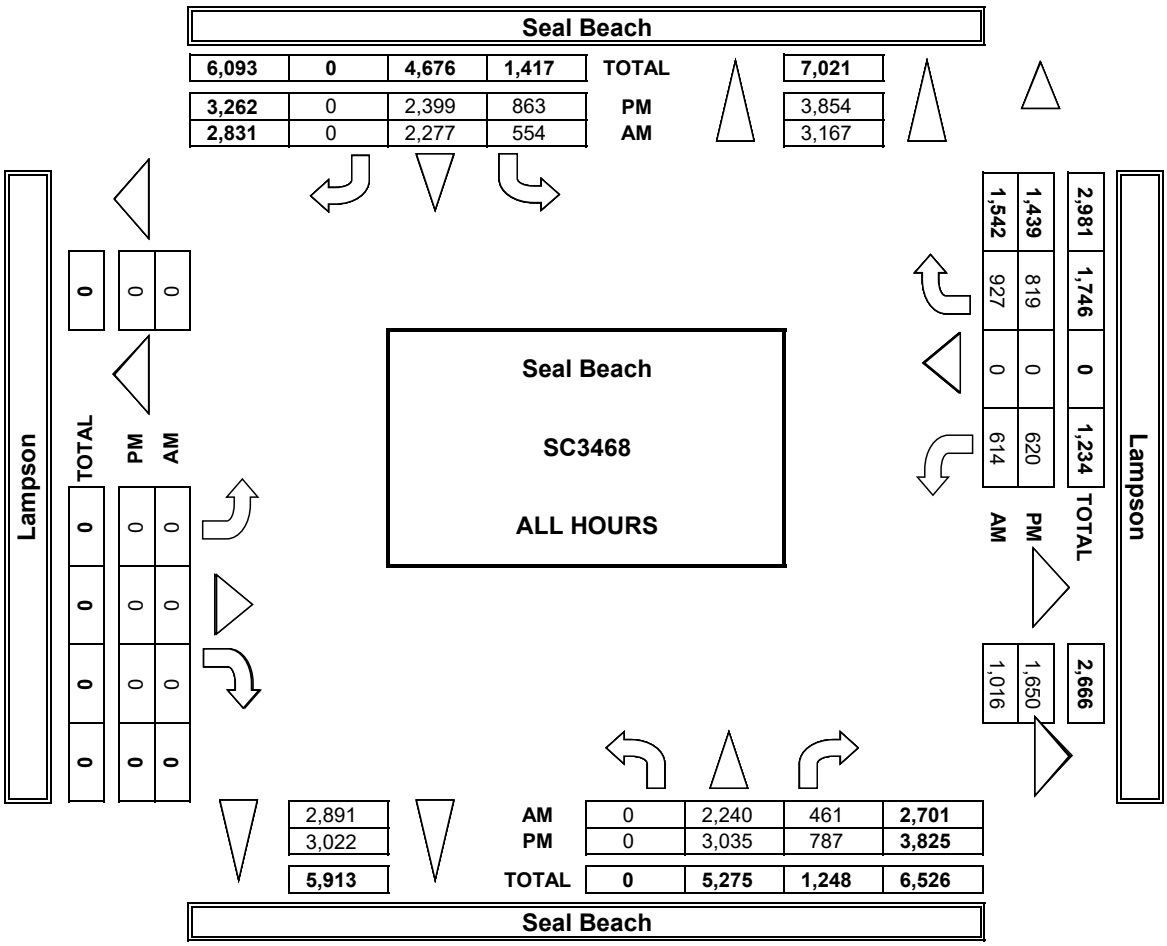
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	2	0	0	2
0	0	0	0	0
2	2	0	0	4
2	0	0	0	2
0	1	0	0	1
5	5	0	0	10
0	0	0	2	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	1	2
1	0	0	3	4

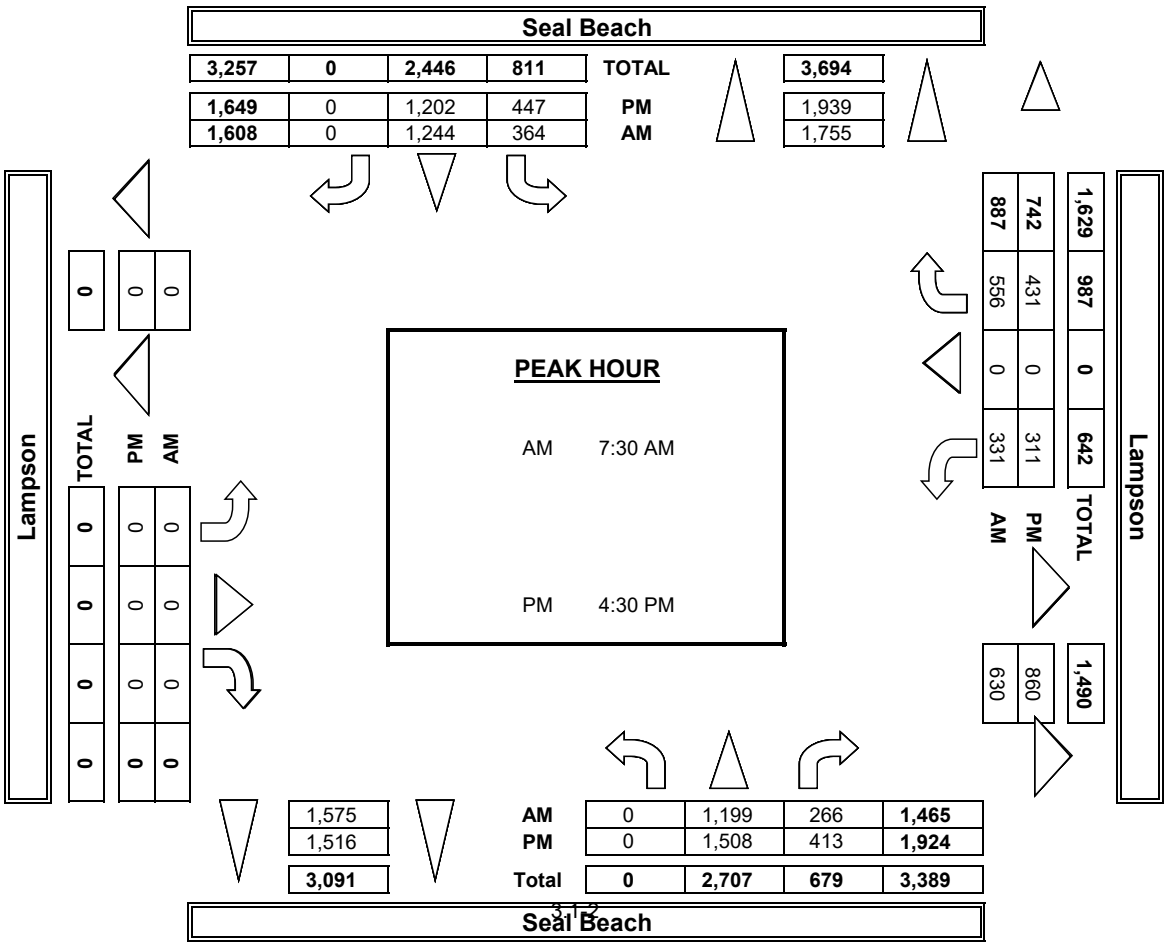
BICYCLE CROSSINGS

ES	WS	SS	NS	TOTAL
0	2	0	1	3
3	2	0	2	7
1	1	0	0	2
1	0	0	0	1
0	2	0	2	4
0	1	0	2	3
0	2	0	0	2
0	3	0	0	3
5	13	0	7	25
2	2	0	2	6
1	0	0	0	1
0	4	0	2	6
2	0	0	2	4
0	2	0	2	4
0	0	0	0	0
1	0	0	1	2
0	3	1	1	5
6	11	1	10	28

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3468
6/1/22	NORTH & SOUTH:	Seal Beach	LOCATION #:	1
WEDNESDAY	EAST & WEST:	Lampson	CONTROL:	SIGNAL

CLASS 2:	NOTES:
2-AXLE WORK VEHICLES/ TRUCKS	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND (Seal Beach)			SOUTHBOUND (Seal Beach)			EASTBOUND (Lampson)			WESTBOUND (Lampson)			
LANES:	NL X	NT 3	NR 1	SL 2	ST 3	SR X	EL X	ET X	ER X	WL 2	WT X	WR 1	TOTAL
7:00 AM	0	13	4	0	11	0	0	0	0	2	0	2	32
7:15 AM	0	19	1	4	12	0	0	0	0	2	0	4	42
7:30 AM	0	17	5	3	6	0	0	0	0	9	0	5	45
7:45 AM	0	19	2	3	12	0	0	0	0	1	0	4	41
8:00 AM	0	19	5	1	16	0	0	0	0	5	0	2	48
8:15 AM	0	21	4	4	9	0	0	0	0	2	0	1	41
8:30 AM	0	15	3	2	17	0	0	0	0	3	0	2	42
8:45 AM	0	14	5	1	13	0	0	0	0	3	0	5	41
AM VOLUMES	0	137	29	18	96	0	0	0	0	27	0	25	332
AM APPROACH %	0%	83%	17%	16%	84%	0%	0%	0%	0%	52%	0%	48%	
AM APP/DEPART	166	/	162	114	/	123	0	/	47	52	/	0	0
BEGIN PEAK HR	7:30 AM												
AM PEAK VOLUMES	0	76	16	11	43	0	0	0	0	17	0	12	175
AM PEAK APPROACH %	0%	83%	17%	20%	80%	0%	0%	0%	0%	59%	0%	41%	
AM PEAK HR FACTOR		0.920			0.794			0.000			0.518		0.911
AM PEAK APP/DEPART	92	/	88	54	/	60	0	/	27	29	/	0	0
4:00 PM	0	11	6	7	10	0	0	0	0	3	0	5	42
4:15 PM	0	14	1	1	16	0	0	0	0	3	0	1	36
4:30 PM	0	9	1	1	10	0	0	0	0	4	0	3	28
4:45 PM	0	13	3	2	11	0	0	0	0	1	0	4	34
5:00 PM	0	9	1	4	10	0	0	0	0	8	0	7	39
5:15 PM	0	9	3	1	5	0	0	0	0	1	0	3	22
5:30 PM	0	13	2	1	11	0	0	0	0	2	0	4	33
5:45 PM	0	5	2	1	8	0	0	0	0	2	0	1	19
PM VOLUMES	0	83	19	18	81	0	0	0	0	24	0	28	253
PM APPROACH %	0%	81%	19%	18%	82%	0%	0%	0%	0%	46%	0%	54%	
PM APP/DEPART	102	/	111	99	/	105	0	/	37	52	/	0	0
BEGIN PEAK HR	4:30 PM												
PM PEAK VOLUMES	0	40	8	8	36	0	0	0	0	14	0	17	123
PM PEAK APPROACH %	0%	83%	17%	18%	82%	0%	0%	0%	0%	45%	0%	55%	
PM PEAK HR FACTOR		0.750			0.786			0.000			0.517		0.788
PM PEAK APP/DEPART	48	/	57	44	/	50	0	/	16	31	/	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

RTOR

NRR 0	SRR X	ERR X	WRR 0
1	0	0	1
0	0	0	3
1	0	0	1
1	0	0	1
1	0	0	0
2	0	0	0
1	0	0	1
0	0	0	2
7	0	0	9
5	0	0	2
0	0	0	1
0	0	0	0
0	0	0	1
0	0	0	1
0	0	0	4
0	0	0	1
0	0	0	1
0	0	0	1
7	0	0	10
4	0	0	7

Seal Beach

NORTH SIDE

Lampson WEST SIDE EAST SIDE **Lampson**

SOUTH SIDE

Seal Beach

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 6/1/22 WEDNESDAY	LOCATION:	Seal Beach	PROJECT #:	SC3468
	NORTH & SOUTH:	Seal Beach	LOCATION #:	1
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

▲
N
◄ W
E ►
S
▼

	NORTHBOUND Seal Beach			SOUTHBOUND Seal Beach			EASTBOUND Lampson			WESTBOUND Lampson			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	X	3	1	2	3	X	X	X	X	2	X	1	
AM 7:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	1	2
7:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	1	1	0	1	0	0	0	0	0	0	0	3
8:45 AM	0	1	0	0	0	0	0	0	0	2	0	0	3
VOLUMES	0	6	3	0	4	0	0	0	0	2	0	1	16
APPROACH %	0%	67%	33%	0%	100%	0%	0%	0%	0%	67%	0%	33%	
APP/DEPART	9	/	7	4	/	6	0	/	3	3	/	0	0
BEGIN PEAK HR		7:30 AM											
VOLUMES	0	2	2	0	1	0	0	0	0	0	0	0	5
APPROACH %	0%	50%	50%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR		0.500			0.250			0.000			0.000		0.625
APP/DEPART	4	/	2	1	/	1	0	/	2	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	2	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	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	1	4	0	0	0	0	0	0	1	6
APPROACH %	0%	0%	0%	20%	80%	0%	0%	0%	0%	0%	0%	100%	
APP/DEPART	0	/	1	5	/	4	0	/	1	1	/	0	0
BEGIN PEAK HR		4:30 PM											
VOLUMES	0	0	0	1	2	0	0	0	0	0	0	1	4
APPROACH %	0%	0%	0%	33%	67%	0%	0%	0%	0%	0%	0%	100%	
PEAK HR FACTOR		0.000			0.375			0.000			0.250		0.500
APP/DEPART	0	/	1	3	/	2	0	/	1	1	/	0	0

	U-TURNS					RTOR			
	NB	SB	EB	WB	TTL	NRR	SRR	ERR	WRR
LANES:						0	X	X	0
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	1
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	1
VOLUMES (PEAK HR)						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
VOLUMES (PEAK HR)						0	0	0	0

Seal Beach

NORTH SIDE

Lampson WEST SIDE

EAST SIDE **Lampson**

SOUTH SIDE

Seal Beach

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

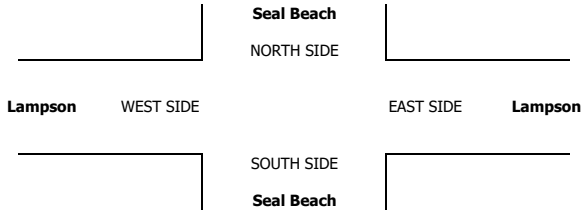
DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3468
6/1/22	NORTH & SOUTH:	Seal Beach	LOCATION #:	1
WEDNESDAY	EAST & WEST:	Lampson	CONTROL:	SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (Seal Beach)			SOUTHBOUND (Seal Beach)			EASTBOUND (Lampson)			WESTBOUND (Lampson)				U-TURNS					RTOR			
	LANES:	NL X	NT 3	NR 1	SL 2	ST 3	SR X	EL X	ET X	ER X	WL 2	WT X	WR 1	TOTAL	NB	SB	EB	WB	TTL	NRR 0	SRR X	ERR X	WRR 0
AM	7:00 AM	0	0	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0
	7:15 AM	0	2	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	7:30 AM	0	1	1	0	2	0	0	0	0	1	0	0	5	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	1	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	8:30 AM	0	1	1	1	1	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0
	VOLUMES	0	5	2	2	8	0	0	0	0	3	0	0	20	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	71%	29%	20%	80%	0%	0%	0%	0%	100%	0%	0%										
	APP/DEPART	7	/	5	10	/	11	0	/	4	3	/	0	0									
	BEGIN PEAK HR		7:30 AM																				
	VOLUMES	0	2	1	0	5	0	0	0	0	1	0	0	9						0	0	0	0
	APPROACH %	0%	67%	33%	0%	100%	0%	0%	0%	0%	100%	0%	0%										
	PEAK HR FACTOR		0.375			0.625			0.000			0.250		0.450									
	APP/DEPART	3	/	2	5	/	6	0	/	1	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	1	0	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	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	2	0	0	1	0	0	0	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	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	3	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%										
	APP/DEPART	3	/	3	1	/	1	0	/	0	0	/	0	0									
	BEGIN PEAK HR		4:30 PM																				
	VOLUMES	0	2	0	0	1	0	0	0	0	0	0	0	3						0	0	0	0
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%										
	PEAK HR FACTOR		0.250			0.250			0.000			0.000		0.250									
	APP/DEPART	2	/	2	1	/	1	0	/	0	0	/	0	0									



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:				
Tue, Sep 27, 22	LOCATION:	Seal Beach	PROJECT #:	SC3651
	NORTH & SOUTH:	Ayres Hotel Driveway	LOCATION #:	1a
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

		NORTHBOUND Ayres Hotel Driveway			SOUTHBOUND Ayres Hotel Driveway			EASTBOUND Lampson			WESTBOUND Lampson			
	LANES:	NL 0.5	NT 0.5	NR 1	SL 0	ST 1	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	9	0	0	0	0	1	2	58	11	0	152	1	234
	7:15 AM	7	0	3	0	0	1	1	70	4	1	176	0	263
	7:30 AM	5	0	1	0	0	1	2	81	8	0	279	0	377
	7:45 AM	5	1	1	0	0	0	1	122	3	2	251	0	386
	8:00 AM	10	1	2	0	0	1	3	147	11	5	174	2	356
	8:15 AM	9	1	3	1	0	1	1	120	10	3	176	1	326
	8:30 AM	8	0	3	1	1	1	5	124	8	3	131	1	286
	8:45 AM	9	0	4	1	0	0	3	98	8	1	138	0	262
	VOLUMES	62	3	17	3	1	6	18	820	63	15	1,477	5	2,490
	APPROACH %	76%	4%	21%	30%	10%	60%	2%	91%	7%	1%	99%	0%	
	APP/DEPART	82	/	23	10	/	79	901	/	840	1,497	/	1,548	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	29	3	7	1	0	3	7	470	32	10	880	3	1,445
	APPROACH %	74%	8%	18%	25%	0%	75%	1%	92%	6%	1%	99%	0%	
	PEAK HR FACTOR		0.750			0.500			0.790			0.800		0.936
	APP/DEPART	39	/	11	4	/	42	509	/	478	893	/	914	0
PM	4:00 PM	6	0	1	0	0	2	4	174	2	2	160	0	351
	4:15 PM	10	0	2	0	0	0	1	178	7	4	169	0	371
	4:30 PM	8	0	3	1	0	2	1	178	4	1	144	0	342
	4:45 PM	14	0	3	0	1	0	0	200	9	1	176	0	404
	5:00 PM	13	0	3	0	0	0	1	179	9	0	174	0	379
	5:15 PM	8	0	2	0	0	0	3	187	5	3	191	0	399
	5:30 PM	7	0	2	0	0	0	0	203	11	3	186	0	412
	5:45 PM	14	0	7	0	0	0	1	173	13	3	171	0	382
	VOLUMES	80	0	23	1	1	4	11	1,472	60	17	1,371	0	3,040
	APPROACH %	78%	0%	22%	17%	17%	67%	1%	95%	4%	1%	99%	0%	
	APP/DEPART	103	/	2	6	/	78	1,543	/	1,496	1,388	/	1,464	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	42	0	10	0	1	0	4	769	34	7	727	0	1,594
	APPROACH %	81%	0%	19%	0%	100%	0%	0%	95%	4%	1%	99%	0%	
	PEAK HR FACTOR		0.765			0.250			0.943			0.946		0.967
	APP/DEPART	52	/	0	1	/	42	807	/	779	734	/	773	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	1	0	1
0	0	1	0	1
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	3	0	3
0	0	2	0	2
0	0	1	0	1
0	0	1	0	1
0	0	0	0	0
0	0	1	0	1
0	0	3	0	3
0	0	0	0	0
0	0	1	0	1
0	0	9	0	9

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
1	0	1	0
0	1	0	0
1	0	0	0
2	1	1	0
1	0	1	0
0	2	0	0
2	0	0	0
0	1	0	0
0	0	0	0
1	0	0	0
2	0	0	0
1	0	0	0
3	0	1	0
9	3	1	0
4	0	0	0

Ayres Hotel Driveway

NORTH SIDE

Lampson WEST SIDE EAST SIDE **Lampson**

SOUTH SIDE

Ayres Hotel Driveway

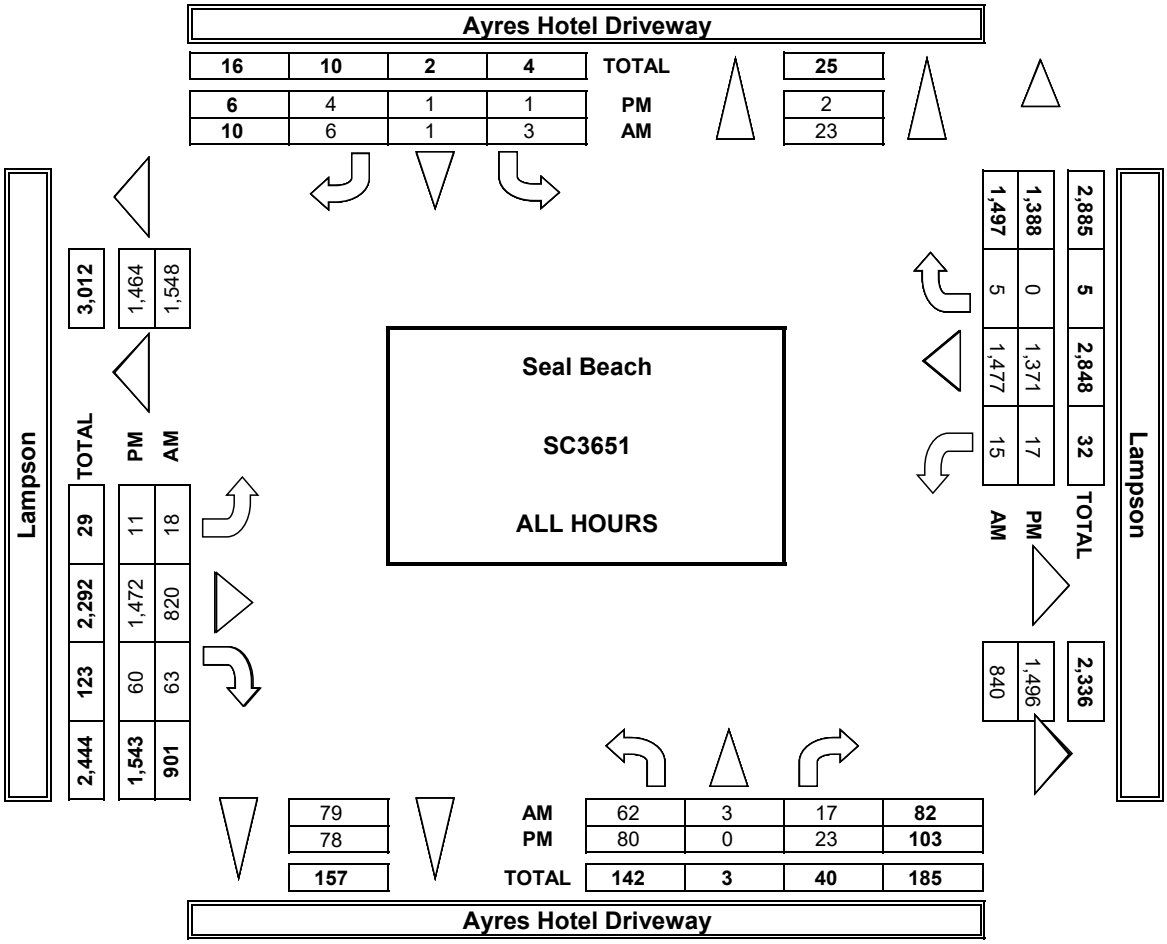
		ALL PED AND BIKE				
		E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM	7:00 AM	0	0	1	1	2
	7:15 AM	0	0	1	0	1
	7:30 AM	0	0	4	2	6
	7:45 AM	0	0	2	1	3
	8:00 AM	0	0	3	1	4
	8:15 AM	0	0	1	1	2
	8:30 AM	0	0	1	3	4
	8:45 AM	0	0	1	4	5
	TOTAL	0	0	14	13	27
PM	4:00 PM	0	0	7	0	7
	4:15 PM	0	0	0	0	0
	4:30 PM	1	0	0	0	1
	4:45 PM	0	0	2	0	2
	5:00 PM	0	0	0	0	0
	5:15 PM	0	0	2	1	3
	5:30 PM	0	0	0	0	0
	5:45 PM	0	0	3	0	3
	TOTAL	1	0	14	1	16

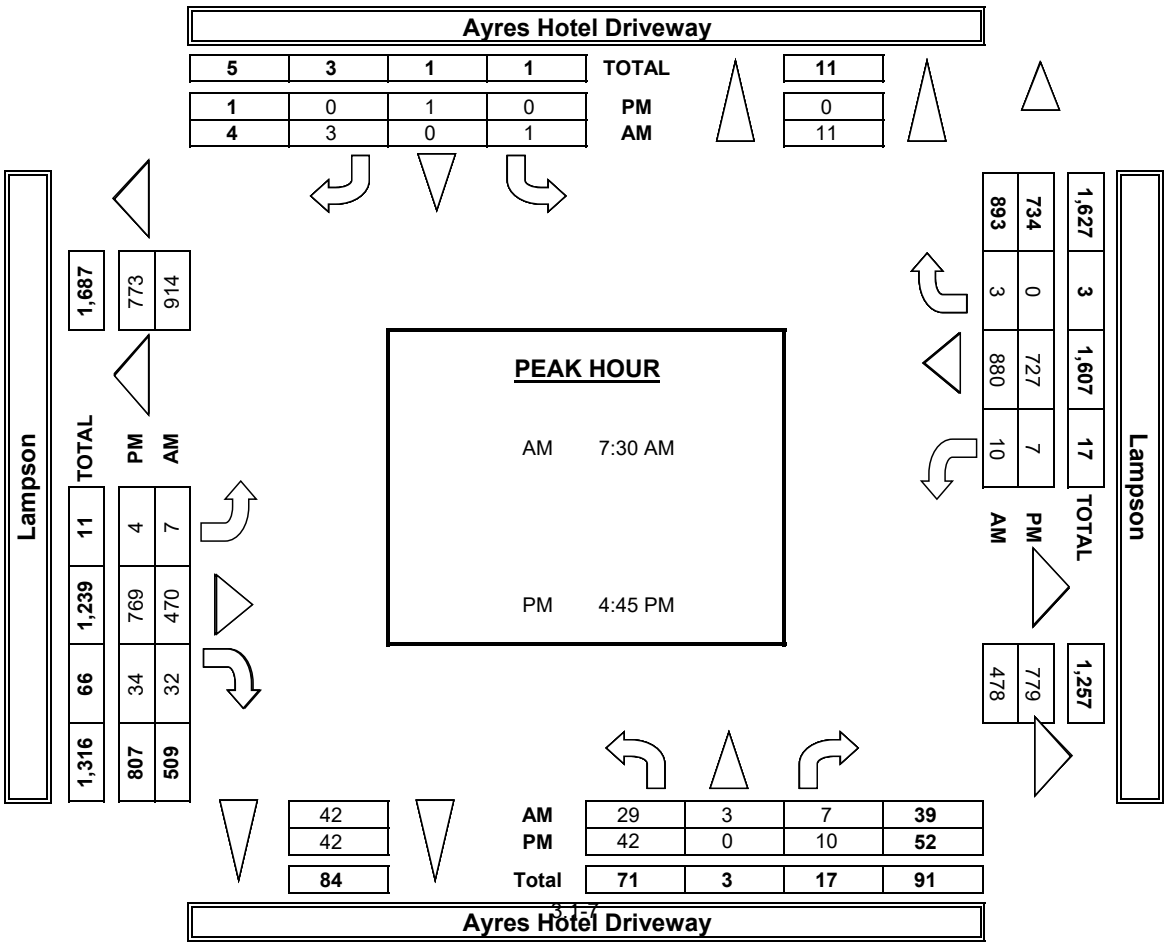
PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	0
0	0	1	0	1
0	0	2	0	2
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	3	0	4
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

BICYCLE CROSSINGS				
ES	WS	SS	NS	TOTAL
0	0	1	1	2
0	0	0	0	0
0	0	2	2	4
0	0	2	1	3
0	0	2	1	3
0	0	1	1	2
0	0	1	3	4
0	0	1	4	5
0	0	7	5	23
0	0	7	0	7
0	0	0	0	0
1	0	0	0	1
0	0	2	0	2
0	0	0	0	0
0	0	2	1	3
0	0	0	0	0
0	0	3	0	3
0	0	4	1	16

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3651
Tue, Sep 27, 22	NORTH & SOUTH:	Basswood	LOCATION #:	2a
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

		NORTHBOUND Basswood			SOUTHBOUND Basswood			EASTBOUND Lampson			WESTBOUND Lampson			
	LANES:	NL 1	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	31	0	1	0	0	1	12	35	6	1	124	2	213
	7:15 AM	32	1	1	1	0	2	14	47	13	1	143	5	260
	7:30 AM	60	1	1	0	0	3	9	58	12	2	224	2	372
	7:45 AM	60	0	1	0	0	2	4	91	22	3	185	4	372
	8:00 AM	57	0	1	0	0	1	2	102	29	2	131	0	325
	8:15 AM	27	0	0	1	0	1	3	96	16	2	149	0	295
	8:30 AM	20	0	1	1	1	1	5	89	13	0	111	1	243
	8:45 AM	28	0	1	1	0	4	9	74	18	3	107	1	246
	VOLUMES	315	2	7	4	1	15	58	592	129	14	1,174	15	2,326
	APPROACH %	97%	1%	2%	20%	5%	75%	7%	76%	17%	1%	98%	1%	
	APP/DEPART	324	/	75	20	/	144	779	/	603	1,203	/	1,504	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	204	1	3	1	0	7	18	347	79	9	689	6	1,364
	APPROACH %	98%	0%	1%	13%	0%	88%	4%	78%	18%	1%	98%	1%	
	PEAK HR FACTOR		0.839			0.667			0.835			0.772		0.917
	APP/DEPART	208	/	25	8	/	88	444	/	351	704	/	900	0
PM	4:00 PM	30	0	3	1	0	6	5	133	35	3	117	2	335
	4:15 PM	21	0	2	0	0	6	4	144	34	0	143	0	354
	4:30 PM	19	0	4	2	0	5	3	142	18	3	121	1	318
	4:45 PM	30	0	1	1	1	8	11	168	29	1	134	0	384
	5:00 PM	34	0	3	1	0	14	3	152	35	3	135	0	380
	5:15 PM	35	0	2	1	0	7	5	147	28	5	149	2	381
	5:30 PM	25	0	4	1	2	9	7	148	24	2	145	1	368
	5:45 PM	25	0	0	3	0	8	7	138	35	1	128	3	348
	VOLUMES	219	0	19	10	3	63	45	1,172	238	18	1,072	9	2,868
	APPROACH %	92%	0%	8%	13%	4%	83%	3%	81%	16%	2%	98%	1%	
	APP/DEPART	238	/	54	76	/	259	1,455	/	1,201	1,099	/	1,354	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	124	0	10	4	3	38	26	615	116	11	563	3	1,513
	APPROACH %	93%	0%	7%	9%	7%	84%	3%	81%	15%	2%	98%	1%	
	PEAK HR FACTOR		0.905			0.750			0.910			0.925		0.985
	APP/DEPART	134	/	29	45	/	130	757	/	629	577	/	725	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

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

RTOR

NRR	SRR	ERR	WRR
0	0	1	1
0	1	1	0
0	3	2	0
0	1	5	0
1	1	5	0
0	0	1	0
0	0	0	0
0	2	0	0
1	8	15	1

NRR	SRR	ERR	WRR
1	5	13	0

NRR	SRR	ERR	WRR
1	5	1	1
1	3	0	0
3	5	2	0
1	3	3	0
0	7	3	0
0	5	2	0
1	5	2	0
0	4	4	0
7	37	17	1

NRR	SRR	ERR	WRR
2	20	10	0

Basswood

NORTH SIDE

Lampson WEST SIDE EAST SIDE **Lampson**

SOUTH SIDE

Basswood

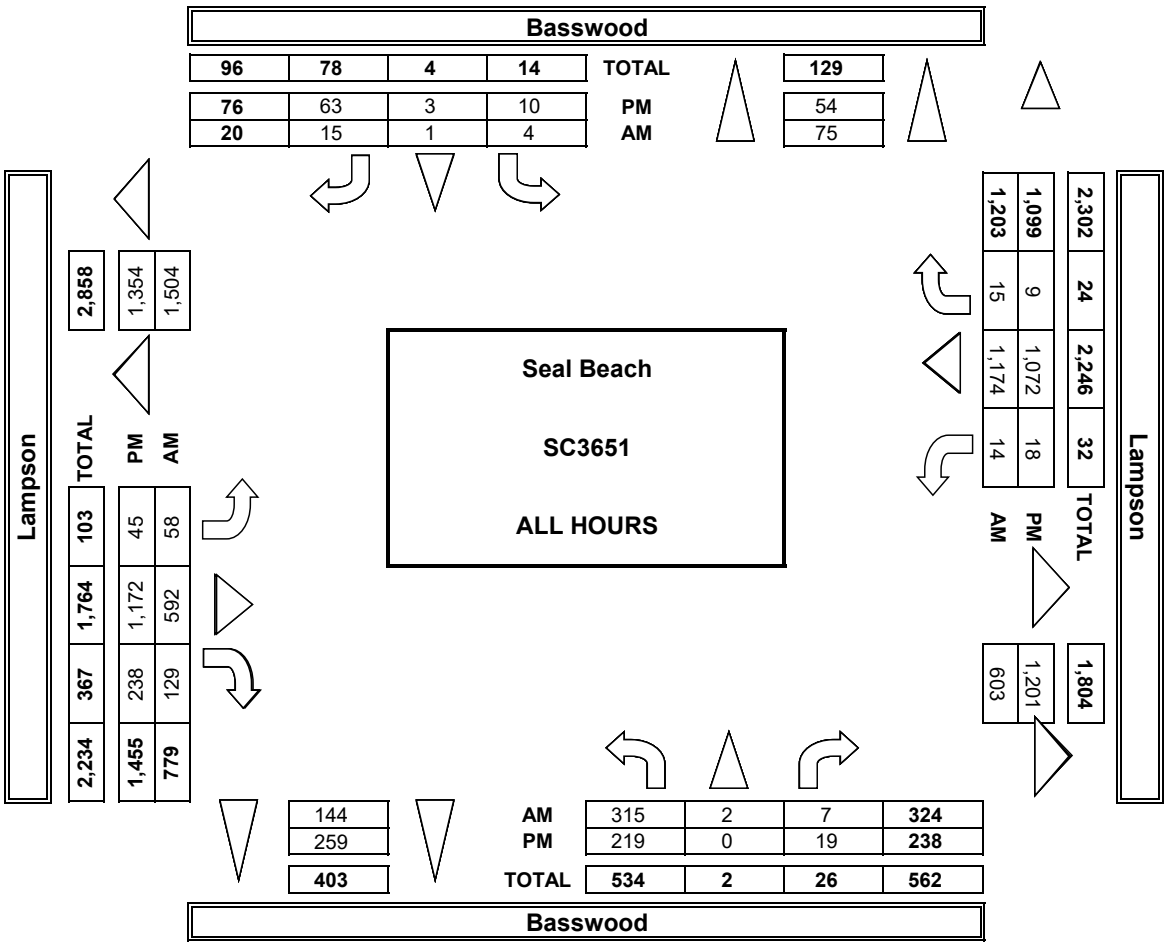
		ALL PED AND BIKE				
		E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM	7:00 AM	0	0	0	1	1
	7:15 AM	0	0	1	0	1
	7:30 AM	0	0	4	2	6
	7:45 AM	0	0	2	1	3
	8:00 AM	0	0	0	1	1
	8:15 AM	0	0	1	2	3
	8:30 AM	1	0	0	2	3
	8:45 AM	0	1	3	2	6
	TOTAL	1	1	11	11	24
PM	4:00 PM	0	0	1	0	1
	4:15 PM	1	0	0	1	2
	4:30 PM	0	0	2	1	3
	4:45 PM	3	0	3	0	6
	5:00 PM	0	0	0	0	0
	5:15 PM	0	0	0	1	1
	5:30 PM	0	0	0	0	0
	5:45 PM	0	0	3	0	3
	TOTAL	4	0	9	3	16

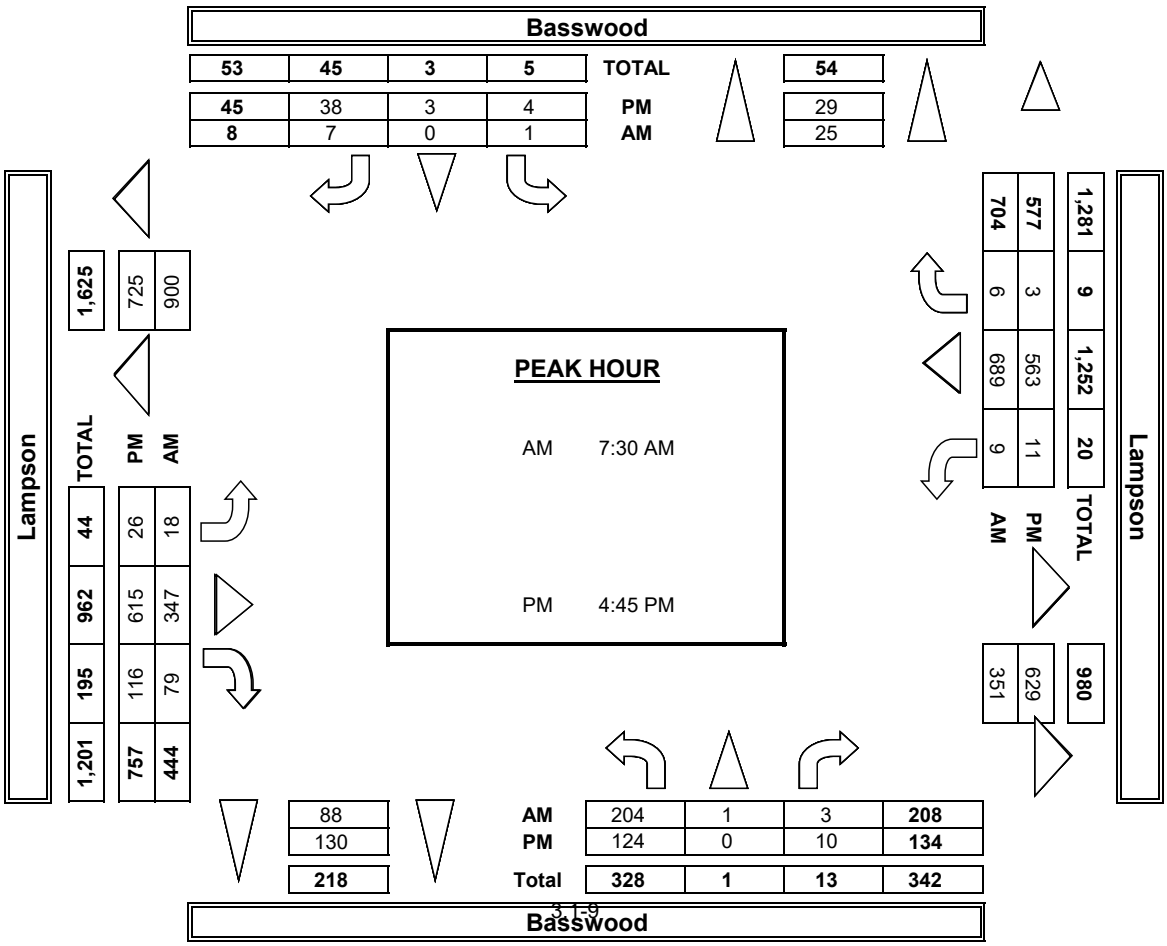
		PEDESTRIAN CROSSINGS				
		E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM	7:00 AM	0	0	0	0	0
	7:15 AM	0	0	0	0	0
	7:30 AM	0	0	0	0	0
	7:45 AM	0	0	1	0	1
	8:00 AM	0	0	0	0	0
	8:15 AM	0	0	1	0	1
	8:30 AM	0	0	0	0	0
	8:45 AM	0	0	1	0	1
	TOTAL	0	0	2	0	3
PM	4:00 PM	0	0	0	0	0
	4:15 PM	1	0	0	1	2
	4:30 PM	0	0	0	0	0
	4:45 PM	3	0	3	0	6
	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	3	0	3	0	8

		BICYCLE CROSSINGS				
		ES	WS	SS	NS	TOTAL
AM	7:00 AM	0	0	0	1	1
	7:15 AM	0	0	1	0	1
	7:30 AM	0	0	4	2	6
	7:45 AM	0	0	1	1	2
	8:00 AM	0	0	0	1	1
	8:15 AM	0	0	0	2	2
	8:30 AM	1	0	0	2	3
	8:45 AM	0	1	2	2	5
	TOTAL	0	0	5	6	21
PM	4:00 PM	0	0	1	0	1
	4:15 PM	0	0	0	0	0
	4:30 PM	0	0	2	1	3
	4:45 PM	0	0	0	0	0
	5:00 PM	0	0	0	0	0
	5:15 PM	0	0	0	1	1
	5:30 PM	0	0	0	0	0
	5:45 PM	0	0	3	0	3
	TOTAL	0	0	0	1	8

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:				
Tue, Sep 27, 22	LOCATION:	Seal Beach	PROJECT #:	SC3651
	NORTH & SOUTH:	Candleberry	LOCATION #:	3a
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

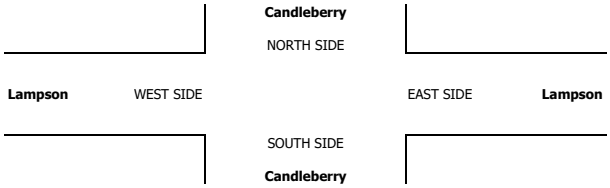
		NORTHBOUND Candleberry			SOUTHBOUND Candleberry			EASTBOUND Lampson			WESTBOUND Lampson			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL
AM	7:00 AM	29	0	6	0	0	0	0	27	8	3	108	0	181
	7:15 AM	26	0	4	0	0	0	0	34	15	1	115	0	195
	7:30 AM	55	0	9	0	0	0	0	50	8	2	187	0	311
	7:45 AM	45	0	8	0	0	0	0	61	20	3	136	0	273
	8:00 AM	36	0	5	0	0	0	0	84	28	5	96	0	254
	8:15 AM	35	0	7	0	0	0	0	73	21	6	121	0	263
	8:30 AM	21	0	7	0	0	0	0	70	20	6	88	0	212
	8:45 AM	15	0	4	0	0	0	0	61	13	8	98	0	199
	VOLUMES	262	0	50	0	0	0	0	460	133	34	949	0	1,888
	APPROACH %	84%	0%	16%	0%	0%	0%	0%	78%	22%	3%	97%	0%	
	APP/DEPART	312	/	0	0	/	167	593	/	510	983	/	1,211	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	171	0	29	0	0	0	0	268	77	16	540	0	1,101
	APPROACH %	86%	0%	15%	0%	0%	0%	0%	78%	22%	3%	97%	0%	
	PEAK HR FACTOR		0.781			0.000			0.770			0.735		0.885
	APP/DEPART	200	/	0	0	/	93	345	/	297	556	/	711	0
PM	4:00 PM	20	0	4	0	0	0	0	119	27	6	109	0	285
	4:15 PM	18	0	4	0	0	0	0	123	22	8	122	0	297
	4:30 PM	22	0	2	0	0	0	0	125	26	3	102	0	280
	4:45 PM	18	0	5	0	0	0	0	141	23	6	117	0	310
	5:00 PM	9	0	5	0	0	0	0	132	28	5	130	0	309
	5:15 PM	21	0	2	0	0	0	0	111	32	6	134	0	306
	5:30 PM	22	0	6	0	0	0	0	136	28	7	131	0	330
	5:45 PM	18	0	6	0	0	0	0	110	24	6	116	0	280
	VOLUMES	148	0	34	0	0	0	0	997	210	47	961	0	2,397
	APPROACH %	81%	0%	19%	0%	0%	0%	0%	83%	17%	5%	95%	0%	
	APP/DEPART	182	/	0	0	/	255	1,207	/	1,033	1,008	/	1,109	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	70	0	18	0	0	0	0	520	111	24	512	0	1,255
	APPROACH %	80%	0%	20%	0%	0%	0%	0%	82%	18%	4%	96%	0%	
	PEAK HR FACTOR		0.786			0.000			0.962			0.957		0.951
	APP/DEPART	88	/	0	0	/	134	631	/	539	536	/	582	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	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	2	2

RTOR

NRR	SRR	ERR	WRR
0	X	0	X
2	0	1	0
3	0	1	0
6	0	4	0
4	0	5	0
2	0	2	0
6	0	4	0
2	0	0	0
4	0	0	0
29	0	17	0
18	0	15	0
1	0	1	0
1	0	3	0
2	0	0	0
1	0	1	0
2	0	1	0
1	0	5	0
3	0	3	0
5	0	3	0
16	0	17	0
7	0	10	0



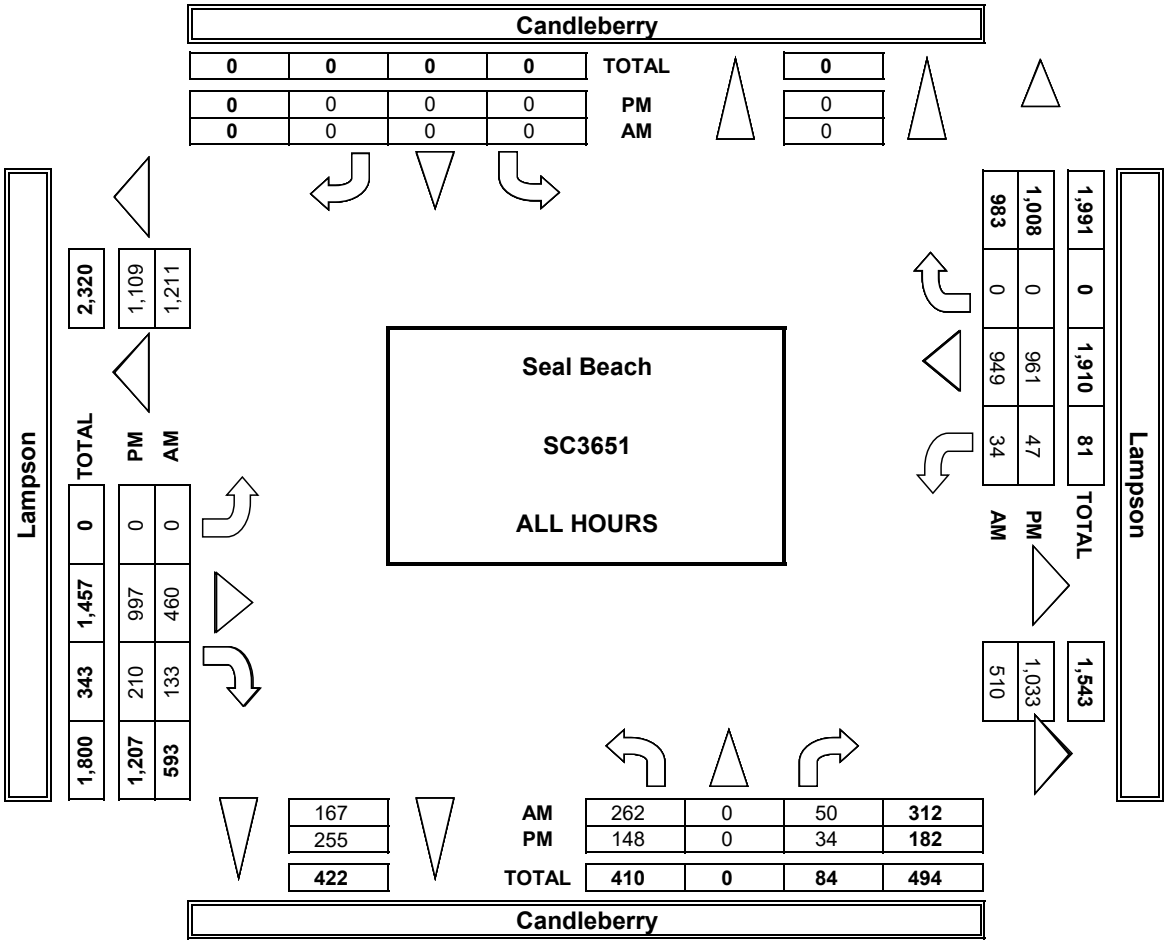
		ALL PED AND BIKE				
		E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM	7:00 AM	0	0	0	1	1
	7:15 AM	0	0	1	0	1
	7:30 AM	1	0	4	2	7
	7:45 AM	0	0	3	1	4
	8:00 AM	0	0	2	1	3
	8:15 AM	0	0	1	2	3
	8:30 AM	0	0	1	1	2
	8:45 AM	0	0	1	3	4
	TOTAL	1	0	13	11	25
PM	4:00 PM	0	0	1	0	1
	4:15 PM	0	0	0	0	0
	4:30 PM	0	0	2	1	3
	4:45 PM	0	0	2	1	3
	5:00 PM	0	0	0	1	1
	5:15 PM	0	0	0	0	0
	5:30 PM	0	0	0	0	0
	5:45 PM	0	0	3	0	3
	TOTAL	0	0	8	3	11

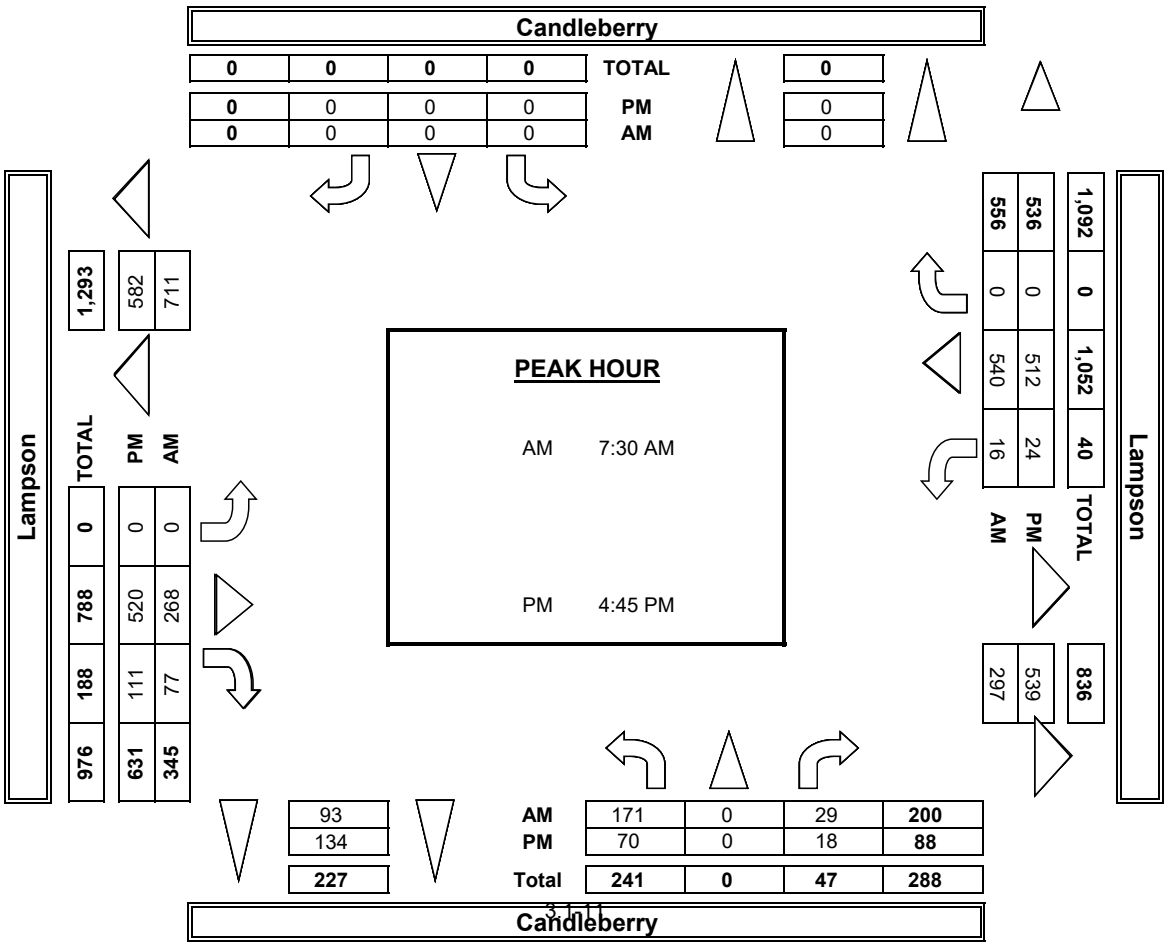
	PEDESTRIAN CROSSINGS				
	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	3	0	3
8:00 AM	0	0	2	0	2
8:15 AM	0	0	1	0	1
8:30 AM	0	0	1	0	1
8:45 AM	0	0	0	0	0
TOTAL	0	0	6	0	7
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	2	0	2
5:00 PM	0	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	2	0	2

	BICYCLE CROSSINGS				
	ES	WS	SS	NS	TOTAL
7:00 AM	0	0	0	1	1
7:15 AM	0	0	1	0	1
7:30 AM	1	0	4	2	7
7:45 AM	0	0	0	1	1
8:00 AM	0	0	0	1	1
8:15 AM	0	0	0	2	2
8:30 AM	0	0	0	1	1
8:45 AM	0	0	1	3	4
TOTAL	1	0	4	6	18
4:00 PM	0	0	1	0	1
4:15 PM	0	0	0	0	0
4:30 PM	0	0	2	1	3
4:45 PM	0	0	0	1	1
5:00 PM	0	0	0	1	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	3	0	3
TOTAL	0	0	0	2	9

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3468
Wed, Jun 1, 22	NORTH & SOUTH:	Heather	LOCATION #:	2
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Heather			SOUTHBOUND Heather			EASTBOUND Lampson			WESTBOUND Lampson			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL
AM	7:00 AM	11	0	9	0	0	0	0	24	7	5	76	0	132
	7:15 AM	35	0	16	0	0	0	0	53	7	5	94	0	210
	7:30 AM	24	0	12	0	0	0	0	53	10	3	140	0	242
	7:45 AM	22	0	15	0	0	0	0	90	15	9	128	0	279
	8:00 AM	19	0	17	0	0	0	0	97	20	9	89	0	251
	8:15 AM	18	0	11	0	0	0	0	74	17	9	82	0	211
	8:30 AM	13	0	7	0	0	0	0	73	10	7	82	0	192
	8:45 AM	14	0	15	0	0	0	0	72	5	10	102	0	218
	VOLUMES	156	0	102	0	0	0	0	536	91	57	793	0	1,735
	APPROACH %	60%	0%	40%	0%	0%	0%	0%	85%	15%	7%	93%	0%	
	APP/DEPART	258	/	0	0	/	142	627	/	644	850	/	949	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	83	0	55	0	0	0	0	314	62	30	439	0	983
	APPROACH %	60%	0%	40%	0%	0%	0%	0%	84%	16%	6%	94%	0%	
	PEAK HR FACTOR		0.932			0.000			0.803			0.820		0.881
	APP/DEPART	138	/	0	0	/	88	376	/	373	469	/	522	0
PM	4:00 PM	18	0	10	0	0	0	0	131	11	10	92	0	272
	4:15 PM	20	0	16	0	0	0	0	106	22	18	88	0	270
	4:30 PM	18	0	16	0	0	0	0	120	13	16	111	0	294
	4:45 PM	12	0	9	0	0	0	0	137	14	18	111	0	301
	5:00 PM	8	0	12	0	0	0	0	121	15	17	119	0	292
	5:15 PM	14	0	9	0	0	0	0	121	18	14	114	0	290
	5:30 PM	14	0	4	0	0	0	0	104	16	11	102	0	251
	5:45 PM	11	0	6	0	0	0	0	108	13	13	96	0	247
	VOLUMES	115	0	82	0	0	0	0	948	122	117	833	0	2,217
	APPROACH %	58%	0%	42%	0%	0%	0%	0%	89%	11%	12%	88%	0%	
	APP/DEPART	197	/	0	0	/	225	1,070	/	1,044	950	/	948	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	52	0	46	0	0	0	0	499	60	65	455	0	1,177
	APPROACH %	53%	0%	47%	0%	0%	0%	0%	89%	11%	13%	88%	0%	
	PEAK HR FACTOR		0.721			0.000			0.925			0.956		0.978
	APP/DEPART	98	/	0	0	/	119	559	/	551	520	/	507	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	2	2
0	0	0	0	0
0	0	0	2	2
0	0	0	0	0
0	0	0	2	2
0	0	0	6	6
0	0	0	1	1
0	0	0	2	2
0	0	0	0	0
0	0	0	3	3
0	0	0	1	1
0	0	0	2	2
0	0	0	3	3
0	0	0	2	2
0	0	0	14	14

RTOR

NRR	SRR	ERR	WRR
0	X	0	X
6	0	0	0
9	0	2	0
10	0	2	0
12	0	2	0
10	0	1	0
10	0	1	0
5	0	1	0
11	0	1	0
73	0	10	0
42	0	6	0
9	0	3	0
12	0	3	0
15	0	1	0
8	0	0	0
11	0	0	0
9	0	1	0
3	0	0	0
6	0	0	0
73	0	8	0
43	0	2	0

Heather

NORTH SIDE

Lampson WEST SIDE EAST SIDE **Lampson**

SOUTH SIDE

Heather

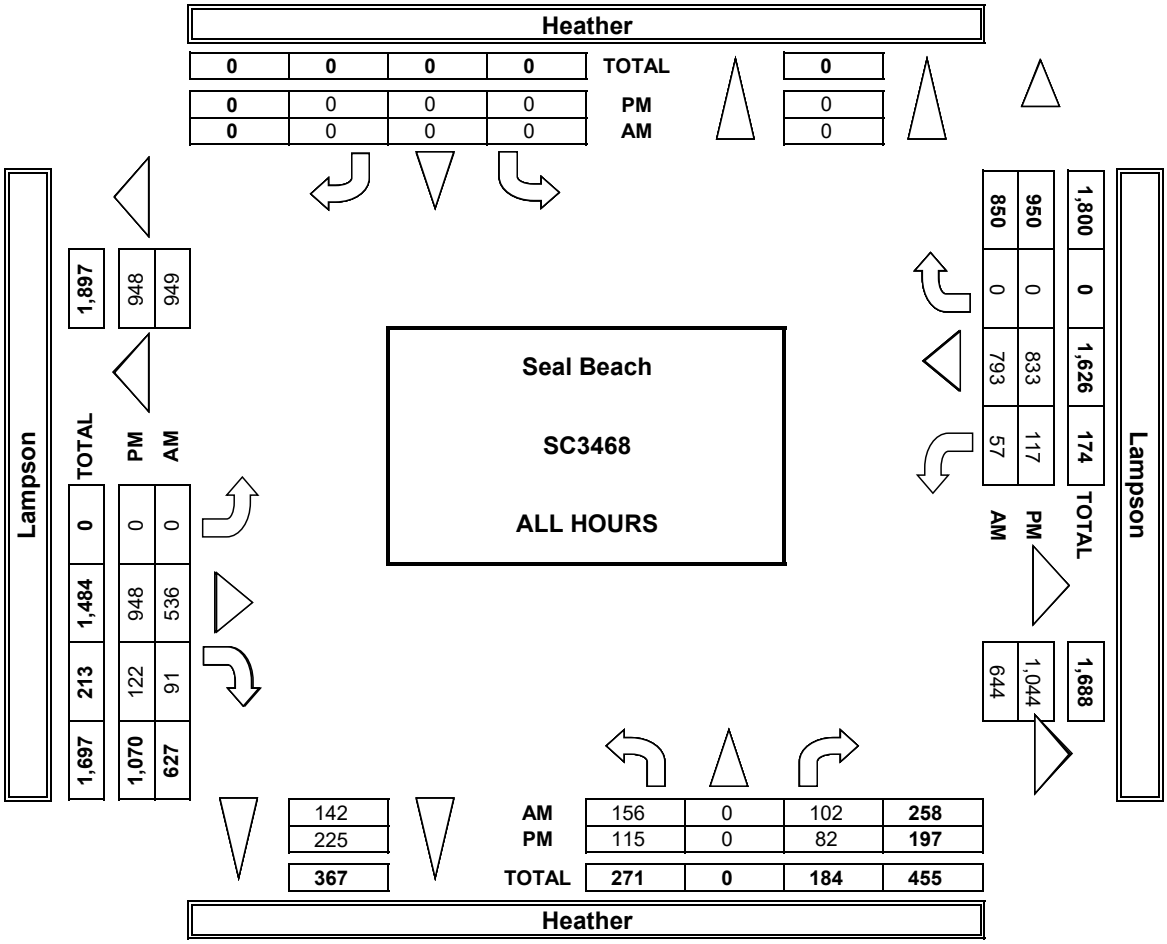
		ALL PED AND BIKE				
		E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM	7:00 AM	0	0	2	1	3
	7:15 AM	0	0	1	1	2
	7:30 AM	0	0	0	0	0
	7:45 AM	1	0	0	0	1
	8:00 AM	0	0	0	2	2
	8:15 AM	2	0	0	0	2
	8:30 AM	0	0	0	0	0
	8:45 AM	2	0	0	0	2
	TOTAL	5	0	3	4	12
PM	4:00 PM	0	0	0	0	0
	4:15 PM	0	0	0	0	0
	4:30 PM	0	0	0	0	0
	4:45 PM	0	0	1	1	2
	5:00 PM	0	0	1	0	1
	5:15 PM	0	0	1	0	1
	5:30 PM	0	0	0	1	1
	5:45 PM	0	0	2	0	2
	TOTAL	0	0	5	2	7

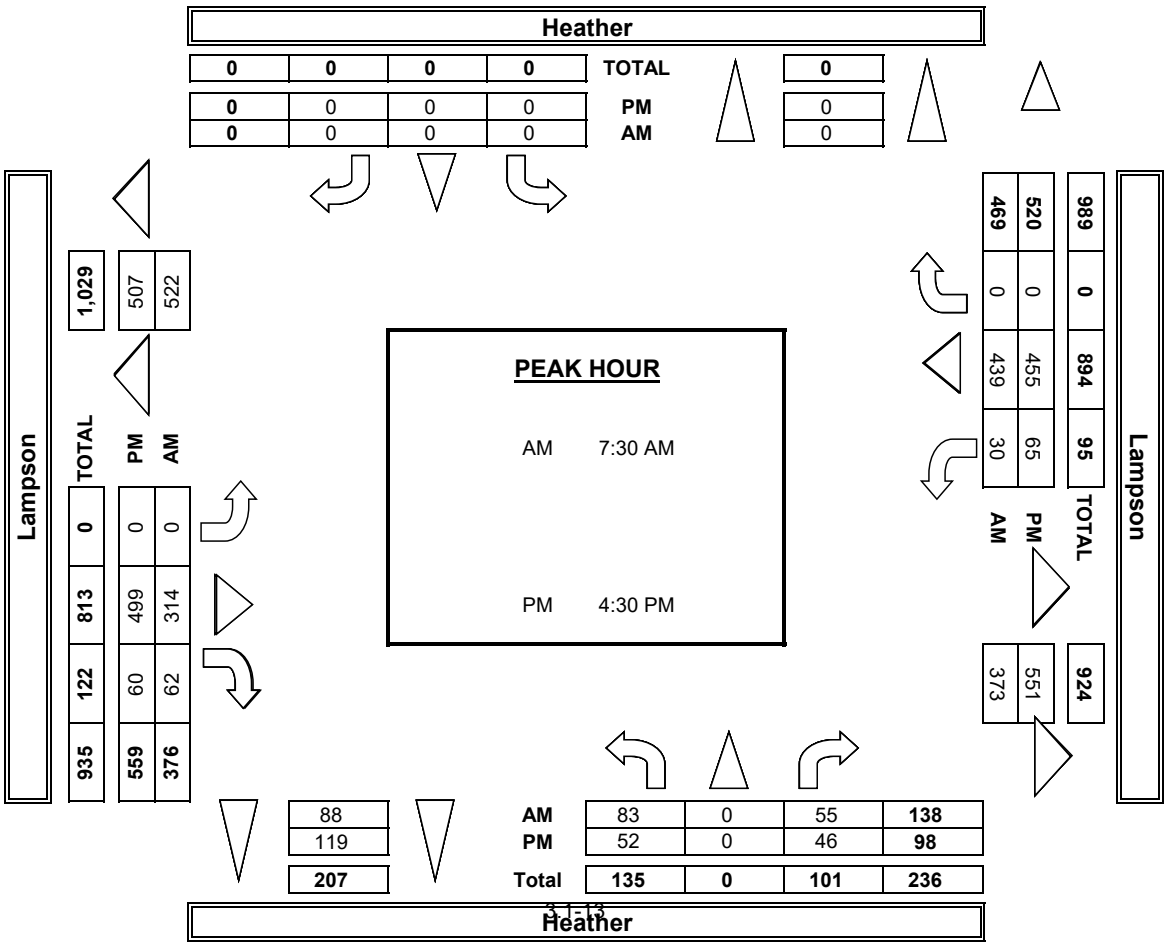
PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
2	0	0	0	2
0	0	0	0	0
2	0	0	0	2
3	0	0	0	5
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	1	0	1
0	0	0	0	2

BICYCLE CROSSINGS				
ES	WS	SS	NS	TOTAL
0	0	2	1	3
0	0	1	1	2
0	0	0	0	0
0	0	0	0	0
0	0	0	2	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	2	7
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	1	2
0	0	1	0	1
0	0	0	0	0
0	0	0	1	1
0	0	1	0	1
0	0	0	1	1

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3468
Wed, Jun 1, 22	NORTH & SOUTH:	Rose	LOCATION #:	3
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

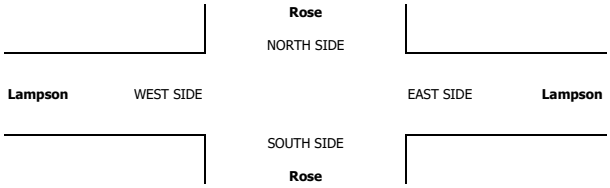
		NORTHBOUND (Rose)			SOUTHBOUND (Rose)			EASTBOUND (Lampson)			WESTBOUND (Lampson)			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL
AM	7:00 AM	8	0	17	0	0	0	0	31	1	4	75	0	136
	7:15 AM	10	0	17	0	0	0	0	66	3	4	98	0	198
	7:30 AM	17	0	7	0	0	0	0	59	1	9	139	0	232
	7:45 AM	9	0	12	0	0	0	0	96	11	7	134	0	269
	8:00 AM	8	0	6	0	0	0	0	98	6	7	86	0	211
	8:15 AM	3	0	21	0	0	0	0	83	6	2	90	0	205
	8:30 AM	8	0	14	0	0	0	0	73	5	11	86	0	197
	8:45 AM	5	0	18	0	0	0	0	74	4	11	110	0	222
	VOLUMES	68	0	112	0	0	0	0	580	37	55	818	0	1,670
	APPROACH %	38%	0%	62%	0%	0%	0%	0%	94%	6%	6%	94%	0%	
	APP/DEPART	180	/	0	0	/	92	617	/	692	873	/	886	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	37	0	46	0	0	0	0	336	24	25	449	0	917
	APPROACH %	45%	0%	55%	0%	0%	0%	0%	93%	7%	5%	95%	0%	
	PEAK HR FACTOR		0.865			0.000			0.841			0.801		0.852
	APP/DEPART	83	/	0	0	/	49	360	/	382	474	/	486	0
PM	4:00 PM	4	0	12	0	0	0	0	127	8	13	89	0	253
	4:15 PM	9	0	7	0	0	0	0	127	7	20	96	0	266
	4:30 PM	6	0	14	0	0	0	0	125	13	17	120	0	295
	4:45 PM	4	0	12	0	0	0	0	139	7	16	107	0	285
	5:00 PM	7	0	14	0	0	0	0	140	7	15	115	0	298
	5:15 PM	11	0	11	0	0	0	0	124	6	17	119	0	288
	5:30 PM	3	0	10	0	0	0	0	102	7	14	107	0	243
	5:45 PM	5	0	10	0	0	0	0	113	7	9	103	0	247
	VOLUMES	49	0	90	0	0	0	0	997	62	121	856	0	2,175
	APPROACH %	35%	0%	65%	0%	0%	0%	0%	94%	6%	12%	88%	0%	
	APP/DEPART	139	/	0	0	/	181	1,059	/	1,089	977	/	905	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	28	0	51	0	0	0	0	528	33	65	461	0	1,166
	APPROACH %	35%	0%	65%	0%	0%	0%	0%	94%	6%	12%	88%	0%	
	PEAK HR FACTOR		0.898			0.000			0.954			0.960		0.978
	APP/DEPART	79	/	0	0	/	96	561	/	581	526	/	489	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	1	1
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	2	2

RTOR

NRR	SRR	ERR	WRR
14	0	0	0
11	0	0	0
4	0	0	0
9	0	0	0
4	0	1	0
14	0	2	0
8	0	0	0
13	0	2	0
77	0	5	0
31	0	3	0
9	0	1	0
5	0	1	0
13	0	0	0
11	0	0	0
8	0	0	0
8	0	0	0
10	0	0	0
9	0	0	0
73	0	2	0
40	0	0	0



ALL PED AND BIKE

	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM 7:00 AM	0	0	1	1	2
7:15 AM	0	0	0	1	1
7:30 AM	0	0	2	0	2
7:45 AM	0	0	1	0	1
8:00 AM	0	0	0	2	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	1	0	1
TOTAL	0	0	5	4	9
PM 4:00 PM	0	0	0	0	0
4:15 PM	0	0	1	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	1	2
5:00 PM	0	0	1	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	2	1	3
5:45 PM	0	0	1	0	1
TOTAL	0	0	6	2	8

PEDESTRIAN CROSSINGS

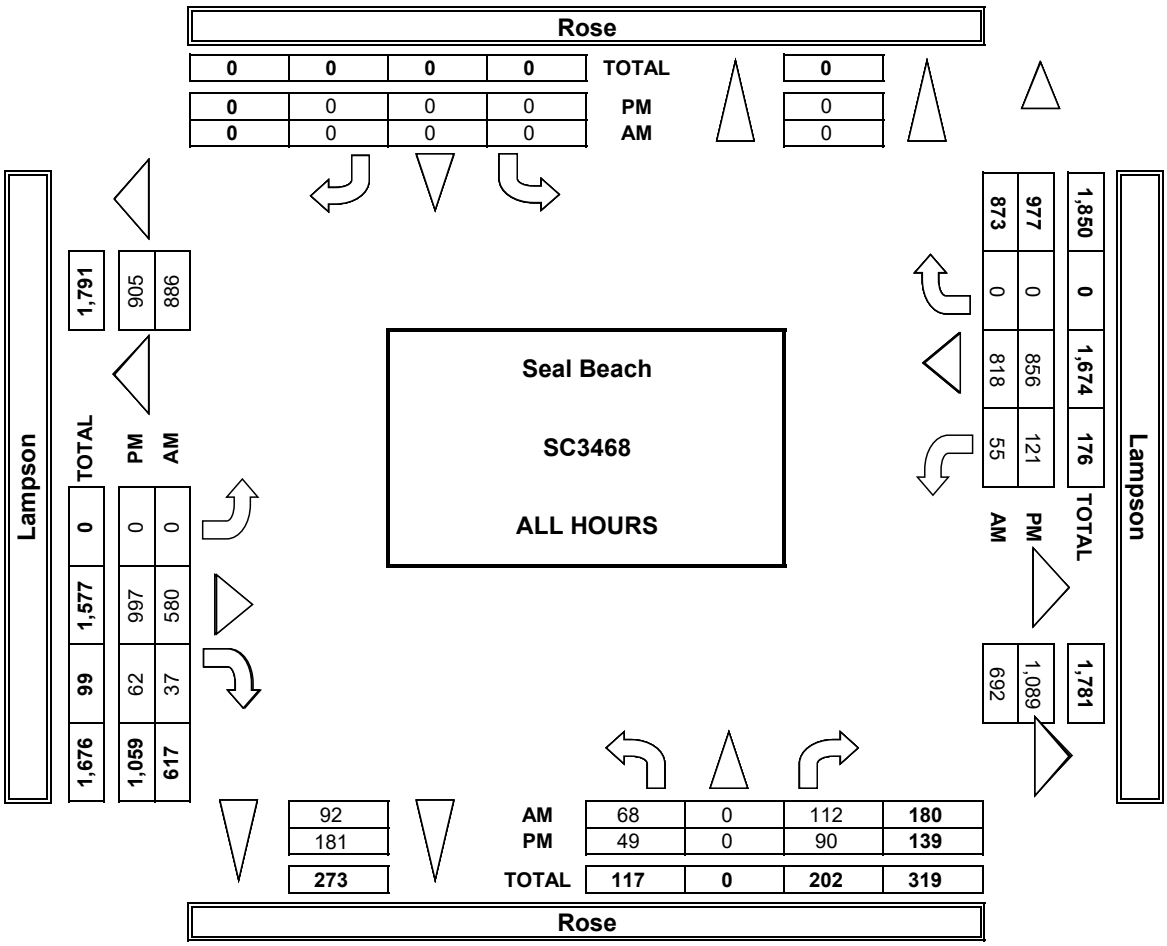
	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM 7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	1	0	1
7:45 AM	0	0	1	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	1	0	1
TOTAL	0	0	2	0	3
PM 4:00 PM	0	0	0	0	0
4:15 PM	0	0	1	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	2	0	2
5:45 PM	0	0	1	0	1
TOTAL	0	0	1	0	4

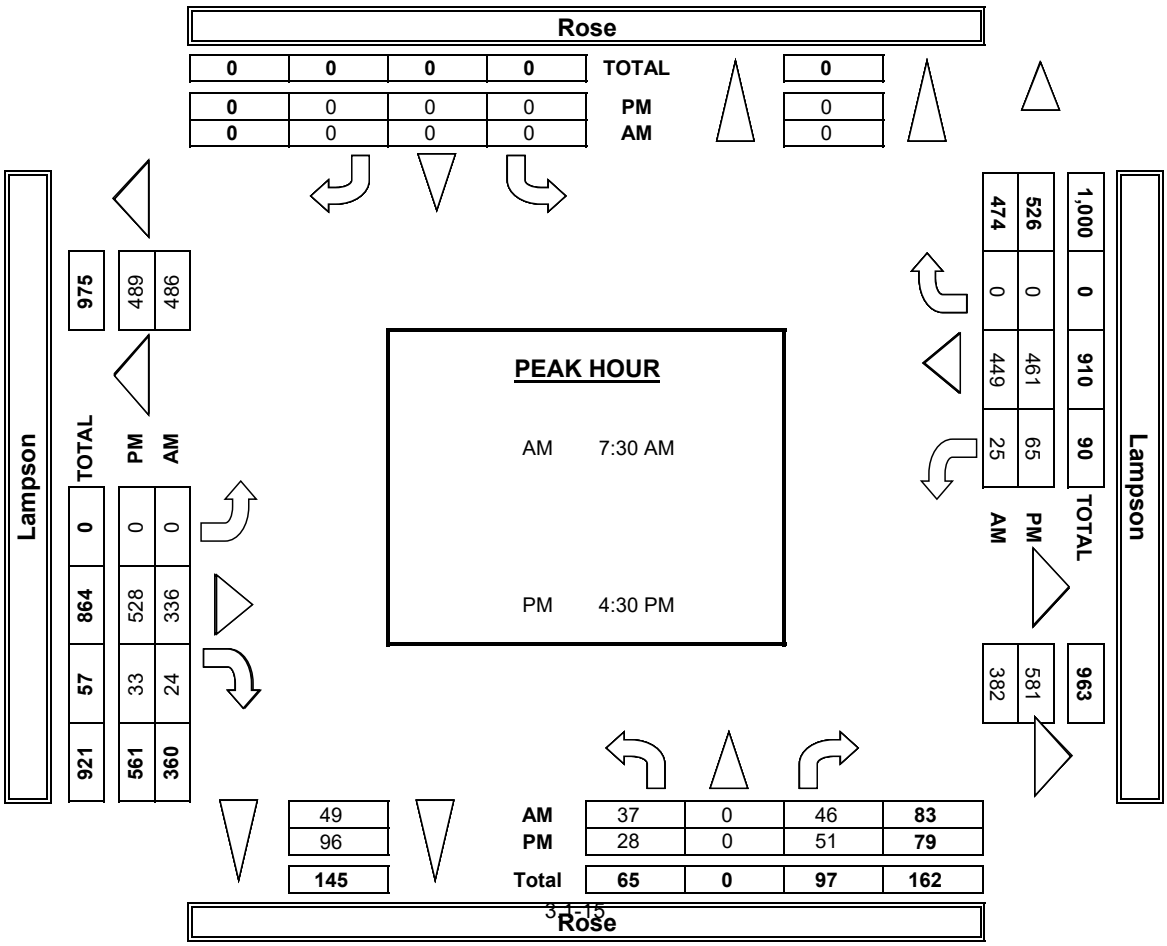
BICYCLE CROSSINGS

	ES	WS	SS	NS	TOTAL
AM 7:00 AM	0	0	1	1	2
7:15 AM	0	0	0	1	1
7:30 AM	0	0	1	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	2	2
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	1	2	6
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	1	1	2
5:00 PM	0	0	1	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	1	1
5:45 PM	0	0	0	0	0
TOTAL	0	0	0	0	4

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3651
Tue, Sep 27, 22	NORTH & SOUTH:	Tulip	LOCATION #:	4a
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

NOTES:

AM PM MD OTHER OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

		NORTHBOUND Tulip			SOUTHBOUND Tulip			EASTBOUND Lampson			WESTBOUND Lampson			
	LANES:	NL 1	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	5	0	18	5	0	6	2	41	0	6	72	1	156
	7:15 AM	6	0	18	3	0	7	1	61	0	7	103	0	206
	7:30 AM	15	1	22	3	1	3	1	79	2	7	153	0	287
	7:45 AM	12	0	19	0	0	4	0	77	0	6	110	3	231
	8:00 AM	7	0	22	4	0	4	2	77	6	7	95	1	225
	8:15 AM	5	0	10	3	0	3	2	78	3	12	119	3	238
	8:30 AM	4	0	15	1	1	2	4	69	6	16	91	1	210
	8:45 AM	7	0	15	2	0	3	4	65	8	15	106	2	227
	VOLUMES	61	1	139	21	2	32	16	547	25	76	849	11	1,780
	APPROACH %	30%	0%	69%	38%	4%	58%	3%	93%	4%	8%	91%	1%	
	APP/DEPART	201	/	27	55	/	101	588	/	709	936	/	943	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	39	1	73	10	1	14	5	311	11	32	477	7	981
	APPROACH %	35%	1%	65%	40%	4%	56%	2%	95%	3%	6%	92%	1%	
	PEAK HR FACTOR		0.743			0.781			0.962			0.806		0.855
	APP/DEPART	113	/	13	25	/	43	327	/	395	516	/	530	0
PM	4:00 PM	7	0	16	3	0	0	3	116	5	19	133	2	304
	4:15 PM	9	0	15	0	0	4	1	107	7	14	132	2	291
	4:30 PM	3	0	15	1	0	2	1	111	6	26	115	4	284
	4:45 PM	8	0	14	4	0	5	2	122	9	17	136	9	326
	5:00 PM	7	0	12	1	0	2	5	106	8	19	122	5	287
	5:15 PM	5	0	11	1	0	4	4	99	7	13	149	1	294
	5:30 PM	7	0	13	2	0	1	1	125	11	28	103	4	295
	5:45 PM	4	0	17	2	0	4	2	110	8	27	111	7	292
	VOLUMES	50	0	113	14	0	22	19	896	61	163	1,001	34	2,373
	APPROACH %	31%	0%	69%	39%	0%	61%	2%	92%	6%	14%	84%	3%	
	APP/DEPART	163	/	52	36	/	223	976	/	1,024	1,198	/	1,074	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	27	0	60	8	0	11	7	456	27	76	516	17	1,205
	APPROACH %	31%	0%	69%	42%	0%	58%	1%	93%	6%	12%	85%	3%	
	PEAK HR FACTOR		0.906			0.528			0.921			0.940		0.924
	APP/DEPART	87	/	24	19	/	103	490	/	524	609	/	554	0

U-TURNS

NB	SB	EB	WB	TTL
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	1	0	1
0	0	1	2	3
0	0	0	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	2
0	0	0	0	0
0	0	0	0	0
0	0	1	1	2

RTOR

NRR	SRR	ERR	WRR
0	0	0	0
12	3	0	0
14	1	0	0
11	0	1	0
19	2	0	0
15	2	1	0
3	2	0	0
9	0	0	0
7	2	0	0
90	12	2	0
48	6	2	0
12	0	0	0
13	1	3	0
8	0	0	0
11	1	0	1
9	1	0	0
6	1	0	0
11	0	2	0
11	1	0	0
81	5	5	1
44	2	3	1

Tulip

NORTH SIDE

Lampson WEST SIDE EAST SIDE **Lampson**

SOUTH SIDE

Tulip

ALL PED AND BIKE

	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
7:00 AM	1	0	1	0	2
7:15 AM	0	1	1	2	4
7:30 AM	0	0	1	0	1
7:45 AM	0	0	1	3	4
8:00 AM	1	0	0	0	1
8:15 AM	0	0	0	2	2
8:30 AM	2	0	1	2	5
8:45 AM	0	3	1	3	7
TOTAL	4	4	6	12	26
4:00 PM	0	0	0	0	0
4:15 PM	0	0	2	0	2
4:30 PM	0	0	0	1	1
4:45 PM	2	0	3	3	8
5:00 PM	0	0	1	1	2
5:15 PM	1	0	2	1	4
5:30 PM	0	0	0	0	0
5:45 PM	0	0	2	0	2
TOTAL	3	0	10	6	19

PEDESTRIAN CROSSINGS

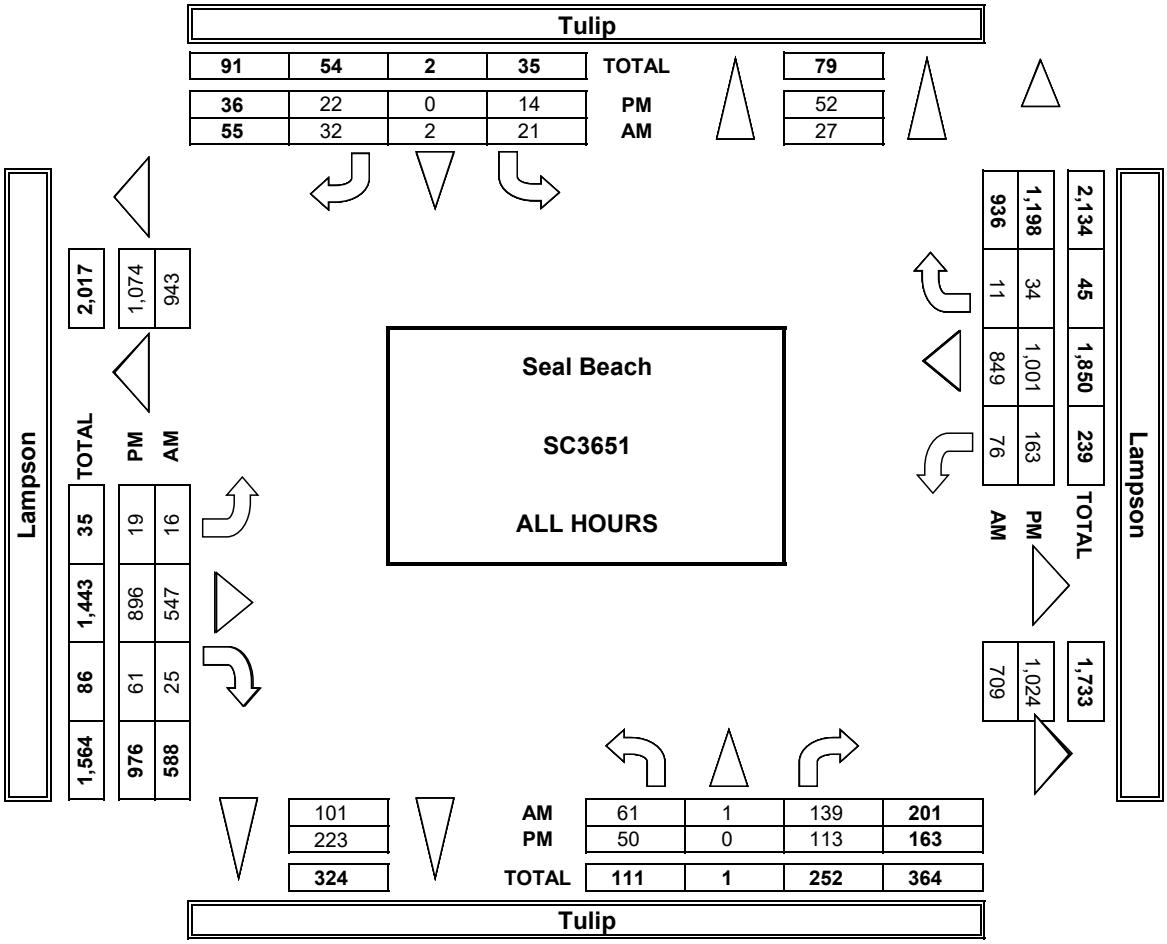
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
1	0	1	0	2
0	1	1	1	3
0	0	0	0	0
0	0	0	1	1
1	0	0	0	1
0	0	0	0	0
2	0	1	1	4
0	3	0	0	3
1	0	0	1	14
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
2	0	0	2	4
0	0	1	0	1
0	0	0	1	1
0	0	1	0	1
2	0	1	2	8

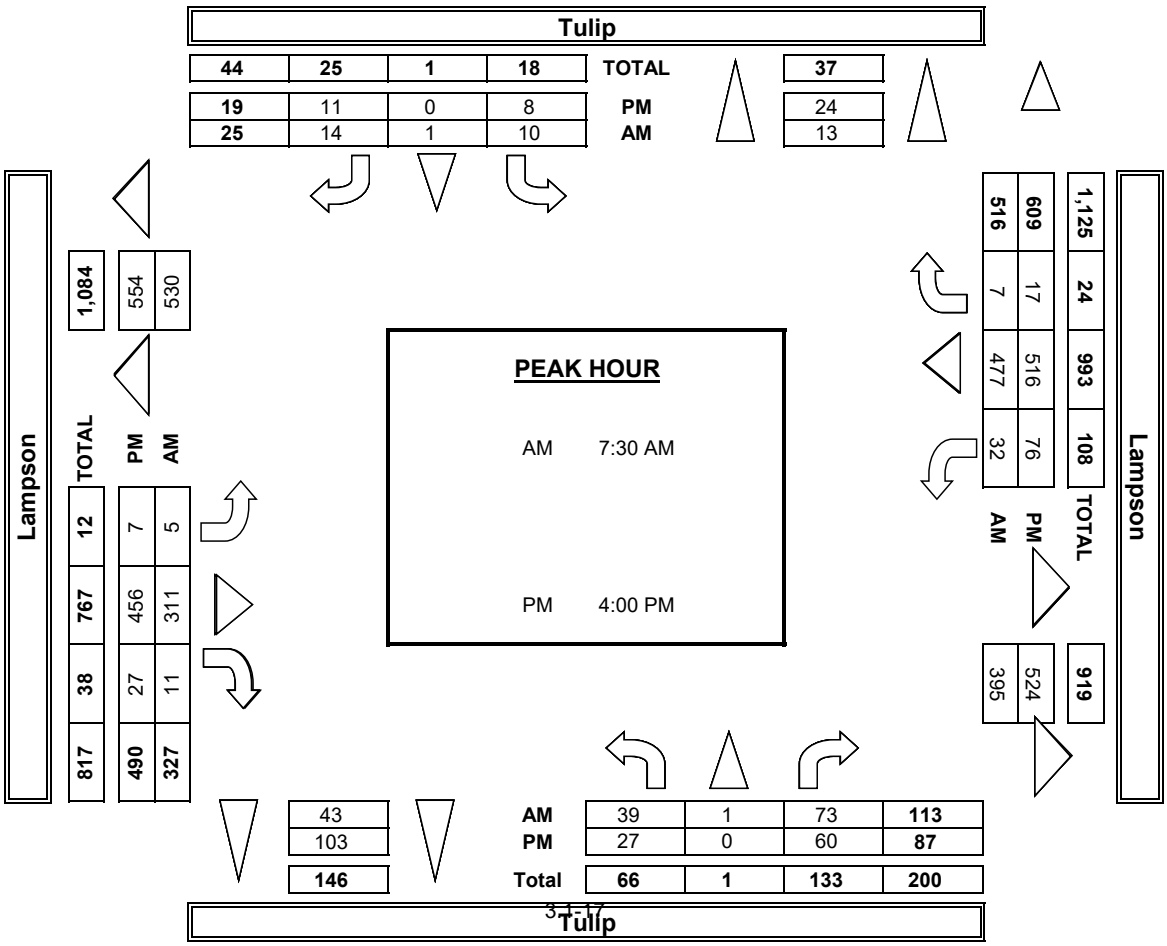
BICYCLE CROSSINGS

ES	WS	SS	NS	TOTAL
0	0	0	0	0
0	0	0	1	1
0	0	1	0	1
0	0	1	2	3
0	0	0	0	0
0	0	0	2	2
0	0	0	1	1
0	0	1	3	4
0	0	2	4	12
0	0	0	0	0
0	0	1	0	1
0	0	0	1	1
0	0	3	1	4
0	0	0	1	1
1	0	2	0	3
0	0	0	0	0
0	0	1	0	1
0	0	4	2	11

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3468
Wed, Jun 1, 22	NORTH & SOUTH:	Valley View	LOCATION #:	4
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

		NORTHBOUND Valley View			SOUTHBOUND Valley View			EASTBOUND Lampson			WESTBOUND Lampson			
	LANES:	NL 1	NT 3	NR 1	SL 1	ST 3	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	20	221	23	16	395	23	42	30	24	35	17	12	858
	7:15 AM	11	287	20	22	405	29	36	38	36	55	31	31	1,001
	7:30 AM	30	309	20	25	364	43	34	65	35	38	41	28	1,032
	7:45 AM	23	378	45	33	426	39	35	58	38	48	61	48	1,232
	8:00 AM	35	353	57	20	362	44	42	54	27	50	49	66	1,159
	8:15 AM	27	360	43	27	377	25	39	57	26	48	33	36	1,098
	8:30 AM	32	322	22	19	339	35	42	42	27	32	35	20	967
	8:45 AM	52	359	29	19	305	49	36	21	41	32	29	18	990
	VOLUMES	230	2,589	259	181	2,973	287	306	365	254	338	296	259	8,337
	APPROACH %	7%	84%	8%	5%	86%	8%	33%	39%	27%	38%	33%	29%	
	APP/DEPART	3,078	/	3,163	3,441	/	3,574	925	/	796	893	/	804	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	115	1,400	165	105	1,529	151	150	234	126	184	184	178	4,521
	APPROACH %	7%	83%	10%	6%	86%	8%	29%	46%	25%	34%	34%	33%	
	PEAK HR FACTOR		0.942			0.896			0.951			0.827		0.917
	APP/DEPART	1,680	/	1,732	1,785	/	1,843	510	/	500	546	/	446	0
PM	4:00 PM	38	366	35	28	375	40	45	47	30	43	35	18	1,100
	4:15 PM	53	418	43	21	415	41	47	43	31	41	48	19	1,220
	4:30 PM	33	389	30	36	429	52	50	48	23	46	52	17	1,205
	4:45 PM	58	402	33	33	392	46	63	63	30	50	58	31	1,259
	5:00 PM	40	381	38	46	415	54	53	44	25	41	45	28	1,210
	5:15 PM	54	382	33	30	452	50	45	45	30	32	53	25	1,231
	5:30 PM	53	386	36	35	378	53	43	48	29	34	40	19	1,154
	5:45 PM	36	394	30	29	393	36	47	50	31	38	40	15	1,139
	VOLUMES	365	3,118	278	258	3,249	372	393	388	229	325	371	172	9,518
	APPROACH %	10%	83%	7%	7%	84%	10%	39%	38%	23%	37%	43%	20%	
	APP/DEPART	3,761	/	3,692	3,879	/	3,806	1,010	/	915	868	/	1,105	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	185	1,554	134	145	1,688	202	211	200	108	169	208	101	4,905
	APPROACH %	10%	83%	7%	7%	83%	10%	41%	39%	21%	35%	44%	21%	
	PEAK HR FACTOR		0.950			0.956			0.832			0.860		0.974
	APP/DEPART	1,873	/	1,870	2,035	/	1,967	519	/	475	478	/	593	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	2	0	0	2
0	1	0	0	1
1	0	0	0	1
0	3	0	0	3
1	0	0	0	1
2	1	0	0	3
3	0	0	0	3
2	2	0	0	4
9	9	0	0	18
0	1	0	0	1
0	2	0	0	2
1	2	0	0	3
0	2	0	0	2
0	0	0	0	0
1	0	0	0	1
0	1	0	0	1
1	1	0	0	2
3	9	0	0	12

RTOR

NRR	SRR	ERR	WRR
0	0	0	0
2	5	8	7
7	11	12	11
8	14	9	10
12	8	12	16
23	15	10	17
15	8	4	10
10	17	15	5
8	17	19	4
85	95	89	80
58	45	35	53
14	10	13	7
12	14	10	2
6	26	3	3
9	16	11	6
12	15	5	6
11	19	14	6
12	20	8	4
8	13	5	2
84	133	69	36
38	76	33	21

Valley View

NORTH SIDE

Lampson WEST SIDE EAST SIDE **Lampson**

SOUTH SIDE

Valley View

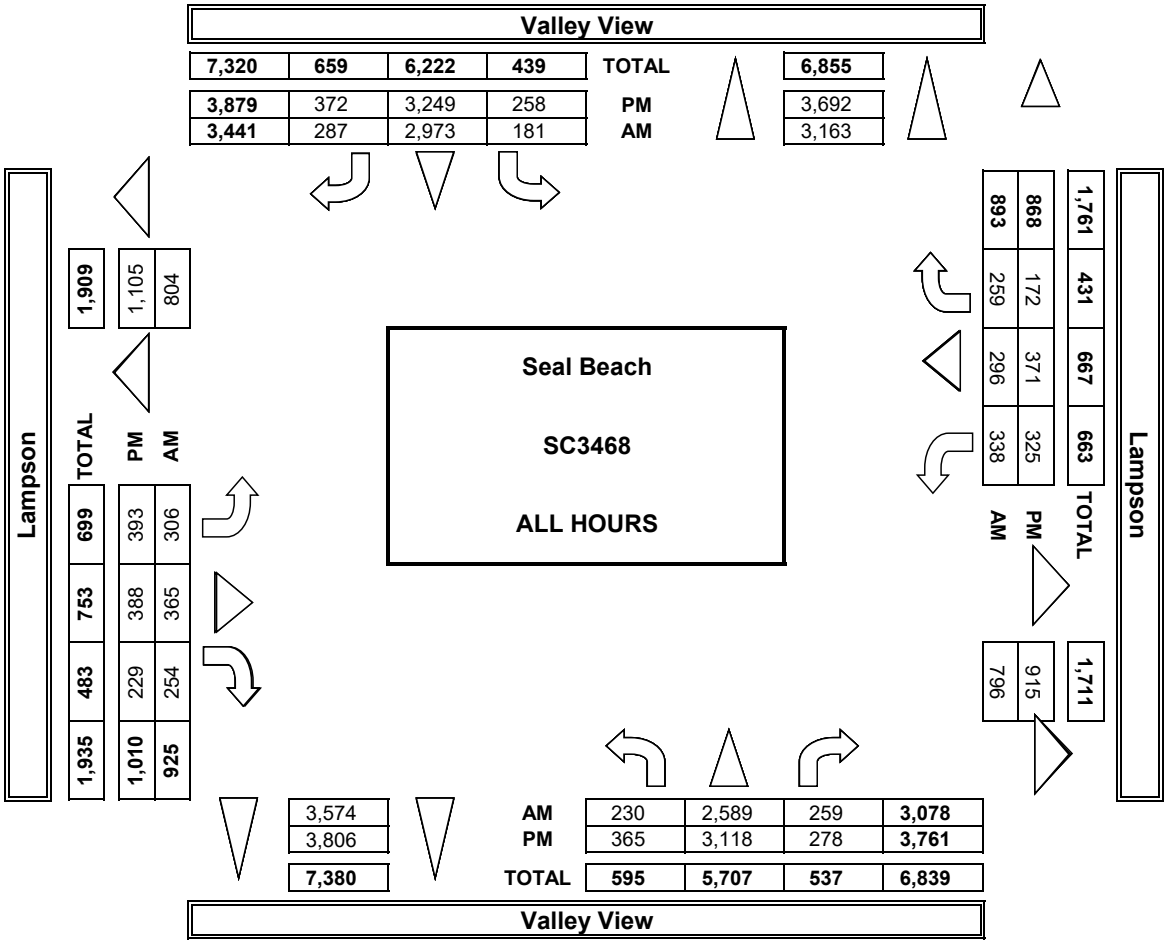
		ALL PED AND BIKE				
		E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM	7:00 AM	0	0	0	2	2
	7:15 AM	2	3	1	2	8
	7:30 AM	2	1	1	7	11
	7:45 AM	4	0	1	5	10
	8:00 AM	1	0	0	2	3
	8:15 AM	1	1	1	0	3
	8:30 AM	1	2	0	1	4
	8:45 AM	2	2	2	2	8
	TOTAL	13	9	6	21	49
PM	4:00 PM	0	0	2	3	5
	4:15 PM	2	2	1	0	5
	4:30 PM	2	0	2	0	4
	4:45 PM	2	2	4	3	11
	5:00 PM	0	0	1	0	1
	5:15 PM	0	0	1	0	1
	5:30 PM	0	1	0	2	3
	5:45 PM	0	3	2	1	6
	TOTAL	6	8	13	9	36

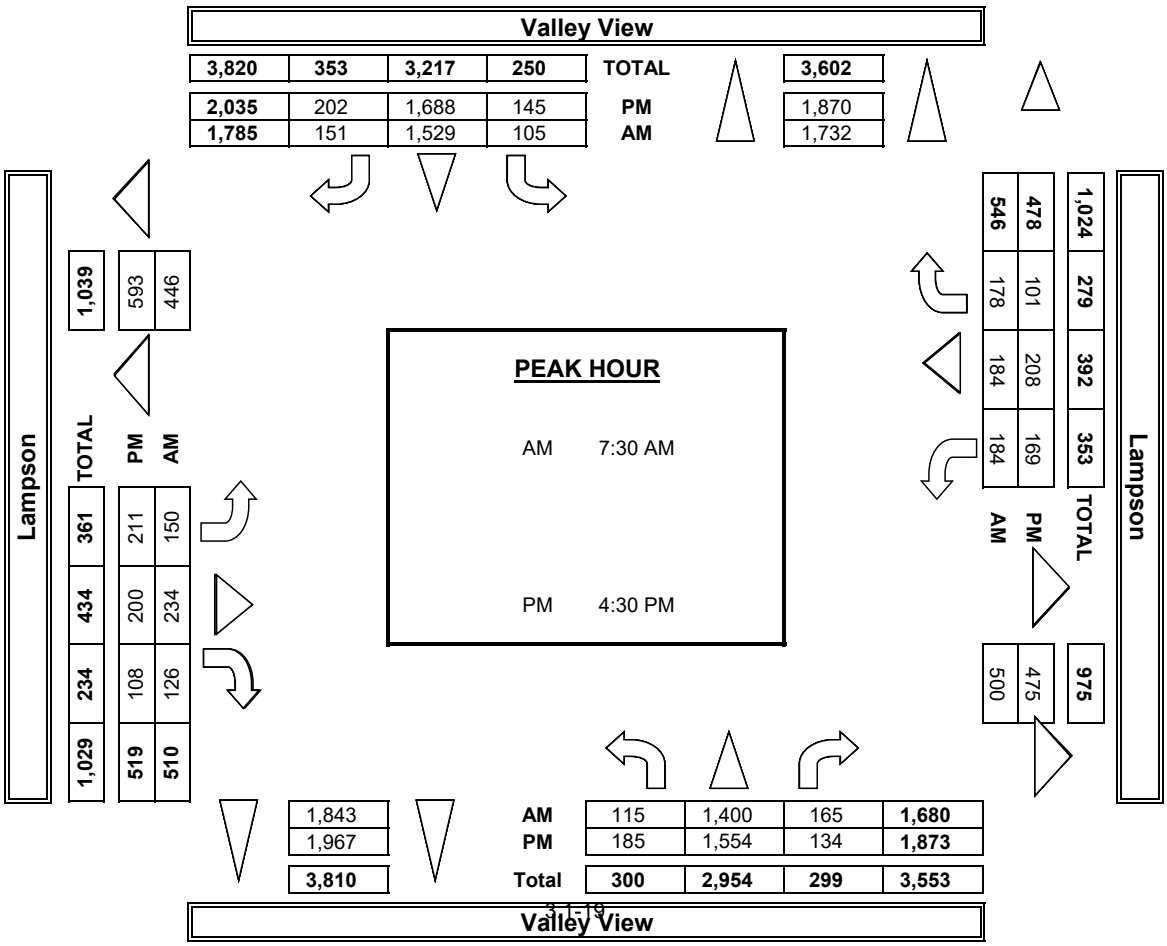
PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	0
2	1	0	1	4
2	0	0	1	3
3	0	0	3	6
0	0	0	1	1
1	1	1	0	3
1	2	0	1	4
2	2	2	1	7
6	1	1	5	28
0	0	2	2	4
1	2	1	0	4
1	0	2	0	3
2	2	2	0	6
0	0	1	0	1
0	0	0	0	0
0	0	0	1	1
0	3	1	0	4
1	2	3	2	23

BICYCLE CROSSINGS				
ES	WS	SS	NS	TOTAL
0	0	0	2	2
0	2	1	1	4
0	1	1	6	8
1	0	1	2	4
1	0	0	1	2
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
2	1	2	9	21
0	0	0	1	1
1	0	0	0	1
1	0	0	0	1
0	0	2	3	5
0	0	0	0	0
0	0	1	0	1
0	1	0	1	2
0	0	1	1	2
1	0	0	1	13

AimTD LLC

TURNING MOVEMENT COUNTS





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A816

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, June 01, 2022 **CITY:** Seal Beach

JOB #: SC3468 **LOCATION:** Lampson west of Rose

AM TIME	1	2	3	4	TOTAL	PM Time	1	2	3	4	TOTAL
0:00	7	0	0	0	7	12:00	98	6	1	0	105
0:15	6	1	0	0	7	12:15	96	5	0	0	101
0:30	7	0	0	0	7	12:30	83	5	0	0	88
0:45	5	0	0	0	5	12:45	92	3	1	1	97
1:00	1	0	0	0	1	13:00	89	3	1	0	93
1:15	5	0	0	0	5	13:15	90	2	0	0	92
1:30	2	0	0	0	2	13:30	109	3	0	0	112
1:45	2	0	0	0	2	13:45	125	6	0	0	131
2:00	0	0	0	0	0	14:00	115	1	0	0	116
2:15	1	0	0	0	1	14:15	121	5	1	0	127
2:30	5	0	0	0	5	14:30	116	4	0	1	121
2:45	1	0	0	0	1	14:45	117	1	0	0	118
3:00	4	0	0	0	4	15:00	129	2	0	1	132
3:15	2	0	0	0	2	15:15	118	2	0	2	122
3:30	1	0	0	0	1	15:30	126	2	0	0	128
3:45	0	0	0	0	0	15:45	144	2	1	0	147
4:00	3	0	0	0	3	16:00	129	6	0	0	135
4:15	2	0	0	0	2	16:15	127	7	0	0	134
4:30	2	0	0	0	2	16:30	137	1	0	0	138
4:45	6	0	0	0	6	16:45	143	3	0	0	146
5:00	4	0	0	0	4	17:00	142	5	0	0	147
5:15	6	1	0	0	7	17:15	129	1	0	0	130
5:30	17	0	0	0	17	17:30	105	4	0	0	109
5:45	10	0	0	0	10	17:45	119	1	0	0	120
6:00	19	0	0	0	19	18:00	101	2	0	0	103
6:15	22	0	0	0	22	18:15	112	0	0	0	112
6:30	25	1	0	0	26	18:30	89	0	0	0	89
6:45	41	3	0	0	44	18:45	83	2	0	0	85
7:00	32	0	0	0	32	19:00	82	2	0	0	84
7:15	66	3	0	0	69	19:15	70	0	0	0	70
7:30	58	2	0	0	60	19:30	89	1	0	0	90
7:45	104	3	0	0	107	19:45	75	0	0	0	75
8:00	99	5	0	0	104	20:00	81	1	0	0	82
8:15	86	3	0	0	89	20:15	57	1	0	0	58
8:30	74	2	2	0	78	20:30	70	0	0	0	70
8:45	72	5	0	1	78	20:45	46	0	0	0	46
9:00	73	5	0	0	78	21:00	56	2	0	0	58
9:15	53	7	0	0	60	21:15	37	1	0	0	38
9:30	51	1	0	0	52	21:30	39	1	0	0	40
9:45	66	3	0	0	69	21:45	26	0	0	0	26
10:00	68	1	0	0	69	22:00	27	1	0	0	28
10:15	68	2	0	0	70	22:15	24	0	0	0	24
10:30	69	5	0	0	74	22:30	18	0	0	0	18
10:45	78	6	0	0	84	22:45	12	0	0	0	12
11:00	80	6	0	2	88	23:00	19	0	0	0	19
11:15	103	3	0	0	106	23:15	8	0	0	0	8
11:30	91	7	1	0	99	23:30	22	0	0	0	22
11:45	79	0	0	0	79	23:45	6	1	0	0	7
TOTAL	1,676	75	3	3	1,757	TOTAL	4,048	95	5	5	4,153

AM PEAK HOUR	7:45 AM
AM PEAK VOLUME	378

AM PEAK HOUR	4:15 PM
AM PEAK VOLUME	565

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS

	1	2	3	4	TOTAL
TOTAL: AM+PM	5,724	170	8	8	5,910
% OF TOTAL	96.9%	2.9%	0.1%	0.1%	100.0%
TOTAL: ALL	11,131	320	11	12	11,474
% OF TOTAL	97.0%	2.8%	0.1%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, June 01, 2022 **CITY:** Seal Beach

JOB #: SC3468 **LOCATION:** Lampson west of Rose

AM TIME	1	2	3	4	TOTAL	PM Time	1	2	3	4	TOTAL
0:00	5	0	0	0	5	12:00	83	0	1	0	84
0:15	6	0	0	0	6	12:15	96	2	0	0	98
0:30	2	0	0	0	2	12:30	95	4	0	0	99
0:45	2	0	0	0	2	12:45	100	0	0	0	100
1:00	3	0	0	0	3	13:00	105	1	0	1	107
1:15	2	0	0	0	2	13:15	107	1	0	0	108
1:30	3	0	0	0	3	13:30	85	4	0	0	89
1:45	1	0	0	0	1	13:45	98	1	0	0	99
2:00	0	0	0	0	0	14:00	96	3	0	0	99
2:15	0	0	0	0	0	14:15	96	1	0	0	97
2:30	5	0	0	0	5	14:30	95	6	0	0	101
2:45	1	0	0	0	1	14:45	69	2	0	0	71
3:00	3	0	0	0	3	15:00	104	2	0	0	106
3:15	1	0	0	0	1	15:15	123	0	0	0	123
3:30	3	0	0	0	3	15:30	110	1	0	0	111
3:45	0	1	0	0	1	15:45	91	0	0	0	91
4:00	4	0	0	0	4	16:00	90	3	0	0	93
4:15	3	0	0	0	3	16:15	102	3	0	0	105
4:30	5	0	0	0	5	16:30	125	1	0	0	126
4:45	10	0	0	0	10	16:45	107	4	0	0	111
5:00	3	0	0	0	3	17:00	118	4	0	0	122
5:15	14	0	0	0	14	17:15	127	3	0	0	130
5:30	20	0	0	0	20	17:30	109	1	0	0	110
5:45	21	1	0	0	22	17:45	106	2	0	0	108
6:00	22	1	0	0	23	18:00	98	0	0	0	98
6:15	35	0	1	0	36	18:15	81	0	0	0	81
6:30	39	0	0	0	39	18:30	90	0	0	0	90
6:45	52	3	0	0	55	18:45	53	0	0	0	53
7:00	80	3	0	0	83	19:00	69	0	0	0	69
7:15	104	3	0	1	108	19:15	55	0	0	0	55
7:30	146	10	0	0	156	19:30	50	1	0	0	51
7:45	135	8	0	0	143	19:45	48	0	0	0	48
8:00	92	2	0	0	94	20:00	43	0	0	0	43
8:15	88	5	0	0	93	20:15	34	0	0	0	34
8:30	93	1	0	0	94	20:30	42	0	0	0	42
8:45	106	9	0	0	115	20:45	39	0	0	0	39
9:00	110	1	0	0	111	21:00	23	1	0	0	24
9:15	108	6	0	1	115	21:15	35	0	0	0	35
9:30	69	6	0	0	75	21:30	18	0	0	0	18
9:45	73	6	0	1	80	21:45	18	0	0	0	18
10:00	73	2	1	0	76	22:00	21	1	0	0	22
10:15	91	4	0	0	95	22:15	12	0	0	0	12
10:30	81	6	0	0	87	22:30	9	0	0	0	9
10:45	93	6	0	0	99	22:45	11	0	0	0	11
11:00	71	4	0	0	75	23:00	10	0	0	0	10
11:15	76	2	0	0	78	23:15	5	0	0	0	5
11:30	65	2	0	0	67	23:30	4	0	0	0	4
11:45	79	5	0	0	84	23:45	4	1	0	0	5
TOTAL	2,098	97	2	3	2,200	TOTAL	3,309	53	1	1	3,364

AM PEAK HOUR	7:15 AM	PM PEAK HOUR	4:30 PM
AM PEAK VOLUME	501	AM PEAK VOLUME	489

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	5,407	150	3	4	5,564
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	97.2%	2.7%	0.1%	0.1%	100.0%
CLASS 3	3-AXLE TRUCKS						
CLASS 4	4 OR MORE AXLE TRUCKS						

APPENDIX 3.2: EXISTING (2022) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.785
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1199	266	364	1244	0	0	0	0	340	0	572
Growth 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
Initial Bse:	0	1199	266	364	1244	0	0	0	0	340	0	572
User 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
PHF 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
PHF Volume:	0	1199	266	364	1244	0	0	0	0	340	0	572
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1199	266	364	1244	0	0	0	0	340	0	572
PCE 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
MLF 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
FinalVolume:	0	1199	266	364	1244	0	0	0	0	340	0	572
OvlAdjVol:			85									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3200	5100	0	0	0	0	3200	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.16	0.11	0.24	0.00	0.00	0.00	0.00	0.11	0.00	0.34
OvlAdjV/S:			0.05									
Crit Moves:	****			****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.398
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1	0 2	0 1	1	0 1 1 0
Volume Module:												
Base Vol:	29	3	7	1	0	3	7	591	32	10	880	3
Growth 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
Initial Bse:	29	3	7	1	0	3	7	591	32	10	880	3
User 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
PHF 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
PHF Volume:	29	3	7	1	0	3	7	591	32	10	880	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	3	7	1	0	3	7	591	32	10	880	3
PCE 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
MLF 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
FinalVolume:	29	3	7	1	0	3	7	591	32	10	880	3
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.06	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.03	1.00
Lanes:	0.91	0.09	1.00	0.25	0.00	0.75	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1450	150	1700	400	0	1200	1600	3400	1700	1600	3289	11
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.17	0.02	0.01	0.27	0.28
Crit Moves:	****				****		****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.469
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	204	1	3	1	0	7	18	420	79	9	730	6
Growth 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
Initial Bse:	204	1	3	1	0	7	18	420	79	9	730	6
User 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
PHF 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
PHF Volume:	204	1	3	1	0	7	18	420	79	9	730	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	1	3	1	0	7	18	420	79	9	730	6
PCE 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
MLF 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
FinalVolume:	204	1	3	1	0	7	18	420	79	9	730	6
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.03	1.00
Lanes:	1.00	0.25	0.75	0.12	0.00	0.88	1.00	1.68	0.32	1.00	1.98	0.02
Final Sat.:	1600	400	1200	200	0	1400	1600	2793	507	1600	3274	26
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.00	0.00	0.00	0.01	0.01	0.15	0.16	0.01	0.22	0.23
Crit Moves:	****				****		****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.394
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	171	0	29	0	0	0	0	347	77	16	574	0
Growth 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
Initial Bse:	171	0	29	0	0	0	0	347	77	16	574	0
User 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
PHF 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
PHF Volume:	171	0	29	0	0	0	0	347	77	16	574	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	0	29	0	0	0	0	347	77	16	574	0
PCE 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
MLF 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
FinalVolume:	171	0	29	0	0	0	0	347	77	16	574	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.04	1.00	1.00	1.06	1.06
Lanes:	0.86	0.00	0.14	0.00	0.00	0.00	0.00	1.64	0.36	1.00	2.00	0.00
Final Sat.:	1368	0	232	0	0	0	0	2719	581	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.13	0.00	0.00	0.00	0.00	0.13	0.13	0.01	0.17	0.00
Crit Moves:			****				****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.335
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	83	0	55	0	0	0	0	314	62	30	507	0
Growth 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
Initial Bse:	83	0	55	0	0	0	0	314	62	30	507	0
User 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
PHF 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
PHF Volume:	83	0	55	0	0	0	0	314	62	30	507	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	0	55	0	0	0	0	314	62	30	507	0
PCE 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
MLF 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
FinalVolume:	83	0	55	0	0	0	0	314	62	30	507	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.04	1.00	1.00	1.06	1.06
Lanes:	0.60	0.00	0.40	0.00	0.00	0.00	0.00	1.67	0.33	1.00	2.00	0.00
Final Sat.:	962	0	638	0	0	0	0	2772	528	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.09	0.00	0.00	0.00	0.00	0.11	0.12	0.02	0.15	0.00
Crit Moves:			****				****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.300
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	37	0	46	0	0	0	0	336	24	25	505	0
Growth 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
Initial Bse:	37	0	46	0	0	0	0	336	24	25	505	0
User 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
PHF 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
PHF Volume:	37	0	46	0	0	0	0	336	24	25	505	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	0	46	0	0	0	0	336	24	25	505	0
PCE 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
MLF 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
FinalVolume:	37	0	46	0	0	0	0	336	24	25	505	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.03	1.00	1.00	1.06	1.06
Lanes:	0.45	0.00	0.55	0.00	0.00	0.00	0.00	1.87	0.13	1.00	2.00	0.00
Final Sat.:	713	0	887	0	0	0	0	3087	213	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.05	0.00	0.00	0.00	0.00	0.11	0.11	0.02	0.15	0.00
Crit Moves:			****				****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.302
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	39	1	73	10	1	14	5	366	11	32	477	7
Growth 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
Initial Bse:	39	1	73	10	1	14	5	366	11	32	477	7
User 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
PHF 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
PHF Volume:	39	1	73	10	1	14	5	366	11	32	477	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	1	73	10	1	14	5	366	11	32	477	7
PCE 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
MLF 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
FinalVolume:	39	1	73	10	1	14	5	366	11	32	477	7
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.03	1.00
Lanes:	1.00	0.01	0.99	0.40	0.04	0.56	1.00	1.94	0.06	1.00	1.97	0.03
Final Sat.:	1600	22	1578	640	64	896	1600	3207	93	1600	3254	46
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.05	0.01	0.02	0.02	0.00	0.11	0.12	0.02	0.15	0.15
Crit Moves:		****		****			****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Valley View & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.694
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	115	1400	165	105	1529	151	150	234	126	184	184	178
Growth 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
Initial Bse:	115	1400	165	105	1529	151	150	234	126	184	184	178
User 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
PHF 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
PHF Volume:	115	1400	165	105	1529	151	150	234	126	184	184	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	1400	165	105	1529	151	150	234	126	184	184	178
PCE 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
MLF 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
FinalVolume:	115	1400	165	105	1529	151	150	234	126	184	184	178
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.05	1.00	1.00	1.06	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.30	0.70	1.00	1.02	0.98
Final Sat.:	1600	5100	1700	1600	5100	1700	1600	2180	1120	1600	1727	1573
Capacity Analysis Module:												
Vol/Sat:	0.07	0.27	0.10	0.07	0.30	0.09	0.09	0.11	0.11	0.12	0.11	0.11
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.798
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 1	2	0 3	0 0	0 0	0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	1508	413	447	1202	0	0	0	0	322	0	447
Growth 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
Initial Bse:	0	1508	413	447	1202	0	0	0	0	322	0	447
User 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
PHF 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
PHF Volume:	0	1508	413	447	1202	0	0	0	0	322	0	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1508	413	447	1202	0	0	0	0	322	0	447
PCE 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
MLF 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
FinalVolume:	0	1508	413	447	1202	0	0	0	0	322	0	447
OvlAdjVol:			242									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3200	5100	0	0	0	0	3200	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.24	0.14	0.24	0.00	0.00	0.00	0.00	0.10	0.00	0.26
OvlAdjV/S:			0.14									
Crit Moves:		****			****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.373
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0 1	0 0	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	42	0	10	0	1	0	4	822	34	7	727	0
Growth 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
Initial Bse:	42	0	10	0	1	0	4	822	34	7	727	0
User 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
PHF 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
PHF Volume:	42	0	10	0	1	0	4	822	34	7	727	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	0	10	0	1	0	4	822	34	7	727	0
PCE 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
MLF 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
FinalVolume:	42	0	10	0	1	0	4	822	34	7	727	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.06	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.03	1.06
Lanes:	1.00	0.00	1.00	0.00	1.00	0.00	1.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1600	0	1700	0	1700	0	1600	3400	1700	1600	3300	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.24	0.02	0.00	0.22	0.00
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.448
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	124	0	10	4	3	38	26	638	116	11	568	3
Growth 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
Initial Bse:	124	0	10	4	3	38	26	638	116	11	568	3
User 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
PHF 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
PHF Volume:	124	0	10	4	3	38	26	638	116	11	568	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	0	10	4	3	38	26	638	116	11	568	3
PCE 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
MLF 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
FinalVolume:	124	0	10	4	3	38	26	638	116	11	568	3
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.03	1.00
Lanes:	1.00	0.00	1.00	0.09	0.07	0.84	1.00	1.69	0.31	1.00	1.99	0.01
Final Sat.:	1600	0	1600	142	107	1351	1600	2808	492	1600	3283	17
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.01	0.00	0.03	0.03	0.02	0.23	0.24	0.01	0.17	0.18
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.366
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module:												
Base Vol:	70	0	18	0	0	0	0	541	111	24	512	0
Growth 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
Initial Bse:	70	0	18	0	0	0	0	541	111	24	512	0
User 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
PHF 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
PHF Volume:	70	0	18	0	0	0	0	541	111	24	512	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	0	18	0	0	0	0	541	111	24	512	0
PCE 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
MLF 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
FinalVolume:	70	0	18	0	0	0	0	541	111	24	512	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.04	1.00	1.00	1.06	1.06
Lanes:	0.80	0.00	0.20	0.00	0.00	0.00	0.00	1.66	0.34	1.00	2.00	0.00
Final Sat.:	1273	0	327	0	0	0	0	2755	545	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.05	0.00	0.00	0.00	0.00	0.20	0.20	0.02	0.15	0.00
Crit Moves:			****					****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.371
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	52	0	46	0	0	0	0	499	60	65	484	0
Growth 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
Initial Bse:	52	0	46	0	0	0	0	499	60	65	484	0
User 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
PHF 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
PHF Volume:	52	0	46	0	0	0	0	499	60	65	484	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	0	46	0	0	0	0	499	60	65	484	0
PCE 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
MLF 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
FinalVolume:	52	0	46	0	0	0	0	499	60	65	484	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.04	1.00	1.00	1.06	1.06
Lanes:	0.53	0.00	0.47	0.00	0.00	0.00	0.00	1.79	0.21	1.00	2.00	0.00
Final Sat.:	849	0	751	0	0	0	0	2957	343	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.06	0.00	0.00	0.00	0.00	0.17	0.17	0.04	0.14	0.00
Crit Moves:			****					****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.365
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	28	0	51	0	0	0	0	528	33	65	489	0
Growth 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
Initial Bse:	28	0	51	0	0	0	0	528	33	65	489	0
User 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
PHF 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
PHF Volume:	28	0	51	0	0	0	0	528	33	65	489	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	0	51	0	0	0	0	528	33	65	489	0
PCE 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
MLF 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
FinalVolume:	28	0	51	0	0	0	0	528	33	65	489	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.03	1.00	1.00	1.06	1.06
Lanes:	0.35	0.00	0.65	0.00	0.00	0.00	0.00	1.88	0.12	1.00	2.00	0.00
Final Sat.:	567	0	1033	0	0	0	0	3112	188	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.05	0.00	0.00	0.00	0.00	0.17	0.18	0.04	0.14	0.00
Crit Moves:			****						****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.369
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	27	0	60	8	0	11	7	545	27	76	516	17
Growth 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
Initial Bse:	27	0	60	8	0	11	7	545	27	76	516	17
User 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
PHF 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
PHF Volume:	27	0	60	8	0	11	7	545	27	76	516	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	0	60	8	0	11	7	545	27	76	516	17
PCE 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
MLF 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
FinalVolume:	27	0	60	8	0	11	7	545	27	76	516	17
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.03	1.00
Lanes:	1.00	0.00	1.00	0.42	0.00	0.58	1.00	1.91	0.09	1.00	1.94	0.06
Final Sat.:	1600	0	1600	674	0	926	1600	3149	151	1600	3198	102
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.04	0.01	0.00	0.01	0.00	0.17	0.18	0.05	0.16	0.17
Crit Moves:			****	****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Valley View & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	185	1554	134	145	1688	202	211	200	108	169	208	101
Growth 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
Initial Bse:	185	1554	134	145	1688	202	211	200	108	169	208	101
User 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
PHF 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
PHF Volume:	185	1554	134	145	1688	202	211	200	108	169	208	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	1554	134	145	1688	202	211	200	108	169	208	101
PCE 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
MLF 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
FinalVolume:	185	1554	134	145	1688	202	211	200	108	169	208	101
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.05	1.00	1.00	1.05	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.30	0.70	1.00	1.35	0.65
Final Sat.:	1600	5100	1700	1600	5100	1700	1600	2178	1122	1600	2254	1046
Capacity Analysis Module:												
Vol/Sat:	0.12	0.30	0.08	0.09	0.33	0.12	0.13	0.09	0.10	0.11	0.09	0.10
Crit Moves:	****				****		****					****

APPENDIX 4.1: POST PROCESSING WORKSHEETS

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Project:	Lampson	Job #:	14501
Scenario:	2045 Without Project	Analyst:	CS
		Date:	2/1/23

LOCATION: Seal Beach Bl. & Lampson Av.
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	1,199	1,285	86	7%	1,508	1,525	17	1%
	Right	266	426	160	60%	413	438	25	6%
	NB Total	1,465	1,711	246	17%	1,921	1,963	42	2%
SOUTH BOUND	Left	364	689	325	89%	447	422	-25	-6%
	Through	1,244	1,289	45	4%	1,202	1,232	30	2%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	1,608	1,978	370	23%	1,649	1,654	5	0%
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	340	298	-42	-12%	322	488	166	52%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	572	613	41	7%	447	595	148	33%
	WB Total	912	911	-1	0%	769	1,083	314	41%
TOTAL ENTERING VOLUME		3,985	4,600	615	15%	4,339	4,700	361	8%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,978	1,654			
North Leg	Outbound	1,898	2,120			
North Leg	**TOTAL**	**3,876**	**3,774**	**9%**	**9%**	**41,044**
South Leg	Inbound	1,711	1,963			
South Leg	Outbound	1,587	1,720			
South Leg	**TOTAL**	**3,298**	**3,683**	**9%**	**9%**	**38,796**
East Leg	Inbound	911	1,083			
East Leg	Outbound	1,115	860			
East Leg	**TOTAL**	**2,026**	**1,943**	**10%**	**10%**	**19,645**
West Leg	Inbound	0	0			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
OVERALL TOTAL		***9,200***	***9,400***	**#DIV/0!**	***#DIV/0!***	***#DIV/0!***

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Project:	Lampson	Job #:	14501
Scenario:	2045 Without Project	Analyst:	CS
		Date:	2/1/23

LOCATION: Valley View St. & Lampson Av.
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	115	180	65	57%	185	184	-1	-1%
	Through	1,400	1,624	224	16%	1,554	1,604	50	3%
	Right	165	192	27	16%	134	177	43	32%
	NB Total	1,680	1,996	316	19%	1,873	1,965	92	5%
SOUTH BOUND	Left	105	103	-2	-2%	145	198	53	37%
	Through	1,529	1,682	153	10%	1,688	1,870	182	11%
	Right	151	199	48	32%	202	208	6	3%
	SB Total	1,785	1,984	199	11%	2,035	2,276	241	12%
EAST BOUND	Left	150	145	-5	-3%	211	260	49	23%
	Through	234	227	-7	-3%	200	315	115	58%
	Right	126	137	11	9%	108	138	30	28%
	EB Total	510	509	-1	0%	519	713	194	37%
WEST BOUND	Left	184	311	127	69%	169	182	13	8%
	Through	184	373	189	103%	208	209	1	0%
	Right	178	267	89	50%	101	105	4	4%
	WB Total	546	951	405	74%	478	496	18	4%
TOTAL ENTERING VOLUME		4,521	5,440	919	20%	4,905	5,450	545	11%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,984	2,276			
North Leg	Outbound	2,036	1,969			
North Leg	**TOTAL**	**4,020**	**4,245**	**9%**	**10%**	**44,418**
South Leg	Inbound	1,996	1,965			
South Leg	Outbound	2,130	2,190			
South Leg	**TOTAL**	**4,126**	**4,155**	**9%**	**9%**	**44,110**
East Leg	Inbound	951	496			
East Leg	Outbound	522	690			
East Leg	**TOTAL**	**1,473**	**1,186**	**12%**	**9%**	**12,685**
West Leg	Inbound	509	713			
West Leg	Outbound	752	601			
West Leg	**TOTAL**	**1,261**	**1,314**	**9%**	**10%**	**13,611**
OVERALL TOTAL		***10,880***	***10,900***	***9%***	***9%***	***114,824***

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APPENDIX 5.1: OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.920
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	111	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1199	266	364	1244	0	0	0	0	340	0	572
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	0	1298	288	394	1347	0	0	0	0	368	0	619
Added Vol:	0	47	28	41	100	0	0	0	0	32	0	27
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1345	316	435	1447	0	0	0	0	400	0	646
User 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
PHF 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
PHF Volume:	0	1345	316	435	1447	0	0	0	0	400	0	646
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1345	316	435	1447	0	0	0	0	400	0	646
PCE 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
MLF 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
FinalVolume:	0	1345	316	435	1447	0	0	0	0	400	0	646
OvlAdjVol:			116									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	3200	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.20	0.14	0.30	0.00	0.00	0.00	0.00	0.13	0.00	0.40
OvlAdjV/S:			0.07									
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.464
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	29	3	7	1	0	3	7	591	32	10	880	3
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	31	3	8	1	0	3	8	640	35	11	953	3
Added Vol:	0	0	0	5	0	31	10	58	0	0	29	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	3	8	6	0	34	18	698	35	11	982	5
User 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
PHF 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
PHF Volume:	31	3	8	6	0	34	18	698	35	11	982	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	3	8	6	0	34	18	698	35	11	982	5
PCE 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
MLF 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
FinalVolume:	31	3	8	6	0	34	18	698	35	11	982	5
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.91	0.09	1.00	0.15	0.00	0.85	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1450	150	1600	241	0	1359	1600	3200	1600	1600	3183	17
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.00	0.00	0.00	0.03	0.01	0.22	0.02	0.01	0.31	0.31
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.514
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	204	1	3	1	0	7	18	420	79	9	730	6
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	221	1	3	1	0	8	19	455	86	10	790	6
Added Vol:	0	0	0	0	0	0	0	63	0	0	30	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	221	1	3	1	0	8	19	518	86	10	820	6
User 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
PHF 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
PHF Volume:	221	1	3	1	0	8	19	518	86	10	820	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	1	3	1	0	8	19	518	86	10	820	6
PCE 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
MLF 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
FinalVolume:	221	1	3	1	0	8	19	518	86	10	820	6
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.25	0.75	0.12	0.00	0.88	1.00	1.72	0.28	1.00	1.98	0.02
Final Sat.:	1600	400	1200	200	0	1400	1600	2746	454	1600	3175	25
Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.00	0.00	0.00	0.01	0.01	0.19	0.19	0.01	0.26	0.26
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.443
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	171	0	29	0	0	0	0	347	77	16	574	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	185	0	31	0	0	0	0	376	83	17	621	0
Added Vol:	0	0	6	0	0	0	0	63	0	5	30	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	185	0	37	0	0	0	0	439	83	22	651	0
User 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
PHF 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
PHF Volume:	185	0	37	0	0	0	0	439	83	22	651	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	0	37	0	0	0	0	439	83	22	651	0
PCE 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
MLF 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
FinalVolume:	185	0	37	0	0	0	0	439	83	22	651	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.83	0.00	0.17	0.00	0.00	0.00	0.00	1.68	0.32	1.00	2.00	0.00
Final Sat.:	1331	0	269	0	0	0	0	2689	511	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.00	0.14	0.00	0.00	0.00	0.00	0.16	0.16	0.01	0.20	0.00
Crit Moves:			****				****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.380
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	83	0	55	0	0	0	0	314	62	30	507	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	90	0	60	0	0	0	0	340	67	32	549	0
Added Vol:	0	0	6	0	0	0	0	69	0	5	35	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	90	0	66	0	0	0	0	409	67	37	584	0
User 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
PHF 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
PHF Volume:	90	0	66	0	0	0	0	409	67	37	584	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	0	66	0	0	0	0	409	67	37	584	0
PCE 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
MLF 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
FinalVolume:	90	0	66	0	0	0	0	409	67	37	584	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.58	0.00	0.42	0.00	0.00	0.00	0.00	1.72	0.28	1.00	2.00	0.00
Final Sat.:	925	0	675	0	0	0	0	2749	451	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.10	0.00	0.00	0.00	0.00	0.15	0.15	0.02	0.18	0.00
Crit Moves:			****				****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.343
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	37	0	46	0	0	0	0	336	24	25	505	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	40	0	50	0	0	0	0	364	26	27	547	0
Added Vol:	0	0	6	0	0	0	0	75	0	5	39	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	0	56	0	0	0	0	439	26	32	586	0
User 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
PHF 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
PHF Volume:	40	0	56	0	0	0	0	439	26	32	586	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	0	56	0	0	0	0	439	26	32	586	0
PCE 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
MLF 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
FinalVolume:	40	0	56	0	0	0	0	439	26	32	586	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.41	0.01	0.58	0.00	0.00	0.00	0.00	1.89	0.11	1.00	2.00	0.00
Final Sat.:	669	0	931	0	0	0	0	3021	179	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.06	0.00	0.00	0.00	0.00	0.15	0.15	0.02	0.18	0.00
Crit Moves:			****				****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.343
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	39	1	73	10	1	14	5	366	11	32	477	7
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	42	1	79	11	1	15	5	396	12	35	516	8
Added Vol:	0	0	6	2	0	0	0	80	0	5	44	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	1	85	13	1	15	5	476	12	40	560	10
User 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
PHF 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
PHF Volume:	42	1	85	13	1	15	5	476	12	40	560	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	1	85	13	1	15	5	476	12	40	560	10
PCE 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
MLF 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
FinalVolume:	42	1	85	13	1	15	5	476	12	40	560	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.01	0.99	0.44	0.04	0.52	1.00	1.95	0.05	1.00	1.97	0.03
Final Sat.:	1600	20	1580	706	60	834	1600	3122	78	1600	3146	54
Capacity Analysis Module:												
Vol/Sat:	0.03	0.05	0.05	0.01	0.02	0.02	0.00	0.15	0.15	0.02	0.18	0.18
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

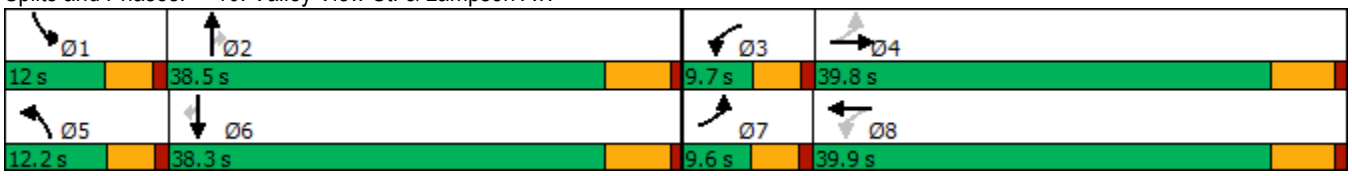
Cycle (sec):	100	Critical Vol./Cap.(X):	0.803
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

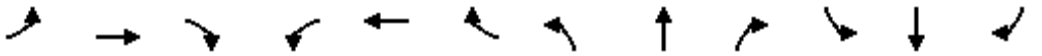
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	115	1400	165	105	1529	151	150	234	126	184	184	178
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	124	1515	179	114	1655	163	162	253	136	199	199	193
Added Vol:	21	25	4	5	21	29	48	14	32	4	4	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	145	1540	183	119	1676	192	210	267	168	203	203	200
User 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
PHF 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
PHF Volume:	145	1540	183	119	1676	192	210	267	168	203	203	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	145	1540	183	119	1676	192	210	267	168	203	203	200
PCE 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
MLF 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
FinalVolume:	145	1540	183	119	1676	192	210	267	168	203	203	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.23	0.77	1.00	1.01	0.99
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	1963	1237	1600	1614	1586
Capacity Analysis Module:												
Vol/Sat:	0.09	0.32	0.11	0.07	0.35	0.12	0.13	0.14	0.14	0.13	0.13	0.13
Crit Moves:	****			****			****			****		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	196	253	234	199	141	1540	187	124	1676	188
Future Volume (vph)	196	253	234	199	141	1540	187	124	1676	188
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8				2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	39.8	9.6	39.8	9.6	27.8	27.8	9.6	27.8	27.8
Total Split (s)	9.6	39.8	9.7	39.9	12.2	38.5	38.5	12.0	38.3	38.3
Total Split (%)	9.6%	39.8%	9.7%	39.9%	12.2%	38.5%	38.5%	12.0%	38.3%	38.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.8	4.8	3.6	4.8	4.8
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	5.8	4.6	5.8	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	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)	22.0	15.7	22.2	15.8	7.7	33.0	33.0	7.5	32.8	32.8
Actuated g/C Ratio	0.27	0.19	0.27	0.19	0.09	0.40	0.40	0.09	0.40	0.40
v/c Ratio	0.87	0.59	1.02	0.57	0.93	0.82	0.29	0.84	0.90	0.29
Control Delay	56.3	23.1	89.2	18.2	95.2	27.7	9.0	80.3	31.9	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.3	23.1	89.2	18.2	95.2	27.7	9.0	80.3	31.9	9.1
LOS	E	C	F	B	F	C	A	F	C	A
Approach Delay		33.9		43.8		30.9			32.8	
Approach LOS		C		D		C			C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 82.4	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 33.6	Intersection LOS: C
Intersection Capacity Utilization 83.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 10: Valley View St. & Lampson Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	253	155	234	199	215	141	1540	187	124	1676	188
Future Volume (veh/h)	196	253	155	234	199	215	141	1540	187	124	1676	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	213	275	130	254	216	176	153	1674	140	135	1822	155
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	420	193	269	339	260	170	2058	628	166	2045	626
Arrive On Green	0.06	0.18	0.18	0.06	0.18	0.18	0.10	0.40	0.40	0.09	0.40	0.40
Sat Flow, veh/h	1781	2353	1079	1781	1884	1448	1781	5106	1557	1781	5106	1564
Grp Volume(v), veh/h	213	206	199	254	203	189	153	1674	140	135	1822	155
Grp Sat Flow(s),veh/h/ln	1781	1777	1655	1781	1777	1555	1781	1702	1557	1781	1702	1564
Q Serve(g_s), s	5.0	8.6	9.0	5.1	8.4	9.0	6.8	23.2	4.7	5.9	26.5	5.2
Cycle Q Clear(g_c), s	5.0	8.6	9.0	5.1	8.4	9.0	6.8	23.2	4.7	5.9	26.5	5.2
Prop In Lane	1.00		0.65	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	268	317	296	269	320	280	170	2058	628	166	2045	626
V/C Ratio(X)	0.79	0.65	0.67	0.94	0.64	0.68	0.90	0.81	0.22	0.82	0.89	0.25
Avail Cap(c_a), veh/h	268	759	707	269	761	666	170	2097	640	166	2085	639
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	30.2	30.4	30.5	31.6	30.2	30.5	35.6	21.1	15.6	35.4	22.2	15.9
Incr Delay (d2), s/veh	14.1	2.2	2.7	39.2	2.1	2.8	40.7	2.5	0.2	24.5	5.2	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	2.5	3.6	3.5	5.1	3.5	3.3	4.7	8.5	1.5	3.5	10.1	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	32.6	33.2	70.8	32.3	33.3	76.3	23.6	15.8	59.9	27.4	16.1
LnGrp LOS	D	C	C	E	C	C	E	C	B	E	C	B
Approach Vol, veh/h		618			646			1967			2112	
Approach Delay, s/veh		36.8			47.7			27.2			28.7	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	37.9	9.7	20.0	12.2	37.7	9.6	20.1
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	7.4	32.7	5.1	34.0	7.6	32.5	5.0	34.1
Max Q Clear Time (g_c+I1), s	7.9	25.2	7.1	11.0	8.8	28.5	7.0	11.0
Green Ext Time (p_c), s	0.0	5.7	0.0	2.2	0.0	3.4	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	31.4
HCM 6th LOS	C

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.946
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	130	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1508	413	447	1202	0	0	0	0	322	0	447
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	0	1632	447	484	1301	0	0	0	0	349	0	484
Added Vol:	0	89	37	35	66	0	0	0	0	29	0	36
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1721	484	519	1367	0	0	0	0	378	0	520
User 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
PHF 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
PHF Volume:	0	1721	484	519	1367	0	0	0	0	378	0	520
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1721	484	519	1367	0	0	0	0	378	0	520
PCE 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
MLF 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
FinalVolume:	0	1721	484	519	1367	0	0	0	0	378	0	520
OvlAdjVol:			295									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	3200	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.30	0.16	0.28	0.00	0.00	0.00	0.00	0.12	0.00	0.32
OvlAdjV/S:			0.18									
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.438
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1	0 2	0 1	1	0 1 1 0
Volume Module:												
Base Vol:	42	0	10	0	1	0	4	822	34	7	727	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	45	0	11	0	1	0	4	890	37	8	787	0
Added Vol:	0	0	0	3	0	20	33	39	0	0	46	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	0	11	3	1	20	37	929	37	8	833	6
User 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
PHF 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
PHF Volume:	45	0	11	3	1	20	37	929	37	8	833	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	0	11	3	1	20	37	929	37	8	833	6
PCE 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
MLF 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
FinalVolume:	45	0	11	3	1	20	37	929	37	8	833	6
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.12	0.04	0.84	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1600	0	1600	199	72	1329	1600	3200	1600	1600	3177	23
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.01	0.00	0.02	0.02	0.02	0.29	0.02	0.00	0.26	0.26
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec): 100 Critical Vol./Cap.(X): 0.490
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 33 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	124	0	10	4	3	38	26	638	116	11	568	3
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	134	0	11	4	3	41	28	691	126	12	615	3
Added Vol:	0	0	0	0	0	0	0	42	0	0	51	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	0	11	4	3	41	28	733	126	12	666	3
User 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
PHF 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
PHF Volume:	134	0	11	4	3	41	28	733	126	12	666	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	0	11	4	3	41	28	733	126	12	666	3
PCE 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
MLF 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
FinalVolume:	134	0	11	4	3	41	28	733	126	12	666	3
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.09	0.07	0.84	1.00	1.71	0.29	1.00	1.99	0.01
Final Sat.:	1600	0	1600	142	107	1351	1600	2732	468	1600	3184	16
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.01	0.00	0.03	0.03	0.02	0.27	0.27	0.01	0.21	0.21
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.415
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	70	0	18	0	0	0	0	541	111	24	512	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	76	0	19	0	0	0	0	586	120	26	554	0
Added Vol:	0	0	5	0	0	0	0	42	0	4	51	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	76	0	24	0	0	0	0	628	120	30	605	0
User 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
PHF 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
PHF Volume:	76	0	24	0	0	0	0	628	120	30	605	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	0	24	0	0	0	0	628	120	30	605	0
PCE 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
MLF 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
FinalVolume:	76	0	24	0	0	0	0	628	120	30	605	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.76	0.00	0.24	0.00	0.00	0.00	0.00	1.68	0.32	1.00	2.00	0.00
Final Sat.:	1209	0	391	0	0	0	0	2686	514	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.06	0.00	0.00	0.00	0.00	0.23	0.23	0.02	0.19	0.00
Crit Moves:			****					****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.420
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	52	0	46	0	0	0	0	499	60	65	484	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	56	0	50	0	0	0	0	540	65	70	524	0
Added Vol:	0	0	5	0	0	0	0	47	0	4	55	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	0	55	0	0	0	0	587	65	74	579	0
User 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
PHF 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
PHF Volume:	56	0	55	0	0	0	0	587	65	74	579	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	0	55	0	0	0	0	587	65	74	579	0
PCE 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
MLF 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
FinalVolume:	56	0	55	0	0	0	0	587	65	74	579	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.51	0.00	0.49	0.00	0.00	0.00	0.00	1.80	0.20	1.00	2.00	0.00
Final Sat.:	811	0	789	0	0	0	0	2881	319	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.07	0.00	0.00	0.00	0.00	0.20	0.20	0.05	0.18	0.00
Crit Moves:			****					****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.409
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	28	0	51	0	0	0	0	528	33	65	489	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	30	0	55	0	0	0	0	572	36	70	529	0
Added Vol:	0	0	5	0	0	0	0	52	0	4	59	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	0	60	0	0	0	0	624	36	74	588	0
User 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
PHF 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
PHF Volume:	30	0	60	0	0	0	0	624	36	74	588	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	0	60	0	0	0	0	624	36	74	588	0
PCE 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
MLF 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
FinalVolume:	30	0	60	0	0	0	0	624	36	74	588	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.33	0.00	0.67	0.00	0.00	0.00	0.00	1.89	0.11	1.00	2.00	0.00
Final Sat.:	536	0	1064	0	0	0	0	3027	173	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.21	0.21	0.05	0.18	0.00
Crit Moves:			****					****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.416
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	27	0	60	8	0	11	7	545	27	76	516	17
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	29	0	65	9	0	12	8	590	29	82	559	18
Added Vol:	0	0	5	2	0	0	0	57	0	4	63	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	0	70	11	0	12	8	647	29	86	622	20
User 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
PHF 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
PHF Volume:	29	0	70	11	0	12	8	647	29	86	622	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	0	70	11	0	12	8	647	29	86	622	20
PCE 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
MLF 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
FinalVolume:	29	0	70	11	0	12	8	647	29	86	622	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.47	0.00	0.53	1.00	1.91	0.09	1.00	1.94	0.06
Final Sat.:	1600	0	1600	756	0	844	1600	3062	138	1600	3098	102
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.04	0.01	0.00	0.01	0.00	0.21	0.21	0.05	0.20	0.20
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

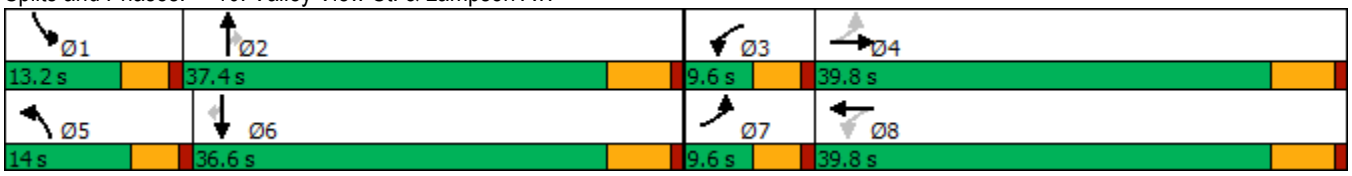
Cycle (sec):	100	Critical Vol./Cap.(X):	0.903
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	102	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	185	1554	134	145	1688	202	211	200	108	169	208	101
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	200	1682	145	157	1827	219	228	216	117	183	225	109
Added Vol:	33	22	5	3	17	28	33	7	29	5	12	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1704	150	160	1844	247	261	223	146	188	237	115
User 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
PHF 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
PHF Volume:	233	1704	150	160	1844	247	261	223	146	188	237	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	233	1704	150	160	1844	247	261	223	146	188	237	115
PCE 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
MLF 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
FinalVolume:	233	1704	150	160	1844	247	261	223	146	188	237	115
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.21	0.79	1.00	1.35	0.65
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	1936	1264	1600	2153	1047
Capacity Analysis Module:												
Vol/Sat:	0.15	0.36	0.09	0.10	0.38	0.15	0.16	0.12	0.12	0.12	0.11	0.11
Crit Moves:	****			****			****			****		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	254	216	214	225	222	1704	161	172	1844	235
Future Volume (vph)	254	216	214	225	222	1704	161	172	1844	235
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8				2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	39.8	9.6	39.8	9.6	27.8	27.8	9.6	27.8	27.8
Total Split (s)	9.6	39.8	9.6	39.8	14.0	37.4	37.4	13.2	36.6	36.6
Total Split (%)	9.6%	39.8%	9.6%	39.8%	14.0%	37.4%	37.4%	13.2%	36.6%	36.6%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.8	4.8	3.6	4.8	4.8
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	5.8	4.6	5.8	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	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)	21.1	14.8	21.1	14.8	9.5	32.0	32.0	8.7	31.2	31.2
Actuated g/C Ratio	0.26	0.18	0.26	0.18	0.12	0.39	0.39	0.11	0.38	0.38
v/c Ratio	0.94	0.51	0.80	0.51	1.11	0.88	0.24	0.94	0.98	0.36
Control Delay	66.8	19.7	45.9	22.3	133.7	31.0	7.1	91.8	42.8	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.8	19.7	45.9	22.3	133.7	31.0	7.1	91.8	42.8	11.3
LOS	E	B	D	C	F	C	A	F	D	B
Approach Delay		39.4		31.3		40.1			43.3	
Approach LOS		D		C		D			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 81.6	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay: 40.4	Intersection LOS: D
Intersection Capacity Utilization 90.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 10: Valley View St. & Lampson Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	254	216	138	214	225	122	222	1704	161	172	1844	235
Future Volume (veh/h)	254	216	138	214	225	122	222	1704	161	172	1844	235
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	262	223	108	221	232	104	229	1757	127	177	1901	164
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	354	165	268	362	156	216	2073	635	197	2021	626
Arrive On Green	0.06	0.15	0.15	0.06	0.15	0.15	0.12	0.41	0.41	0.11	0.40	0.40
Sat Flow, veh/h	1781	2347	1095	1781	2401	1038	1781	5106	1564	1781	5106	1583
Grp Volume(v), veh/h	262	167	164	221	170	166	229	1757	127	177	1901	164
Grp Sat Flow(s),veh/h/ln	1781	1777	1665	1781	1777	1662	1781	1702	1564	1781	1702	1583
Q Serve(g_s), s	5.0	6.8	7.2	5.0	7.0	7.3	9.4	24.2	4.1	7.6	27.8	5.4
Cycle Q Clear(g_c), s	5.0	6.8	7.2	5.0	7.0	7.3	9.4	24.2	4.1	7.6	27.8	5.4
Prop In Lane	1.00		0.66	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	268	251	268	268	250	216	2073	635	197	2021	626
V/C Ratio(X)	0.98	0.62	0.65	0.82	0.63	0.66	1.06	0.85	0.20	0.90	0.94	0.26
Avail Cap(c_a), veh/h	266	778	730	268	778	728	216	2079	637	197	2027	628
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	32.1	30.9	31.0	30.8	30.9	31.1	34.1	20.9	14.9	34.1	22.6	15.8
Incr Delay (d2), s/veh	50.6	2.4	2.9	17.5	2.5	3.0	78.4	3.5	0.2	36.1	9.4	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	6.0	2.9	2.9	2.8	2.9	2.9	8.5	8.9	1.3	5.0	11.3	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.7	33.3	33.9	48.3	33.4	34.1	112.5	24.3	15.1	70.1	32.0	16.0
LnGrp LOS	F	C	C	D	C	C	F	C	B	E	C	B
Approach Vol, veh/h		593			557			2113			2242	
Approach Delay, s/veh		55.3			39.5			33.3			33.9	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	37.3	9.6	17.5	14.0	36.5	9.6	17.5
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	8.6	31.6	5.0	34.0	9.4	30.8	5.0	34.0
Max Q Clear Time (g_c+I1), s	9.6	26.2	7.0	9.2	11.4	29.8	7.0	9.3
Green Ext Time (p_c), s	0.0	4.4	0.0	1.7	0.0	0.9	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	36.5
HCM 6th LOS	D

APPENDIX 5.2: OPENING YEAR CUMULATIVE (2026) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.932
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	119	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1199	266	364	1244	0	0	0	0	340	0	572
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	0	1298	288	394	1347	0	0	0	0	368	0	619
Added Vol:	0	47	38	46	100	0	0	0	0	61	0	44
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1345	326	440	1447	0	0	0	0	429	0	663
User 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
PHF 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
PHF Volume:	0	1345	326	440	1447	0	0	0	0	429	0	663
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1345	326	440	1447	0	0	0	0	429	0	663
PCE 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
MLF 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
FinalVolume:	0	1345	326	440	1447	0	0	0	0	429	0	663
OvlAdjVol:			111									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	3200	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.20	0.14	0.30	0.00	0.00	0.00	0.00	0.13	0.00	0.41
OvlAdjV/S:			0.07									
Crit Moves:		****			****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.478
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	29	3	7	1	0	3	7	591	32	10	880	3
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	31	3	8	1	0	3	8	640	35	11	953	3
Added Vol:	0	0	0	5	0	31	10	74	0	0	74	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	3	8	6	0	34	18	714	35	11	1027	5
User 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
PHF 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
PHF Volume:	31	3	8	6	0	34	18	714	35	11	1027	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	3	8	6	0	34	18	714	35	11	1027	5
PCE 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
MLF 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
FinalVolume:	31	3	8	6	0	34	18	714	35	11	1027	5
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.91	0.09	1.00	0.15	0.00	0.85	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1450	150	1600	241	0	1359	1600	3200	1600	1600	3184	16
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.00	0.00	0.00	0.03	0.01	0.22	0.02	0.01	0.32	0.32
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.528
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	204	1	3	1	0	7	18	420	79	9	730	6
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	221	1	3	1	0	8	19	455	86	10	790	6
Added Vol:	0	0	0	0	0	0	0	79	0	0	76	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	221	1	3	1	0	8	19	534	86	10	866	6
User 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
PHF 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
PHF Volume:	221	1	3	1	0	8	19	534	86	10	866	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	1	3	1	0	8	19	534	86	10	866	6
PCE 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
MLF 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
FinalVolume:	221	1	3	1	0	8	19	534	86	10	866	6
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.25	0.75	0.12	0.00	0.88	1.00	1.72	0.28	1.00	1.99	0.01
Final Sat.:	1600	400	1200	200	0	1400	1600	2758	442	1600	3176	24
Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.00	0.00	0.00	0.01	0.01	0.19	0.19	0.01	0.27	0.27
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.457
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	171	0	29	0	0	0	0	347	77	16	574	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	185	0	31	0	0	0	0	376	83	17	621	0
Added Vol:	0	0	6	0	0	0	0	79	0	5	76	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	185	0	37	0	0	0	0	455	83	22	697	0
User 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
PHF 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
PHF Volume:	185	0	37	0	0	0	0	455	83	22	697	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	0	37	0	0	0	0	455	83	22	697	0
PCE 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
MLF 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
FinalVolume:	185	0	37	0	0	0	0	455	83	22	697	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.83	0.00	0.17	0.00	0.00	0.00	0.00	1.69	0.31	1.00	2.00	0.00
Final Sat.:	1331	0	269	0	0	0	0	2704	496	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.00	0.14	0.00	0.00	0.00	0.00	0.17	0.17	0.01	0.22	0.00
Crit Moves:			****				****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.394
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	83	0	55	0	0	0	0	314	62	30	507	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	90	0	60	0	0	0	0	340	67	32	549	0
Added Vol:	0	0	6	0	0	0	0	85	0	5	80	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	90	0	66	0	0	0	0	425	67	37	629	0
User 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
PHF 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
PHF Volume:	90	0	66	0	0	0	0	425	67	37	629	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	0	66	0	0	0	0	425	67	37	629	0
PCE 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
MLF 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
FinalVolume:	90	0	66	0	0	0	0	425	67	37	629	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.58	0.00	0.42	0.00	0.00	0.00	0.00	1.73	0.27	1.00	2.00	0.00
Final Sat.:	925	0	675	0	0	0	0	2764	436	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.10	0.00	0.00	0.00	0.00	0.15	0.15	0.02	0.20	0.00
Crit Moves:			****				****				****	

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	481	651	7	0	21
Future Vol, veh/h	0	481	651	7	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
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	523	708	8	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	358
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	638
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	638
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	638
HCM Lane V/C Ratio	-	-	-	0.036
HCM Control Delay (s)	-	-	-	10.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	465	633	6	37	25
Future Vol, veh/h	16	465	633	6	37	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	505	688	7	40	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	695	0	-	0	979	348
Stage 1	-	-	-	-	692	-
Stage 2	-	-	-	-	287	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	897	-	-	-	247	648
Stage 1	-	-	-	-	458	-
Stage 2	-	-	-	-	736	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	897	-	-	-	242	648
Mov Cap-2 Maneuver	-	-	-	-	354	-
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	736	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	897	-	-	-	433
HCM Lane V/C Ratio	0.019	-	-	-	0.156
HCM Control Delay (s)	9.1	-	-	-	14.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.347
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	37	0	46	0	0	0	0	336	24	25	505	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	40	0	50	0	0	0	0	364	26	27	547	0
Added Vol:	0	0	6	0	0	0	0	112	0	5	52	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	0	56	0	0	0	0	476	26	32	599	0
User 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
PHF 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
PHF Volume:	40	0	56	0	0	0	0	476	26	32	599	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	0	56	0	0	0	0	476	26	32	599	0
PCE 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
MLF 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
FinalVolume:	40	0	56	0	0	0	0	476	26	32	599	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.41	0.01	0.58	0.00	0.00	0.00	0.00	1.90	0.10	1.00	2.00	0.00
Final Sat.:	669	0	931	0	0	0	0	3034	166	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.06	0.00	0.00	0.00	0.00	0.16	0.16	0.02	0.19	0.00
Crit Moves:			****				****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.351
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	39	1	73	10	1	14	5	366	11	32	477	7
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	42	1	79	11	1	15	5	396	12	35	516	8
Added Vol:	0	0	6	2	0	0	0	118	0	5	57	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	1	85	13	1	15	5	514	12	40	573	10
User 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
PHF 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
PHF Volume:	42	1	85	13	1	15	5	514	12	40	573	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	1	85	13	1	15	5	514	12	40	573	10
PCE 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
MLF 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
FinalVolume:	42	1	85	13	1	15	5	514	12	40	573	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.01	0.99	0.44	0.04	0.52	1.00	1.95	0.05	1.00	1.97	0.03
Final Sat.:	1600	20	1580	706	60	834	1600	3128	72	1600	3147	53
Capacity Analysis Module:												
Vol/Sat:	0.03	0.05	0.05	0.01	0.02	0.02	0.00	0.16	0.16	0.02	0.18	0.18
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

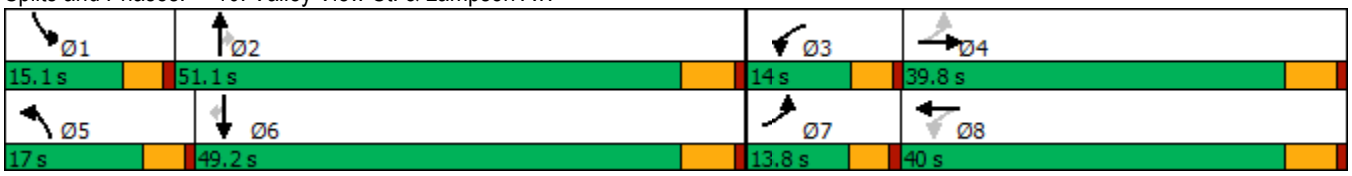
Cycle (sec):	100	Critical Vol./Cap.(X):	0.816
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

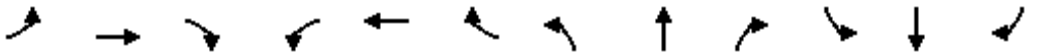
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	115	1400	165	105	1529	151	150	234	126	184	184	178
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	124	1515	179	114	1655	163	162	253	136	199	199	193
Added Vol:	27	25	4	5	21	32	56	26	49	4	8	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	151	1540	183	119	1676	195	218	279	185	203	207	200
User 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
PHF 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
PHF Volume:	151	1540	183	119	1676	195	218	279	185	203	207	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	1540	183	119	1676	195	218	279	185	203	207	200
PCE 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
MLF 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
FinalVolume:	151	1540	183	119	1676	195	218	279	185	203	207	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.20	0.80	1.00	1.02	0.98
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	1923	1277	1600	1629	1571
Capacity Analysis Module:												
Vol/Sat:	0.09	0.32	0.11	0.07	0.35	0.12	0.14	0.15	0.15	0.13	0.13	0.13
Crit Moves:	****				****			****			****	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	204	265	234	203	147	1540	187	124	1676	191
Future Volume (vph)	204	265	234	203	147	1540	187	124	1676	191
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8				2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	39.8	9.6	39.8	9.6	27.8	27.8	9.6	27.8	27.8
Total Split (s)	13.8	39.8	14.0	40.0	17.0	51.1	51.1	15.1	49.2	49.2
Total Split (%)	11.5%	33.2%	11.7%	33.3%	14.2%	42.6%	42.6%	12.6%	41.0%	41.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.8	4.8	3.6	4.8	4.8
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	5.8	4.6	5.8	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	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)	28.9	18.4	29.3	18.6	12.0	45.4	45.4	10.3	43.7	43.7
Actuated g/C Ratio	0.28	0.18	0.28	0.18	0.11	0.43	0.43	0.10	0.42	0.42
v/c Ratio	0.85	0.69	1.00	0.61	0.79	0.76	0.28	0.78	0.86	0.29
Control Delay	57.8	34.6	88.9	23.7	73.2	28.8	11.1	76.6	33.7	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.8	34.6	88.9	23.7	73.2	28.8	11.1	76.6	33.7	12.0
LOS	E	C	F	C	E	C	B	E	C	B
Approach Delay		42.0		47.1		30.5			34.3	
Approach LOS		D		D		C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 104.5	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 35.5	Intersection LOS: D
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 10: Valley View St. & Lampson Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	265	172	234	203	214	147	1540	187	124	1676	191
Future Volume (veh/h)	204	265	172	234	203	214	147	1540	187	124	1676	191
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	222	288	149	254	221	175	160	1674	140	135	1822	159
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	294	387	194	285	328	246	191	2207	673	165	2131	653
Arrive On Green	0.09	0.17	0.17	0.10	0.17	0.17	0.11	0.43	0.43	0.09	0.42	0.42
Sat Flow, veh/h	1781	2276	1143	1781	1907	1427	1781	5106	1558	1781	5106	1564
Grp Volume(v), veh/h	222	223	214	254	205	191	160	1674	140	135	1822	159
Grp Sat Flow(s),veh/h/ln	1781	1777	1642	1781	1777	1558	1781	1702	1558	1781	1702	1564
Q Serve(g_s), s	9.2	11.8	12.3	9.4	10.7	11.4	8.7	27.4	5.5	7.4	32.0	6.5
Cycle Q Clear(g_c), s	9.2	11.8	12.3	9.4	10.7	11.4	8.7	27.4	5.5	7.4	32.0	6.5
Prop In Lane	1.00		0.70	1.00		0.92	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	294	302	279	285	306	268	191	2207	673	165	2131	653
V/C Ratio(X)	0.76	0.74	0.77	0.89	0.67	0.71	0.84	0.76	0.21	0.82	0.85	0.24
Avail Cap(c_a), veh/h	294	611	564	285	614	539	223	2339	714	189	2241	686
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	32.8	39.0	39.2	34.7	38.3	38.6	43.3	23.7	17.5	44.1	26.1	18.7
Incr Delay (d2), s/veh	9.6	3.5	4.4	26.4	2.5	3.5	18.5	1.4	0.2	19.0	3.3	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	5.0	5.2	5.1	3.5	4.7	4.4	4.7	10.3	1.9	4.0	12.4	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	42.5	43.6	61.2	40.9	42.1	61.8	25.1	17.7	63.1	29.5	18.9
LnGrp LOS	D	D	D	E	D	D	E	C	B	E	C	B
Approach Vol, veh/h		659			650			1974			2116	
Approach Delay, s/veh		42.8			49.2			27.6			30.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	48.5	14.0	22.6	15.2	47.1	13.8	22.8
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	10.5	45.3	9.4	34.0	12.4	43.4	9.2	34.2
Max Q Clear Time (g_c+I1), s	9.4	29.4	11.4	14.3	10.7	34.0	11.2	13.4
Green Ext Time (p_c), s	0.0	10.3	0.0	2.3	0.0	7.3	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.959
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	142	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 1	2	0 3	0 0	0	0 0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	1508	413	447	1202	0	0	0	0	322	0	447
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	0	1632	447	484	1301	0	0	0	0	349	0	484
Added Vol:	0	89	68	54	66	0	0	0	0	48	0	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1721	515	538	1367	0	0	0	0	397	0	532
User 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
PHF 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
PHF Volume:	0	1721	515	538	1367	0	0	0	0	397	0	532
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1721	515	538	1367	0	0	0	0	397	0	532
PCE 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
MLF 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
FinalVolume:	0	1721	515	538	1367	0	0	0	0	397	0	532
OvlAdjVol:			317									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	3200	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.32	0.17	0.28	0.00	0.00	0.00	0.00	0.12	0.00	0.33
OvlAdjV/S:			0.20									
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.454
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1	0 2	0 1	1	0 1 1 0
Volume Module:												
Base Vol:	42	0	10	0	1	0	4	822	34	7	727	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	45	0	11	0	1	0	4	890	37	8	787	0
Added Vol:	0	0	0	3	0	20	33	89	0	0	76	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	0	11	3	1	20	37	979	37	8	863	6
User 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
PHF 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
PHF Volume:	45	0	11	3	1	20	37	979	37	8	863	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	0	11	3	1	20	37	979	37	8	863	6
PCE 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
MLF 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
FinalVolume:	45	0	11	3	1	20	37	979	37	8	863	6
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.12	0.04	0.84	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1600	0	1600	199	72	1329	1600	3200	1600	1600	3178	22
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.01	0.00	0.02	0.02	0.02	0.31	0.02	0.00	0.27	0.27
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.506
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	124	0	10	4	3	38	26	638	116	11	568	3
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	134	0	11	4	3	41	28	691	126	12	615	3
Added Vol:	0	0	0	0	0	0	0	92	0	0	82	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	0	11	4	3	41	28	783	126	12	697	3
User 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
PHF 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
PHF Volume:	134	0	11	4	3	41	28	783	126	12	697	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	0	11	4	3	41	28	783	126	12	697	3
PCE 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
MLF 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
FinalVolume:	134	0	11	4	3	41	28	783	126	12	697	3
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.09	0.07	0.84	1.00	1.72	0.28	1.00	1.99	0.01
Final Sat.:	1600	0	1600	142	107	1351	1600	2758	442	1600	3185	15
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.01	0.00	0.03	0.03	0.02	0.28	0.28	0.01	0.22	0.22
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.431
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	70	0	18	0	0	0	0	541	111	24	512	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	76	0	19	0	0	0	0	586	120	26	554	0
Added Vol:	0	0	5	0	0	0	0	92	0	4	82	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	76	0	24	0	0	0	0	678	120	30	636	0
User 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
PHF 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
PHF Volume:	76	0	24	0	0	0	0	678	120	30	636	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	0	24	0	0	0	0	678	120	30	636	0
PCE 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
MLF 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
FinalVolume:	76	0	24	0	0	0	0	678	120	30	636	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.76	0.00	0.24	0.00	0.00	0.00	0.00	1.70	0.30	1.00	2.00	0.00
Final Sat.:	1209	0	391	0	0	0	0	2718	482	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.06	0.00	0.00	0.00	0.00	0.25	0.25	0.02	0.20	0.00
Crit Moves:			****					****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.435
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	52	0	46	0	0	0	0	499	60	65	484	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	56	0	50	0	0	0	0	540	65	70	524	0
Added Vol:	0	0	5	0	0	0	0	97	0	4	86	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	0	55	0	0	0	0	637	65	74	610	0
User 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
PHF 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
PHF Volume:	56	0	55	0	0	0	0	637	65	74	610	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	0	55	0	0	0	0	637	65	74	610	0
PCE 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
MLF 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
FinalVolume:	56	0	55	0	0	0	0	637	65	74	610	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.51	0.00	0.49	0.00	0.00	0.00	0.00	1.81	0.19	1.00	2.00	0.00
Final Sat.:	811	0	789	0	0	0	0	2904	296	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.07	0.00	0.00	0.00	0.00	0.22	0.22	0.05	0.19	0.00
Crit Moves:			****					****		****		

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	709	636	23	0	14
Future Vol, veh/h	0	709	636	23	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
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	771	691	25	0	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	358
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	638
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	638
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	638
HCM Lane V/C Ratio	-	-	-	0.024
HCM Control Delay (s)	-	-	-	10.8
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	659	642	18	25	17
Future Vol, veh/h	50	659	642	18	25	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	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	716	698	20	27	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	718	0	-	0	1174	359
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	466	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	879	-	-	-	185	638
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	598	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	879	-	-	-	174	638
Mov Cap-2 Maneuver	-	-	-	-	302	-
Stage 1	-	-	-	-	422	-
Stage 2	-	-	-	-	598	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	15.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	879	-	-	-	384
HCM Lane V/C Ratio	0.062	-	-	-	0.119
HCM Control Delay (s)	9.4	-	-	-	15.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.4

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.417
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	28	0	51	0	0	0	0	528	33	65	489	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	30	0	55	0	0	0	0	572	36	70	529	0
Added Vol:	0	0	5	0	0	0	0	77	0	4	100	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	0	60	0	0	0	0	649	36	74	629	0
User 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
PHF 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
PHF Volume:	30	0	60	0	0	0	0	649	36	74	629	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	0	60	0	0	0	0	649	36	74	629	0
PCE 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
MLF 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
FinalVolume:	30	0	60	0	0	0	0	649	36	74	629	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.33	0.00	0.67	0.00	0.00	0.00	0.00	1.90	0.10	1.00	2.00	0.00
Final Sat.:	536	0	1064	0	0	0	0	3033	167	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.21	0.21	0.05	0.20	0.00
Crit Moves:			****					****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.423
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	27	0	60	8	0	11	7	545	27	76	516	17
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	29	0	65	9	0	12	8	590	29	82	559	18
Added Vol:	0	0	5	2	0	0	0	82	0	4	104	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	0	70	11	0	12	8	672	29	86	663	20
User 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
PHF 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
PHF Volume:	29	0	70	11	0	12	8	672	29	86	663	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	0	70	11	0	12	8	672	29	86	663	20
PCE 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
MLF 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
FinalVolume:	29	0	70	11	0	12	8	672	29	86	663	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.47	0.00	0.53	1.00	1.92	0.08	1.00	1.94	0.06
Final Sat.:	1600	0	1600	756	0	844	1600	3067	133	1600	3104	96
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.04	0.01	0.00	0.01	0.00	0.22	0.22	0.05	0.21	0.21
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

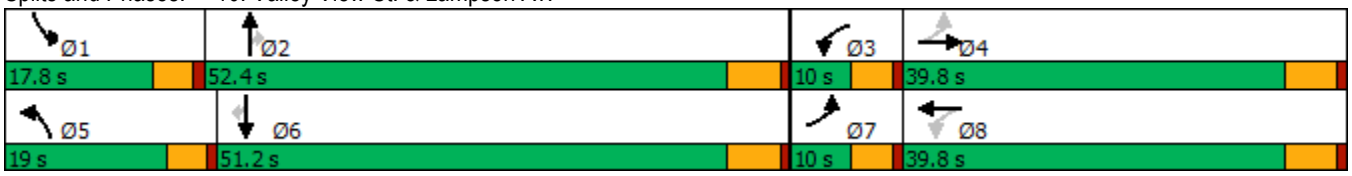
Cycle (sec):	100	Critical Vol./Cap.(X):	0.923
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	113	Level Of Service:	E

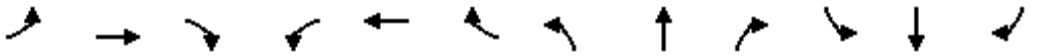
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	185	1554	134	145	1688	202	211	200	108	169	208	101
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	200	1682	145	157	1827	219	228	216	117	183	225	109
Added Vol:	52	22	5	3	17	37	39	16	40	5	25	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	252	1704	150	160	1844	256	267	232	157	188	250	115
User 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
PHF 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
PHF Volume:	252	1704	150	160	1844	256	267	232	157	188	250	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1704	150	160	1844	256	267	232	157	188	250	115
PCE 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
MLF 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
FinalVolume:	252	1704	150	160	1844	256	267	232	157	188	250	115
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.19	0.81	1.00	1.37	0.63
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	1911	1289	1600	2190	1010
Capacity Analysis Module:												
Vol/Sat:	0.16	0.36	0.09	0.10	0.38	0.16	0.17	0.12	0.12	0.12	0.11	0.11
Crit Moves:	****			****			****			****		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	260	224	214	239	240	1704	161	172	1844	244
Future Volume (vph)	260	224	214	239	240	1704	161	172	1844	244
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8				2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	39.8	9.6	39.8	9.6	27.8	27.8	9.6	27.8	27.8
Total Split (s)	10.0	39.8	10.0	39.8	19.0	52.4	52.4	17.8	51.2	51.2
Total Split (%)	8.3%	33.2%	8.3%	33.2%	15.8%	43.7%	43.7%	14.8%	42.7%	42.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.8	4.8	3.6	4.8	4.8
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	5.8	4.6	5.8	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	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)	23.5	16.9	23.5	16.9	14.5	47.2	47.2	12.9	45.7	45.7
Actuated g/C Ratio	0.23	0.16	0.23	0.16	0.14	0.46	0.46	0.12	0.44	0.44
v/c Ratio	1.24	0.59	1.05	0.61	1.00	0.76	0.22	0.80	0.85	0.33
Control Delay	171.2	29.1	110.5	35.7	103.1	27.2	8.3	71.6	31.2	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	171.2	29.1	110.5	35.7	103.1	27.2	8.3	71.6	31.2	12.5
LOS	F	C	F	D	F	C	A	E	C	B
Approach Delay		87.4		63.5		34.4			32.3	
Approach LOS		F		E		C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.4	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.24	
Intersection Signal Delay: 42.6	Intersection LOS: D
Intersection Capacity Utilization 92.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Valley View St. & Lampson Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	224	149	214	239	122	240	1704	161	172	1844	244
Future Volume (veh/h)	260	224	149	214	239	122	240	1704	161	172	1844	244
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	268	231	120	221	246	104	247	1757	127	177	1901	174
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	221	337	169	220	360	147	261	2392	733	209	2241	695
Arrive On Green	0.06	0.15	0.15	0.06	0.15	0.15	0.15	0.47	0.47	0.12	0.44	0.44
Sat Flow, veh/h	1781	2288	1145	1781	2445	1001	1781	5106	1564	1781	5106	1583
Grp Volume(v), veh/h	268	177	174	221	177	173	247	1757	127	177	1901	174
Grp Sat Flow(s),veh/h/ln	1781	1777	1656	1781	1777	1669	1781	1702	1564	1781	1702	1583
Q Serve(g_s), s	5.4	9.3	9.8	5.4	9.2	9.7	13.5	27.4	4.6	9.6	32.6	6.8
Cycle Q Clear(g_c), s	5.4	9.3	9.8	5.4	9.2	9.7	13.5	27.4	4.6	9.6	32.6	6.8
Prop In Lane	1.00		0.69	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	221	262	244	220	262	246	261	2392	733	209	2241	695
V/C Ratio(X)	1.21	0.68	0.71	1.00	0.67	0.71	0.94	0.73	0.17	0.85	0.85	0.25
Avail Cap(c_a), veh/h	221	616	574	220	616	579	261	2426	743	240	2363	733
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	40.9	39.6	39.8	40.9	39.6	39.8	41.5	21.1	15.1	42.4	24.6	17.4
Incr Delay (d2), s/veh	129.4	3.1	3.8	61.6	3.0	3.7	40.3	1.2	0.1	19.4	3.0	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	10.5	4.1	4.1	6.3	4.1	4.1	8.6	10.0	1.5	5.2	12.5	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	170.3	42.7	43.7	102.5	42.6	43.5	81.7	22.3	15.2	61.8	27.6	17.5
LnGrp LOS	F	D	D	F	D	D	F	C	B	E	C	B
Approach Vol, veh/h		619			571			2131			2252	
Approach Delay, s/veh		98.2			66.1			28.8			29.5	
Approach LOS		F			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	51.8	10.0	20.2	19.0	48.9	10.0	20.2
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	13.2	46.6	5.4	34.0	14.4	45.4	5.4	34.0
Max Q Clear Time (g_c+I1), s	11.6	29.4	7.4	11.8	15.5	34.6	7.4	11.7
Green Ext Time (p_c), s	0.0	11.3	0.0	1.8	0.0	8.4	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	40.6
HCM 6th LOS	D

APPENDIX 5.3: OPENING YEAR CUMULATIVE (2026) WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

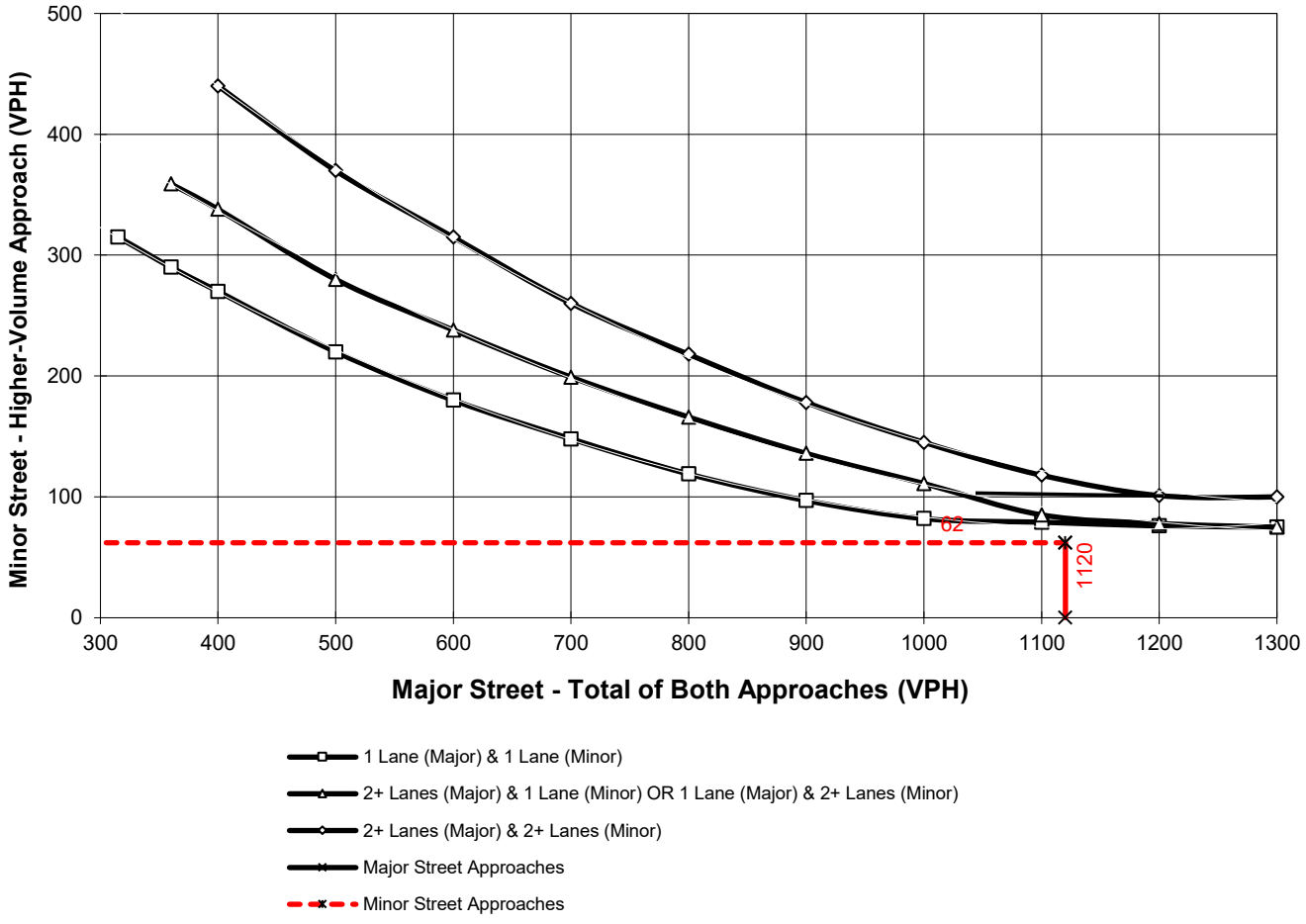
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Opening Year Cumulative (2026) Conditions - Weekday AM Peak Hour**

Major Street Name = **Lampson Av.**
Total of Both Approaches (VPH) = **1120**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Driveway 2**
High Volume Approach (VPH) = **62**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 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		**2026 WP**
				CALC CS	DATE	02/01/23
Jurisdiction: **City of Seal Beach/Los Alamitos**				CHK CS	DATE	02/01/23
Major Street: **Lampson Av.**				Critical Approach Speed (Major)		45 mph
Minor Street: **Driveway 2**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **14,416** vpd Minor Street Future ADT = **623** 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)		Minimum Requirements EADT: 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 / 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 + **14,416** / *1* **623**	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 + **14,416** / *1* **623**	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: 37% B: 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.

APPENDIX 5.4: OPENING YEAR CUMULATIVE (2026) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.745
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1199	266	364	1244	0	0	0	0	340	0	572
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	0	1298	288	394	1347	0	0	0	0	368	0	619
Added Vol:	0	47	38	46	100	0	0	0	0	61	0	44
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1345	326	440	1447	0	0	0	0	429	0	663
User 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
PHF 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
PHF Volume:	0	1345	326	440	1447	0	0	0	0	429	0	663
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1345	326	440	1447	0	0	0	0	429	0	663
PCE 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
MLF 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
FinalVolume:	0	1345	326	440	1447	0	0	0	0	429	0	663
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.18	0.00	1.82
Final Sat.:	0	4800	1600	3200	4800	0	0	0	0	1886	0	2914
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.20	0.14	0.30	0.00	0.00	0.00	0.00	0.23	0.00	0.23
OvlAdjV/S:			0.00									
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.820
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1508	413	447	1202	0	0	0	0	322	0	447
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	0	1632	447	484	1301	0	0	0	0	349	0	484
Added Vol:	0	89	68	54	66	0	0	0	0	48	0	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1721	515	538	1367	0	0	0	0	397	0	532
User 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
PHF 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
PHF Volume:	0	1721	515	538	1367	0	0	0	0	397	0	532
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1721	515	538	1367	0	0	0	0	397	0	532
PCE 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
MLF 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
FinalVolume:	0	1721	515	538	1367	0	0	0	0	397	0	532
OvlAdjVol:			206									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.28	0.01	1.71
Final Sat.:	0	4800	1600	3200	4800	0	0	0	0	2050	0	2750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.32	0.17	0.28	0.00	0.00	0.00	0.00	0.19	0.00	0.19
OvlAdjV/S:			0.13									
Crit Moves:		****		****						****		

APPENDIX 6.1: GENERAL PLAN BUILDOUT WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	1.024
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1479	426	689	1591	0	0	0	0	440	0	711
Growth 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
Initial Bse:	0	1479	426	689	1591	0	0	0	0	440	0	711
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1479	426	689	1591	0	0	0	0	440	0	711
User 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
PHF 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
PHF Volume:	0	1479	426	689	1591	0	0	0	0	440	0	711
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1479	426	689	1591	0	0	0	0	440	0	711
PCE 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
MLF 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
FinalVolume:	0	1479	426	689	1591	0	0	0	0	440	0	711
OvlAdjVol:			192									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3200	5100	0	0	0	0	3200	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.25	0.22	0.31	0.00	0.00	0.00	0.00	0.14	0.00	0.42
OvlAdjV/S:			0.11									
Crit Moves:		****			****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.481
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	33	3	8	6	0	34	18	732	36	11	1032	5
Growth 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
Initial Bse:	33	3	8	6	0	34	18	732	36	11	1032	5
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	3	8	6	0	34	18	732	36	11	1032	5
User 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
PHF 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
PHF Volume:	33	3	8	6	0	34	18	732	36	11	1032	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	3	8	6	0	34	18	732	36	11	1032	5
PCE 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
MLF 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
FinalVolume:	33	3	8	6	0	34	18	732	36	11	1032	5
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.06	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.03	1.00
Lanes:	0.92	0.08	1.00	0.15	0.00	0.85	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1467	133	1700	240	0	1360	1600	3400	1700	1600	3285	15
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.00	0.00	0.00	0.03	0.01	0.22	0.02	0.01	0.31	0.32
Crit Moves:	****					****	****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.536
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1	0	1 0	1 1 0
Volume Module:												
Base Vol:	233	1	3	1	0	8	21	542	90	10	862	7
Growth 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
Initial Bse:	233	1	3	1	0	8	21	542	90	10	862	7
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1	3	1	0	8	21	542	90	10	862	7
User 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
PHF 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
PHF Volume:	233	1	3	1	0	8	21	542	90	10	862	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	233	1	3	1	0	8	21	542	90	10	862	7
PCE 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
MLF 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
FinalVolume:	233	1	3	1	0	8	21	542	90	10	862	7
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.03	1.00
Lanes:	1.00	0.25	0.75	0.11	0.00	0.89	1.00	1.72	0.28	1.00	1.98	0.02
Final Sat.:	1600	400	1200	178	0	1422	1600	2844	456	1600	3274	26
Capacity Analysis Module:												
Vol/Sat:	0.15	0.00	0.00	0.00	0.00	0.01	0.01	0.19	0.20	0.01	0.26	0.27
Crit Moves:	****					****	****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.447
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	195	0	39	0	0	0	0	459	88	23	684	0
Growth 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
Initial Bse:	195	0	39	0	0	0	0	459	88	23	684	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	195	0	39	0	0	0	0	459	88	23	684	0
User 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
PHF 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
PHF Volume:	195	0	39	0	0	0	0	459	88	23	684	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	0	39	0	0	0	0	459	88	23	684	0
PCE 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
MLF 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
FinalVolume:	195	0	39	0	0	0	0	459	88	23	684	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.04	1.00	1.00	1.06	1.06
Lanes:	0.83	0.00	0.17	0.00	0.00	0.00	0.00	1.68	0.32	1.00	2.00	0.00
Final Sat.:	1333	0	267	0	0	0	0	2785	515	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.00	0.15	0.00	0.00	0.00	0.00	0.16	0.17	0.01	0.20	0.00
Crit Moves:			****				****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.383
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	95	0	69	0	0	0	0	427	71	39	613	0
Growth 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
Initial Bse:	95	0	69	0	0	0	0	427	71	39	613	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	0	69	0	0	0	0	427	71	39	613	0
User 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
PHF 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
PHF Volume:	95	0	69	0	0	0	0	427	71	39	613	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	0	69	0	0	0	0	427	71	39	613	0
PCE 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
MLF 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
FinalVolume:	95	0	69	0	0	0	0	427	71	39	613	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.04	1.00	1.00	1.06	1.06
Lanes:	0.58	0.00	0.42	0.00	0.00	0.00	0.00	1.71	0.29	1.00	2.00	0.00
Final Sat.:	927	0	673	0	0	0	0	2844	456	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.10	0.00	0.00	0.00	0.00	0.15	0.16	0.02	0.18	0.00
Crit Moves:			****						****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.343
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	42	0	58	0	0	0	0	458	27	34	615	0
Growth 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
Initial Bse:	42	0	58	0	0	0	0	458	27	34	615	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	0	58	0	0	0	0	458	27	34	615	0
User 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
PHF 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
PHF Volume:	42	0	58	0	0	0	0	458	27	34	615	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	0	58	0	0	0	0	458	27	34	615	0
PCE 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
MLF 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
FinalVolume:	42	0	58	0	0	0	0	458	27	34	615	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.03	1.00	1.00	1.06	1.06
Lanes:	0.42	0.00	0.58	0.00	0.00	0.00	0.00	1.89	0.11	1.00	2.00	0.00
Final Sat.:	672	0	928	0	0	0	0	3122	178	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.06	0.00	0.00	0.00	0.00	0.15	0.15	0.02	0.18	0.00
Crit Moves:			****				****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.349
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1	0	1 0	1 1 0
Volume Module:												
Base Vol:	44	1	89	13	1	16	6	497	13	41	588	10
Growth 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
Initial Bse:	44	1	89	13	1	16	6	497	13	41	588	10
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	1	89	13	1	16	6	497	13	41	588	10
User 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
PHF 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
PHF Volume:	44	1	89	13	1	16	6	497	13	41	588	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	1	89	13	1	16	6	497	13	41	588	10
PCE 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
MLF 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
FinalVolume:	44	1	89	13	1	16	6	497	13	41	588	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.03	1.00
Lanes:	1.00	0.01	0.99	0.43	0.03	0.54	1.00	1.95	0.05	1.00	1.97	0.03
Final Sat.:	1600	18	1582	693	53	853	1600	3218	82	1600	3246	54
Capacity Analysis Module:												
Vol/Sat:	0.03	0.06	0.06	0.01	0.02	0.02	0.00	0.15	0.16	0.03	0.18	0.19
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

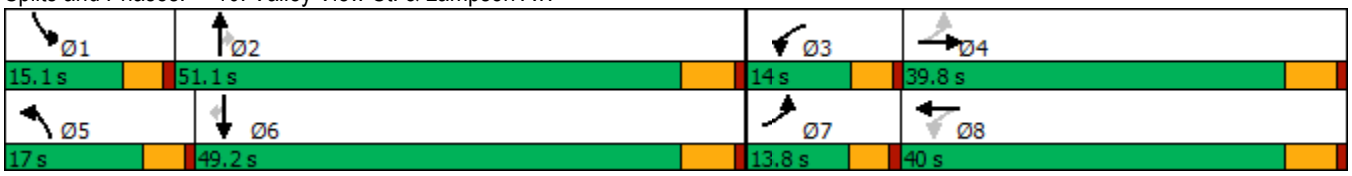
Cycle (sec):	100	Critical Vol./Cap.(X):	0.909
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	105	Level Of Service:	E

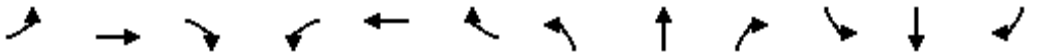
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	180	1694	205	136	1844	207	216	279	171	311	373	267
Growth 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
Initial Bse:	180	1694	205	136	1844	207	216	279	171	311	373	267
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	180	1694	205	136	1844	207	216	279	171	311	373	267
User 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
PHF 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
PHF Volume:	180	1694	205	136	1844	207	216	279	171	311	373	267
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1694	205	136	1844	207	216	279	171	311	373	267
PCE 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
MLF 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
FinalVolume:	180	1694	205	136	1844	207	216	279	171	311	373	267
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.05	1.00	1.00	1.05	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.24	0.76	1.00	1.17	0.83
Final Sat.:	1600	5100	1700	1600	5100	1700	1600	2084	1216	1600	1965	1335
Capacity Analysis Module:												
Vol/Sat:	0.11	0.33	0.12	0.09	0.36	0.12	0.14	0.13	0.14	0.19	0.19	0.20
Crit Moves:	****				****		****					****

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	216	279	311	373	180	1694	205	136	1844	207
Future Volume (vph)	216	279	311	373	180	1694	205	136	1844	207
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8				2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	39.8	9.6	39.8	9.6	27.8	27.8	9.6	27.8	27.8
Total Split (s)	13.8	39.8	14.0	40.0	17.0	51.1	51.1	15.1	49.2	49.2
Total Split (%)	11.5%	33.2%	11.7%	33.3%	14.2%	42.6%	42.6%	12.6%	41.0%	41.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.8	4.8	3.6	4.8	4.8
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	5.8	4.6	5.8	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	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)	35.5	25.0	35.9	25.2	12.4	45.4	45.4	10.5	43.5	43.5
Actuated g/C Ratio	0.32	0.22	0.32	0.23	0.11	0.41	0.41	0.09	0.39	0.39
v/c Ratio	1.09	0.59	1.18	0.81	0.99	0.89	0.32	0.89	1.01	0.33
Control Delay	115.6	32.1	141.3	39.4	113.6	37.7	13.4	96.8	56.6	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	115.6	32.1	141.3	39.4	113.6	37.7	13.4	96.8	56.6	14.3
LOS	F	C	F	D	F	D	B	F	E	B
Approach Delay		59.2		72.8		41.9			55.1	
Approach LOS		E		E		D			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 111.3	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay: 53.8	Intersection LOS: D
Intersection Capacity Utilization 95.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Valley View St. & Lampson Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	216	279	171	311	373	267	180	1694	205	136	1844	207
Future Volume (veh/h)	216	279	171	311	373	267	180	1694	205	136	1844	207
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	235	303	148	338	405	232	196	1841	160	148	2004	176
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	531	253	317	498	282	198	2075	633	168	1988	609
Arrive On Green	0.08	0.23	0.23	0.08	0.23	0.23	0.11	0.41	0.41	0.09	0.39	0.39
Sat Flow, veh/h	1781	2323	1105	1781	2164	1223	1781	5106	1557	1781	5106	1564
Grp Volume(v), veh/h	235	230	221	338	332	305	196	1841	160	148	2004	176
Grp Sat Flow(s),veh/h/ln	1781	1777	1651	1781	1777	1610	1781	1702	1557	1781	1702	1564
Q Serve(g_s), s	9.2	12.8	13.3	9.4	19.7	20.1	12.2	37.3	7.6	9.1	43.4	8.6
Cycle Q Clear(g_c), s	9.2	12.8	13.3	9.4	19.7	20.1	12.2	37.3	7.6	9.1	43.4	8.6
Prop In Lane	1.00		0.67	1.00		0.76	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	406	377	317	409	371	198	2075	633	168	1988	609
V/C Ratio(X)	0.94	0.57	0.59	1.06	0.81	0.82	0.99	0.89	0.25	0.88	1.01	0.29
Avail Cap(c_a), veh/h	251	542	504	317	545	494	198	2075	633	168	1988	609
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	36.5	38.1	38.3	39.5	40.6	40.7	49.5	30.7	21.9	49.9	34.0	23.4
Incr Delay (d2), s/veh	39.1	1.2	1.4	68.7	6.7	8.2	60.6	5.1	0.2	37.0	22.2	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	4.6	5.5	5.3	10.1	9.0	8.5	8.6	15.2	2.7	5.7	20.7	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.5	39.3	39.7	108.2	47.3	49.0	110.0	35.8	22.1	86.9	56.2	23.7
LnGrp LOS	E	D	D	F	D	D	F	D	C	F	F	C
Approach Vol, veh/h		686			975			2197			2328	
Approach Delay, s/veh		51.9			69.0			41.4			55.7	
Approach LOS		D			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	51.1	14.0	31.3	17.0	49.2	13.8	31.5
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	10.5	45.3	9.4	34.0	12.4	43.4	9.2	34.2
Max Q Clear Time (g_c+I1), s	11.1	39.3	11.4	15.3	14.2	45.4	11.2	22.1
Green Ext Time (p_c), s	0.0	4.9	0.0	2.3	0.0	0.0	0.0	2.9

Intersection Summary	
HCM 6th Ctrl Delay	52.3
HCM 6th LOS	D

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	1.000
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 1	2	0 3	0 0	0 0	0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	1893	532	571	1504	0	0	0	0	488	0	595
Growth 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
Initial Bse:	0	1893	532	571	1504	0	0	0	0	488	0	595
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1893	532	571	1504	0	0	0	0	488	0	595
User 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
PHF 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
PHF Volume:	0	1893	532	571	1504	0	0	0	0	488	0	595
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1893	532	571	1504	0	0	0	0	488	0	595
PCE 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
MLF 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
FinalVolume:	0	1893	532	571	1504	0	0	0	0	488	0	595
OvlAdjVol:			273									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3200	5100	0	0	0	0	3200	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.31	0.18	0.29	0.00	0.00	0.00	0.00	0.15	0.00	0.35
OvlAdjV/S:			0.16									
Crit Moves:		****			****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.444
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	48	0	11	3	1	20	38	976	39	8	875	6
Growth 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
Initial Bse:	48	0	11	3	1	20	38	976	39	8	875	6
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	0	11	3	1	20	38	976	39	8	875	6
User 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
PHF 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
PHF Volume:	48	0	11	3	1	20	38	976	39	8	875	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	0	11	3	1	20	38	976	39	8	875	6
PCE 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
MLF 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
FinalVolume:	48	0	11	3	1	20	38	976	39	8	875	6
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.06	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.03	1.00
Lanes:	1.00	0.00	1.00	0.12	0.04	0.84	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1600	0	1700	200	67	1333	1600	3400	1700	1600	3278	22
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.01	0.00	0.01	0.02	0.02	0.29	0.02	0.01	0.27	0.28
Crit Moves:	****					****	****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.510
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	141	0	11	5	3	43	30	769	132	13	699	3
Growth 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
Initial Bse:	141	0	11	5	3	43	30	769	132	13	699	3
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	141	0	11	5	3	43	30	769	132	13	699	3
User 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
PHF 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
PHF Volume:	141	0	11	5	3	43	30	769	132	13	699	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	0	11	5	3	43	30	769	132	13	699	3
PCE 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
MLF 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
FinalVolume:	141	0	11	5	3	43	30	769	132	13	699	3
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.03	1.00
Lanes:	1.00	0.00	1.00	0.10	0.06	0.84	1.00	1.71	0.29	1.00	1.99	0.01
Final Sat.:	1600	0	1600	157	94	1349	1600	2831	469	1600	3286	14
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.01	0.00	0.03	0.03	0.02	0.27	0.28	0.01	0.21	0.22
Crit Moves:	****			****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.431
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	80	0	26	0	0	0	0	659	127	31	635	0
Growth 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
Initial Bse:	80	0	26	0	0	0	0	659	127	31	635	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	0	26	0	0	0	0	659	127	31	635	0
User 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
PHF 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
PHF Volume:	80	0	26	0	0	0	0	659	127	31	635	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	0	26	0	0	0	0	659	127	31	635	0
PCE 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
MLF 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
FinalVolume:	80	0	26	0	0	0	0	659	127	31	635	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.04	1.00	1.00	1.06	1.06
Lanes:	0.75	0.00	0.25	0.00	0.00	0.00	0.00	1.68	0.32	1.00	2.00	0.00
Final Sat.:	1208	0	392	0	0	0	0	2783	517	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.07	0.00	0.00	0.00	0.00	0.24	0.25	0.02	0.19	0.00
Crit Moves:			****						****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.428
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	59	0	57	0	0	0	0	616	68	78	607	0
Growth 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
Initial Bse:	59	0	57	0	0	0	0	616	68	78	607	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	0	57	0	0	0	0	616	68	78	607	0
User 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
PHF 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
PHF Volume:	59	0	57	0	0	0	0	616	68	78	607	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	0	57	0	0	0	0	616	68	78	607	0
PCE 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
MLF 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
FinalVolume:	59	0	57	0	0	0	0	616	68	78	607	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.03	1.00	1.00	1.06	1.06
Lanes:	0.51	0.00	0.49	0.00	0.00	0.00	0.00	1.80	0.20	1.00	2.00	0.00
Final Sat.:	814	0	786	0	0	0	0	2982	318	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.07	0.00	0.00	0.00	0.00	0.21	0.21	0.05	0.18	0.00
Crit Moves:			****					****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.424
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	32	0	63	0	0	0	0	654	38	78	616	0
Growth 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
Initial Bse:	32	0	63	0	0	0	0	654	38	78	616	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	0	63	0	0	0	0	654	38	78	616	0
User 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
PHF 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
PHF Volume:	32	0	63	0	0	0	0	654	38	78	616	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	0	63	0	0	0	0	654	38	78	616	0
PCE 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
MLF 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
FinalVolume:	32	0	63	0	0	0	0	654	38	78	616	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.03	1.00	1.00	1.06	1.06
Lanes:	0.34	0.00	0.66	0.00	0.00	0.00	0.00	1.89	0.11	1.00	2.00	0.00
Final Sat.:	539	0	1061	0	0	0	0	3124	176	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.21	0.22	0.05	0.18	0.00
Crit Moves:			****						****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.431
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	31	0	73	11	0	13	8	678	31	91	651	21
Growth 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
Initial Bse:	31	0	73	11	0	13	8	678	31	91	651	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	0	73	11	0	13	8	678	31	91	651	21
User 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
PHF 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
PHF Volume:	31	0	73	11	0	13	8	678	31	91	651	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	0	73	11	0	13	8	678	31	91	651	21
PCE 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
MLF 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
FinalVolume:	31	0	73	11	0	13	8	678	31	91	651	21
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.03	1.00
Lanes:	1.00	0.00	1.00	0.46	0.00	0.54	1.00	1.91	0.09	1.00	1.94	0.06
Final Sat.:	1600	0	1600	733	0	867	1600	3160	140	1600	3200	100
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.05	0.01	0.00	0.01	0.01	0.21	0.22	0.06	0.20	0.21
Crit Moves:			****	****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

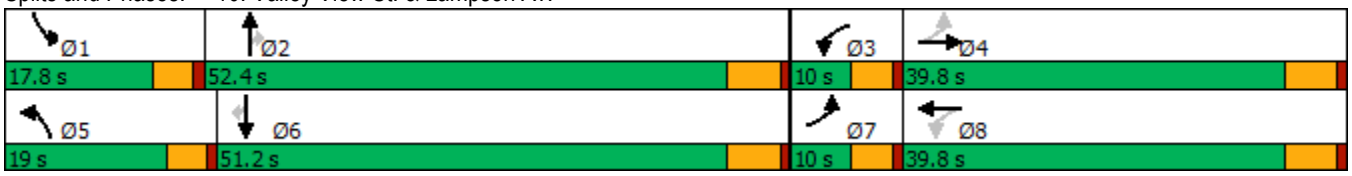
Cycle (sec):	100	Critical Vol./Cap.(X):	0.945
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	129	Level Of Service:	E

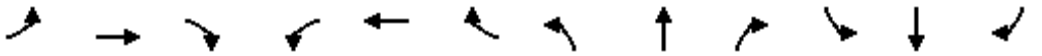
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	244	1875	177	198	2029	258	280	315	152	235	248	135
Growth 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
Initial Bse:	244	1875	177	198	2029	258	280	315	152	235	248	135
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	244	1875	177	198	2029	258	280	315	152	235	248	135
User 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
PHF 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
PHF Volume:	244	1875	177	198	2029	258	280	315	152	235	248	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	244	1875	177	198	2029	258	280	315	152	235	248	135
PCE 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
MLF 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
FinalVolume:	244	1875	177	198	2029	258	280	315	152	235	248	135
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.05	1.00	1.00	1.05	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.35	0.65	1.00	1.30	0.70
Final Sat.:	1600	5100	1700	1600	5100	1700	1600	2258	1042	1600	2172	1128
Capacity Analysis Module:												
Vol/Sat:	0.15	0.37	0.10	0.12	0.40	0.15	0.17	0.14	0.15	0.15	0.11	0.12
Crit Moves:	****			****			****					****

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	280	315	235	248	244	1875	177	198	2029	258
Future Volume (vph)	280	315	235	248	244	1875	177	198	2029	258
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8				2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	39.8	9.6	39.8	9.6	27.8	27.8	9.6	27.8	27.8
Total Split (s)	10.0	39.8	10.0	39.8	19.0	52.4	52.4	17.8	51.2	51.2
Total Split (%)	8.3%	33.2%	8.3%	33.2%	15.8%	43.7%	43.7%	14.8%	42.7%	42.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.8	4.8	3.6	4.8	4.8
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	5.8	4.6	5.8	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	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)	26.6	20.0	26.6	20.0	14.5	46.8	46.8	13.3	45.6	45.6
Actuated g/C Ratio	0.25	0.19	0.25	0.19	0.14	0.44	0.44	0.12	0.43	0.43
v/c Ratio	1.26	0.70	1.25	0.57	1.05	0.86	0.24	0.93	0.96	0.36
Control Delay	179.0	40.0	180.7	33.4	117.4	32.9	9.7	92.4	42.5	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	179.0	40.0	180.7	33.4	117.4	32.9	9.7	92.4	42.5	14.3
LOS	F	D	F	C	F	C	A	F	D	B
Approach Delay		92.1		89.3		40.1			43.5	
Approach LOS		F		F		D			D	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 106.4		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 1.26		
Intersection Signal Delay: 52.7	Intersection LOS: D	
Intersection Capacity Utilization 98.1%	ICU Level of Service F	
Analysis Period (min) 15		

Splits and Phases: 10: Valley View St. & Lampson Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	315	152	235	248	135	244	1875	177	198	2029	258
Future Volume (veh/h)	280	315	152	235	248	135	244	1875	177	198	2029	258
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	289	325	123	242	256	117	252	1933	143	204	2092	188
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	438	162	208	412	182	247	2283	699	227	2224	689
Arrive On Green	0.05	0.17	0.17	0.05	0.17	0.17	0.14	0.45	0.45	0.13	0.44	0.44
Sat Flow, veh/h	1781	2532	940	1781	2382	1054	1781	5106	1564	1781	5106	1583
Grp Volume(v), veh/h	289	226	222	242	189	184	252	1933	143	204	2092	188
Grp Sat Flow(s),veh/h/ln	1781	1777	1695	1781	1777	1660	1781	1702	1564	1781	1702	1583
Q Serve(g_s), s	5.4	12.5	12.9	5.4	10.2	10.7	14.4	34.9	5.8	11.7	40.6	7.9
Cycle Q Clear(g_c), s	5.4	12.5	12.9	5.4	10.2	10.7	14.4	34.9	5.8	11.7	40.6	7.9
Prop In Lane	1.00		0.55	1.00		0.64	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	307	293	208	307	287	247	2283	699	227	2224	689
V/C Ratio(X)	1.24	0.74	0.76	1.17	0.61	0.64	1.02	0.85	0.20	0.90	0.94	0.27
Avail Cap(c_a), veh/h	232	583	556	208	583	544	247	2295	703	227	2236	693
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	42.5	40.6	40.8	42.1	39.7	39.9	44.6	25.5	17.4	44.6	28.0	18.7
Incr Delay (d2), s/veh	140.6	3.4	4.0	114.2	2.0	2.4	62.1	3.1	0.1	33.3	8.7	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	12.3	5.5	5.5	9.2	4.4	4.4	10.4	13.5	2.0	7.1	16.8	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	183.1	44.1	44.8	156.3	41.7	42.3	106.7	28.6	17.6	77.9	36.7	19.0
LnGrp LOS	F	D	D	F	D	D	F	C	B	E	D	B
Approach Vol, veh/h		737			615			2328			2484	
Approach Delay, s/veh		98.8			87.0			36.4			38.7	
Approach LOS		F			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	52.2	10.0	23.7	19.0	51.0	10.0	23.7
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	13.2	46.6	5.4	34.0	14.4	45.4	5.4	34.0
Max Q Clear Time (g_c+I1), s	13.7	36.9	7.4	14.9	16.4	42.6	7.4	12.7
Green Ext Time (p_c), s	0.0	7.7	0.0	2.3	0.0	2.5	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	49.8
HCM 6th LOS	D

APPENDIX 6.2: GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	1.035
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1479	426	689	1591	0	0	0	0	440	0	711
Growth 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
Initial Bse:	0	1479	426	689	1591	0	0	0	0	440	0	711
Added Vol:	0	0	10	6	0	0	0	0	0	29	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1479	436	695	1591	0	0	0	0	469	0	728
User 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
PHF 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
PHF Volume:	0	1479	436	695	1591	0	0	0	0	469	0	728
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1479	436	695	1591	0	0	0	0	469	0	728
PCE 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
MLF 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
FinalVolume:	0	1479	436	695	1591	0	0	0	0	469	0	728
OvlAdjVol:			187									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3200	5100	0	0	0	0	3200	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.26	0.22	0.31	0.00	0.00	0.00	0.00	0.15	0.00	0.43
OvlAdjV/S:			0.11									
Crit Moves:		****			****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.495
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	33	3	8	6	0	34	18	732	36	11	1032	5
Growth 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
Initial Bse:	33	3	8	6	0	34	18	732	36	11	1032	5
Added Vol:	0	0	0	0	0	0	0	16	0	0	46	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	3	8	6	0	34	18	748	36	11	1078	5
User 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
PHF 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
PHF Volume:	33	3	8	6	0	34	18	748	36	11	1078	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	3	8	6	0	34	18	748	36	11	1078	5
PCE 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
MLF 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
FinalVolume:	33	3	8	6	0	34	18	748	36	11	1078	5
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.06	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.03	1.00
Lanes:	0.92	0.08	1.00	0.15	0.00	0.85	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1467	133	1700	240	0	1360	1600	3400	1700	1600	3285	15
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.00	0.00	0.00	0.03	0.01	0.22	0.02	0.01	0.33	0.34
Crit Moves:	****					****	****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.550
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1	0	1 0	1 1 0
Volume Module:												
Base Vol:	233	1	3	1	0	8	21	542	90	10	862	7
Growth 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
Initial Bse:	233	1	3	1	0	8	21	542	90	10	862	7
Added Vol:	0	0	0	0	0	0	0	16	0	0	46	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1	3	1	0	8	21	558	90	10	908	7
User 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
PHF 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
PHF Volume:	233	1	3	1	0	8	21	558	90	10	908	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	233	1	3	1	0	8	21	558	90	10	908	7
PCE 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
MLF 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
FinalVolume:	233	1	3	1	0	8	21	558	90	10	908	7
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.03	1.00
Lanes:	1.00	0.25	0.75	0.11	0.00	0.89	1.00	1.72	0.28	1.00	1.98	0.02
Final Sat.:	1600	400	1200	178	0	1422	1600	2856	444	1600	3276	24
Capacity Analysis Module:												
Vol/Sat:	0.15	0.00	0.00	0.00	0.00	0.01	0.01	0.20	0.20	0.01	0.28	0.29
Crit Moves:	****					****	****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.461
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	195	0	39	0	0	0	0	459	88	23	684	0
Growth 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
Initial Bse:	195	0	39	0	0	0	0	459	88	23	684	0
Added Vol:	0	0	0	0	0	0	0	16	0	0	46	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	195	0	39	0	0	0	0	475	88	23	730	0
User 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
PHF 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
PHF Volume:	195	0	39	0	0	0	0	475	88	23	730	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	0	39	0	0	0	0	475	88	23	730	0
PCE 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
MLF 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
FinalVolume:	195	0	39	0	0	0	0	475	88	23	730	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.04	1.00	1.00	1.06	1.06
Lanes:	0.83	0.00	0.17	0.00	0.00	0.00	0.00	1.69	0.31	1.00	2.00	0.00
Final Sat.:	1333	0	267	0	0	0	0	2800	500	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.00	0.15	0.00	0.00	0.00	0.00	0.17	0.18	0.01	0.21	0.00
Crit Moves:			****				****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.396
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	95	0	69	0	0	0	0	427	71	39	613	0
Growth 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
Initial Bse:	95	0	69	0	0	0	0	427	71	39	613	0
Added Vol:	0	0	0	0	0	0	0	16	0	0	46	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	0	69	0	0	0	0	443	71	39	659	0
User 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
PHF 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
PHF Volume:	95	0	69	0	0	0	0	443	71	39	659	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	0	69	0	0	0	0	443	71	39	659	0
PCE 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
MLF 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
FinalVolume:	95	0	69	0	0	0	0	443	71	39	659	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.04	1.00	1.00	1.06	1.06
Lanes:	0.58	0.00	0.42	0.00	0.00	0.00	0.00	1.72	0.28	1.00	2.00	0.00
Final Sat.:	927	0	673	0	0	0	0	2858	442	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.10	0.00	0.00	0.00	0.00	0.16	0.16	0.02	0.19	0.00
Crit Moves:			****					****				****

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	501	682	7	0	21
Future Vol, veh/h	0	501	682	7	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
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	545	741	8	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	375
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	623
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	623
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	623
HCM Lane V/C Ratio	-	-	-	0.037
HCM Control Delay (s)	-	-	-	11
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	485	664	6	37	25
Future Vol, veh/h	16	485	664	6	37	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	527	722	7	40	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	729	0	-	0	1024	365
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	298	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	871	-	-	-	231	632
Stage 1	-	-	-	-	440	-
Stage 2	-	-	-	-	727	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	871	-	-	-	226	632
Mov Cap-2 Maneuver	-	-	-	-	339	-
Stage 1	-	-	-	-	431	-
Stage 2	-	-	-	-	727	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	15.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	871	-	-	-	417
HCM Lane V/C Ratio	0.02	-	-	-	0.162
HCM Control Delay (s)	9.2	-	-	-	15.3
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.342
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	42	0	58	0	0	0	0	458	27	34	615	0
Growth 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
Initial Bse:	42	0	58	0	0	0	0	458	27	34	615	0
Added Vol:	0	0	0	0	0	0	0	37	0	0	13	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	0	58	0	0	0	0	495	27	34	628	0
User 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
PHF 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
PHF Volume:	42	0	58	0	0	0	0	495	27	34	628	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	0	58	0	0	0	0	495	27	34	628	0
PCE 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
MLF 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
FinalVolume:	42	0	58	0	0	0	0	495	27	34	628	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.03	1.00	1.00	1.06	1.06
Lanes:	0.42	0.00	0.58	0.00	0.00	0.00	0.00	1.90	0.10	1.00	2.00	0.00
Final Sat.:	672	0	928	0	0	0	0	3134	166	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.06	0.00	0.00	0.00	0.00	0.16	0.16	0.02	0.18	0.00
Crit Moves:			****					****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.356
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	44	1	89	13	1	16	6	497	13	41	588	10
Growth 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
Initial Bse:	44	1	89	13	1	16	6	497	13	41	588	10
Added Vol:	0	0	0	0	0	0	0	37	0	0	13	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	1	89	13	1	16	6	534	13	41	601	10
User 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
PHF 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
PHF Volume:	44	1	89	13	1	16	6	534	13	41	601	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	1	89	13	1	16	6	534	13	41	601	10
PCE 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
MLF 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
FinalVolume:	44	1	89	13	1	16	6	534	13	41	601	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.03	1.00
Lanes:	1.00	0.01	0.99	0.43	0.03	0.54	1.00	1.95	0.05	1.00	1.97	0.03
Final Sat.:	1600	18	1582	693	53	853	1600	3224	76	1600	3248	52
Capacity Analysis Module:												
Vol/Sat:	0.03	0.06	0.06	0.01	0.02	0.02	0.00	0.17	0.17	0.03	0.19	0.19
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

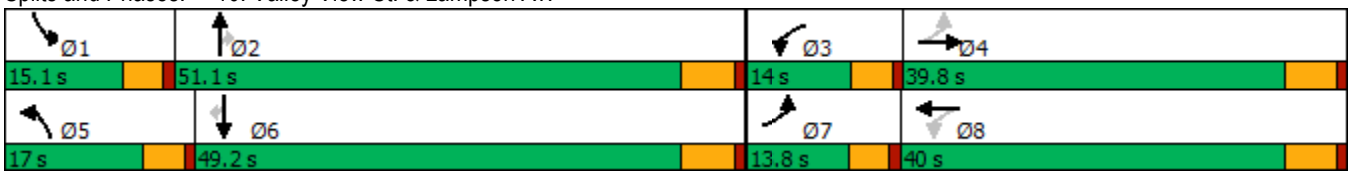
Cycle (sec):	100	Critical Vol./Cap.(X):	0.919
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	111	Level Of Service:	E

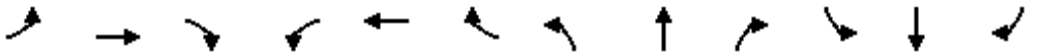
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	180	1694	205	136	1844	207	216	279	171	311	373	267
Growth 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
Initial Bse:	180	1694	205	136	1844	207	216	279	171	311	373	267
Added Vol:	6	0	0	0	0	3	8	12	17	0	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	186	1694	205	136	1844	210	224	291	188	311	377	267
User 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
PHF 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
PHF Volume:	186	1694	205	136	1844	210	224	291	188	311	377	267
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	1694	205	136	1844	210	224	291	188	311	377	267
PCE 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
MLF 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
FinalVolume:	186	1694	205	136	1844	210	224	291	188	311	377	267
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.05	1.00	1.00	1.05	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.22	0.78	1.00	1.17	0.83
Final Sat.:	1600	5100	1700	1600	5100	1700	1600	2044	1256	1600	1973	1327
Capacity Analysis Module:												
Vol/Sat:	0.12	0.33	0.12	0.09	0.36	0.12	0.14	0.14	0.15	0.19	0.19	0.20
Crit Moves:	****				****		****					****

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	224	291	311	377	186	1694	205	136	1844	210
Future Volume (vph)	224	291	311	377	186	1694	205	136	1844	210
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8				2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	39.8	9.6	39.8	9.6	27.8	27.8	9.6	27.8	27.8
Total Split (s)	13.8	39.8	14.0	40.0	17.0	51.1	51.1	15.1	49.2	49.2
Total Split (%)	11.5%	33.2%	11.7%	33.3%	14.2%	42.6%	42.6%	12.6%	41.0%	41.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.8	4.8	3.6	4.8	4.8
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	5.8	4.6	5.8	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	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)	35.7	25.2	36.1	25.4	12.4	45.4	45.4	10.5	43.5	43.5
Actuated g/C Ratio	0.32	0.23	0.32	0.23	0.11	0.41	0.41	0.09	0.39	0.39
v/c Ratio	1.12	0.62	1.23	0.81	1.03	0.89	0.32	0.89	1.01	0.34
Control Delay	127.7	32.3	160.8	39.7	120.9	37.9	13.4	96.8	57.1	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	127.7	32.3	160.8	39.7	120.9	37.9	13.4	96.8	57.1	14.5
LOS	F	C	F	D	F	D	B	F	E	B
Approach Delay		62.6		79.2		42.9			55.5	
Approach LOS		E		E		D			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 111.5	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.23	
Intersection Signal Delay: 55.7	Intersection LOS: E
Intersection Capacity Utilization 96.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Valley View St. & Lampson Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	291	188	311	377	267	186	1694	205	136	1844	210
Future Volume (veh/h)	224	291	188	311	377	267	186	1694	205	136	1844	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	243	316	166	338	410	232	202	1841	160	148	2004	179
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	519	266	306	503	281	198	2072	632	168	1985	608
Arrive On Green	0.08	0.23	0.23	0.08	0.23	0.23	0.11	0.41	0.41	0.09	0.39	0.39
Sat Flow, veh/h	1781	2260	1158	1781	2175	1214	1781	5106	1557	1781	5106	1564
Grp Volume(v), veh/h	243	247	235	338	334	308	202	1841	160	148	2004	179
Grp Sat Flow(s),veh/h/ln	1781	1777	1641	1781	1777	1612	1781	1702	1557	1781	1702	1564
Q Serve(g_s), s	9.2	13.9	14.4	9.4	19.9	20.3	12.4	37.4	7.6	9.2	43.4	8.8
Cycle Q Clear(g_c), s	9.2	13.9	14.4	9.4	19.9	20.3	12.4	37.4	7.6	9.2	43.4	8.8
Prop In Lane	1.00		0.71	1.00		0.75	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	408	377	306	411	373	198	2072	632	168	1985	608
V/C Ratio(X)	0.97	0.60	0.62	1.10	0.81	0.83	1.02	0.89	0.25	0.88	1.01	0.29
Avail Cap(c_a), veh/h	251	541	500	306	544	494	198	2072	632	168	1985	608
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	37.1	38.5	38.7	39.3	40.6	40.8	49.6	30.8	22.0	50.0	34.1	23.6
Incr Delay (d2), s/veh	48.0	1.4	1.7	81.9	6.9	8.4	69.5	5.2	0.2	37.4	22.6	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	5.5	6.0	5.8	10.7	9.1	8.6	9.2	15.3	2.7	5.7	20.8	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.1	39.9	40.4	121.2	47.5	49.2	119.2	36.0	22.2	87.3	56.7	23.8
LnGrp LOS	F	D	D	F	D	D	F	D	C	F	F	C
Approach Vol, veh/h		725			980			2203			2331	
Approach Delay, s/veh		55.2			73.5			42.6			56.1	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	51.1	14.0	31.4	17.0	49.2	13.8	31.6
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	10.5	45.3	9.4	34.0	12.4	43.4	9.2	34.2
Max Q Clear Time (g_c+I1), s	11.2	39.4	11.4	16.4	14.4	45.4	11.2	22.3
Green Ext Time (p_c), s	0.0	4.9	0.0	2.5	0.0	0.0	0.0	2.9

Intersection Summary	
HCM 6th Ctrl Delay	54.0
HCM 6th LOS	D

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	1.012
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 1	2	0 3	0 0	0 0	0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	1893	532	571	1504	0	0	0	0	488	0	595
Growth 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
Initial Bse:	0	1893	532	571	1504	0	0	0	0	488	0	595
Added Vol:	0	0	32	18	0	0	0	0	0	20	0	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1893	564	589	1504	0	0	0	0	508	0	606
User 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
PHF 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
PHF Volume:	0	1893	564	589	1504	0	0	0	0	508	0	606
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1893	564	589	1504	0	0	0	0	508	0	606
PCE 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
MLF 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
FinalVolume:	0	1893	564	589	1504	0	0	0	0	508	0	606
OvlAdjVol:			294									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3200	5100	0	0	0	0	3200	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.33	0.18	0.29	0.00	0.00	0.00	0.00	0.16	0.00	0.36
OvlAdjV/S:			0.17									
Crit Moves:		****			****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.454
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	48	0	11	3	1	20	38	976	39	8	875	6
Growth 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
Initial Bse:	48	0	11	3	1	20	38	976	39	8	875	6
Added Vol:	0	0	0	0	0	0	0	50	0	0	31	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	0	11	3	1	20	38	1026	39	8	906	6
User 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
PHF 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
PHF Volume:	48	0	11	3	1	20	38	1026	39	8	906	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	0	11	3	1	20	38	1026	39	8	906	6
PCE 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
MLF 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
FinalVolume:	48	0	11	3	1	20	38	1026	39	8	906	6
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.06	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.03	1.00
Lanes:	1.00	0.00	1.00	0.12	0.04	0.84	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1600	0	1700	200	67	1333	1600	3400	1700	1600	3279	21
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.01	0.00	0.01	0.02	0.02	0.30	0.02	0.01	0.28	0.29
Crit Moves:	****					****	****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	141	0	11	5	3	43	30	769	132	13	699	3
Growth 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
Initial Bse:	141	0	11	5	3	43	30	769	132	13	699	3
Added Vol:	0	0	0	0	0	0	0	50	0	0	31	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	141	0	11	5	3	43	30	819	132	13	730	3
User 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
PHF 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
PHF Volume:	141	0	11	5	3	43	30	819	132	13	730	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	0	11	5	3	43	30	819	132	13	730	3
PCE 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
MLF 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
FinalVolume:	141	0	11	5	3	43	30	819	132	13	730	3
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.03	1.00
Lanes:	1.00	0.00	1.00	0.10	0.06	0.84	1.00	1.72	0.28	1.00	1.99	0.01
Final Sat.:	1600	0	1600	157	94	1349	1600	2856	444	1600	3287	13
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.01	0.00	0.03	0.03	0.02	0.29	0.30	0.01	0.22	0.23
Crit Moves:	****			****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.447
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	80	0	26	0	0	0	0	659	127	31	635	0
Growth 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
Initial Bse:	80	0	26	0	0	0	0	659	127	31	635	0
Added Vol:	0	0	0	0	0	0	0	50	0	0	31	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	0	26	0	0	0	0	709	127	31	666	0
User 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
PHF 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
PHF Volume:	80	0	26	0	0	0	0	709	127	31	666	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	0	26	0	0	0	0	709	127	31	666	0
PCE 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
MLF 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
FinalVolume:	80	0	26	0	0	0	0	709	127	31	666	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.04	1.00	1.00	1.06	1.06
Lanes:	0.75	0.00	0.25	0.00	0.00	0.00	0.00	1.70	0.30	1.00	2.00	0.00
Final Sat.:	1208	0	392	0	0	0	0	2814	486	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.07	0.00	0.00	0.00	0.00	0.25	0.26	0.02	0.20	0.00
Crit Moves:			****						****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.451
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	59	0	57	0	0	0	0	616	68	78	607	0
Growth 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
Initial Bse:	59	0	57	0	0	0	0	616	68	78	607	0
Added Vol:	0	0	0	0	0	0	0	50	0	0	31	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	0	57	0	0	0	0	666	68	78	638	0
User 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
PHF 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
PHF Volume:	59	0	57	0	0	0	0	666	68	78	638	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	0	57	0	0	0	0	666	68	78	638	0
PCE 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
MLF 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
FinalVolume:	59	0	57	0	0	0	0	666	68	78	638	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.03	1.00	1.00	1.06	1.06
Lanes:	0.51	0.00	0.49	0.00	0.00	0.00	0.00	1.81	0.19	1.00	2.00	0.00
Final Sat.:	814	0	786	0	0	0	0	3004	296	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.07	0.00	0.00	0.00	0.00	0.22	0.23	0.05	0.19	0.00
Crit Moves:			****						****	****		

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	742	665	23	0	14
Future Vol, veh/h	0	742	665	23	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
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	807	723	25	0	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	374
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	623
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	623
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	623
HCM Lane V/C Ratio	-	-	-	0.024
HCM Control Delay (s)	-	-	-	10.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	692	671	18	25	17
Future Vol, veh/h	50	692	671	18	25	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	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	752	729	20	27	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	749	0	-	0	1223	375
Stage 1	-	-	-	-	739	-
Stage 2	-	-	-	-	484	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	856	-	-	-	172	623
Stage 1	-	-	-	-	433	-
Stage 2	-	-	-	-	585	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	856	-	-	-	161	623
Mov Cap-2 Maneuver	-	-	-	-	289	-
Stage 1	-	-	-	-	406	-
Stage 2	-	-	-	-	585	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	16.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	856	-	-	-	369
HCM Lane V/C Ratio	0.063	-	-	-	0.124
HCM Control Delay (s)	9.5	-	-	-	16.1
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.4

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.425
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	32	0	63	0	0	0	0	654	38	78	616	0
Growth 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
Initial Bse:	32	0	63	0	0	0	0	654	38	78	616	0
Added Vol:	0	0	0	0	0	0	0	25	0	0	41	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	0	63	0	0	0	0	679	38	78	657	0
User 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
PHF 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
PHF Volume:	32	0	63	0	0	0	0	679	38	78	657	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	0	63	0	0	0	0	679	38	78	657	0
PCE 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
MLF 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
FinalVolume:	32	0	63	0	0	0	0	679	38	78	657	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.06	1.06	1.00	1.03	1.00	1.00	1.06	1.06
Lanes:	0.34	0.00	0.66	0.00	0.00	0.00	0.00	1.89	0.11	1.00	2.00	0.00
Final Sat.:	539	0	1061	0	0	0	0	3130	170	1600	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.22	0.22	0.05	0.19	0.00
Crit Moves:			****					****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.439
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	31	0	73	11	0	13	8	678	31	91	651	21
Growth 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
Initial Bse:	31	0	73	11	0	13	8	678	31	91	651	21
Added Vol:	0	0	0	0	0	0	0	25	0	0	41	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	0	73	11	0	13	8	703	31	91	692	21
User 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
PHF 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
PHF Volume:	31	0	73	11	0	13	8	703	31	91	692	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	0	73	11	0	13	8	703	31	91	692	21
PCE 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
MLF 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
FinalVolume:	31	0	73	11	0	13	8	703	31	91	692	21
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.03	1.00
Lanes:	1.00	0.00	1.00	0.46	0.00	0.54	1.00	1.92	0.08	1.00	1.94	0.06
Final Sat.:	1600	0	1600	733	0	867	1600	3165	135	1600	3206	94
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.05	0.01	0.00	0.01	0.01	0.22	0.23	0.06	0.22	0.22
Crit Moves:			****	****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

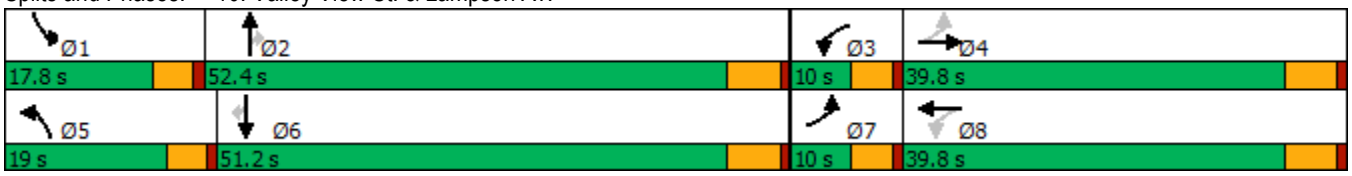
Cycle (sec):	100	Critical Vol./Cap.(X):	0.959
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	142	Level Of Service:	E

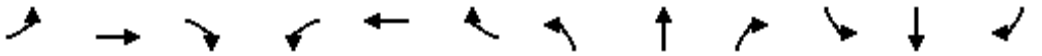
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	244	1875	177	198	2029	258	280	315	152	235	248	135
Growth 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
Initial Bse:	244	1875	177	198	2029	258	280	315	152	235	248	135
Added Vol:	18	0	0	0	0	9	6	8	11	0	14	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	262	1875	177	198	2029	267	286	323	163	235	262	135
User 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
PHF 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
PHF Volume:	262	1875	177	198	2029	267	286	323	163	235	262	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	262	1875	177	198	2029	267	286	323	163	235	262	135
PCE 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
MLF 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
FinalVolume:	262	1875	177	198	2029	267	286	323	163	235	262	135
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.05	1.00	1.00	1.05	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.33	0.67	1.00	1.32	0.68
Final Sat.:	1600	5100	1700	1600	5100	1700	1600	2227	1073	1600	2212	1088
Capacity Analysis Module:												
Vol/Sat:	0.16	0.37	0.10	0.12	0.40	0.16	0.18	0.15	0.15	0.15	0.12	0.12
Crit Moves:	****			****			****				****	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	286	323	235	262	262	1875	177	198	2029	267
Future Volume (vph)	286	323	235	262	262	1875	177	198	2029	267
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8				2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	39.8	9.6	39.8	9.6	27.8	27.8	9.6	27.8	27.8
Total Split (s)	10.0	39.8	10.0	39.8	19.0	52.4	52.4	17.8	51.2	51.2
Total Split (%)	8.3%	33.2%	8.3%	33.2%	15.8%	43.7%	43.7%	14.8%	42.7%	42.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.8	4.8	3.6	4.8	4.8
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	5.8	4.6	5.8	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	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)	27.2	20.6	27.2	20.6	14.5	46.8	46.8	13.3	45.6	45.6
Actuated g/C Ratio	0.25	0.19	0.25	0.19	0.14	0.44	0.44	0.12	0.43	0.43
v/c Ratio	1.29	0.71	1.28	0.58	1.13	0.87	0.24	0.93	0.97	0.38
Control Delay	193.0	39.9	191.0	34.5	141.2	33.5	9.8	93.9	43.7	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	193.0	39.9	191.0	34.5	141.2	33.5	9.8	93.9	43.7	14.6
LOS	F	D	F	C	F	C	A	F	D	B
Approach Delay		96.6		92.7		43.9			44.6	
Approach LOS		F		F		D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 107	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.29	
Intersection Signal Delay: 55.7	Intersection LOS: E
Intersection Capacity Utilization 99.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Valley View St. & Lampson Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	286	323	163	235	262	135	262	1875	177	198	2029	267
Future Volume (veh/h)	286	323	163	235	262	135	262	1875	177	198	2029	267
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	295	333	134	242	270	117	270	1933	143	204	2092	197
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	443	175	206	433	182	246	2269	695	225	2210	685
Arrive On Green	0.05	0.18	0.18	0.05	0.18	0.18	0.14	0.44	0.44	0.13	0.43	0.43
Sat Flow, veh/h	1781	2484	981	1781	2424	1020	1781	5106	1564	1781	5106	1583
Grp Volume(v), veh/h	295	236	231	242	196	191	270	1933	143	204	2092	197
Grp Sat Flow(s),veh/h/ln	1781	1777	1688	1781	1777	1667	1781	1702	1564	1781	1702	1583
Q Serve(g_s), s	5.4	13.2	13.6	5.4	10.6	11.1	14.4	35.4	5.8	11.8	41.1	8.4
Cycle Q Clear(g_c), s	5.4	13.2	13.6	5.4	10.6	11.1	14.4	35.4	5.8	11.8	41.1	8.4
Prop In Lane	1.00		0.58	1.00		0.61	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	317	301	206	317	298	246	2269	695	225	2210	685
V/C Ratio(X)	1.27	0.75	0.77	1.18	0.62	0.64	1.10	0.85	0.21	0.91	0.95	0.29
Avail Cap(c_a), veh/h	233	578	549	206	578	542	246	2278	698	225	2219	688
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	42.6	40.7	40.8	42.1	39.6	39.8	45.0	26.0	17.8	45.0	28.5	19.2
Incr Delay (d2), s/veh	149.8	3.5	4.1	118.1	2.0	2.3	86.7	3.3	0.1	35.0	9.4	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	12.9	5.8	5.8	9.3	4.6	4.6	12.0	13.7	2.0	7.2	17.2	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	192.5	44.1	44.9	160.3	41.6	42.1	131.7	29.3	17.9	80.0	37.9	19.4
LnGrp LOS	F	D	D	F	D	D	F	C	B	F	D	B
Approach Vol, veh/h		762			629			2346			2493	
Approach Delay, s/veh		101.8			87.4			40.4			39.9	
Approach LOS		F			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	52.2	10.0	24.5	19.0	51.0	10.0	24.5
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	13.2	46.6	5.4	34.0	14.4	45.4	5.4	34.0
Max Q Clear Time (g_c+I1), s	13.8	37.4	7.4	15.6	16.4	43.1	7.4	13.1
Green Ext Time (p_c), s	0.0	7.4	0.0	2.4	0.0	2.1	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	52.4
HCM 6th LOS	D

APPENDIX 6.3: GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

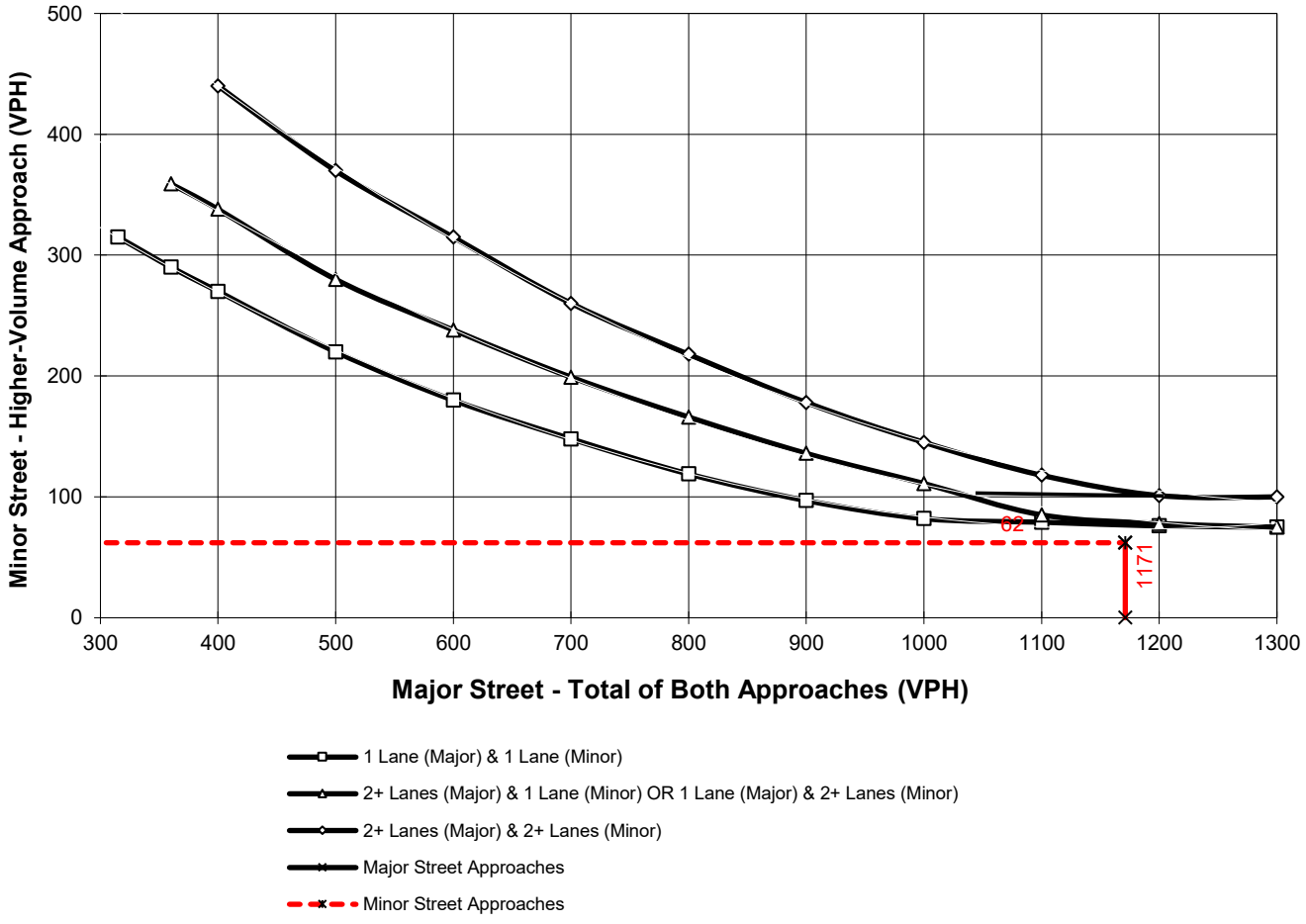
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **General Plan Buildout Conditions - Weekday AM Peak Hour**

Major Street Name = **Lampson Av.**
Total of Both Approaches (VPH) = **1171**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Driveway 2**
High Volume Approach (VPH) = **62**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 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		GPBO WP
				CALC CS	DATE	02/01/23
Jurisdiction: City of Seal Beach/Los Alamitos				CHK CS	DATE	02/01/23
Major Street: Lampson Av.				Critical Approach Speed (Major)		45 mph
Minor Street: Driveway 2				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **15,076** vpd

Minor Street Future ADT = **623** 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	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
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied XX / RURAL XX						
	1	*1*	8,000	5,600	2,400	1,680
	2 + **15,076**	*1* **623**	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						
	1	*1*	12,000	8,400	1,200	850
	2 + **15,076**	*1* **623**	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** 37%	**B** 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.

APPENDIX 6.4: GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.857
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1479	426	689	1591	0	0	0	0	440	0	711
Growth 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
Initial Bse:	0	1479	426	689	1591	0	0	0	0	440	0	711
Added Vol:	0	0	10	6	0	0	0	0	0	29	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1479	436	695	1591	0	0	0	0	469	0	728
User 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
PHF 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
PHF Volume:	0	1479	436	695	1591	0	0	0	0	469	0	728
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1479	436	695	1591	0	0	0	0	469	0	728
PCE 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
MLF 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
FinalVolume:	0	1479	436	695	1591	0	0	0	0	469	0	728
OvlAdjVol:			12									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.03
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.18	0.00	1.82
Final Sat.:	0	5100	1700	3200	5100	0	0	0	0	1881	0	3019
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.26	0.22	0.31	0.00	0.00	0.00	0.00	0.25	0.00	0.24
OvlAdjV/S:			0.01									
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.887
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	94	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1893	532	571	1504	0	0	0	0	488	0	595
Growth 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
Initial Bse:	0	1893	532	571	1504	0	0	0	0	488	0	595
Added Vol:	0	0	32	18	0	0	0	0	0	20	0	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1893	564	589	1504	0	0	0	0	508	0	606
User 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
PHF 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
PHF Volume:	0	1893	564	589	1504	0	0	0	0	508	0	606
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1893	564	589	1504	0	0	0	0	508	0	606
PCE 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
MLF 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
FinalVolume:	0	1893	564	589	1504	0	0	0	0	508	0	606
OvlAdjVol:			169									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.04
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.37	xxxx	1.63
Final Sat.:	0	5100	1700	3200	5100	0	0	0	0	2189	0	2711
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.33	0.18	0.29	0.00	0.00	0.00	0.00	0.23	0.00	0.22
OvlAdjV/S:			0.10									
Crit Moves:		****		****						****		