LINSCOTT LAW & GREENSPAN engineers

LOCAL TRANSPORTATION ASSESSMENT

TRI-CITY HOSPITAL

Oceanside, California
October 12, 2021

LLG Ref. 3-21-3364

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EXECUTIVE SUMMARY

The Project proposes the construction of a 13,400 SF, 16-bed psychiatric facility. The Project is consistent with the existing General Plan and Zoning. The existing medical center is primarily accessible via Vista Way and Thunder Drive. The proposed new building will use the existing Tri-City Hospital access on Vista Way.

VMT ANALYSIS

The Project is screened out from requiring a VMT analysis based on the following criteria:

- The Project is located in a low-VMT generating area identified on the most recent SANDAG SB 743 VMT Screening map.
- The Project is consistent with the adopted general plan and generates 320 ADT, less than the 1,000 ADT threshold.

Therefore, the Project is presumed to have a less than significant CEQA / VMT impact.

LOCAL TRANSPORTATION ASSESSMENT

Following is a summary of the Local Transportation Assessment.

Study Area

This study analyzes the following intersections.

1. W. Vista Way / SR-78 WB Ramps (Home Depot Dwy)
2. W. Vista Way / Tri-City Hospital Driveway
3. W. Vista Way / Thunder Drive

Study Scenarios

The following scenarios were analyzed:

- Existing Conditions
- Existing Conditions + Project

Trip Generation

The Project is calculated to generate 320 daily trips with 26 trips during the AM peak hour (18 inbound/ 8 outbound trips) and 32 trips during PM peak hour (13 inbound/ 19 outbound trips).

Intersection Analysis

All study area intersections are calculated to operate at LOS C or better in the Existing and Exiting + Project conditions.

Recommendations

No improvements are recommended.

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TRI-CITY HOSPITAL

Oceanside, California
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1.0 INTRODUCTION

Linscott, Law & Greenspan, Engineers (LLG) has prepared this Local Transportation Assessment (LTA) to assess the potential impacts associated with the proposed Tri-City Medical Center Expansion project (Project) in the City of Oceanside.

The following sections are included in this report:

- Project Description
- CEQA VMT Screening Process
- Local Transportation Assessment Methodology & Thresholds
- Existing Vehicular Conditions Description
- Analysis of Existing Conditions
- Project Trip Generation/Distribution/Assignment
- Analysis of Existing + Project Conditions
- Pedestrian, Transit and Bicycle Mobility
- Conclusions

2.0 PROJECT DESCRIPTION

The Project proposes the construction of a 13,400 SF, 16-bed psychiatric facility. The Project is consistent with the proposed General Plan and Zoning. The existing medical center is primarily accessible via Vista Way and Thunder Drive and provides 380 hospital beds, 59,940 SF of medical office uses and 21,535 SF of general office uses.

2.1 Site Location

The Project site is located on the east side of Waring Road between College Boulevard and Camarillo Avenue on a vacant lot within the existing Tri-City Medical Center in the City of Oceanside.

Figure 2–1 shows the Project's Vicinity Map and ***Figure 2-2*** shows a more detailed Project Area Map.

2.2 Site Access

The proposed new building will use the existing Tri-City Hospital access on Vista Way. An emergency access only is provided at Waring Road and no public access will be permitted.

Figure 2–3 is the Proposed Conceptual Site Plan.

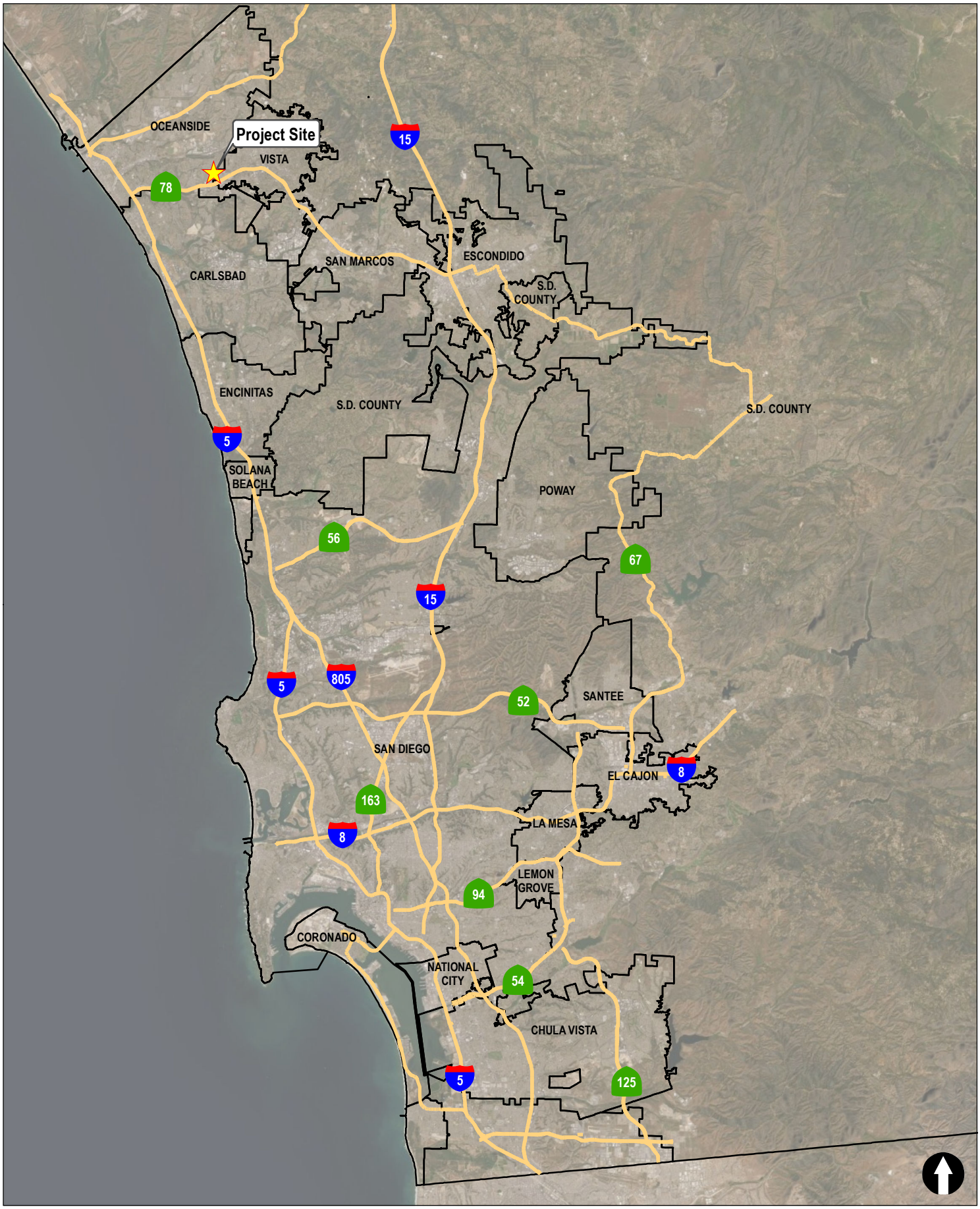

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Figure 2-1

Vicinity Map

Tri-City Hospital

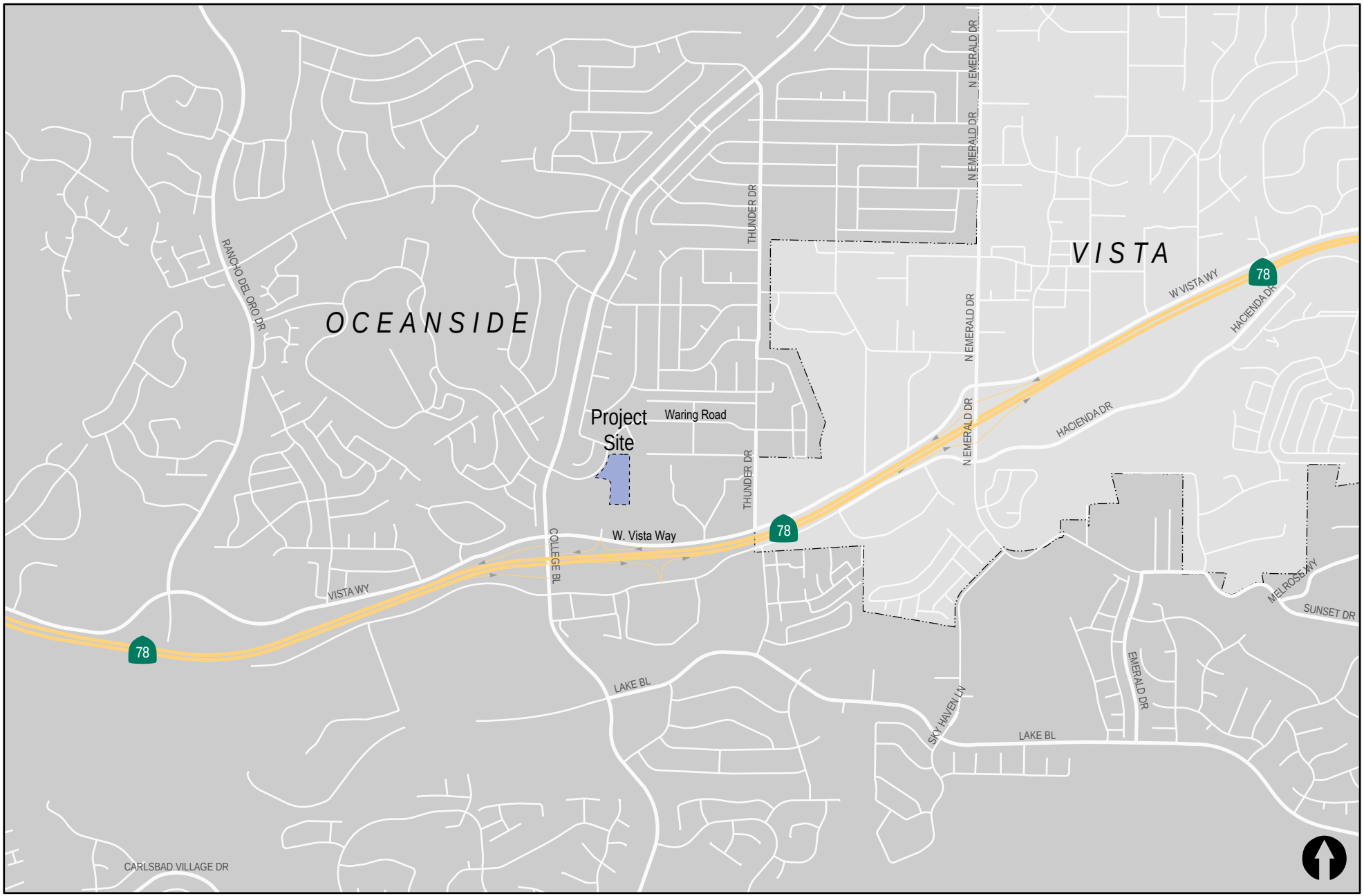

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Figure 2-2

Project Area Map

Tri-City Hospital

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Figure 2-3

Site Plan

TRI-CITY HOSPITAL

LINSCOTT LAW & GREENSPAN engineers

3.0 CEQA VMT ANALYSIS

An assessment was conducted to determine the impacts on Vehicle Miles Traveled (VMT) for the Project. This assessment utilizes methodologies presented within the Governor's Office of Planning and Research (OPR) Technical Advisory developed to assist with implementation of Senate Bill 743 (SB 743), which resulted in a shift in the measure of effectiveness for determining transportation impacts from Level of Service (LOS) and vehicular delay to VMT. VMT analyses are required in all California Environmental Quality Act (CEQA) documents as of July 1, 2020. This assessment follows the guidelines provided in the City of Oceanside *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment,* August 2020.

As seen in ***Table 3-1*** (Table 3 of the City of Oceanside *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment* (August 2020)). The Project is screened out from requiring a VMT analysis based on the following criteria:

1. Projects located in a low-VMT generating area identified on the most recent SANDAG SB 743 VMT Screening map.

   The Project is located in a Low-VMT generating area at 82.8 % of the Mean (see ***Appendix A***).

2. Projects generating less than 1,000 daily vehicle trips (if consistent with adopted General Plan).

   The Project is consistent with the adopted General Plan and generates 320 ADT, less than the 1,000 ADT threshold.

TABLE 3-1
SCREENED OUT PROJECTS

Project Type	Qualifies?
1. Projects located in a Transit Priority Areas (TPA) or Smart Growth Opportunity Area as identified in the most recent SANDAG San Diego Forward Regional Plan and is consistent with the General Plan at the time of project application. (1)(2)	
2. Projects located in a low-VMT generating area identified on the most recent SANDAG SB 743 VMT Screening map	The Project is located in a Low-VMT generating area at 82.8 % of the Mean (see *Appendix A*)
3. Locally serving K-12 schools	
4. Day care centers	
5. Local parks	
6. Locally serving retail uses less than 50,000 square feet, including: gas stations, banks, restaurants, grocery stores, and shopping centers	
7. Community institutions (Public libraries, fire stations, local government)	
8. Locally serving hotels (e.g. non-destination hotels, non-regionally serving)	
9. Student housing projects on or adjacent to college campuses	
10. Local serving community colleges that are consistent with the assumptions noted in the most recent SANDAG Regional Transportation Plan/Sustainable Communities Strategy	
11. Affordable housing projects [3]	
12. Assisted living facilities	
13. Senior housing (as defined by HUD)	
14. Transit projects	
15. Bike projects	
16. Pedestrian projects	
17. Safety improvement projects (e.g. RRFBs and high visibility crosswalks at uncontrolled locations, pedestrian count down timers, additionally projects identified through the Highway Safety Improvement Program)	
18. Safe Routes to School	
19. Projects generating less than 500 daily vehicle trips (if inconsistent with adopted General Plan)	
20. Projects generating less than 1,000 daily vehicle trips (if consistent with adopted General Plan)	Consistent with General Plan and generates 320 ADT.

Source:

Table 2 Screened out Projects, City of Oceanside Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment, August 2020.

Footnotes:

1. Projects located in a TPA must be able to access the transit station within a ½ mile walking distance or 6-minute walk continuously without discontinuity of sidewalk or obstructions to the route. Qualifying transit stops means a site containing an existing rail transit station served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (OPR, 2017). A high-quality transit corridor may also be considered if a corridor with fixed route bus service has service intervals no longer than 15 minutes during peak commute hours (OPR, 2017).
2. Smart Growth Opportunity Area Map is provided in Appendix B. The most recent version available shall be used.
3. If a project is a mix of affordable housing and market rate housing or unscreened use, only the affordable housing component would qualify as screened out. Additionally, any removal of affordable housing automatically requires CEQA VMT analysis.

4.0 LOCAL TRANSPORTATION ASSESSMENT METHODOLOGY & THRESHOLDS

A Project-Specific Local Transportation Assessment was prepared that analyzes automobile delay and LOS. The LOS analysis was conducted to identify Project effects on the roadway operations in the Project study area and to recommend Project improvements to address noted deficiencies; however, the CEQA impact significance determination for the proposed Project is based only on VMT and not on LOS.

The proposed Project generates over 200 ADT but less than 1,000 ADT and is consistent with the City's adopted General Plan. Therefore, a Local Transportation Assessment (LTA) was prepared consistent with City guidelines.

4.1 Study Area

The following study area was developed based on the anticipated assignment of Project traffic and locations which will carry the most Project traffic, per City of Oceanside staff coordination and scoping meetings. The study area meets and exceeds the trip-based criteria from the City's guidelines, which state that:

- All signalized intersections and project driveways shall be analyzed if the project will add 50 or more new peak hour trips in either direction.
- All unsignalized intersections and project driveways shall be analyzed if the project will add 50 or more new peak hour trips in either direction.
- All freeway ramp intersections and signalized ramp meters shall be analyzed if the project all 20 or more new peak hour trips in either direction.

INTERSECTIONS

4. W. Vista Way / SR-78 WB Ramps (Home Depot Dwy)
5. W. Vista Way / Tri-City Hospital Driveway
6. W. Vista Way / Thunder Drive

4.2 Analysis Scenarios

This study includes analysis of the following scenarios:

- Existing Conditions
- Existing Conditions + Project

4.3 Analysis Methodology

Level of service (LOS) is the term used to denote the different operating conditions which occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. Level of Service provides an index to the operational qualities of a roadway segment or an intersection. Level of Service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating

conditions. Level of Service designation is reported differently for signalized and unsignalized intersections, as well as for roadway segments.

4.3.1 *Intersections*

Intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapters 18, 19 and 20 of the *Highway Capacity Manual (HCM),* with the assistance of the *Synchro* (version 10) computer software. The delay values (represented in seconds) were qualified with a corresponding intersection Level of Service (LOS).

4.4 Thresholds for the Determination of the Need for Roadway Improvements

The City of Oceanside uses the published SANTEC/ITE guidelines to establish thresholds and methodology for this Local Transportation Assessment (LTA). ***Table 4–1*** below indicates when a project's effect on the roadway system is considered to justify the need for roadway improvements. That is, if a project's traffic effect causes the values in this table to be exceeded, roadway improvements should be considered as follows on a case-by-case basis:

- Improvements should be consistent with the General Plan
- Improvements for transit, bike and pedestrian facilities should be given priority in Transit Priority Areas or Smart Growth Opportunity Areas as identified by SANDAG.
- Projects in Transit Priority Areas or Smart Growth Opportunity Areas as identified by SANDAG, that are consistent with the General Plan at the time of project application, should not be denied due to the inability to provide roadway improvements (i.e., existing right of way is constrained, etc.)

TABLE 4–1
CITY OF OCEANSIDE
DETERMINATION OF THE NEED FOR ROADWAY IMPROVEMENTS

Level of Service with Project [a]	Allowable Change Due to Project Effect	
	Roadway Segments	Intersections
	V/C	Delay (sec.)
E & F	0.02	2.0

Source: SANTEC/ITE *Guidelines for Traffic Impact Studies in the San Diego Region*, May 2019.

Footnotes:

a. All level of service measurements are based upon HCM procedures for peak-hour conditions. However, V/C ratios for Roadway Segments may be estimated on an ADT/24-hour traffic volume basis. The acceptable LOS for roadways and intersections is generally "D" ("C" for undeveloped or not densely developed locations per jurisdiction definitions).

General Notes:

1. V/C = Volume to Capacity Ratio
2. Delay = Average stopped delay per vehicle measured in seconds for intersections.

5.0 EXISTING VEHICULAR CONDITIONS

Effective evaluation of the traffic effects associated with the proposed Project requires an understanding of the existing transportation system within the project study area. ***Figure 5–1*** depicts the existing conditions, including intersection lane configurations and traffic control.

5.1 Existing Street Network

The following is a brief description of the existing roadway system in the project area. Roadway classifications are based on the City of Oceanside Circulation Element.

W. VISTA WAY

W. Vista Way is classified as a Secondary Arterial in the City of Oceanside Circulation Element in the project vicinity. It is currently constructed as a six-lane undivided roadway with intermittent turning lanes between College Boulevard and SR-78 westbound ramps, with a curb-to-curb distance is about 85 feet. Between SR-78 westbound ramps and Thunder Drive, Vista way is built as a four-lane undivided roadway with two-way left-turn lane. With a curb-to-curb distance is about 60 feet. Sidewalks are provided on the north side of the roadway measuring about 6 feet. Bike lanes are provided on both sides of the roadway. Curbside parking is not permitted. Pedestrian push buttons are provided at intersections along Vista Way. The posted speed limit is 40 mph.

TRI-CITY MEDICAL

Tri-City Medical is a non-classified roadway in the City of Oceanside Circulation Element in the project vicinity. It is currently constructed as a four-lane divided roadway between Vista Way and Tri-City Hospital. The curb-to-curb distance is about 55 feet. Sidewalks are provided on both sides of the roadway measuring about 6 feet. Bike lanes are not provided. Curbside parking is not permitted. Pedestrian push buttons are provided at the W. Vista Way / Tri-City Medical intersection. There is no posted speed limit.

THUNDER DRIVE

Thunder Drive is classified as a Collector Road in the City of Oceanside Circulation Element in the project vicinity. It is currently constructed as a two-lane undivided roadway. The curb-to-curb distance is about 40 feet. Sidewalks are provided on both sides of the roadway measuring about 10 feet. Bike lanes are not provided. Curbside parking is permitted intermittently on both sides of the roadway. Pedestrian push buttons are provided at the Vista Way and Thunder Drive intersection. The posted speed limit is 30 mph.

5.2 Existing Traffic Volumes

Counts were conducted at the following study area intersections on September 22, 2021.

1. SR 78 WB Ramps / W. Vista Way (Home Depot Driveway)
2. Tri-City Driveway / W. Vista Way
3. Thunder Drive / W. Vista Way

Appendix B contains the Manual count sheets.

5.2.1 *Determining the Covid Factor*

Due to the current Covid situation, traffic counts conducted in 2021 do not reflect the normal traffic volumes. Hence, research was conducted to identify historical traffic volume counts in the Project study area. However, historical roadway segment traffic volumes are not available in the Project vicinity. Therefore, historical traffic volumes on SR 78 were compared and it was determined that the Pre-Covid traffic volumes from 2019 are generally 5% higher than the during Covid volumes in 2021. Thus the 2021 counts were increased by an average of 5% in order to replicate pre-pandemic traffic volumes.

TABLE 5-1
DETERMINING THE COVID FACTOR

Segment	Aug-19			Aug-21			Difference	
	EB	WB	Total	EB	WB	Total	Amount	Percent
SR 78								
West of College Blvd	56,255	57,898	114,153	53,429	55,000	108,429	5,724	5.01%
College Blvd to Emerald Dr	56,888	59,223	116,111	55,191	56,601	111,792	4,319	3.72%
East of Emerald Dr	56,386	64,743	121,129	53,054	61,545	114,599	6,530	5.39%
Average Difference								**4.71%**
Use								**5%**

5.2.2 *Existing Volumes Used in the Analysis*

The 2021 intersections volumes were updated for the "Covid" effect by applying the 5% Covid factor to the volumes in all movements at each intersection.

Figure 5–2 shows the Existing Traffic Volumes adjusted for Covid and used in the analysis. ***Appendix C*** contains the signal timing plans for the City of Oceanside signalized intersections.

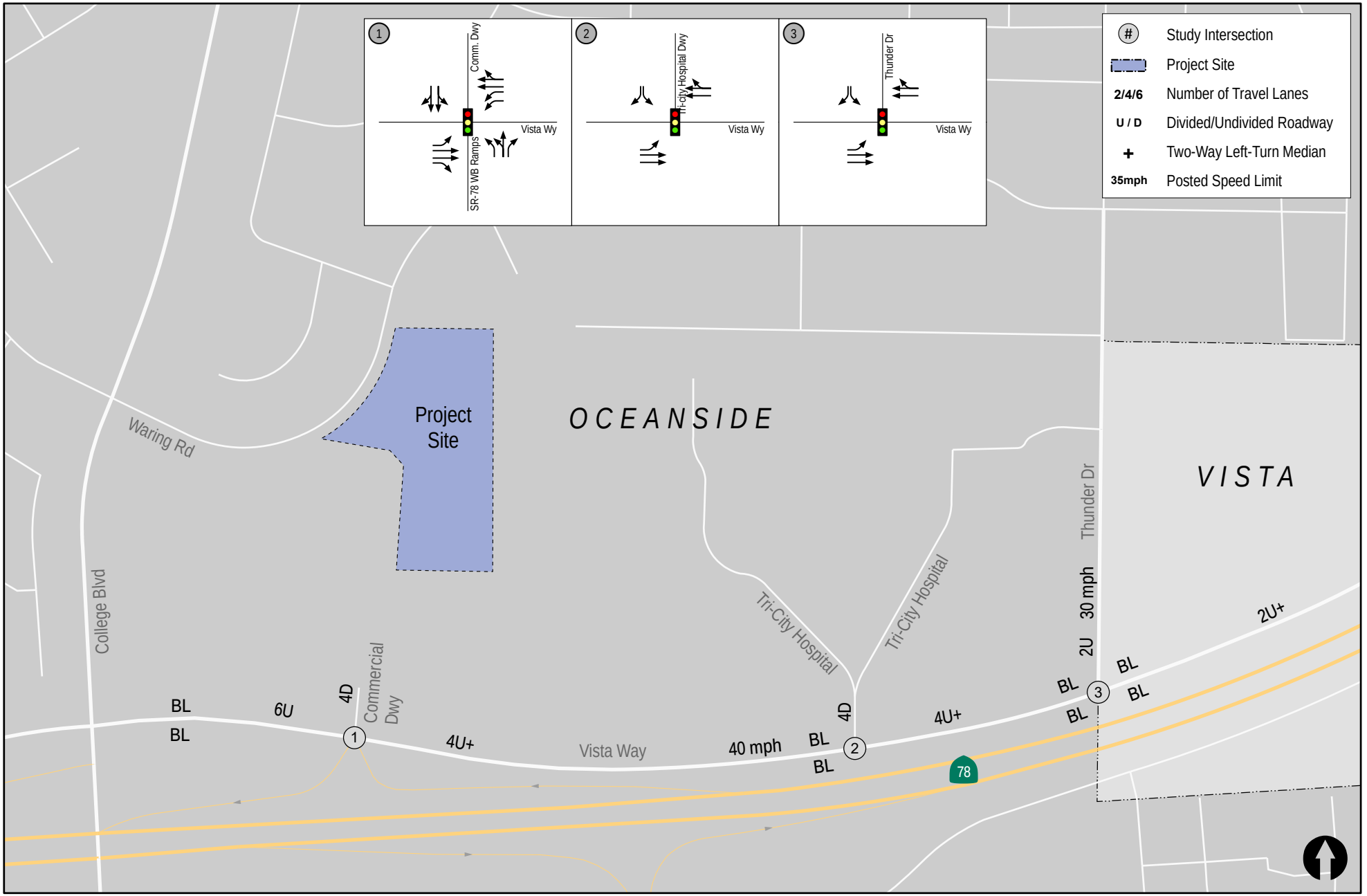

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Figure 5-1

Existing Conditions

Tri-City Hospital

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Figure 5-2

Existing Traffic Volumes

Tri-City Hospital

6.0 ANALYSIS OF EXISTING CONDITIONS

6.1 Peak Hour Intersection Analysis

Table 6–1 summarizes the peak hour intersection operations under Existing Conditions in the study area. As shown, the study area intersections are calculated to currently operate acceptably at LOS C or better during the AM and PM peak hours.

Appendix D contains the Existing Conditions intersection analysis worksheets.

TABLE 6–1
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Delay [a]	LOS [b]
1. W. Vista Way / SR-78 WB Ramps (Home Depot Dwy)	Signal	AM	33.7	C
		PM	30.1	C
2. W. Vista Way / Tri-City Hospital Dwy	Signal	AM	16.9	B
		PM	17.0	B
3. W. Vista Way / Thunder Dr	Signal	AM	20.9	C
		PM	18.3	B

Footnotes:
a. Average delay expressed in seconds per vehicle.
b. Level of Service.

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

7.0 TRIP GENERATION/DISTRIBUTION/ASSIGNMENT

7.1 Trip Generation

Trip generation rates were obtained from the (Not So) *Brief guide of Vehicular Traffic Generation Rates for the San Diego Region* (April 2002) by SANDAG. The "Hospital - General" trip rate per bed was used to estimate the Project trip generation.

Table 7–1 summarizes the trip generation for the Project. As shown in *Table 7–1*, the Project is calculated to generate 320 daily trips with 26 trips during the AM peak hour (18 inbound/ 8 outbound trips) and 32 trips during PM peak hour (13 inbound/ 19 outbound trips).

7.2 Trip Distribution and Assignment

Project traffic was distributed to the street system based on existing traffic patterns in the area, the Project's proximity to freeways and arterials and residences.

It is assumed that all project traffic will utilize the Vista Way / Hospital Driveway intersection.

Figure 7–1 shows the distribution of the Project trips. ***Figure 7–2*** shows the Project traffic volumes. ***Figure 7-3*** shows the Existing + Project traffic volumes.

TABLE 7–1
PROJECT TRIP GENERATION

Land Use	Quantity	Trip Rate [a]	ADT	AM Peak Hour					PM Peak Hour				
				% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
						In	Out	Total			In	Out	Total
Hospital	16 Beds	20 / Bed	320	8%	70:30	18	8	26	10%	40:60	13	19	32

Footnote:

a. Rates are based on SANDAG's *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002.

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Figure 7-1

Project Traffic Distribution

Tri-City Hospital

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Figure 7-2

Project Traffic Volumes

Tri-City Hospital

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Figure 7-3

Existing + Project Traffic Volumes

Tri-City Hospital

8.0 ANALYSIS OF EXISTING + PROJECT CONDITIONS

8.1 Peak Hour Intersection Analysis

Table 8–1 summarizes the peak hour intersection operations under Existing + Project conditions in the study area. As shown in *Table 8-1*, with the addition of Project traffic, all study area intersections are calculated to continue to operate at LOS C or better.

Based on the City of Oceanside's traffic thresholds and methodology summarized in *Section 4*, roadway improvements are not required since all intersections are calculated to operate at the acceptable LOS C or better.

Appendix E contains the Existing + Project intersection analysis worksheets.

TABLE 8–1
EXISTING + PROJECT INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing		Existing with Project		Delay Δ [c]	Improvement Required?
			Delay [a]	LOS [b]	Delay	LOS		
1. W. Vista Way / SR-78 WB Ramps (Home Depot Dwy)	Signal	AM	33.7	C	33.9	C	0.2	No
		PM	30.1	C	30.2	C	0.1	No
2. W. Vista Way / Tri-City Hospital Dwy	Signal	AM	16.9	B	17.6	B	0.7	No
		PM	17.0	B	18.0	B	1.0	No
3. W. Vista Way / Thunder Dr	Signal	AM	20.9	C	21.0	C	0.1	No
		PM	18.3	B	18.4	B	0.1	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Δ denotes the increase in delay due to Project.

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

9.0 PEDESTRIAN, TRANSIT AND BICYCLE MOBILITY

9.1 Pedestrian Conditions

Sidewalks are provided on both sides Tri-City Medical and Thunder Drive and on the north side of Vista Way. The closest pedestrian crossing is at the Vista Way / Thunder Drive intersection. This intersection is about 630 feet east of the Tri City Hospital Driveway. Pedestrian crosswalks are provided at the College Boulevard / Vista Way intersection allowing all pedestrians to cross north-south and east-west. This intersection is about 1,900 feet west of the Tri City Hospital Driveway. Pedestrians are not permitted to cross Vista Way at the Tri City Hospital Driveway.

9.1.1 *Existing Bicycle Conditions*

Class II bike lanes are provided along Vista Way.

9.1.2 *Future Bicycle Improvements/Plans*

Based on the City of Oceanside Bicycle Master Plan, there are no planned bicycle facility improvements within the project vicinity.

9.2 Existing Transit Conditions

Transit service within the City of Oceanside and City of Vista is provided by North County Transit District (NCTD). Bus routes 302 and 325 serve the project area.

Stops at the above routes are located along Vista Way and Thunder Drive. The nearest bus stop (westbound) at the project site is on Vista Way, approximately 175 feet west of Tri-City Medical. The nearest bus stop (eastbound) at the project site is on Thunder Drive, approximately 260 feet north of Vista Way.

Route 302

Route 302 begins at Vista Transit Center and ends at Oceanside Transit Center or vice versa. There are 41-42 stops along this route. It operates from approximately 4 AM to 11 PM on Tuesdays through Fridays. It operates from approximately 6 AM to 11 PM on Saturdays through Mondays. Services are at 45-minute frequencies.

Route 325

Route 325 begins at College Boulevard Station to Carlsbad Village Station or vice versa. There are 39-43 stops along this route. It operates from approximately 6 AM to 5 PM on Tuesdays through Fridays. It operates from approximately 10:30 AM to 6 PM on Mondays and Saturdays. It is not operational on Sundays. Services are 50-minute frequencies.

Stops at the above routes are located along Vista Way and Thunder Drive. The nearest bus stop (westbound) at the project site is on Vista Way, approximately 175 feet west of Tri-City Medical. The nearest bus stop (eastbound) at the project site is on Thunder Drive, approximately 260 feet north of Vista Way.

10.0 CONCLUSIONS

A Transportation VMT CEQA Analysis is not required based on the City of Oceanside *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment,* August 2020. The Project is presumed to have a less than significant CEQA / VMT impact. Based on the City's traffic thresholds and methodology summarized in *Section 4*, and the analysis presented in this report, roadway capacity improvements are not required since the increase in Project related delay does not exceed the allowable thresholds.

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TECHNICAL APPENDICES
TRI-CITY HOSPITAL

Oceanside, California
October 12, 2021

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APPENDICES

APPENDIX

A. VMT Screening Map

B. Intersection Count Sheets

C. Signal Timing Plans

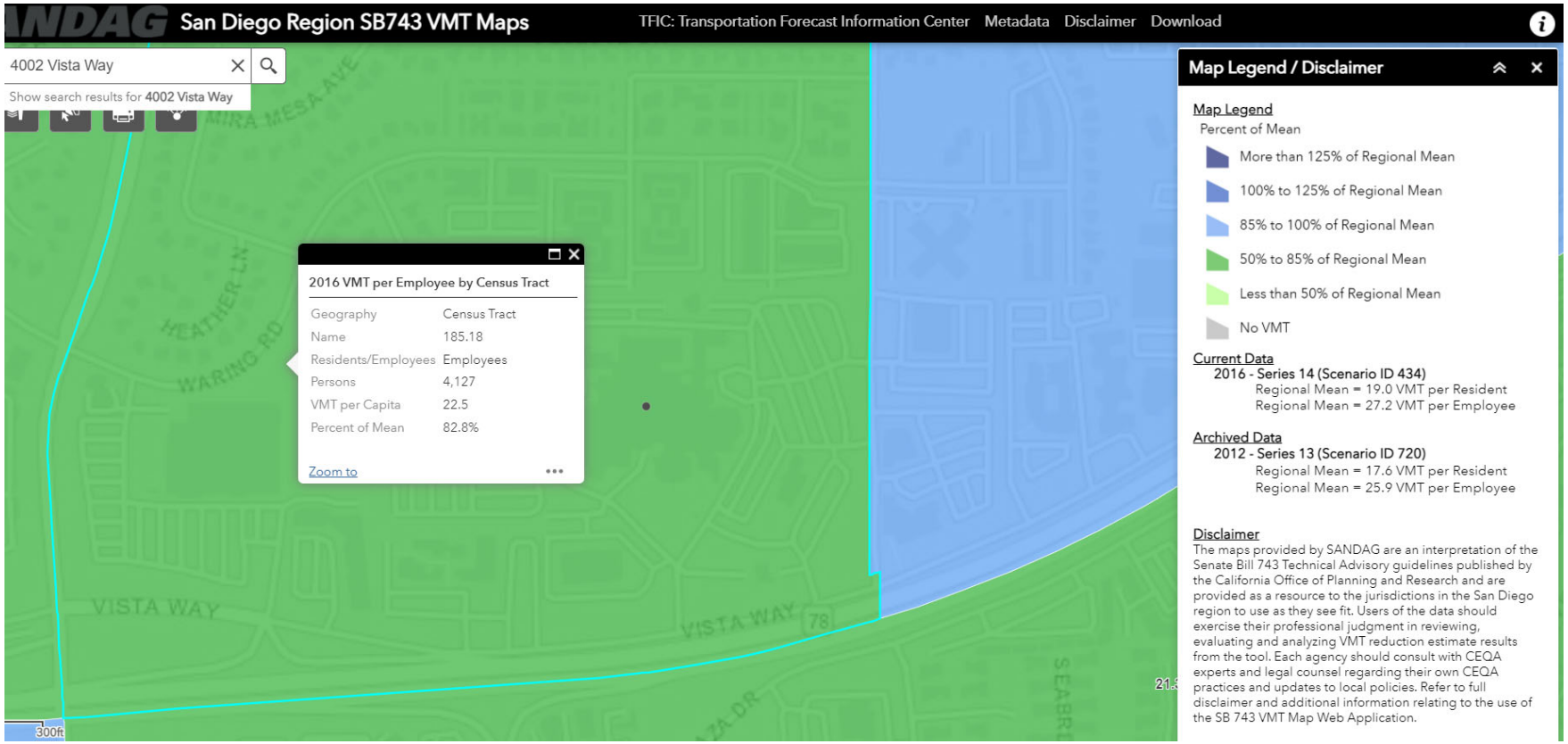
D. Peak Hour Intersection Analysis Worksheets – Existing

E. Peak Hour Intersection Analysis Worksheets – Existing + Project

APPENDIX A

VMT SCREENING MAP

VMT For 4002 Vista Way – Tri City Hospital



APPENDIX B

INTERSECTION COUNT SHEETS

Intersection Turning Movement - Peak Hour Vehicle Count

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Location:	#01	File Name:	ITM-21-057-01
Intersection:	W. Vista Way / SR-78 WB Ramps – Home Depot Driveway	Project:	LLG Ref. 3--21-3448
Date of Count:	Wednesday, September 22, 2021		Tri-City Hospital Oceanside

AM	Home Depo Drwy Southbound			West Vista Way Westbound			SR-78 WB Ramps Northbound			West Vista Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	12	23	7	28	45	7	84	27	24	22	50	69	398
7:15	8	14	11	35	47	4	142	27	25	19	76	60	468
7:30	13	19	17	52	71	7	180	19	29	24	72	68	571
7:45	20	14	13	58	71	6	191	16	49	24	113	79	654
8:00	16	15	14	69	90	7	158	17	36	24	97	87	630
8:15	15	17	23	70	125	11	168	18	18	29	116	54	664
8:30	16	12	15	29	50	15	134	16	25	29	93	68	502
8:45	10	15	21	28	50	7	158	17	17	40	104	61	528
Total	110	129	121	369	549	64	1215	157	223	211	721	546	4415
Approach%	30.6	35.8	33.6	37.6	55.9	6.5	76.2	9.8	14.0	14.3	48.8	36.9	
Total%	2.5	2.9	2.7	8.4	12.4	1.4	27.5	3.6	5.1	4.8	16.3	12.4	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	64	65	67	249	357	31	697	70	132	101	398	288	2,519
Approach%	32.7	33.2	34.2	39.1	56.0	4.9	77.5	7.8	14.7	12.8	50.6	36.6	
Total%	2.5	2.6	2.7	9.9	14.2	1.2	27.7	2.8	5.2	4.0	15.8	11.4	
PHF			0.89			0.77			0.88			0.91	0.95

PM	Home Depo Drwy Southbound			West Vista Way Westbound			SR-78 WB Ramps Northbound			West Vista Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	17	21	20	57	70	11	161	20	11	29	72	87	576
16:15	18	14	15	49	86	7	150	10	12	33	90	87	571
16:30	14	26	12	51	76	7	146	16	5	32	70	77	532
16:45	19	17	16	40	67	6	182	16	7	27	80	88	565
17:00	16	5	6	38	60	8	186	14	4	24	75	97	533
17:15	12	5	4	38	58	8	186	20	7	27	74	91	530
17:30	21	8	18	36	65	8	202	14	9	24	66	82	553
17:45	19	14	21	27	51	10	155	11	8	28	67	76	487
Total	136	110	112	336	533	65	1368	121	63	224	594	685	4347
Approach%	38.0	30.7	31.3	36.0	57.1	7.0	88.1	7.8	4.1	14.9	39.5	45.6	
Total%	3.1	2.5	2.6	7.7	12.3	1.5	31.5	2.8	1.4	5.2	13.7	15.8	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	68	78	63	197	299	31	639	62	35	121	312	339	2,244
Approach%	32.5	37.3	30.1	37.4	56.7	5.9	86.8	8.4	4.8	15.7	40.4	43.9	
Total%	3.0	3.5	2.8	8.8	13.3	1.4	28.5	2.8	1.6	5.4	13.9	15.1	
PHF			0.90			0.93			0.90			0.92	0.97

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

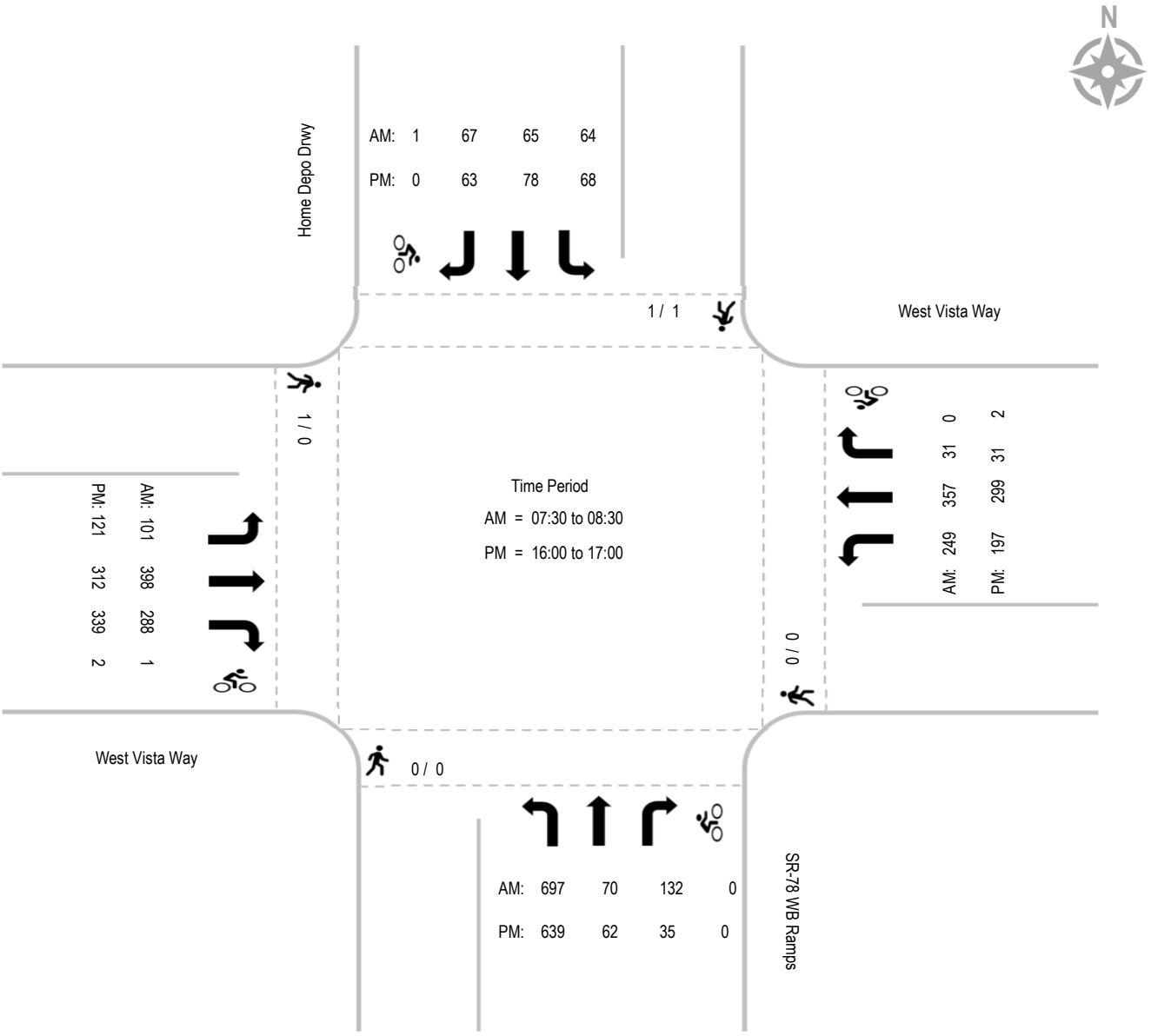
Location:	#01	File Name:	ITM-21-057-01
Intersection:	W. Vista Way / SR-78 WB Ramps – Home Depot Driveway	Project:	LLG Ref. 3--21-3448
Date of Count:	Wednesday, September 22, 2021		Tri-City Hospital Oceanside

AM	Home Depo Drwy Southbound				West Vista Way Westbound				SR-78 WB Ramps Northbound				West Vista Way Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Ped Total	1				0				0				1				2	
Bike Total		0	0	1		0	0	0		0	0	0		0	1	0		2

PM	Home Depo Drwy Southbound				West Vista Way Westbound				SR-78 WB Ramps Northbound				West Vista Way Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
17:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Ped Total	1				0				0				0				1	
Bike Total		0	0	0		0	2	0		0	0	0		0	2	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location: #01	File Name:	ITM-21-057-01
	Intersection: W. Vista Way / SR-78 WB Ramps – Home Depot Driveway	Project:	LLG Ref. 3--21-3448
	Date of Count: Wednesday, September 22, 2021		Tri-City Hospital Oceanside



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#02	File Name:	ITM-21-057-02
Intersection:	W. Vista Way - Tri-City Hospital Driveway	Project:	LLG Ref. 3--21-3448
Date of Count:	Wednesday, September 22, 2021		Tri-City Hospital Oceanside

AM	Tri-City Hospital Drwy Southbound			West Vista Way Westbound			- Northbound			West Vista Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	5	0	8	0	81	7	0	0	0	30	54	0	185
7:15	13	0	12	0	82	12	0	0	0	37	80	0	236
7:30	18	0	30	0	108	2	0	0	0	27	73	0	258
7:45	3	0	17	0	119	9	0	0	0	43	147	0	338
8:00	4	0	12	0	159	5	0	0	0	24	134	0	338
8:15	5	0	7	0	186	8	0	0	0	22	107	0	335
8:30	4	0	9	0	99	5	0	0	0	35	114	0	266
8:45	5	0	11	0	72	4	0	0	0	26	102	0	220
Total	57	0	106	0	906	52	0	0	0	244	811	0	2176
Approach%	35.0	-	65.0	-	94.6	5.4	-	-	-	23.1	76.9	-	
Total%	2.6	-	4.9	-	41.6	2.4	-	-	-	11.2	37.3	-	

AM Intersection Peak Hour: **07:45 to 08:45**

Volume	16	-	45	-	563	27	-	-	-	124	502	-	1,277
Approach%	26.2	-	73.8	-	95.4	4.6	-	-	-	19.8	80.2	-	
Total%	1.3	-	3.5	-	44.1	2.1	-	-	-	9.7	39.3	-	
PHF			0.76			0.76			#DIV/0!			0.82	0.94

PM	Tri-City Hospital Drwy Southbound			West Vista Way Westbound			- Northbound			West Vista Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	17	0	35	0	97	0	0	0	0	9	111	0	269
16:15	7	0	25	0	100	4	0	0	0	7	99	0	242
16:30	20	0	33	0	99	1	0	0	0	13	108	0	274
16:45	11	0	20	0	99	1	0	0	0	3	100	0	234
17:00	8	0	27	0	117	2	0	0	0	10	89	0	253
17:15	8	0	11	0	87	0	0	0	0	8	101	0	215
17:30	8	0	17	0	88	1	0	0	0	6	102	0	222
17:45	6	0	10	0	62	10	0	0	0	12	90	0	190
Total	85	0	178	0	749	19	0	0	0	68	800	0	1899
Approach%	32.3	-	67.7	-	97.5	2.5	-	-	-	7.8	92.2	-	
Total%	4.5	-	9.4	-	39.4	1.0	-	-	-	3.6	42.1	-	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	55	-	113	-	395	6	-	-	-	32	418	-	1,019
Approach%	32.7	-	67.3	-	98.5	1.5	-	-	-	7.1	92.9	-	
Total%	5.4	-	11.1	-	38.8	0.6	-	-	-	3.1	41.0	-	
PHF			0.79			0.96			#DIV/0!			0.93	0.93

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

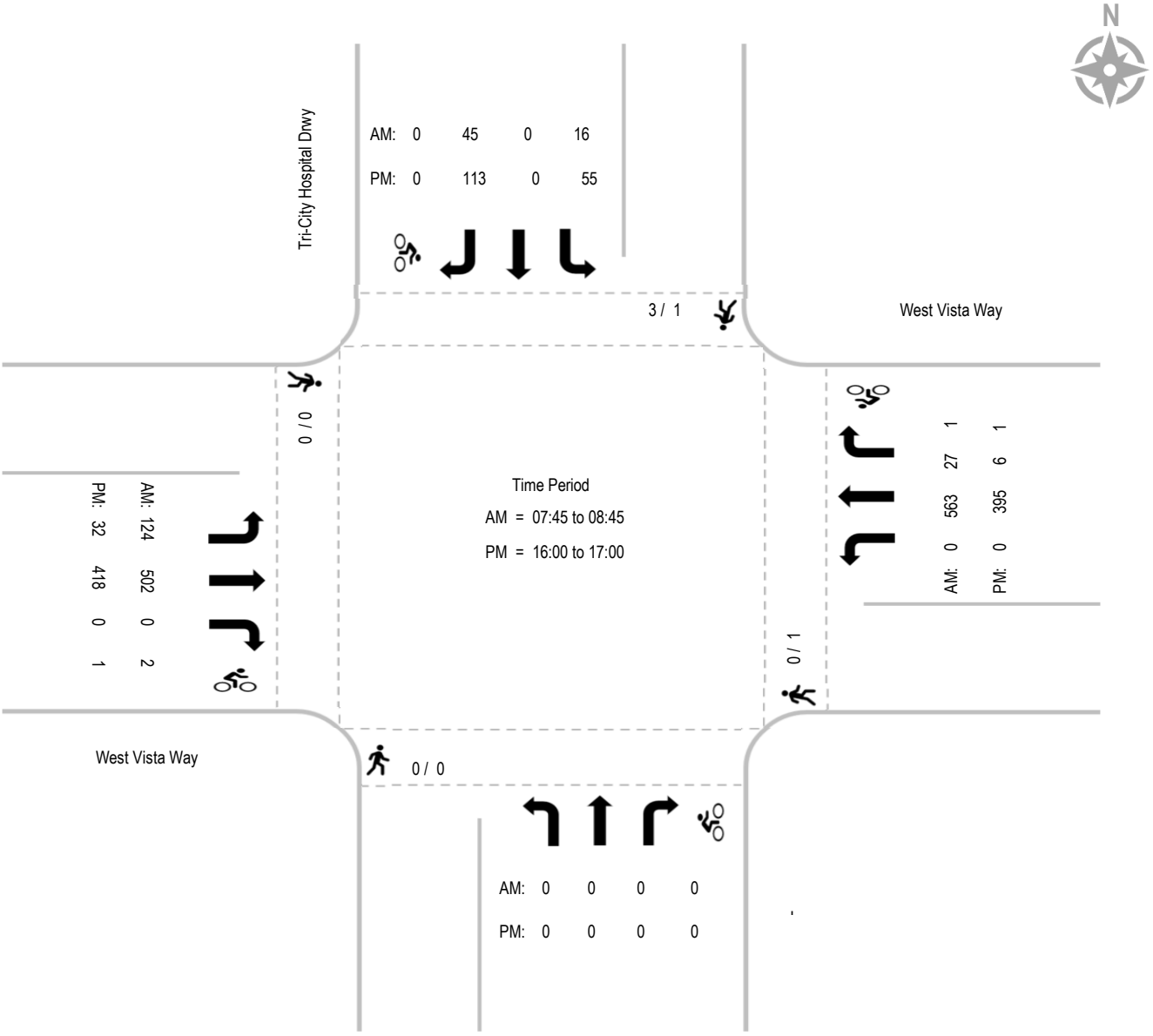
Location:	#02	File Name:	ITM-21-057-02
Intersection:	W. Vista Way - Tri-City Hospital Driveway	Project:	LLG Ref. 3--21-3448
Date of Count:	Wednesday, September 22, 2021		Tri-City Hospital Oceanside

AM	Tri-City Hospital Drwy Southbound				West Vista Way Westbound				- Northbound				West Vista Way Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
7:15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
7:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Ped Total	3				0				0				0				3	
Bike Total		0	0	0		0	1	0		0	0	0		1	1	0		3

PM	Tri-City Hospital Drwy Southbound				West Vista Way Westbound				- Northbound				West Vista Way Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
17:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	1				1				0				0				2	
Bike Total		0	0	0		0	1	0		0	0	0		0	1	0		2

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#02	File Name: ITM-21-057-02
	Intersection:	W. Vista Way - Tri-City Hospital Driveway	Project: LLG Ref. 3--21-3448
	Date of Count:	Wednesday, September 22, 2021	Tri-City Hospital Oceanside



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#03	File Name:	ITM-21-057-03
Intersection:	W. Vista Way / Thunder Drive	Project:	LLG Ref. 3--21-3448
Date of Count:	Wednesday, September 22, 2021		Tri-City Hospital Oceanside

AM	Thunder Drive Southbound			West Vista Way Westbound			- Northbound			West Vista Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	39	0	35	0	50	16	0	0	0	27	34	0	201
7:15	36	0	37	0	58	22	0	0	0	23	64	0	240
7:30	64	0	48	0	61	28	0	0	0	20	66	0	287
7:45	70	0	50	0	81	38	0	0	0	46	109	0	394
8:00	74	0	60	0	107	67	0	0	0	43	102	0	453
8:15	42	0	83	0	108	39	0	0	0	26	79	0	377
8:30	32	0	27	0	76	28	0	0	0	37	81	0	281
8:45	27	0	16	0	55	40	0	0	0	30	77	0	245
Total	384	0	356	0	596	278	0	0	0	252	612	0	2478
Approach%	51.9	-	48.1	-	68.2	31.8	-	-	-	29.2	70.8	-	
Total%	15.5	-	14.4	-	24.1	11.2	-	-	-	10.2	24.7	-	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	250	-	241	-	357	172	-	-	-	135	356	-	1,511
Approach%	50.9	-	49.1	-	67.5	32.5	-	-	-	27.5	72.5	-	
Total%	16.5	-	15.9	-	23.6	11.4	-	-	-	8.9	23.6	-	
PHF			0.92			0.76			#DIV/0!			0.79	0.83

PM	Thunder Drive Southbound			West Vista Way Westbound			- Northbound			West Vista Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	38	0	44	0	50	37	0	0	0	30	105	0	304
16:15	37	0	33	0	69	31	0	0	0	23	92	0	285
16:30	44	0	33	0	65	16	0	0	0	27	87	0	272
16:45	36	0	32	0	66	17	0	0	0	32	82	0	265
17:00	40	0	42	0	75	26	0	0	0	30	72	0	285
17:15	29	0	31	0	56	21	0	0	0	24	80	0	241
17:30	22	0	35	0	59	15	0	0	0	19	96	0	246
17:45	23	0	17	0	42	22	0	0	0	21	79	0	204
Total	269	0	267	0	482	185	0	0	0	206	693	0	2102
Approach%	50.2	-	49.8	-	72.3	27.7	-	-	-	22.9	77.1	-	
Total%	12.8	-	12.7	-	22.9	8.8	-	-	-	9.8	33.0	-	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	155	-	142	-	250	101	-	-	-	112	366	-	1,126
Approach%	52.2	-	47.8	-	71.2	28.8	-	-	-	23.4	76.6	-	
Total%	13.8	-	12.6	-	22.2	9.0	-	-	-	9.9	32.5	-	
PHF			0.91			0.88			#DIV/0!			0.89	0.93

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

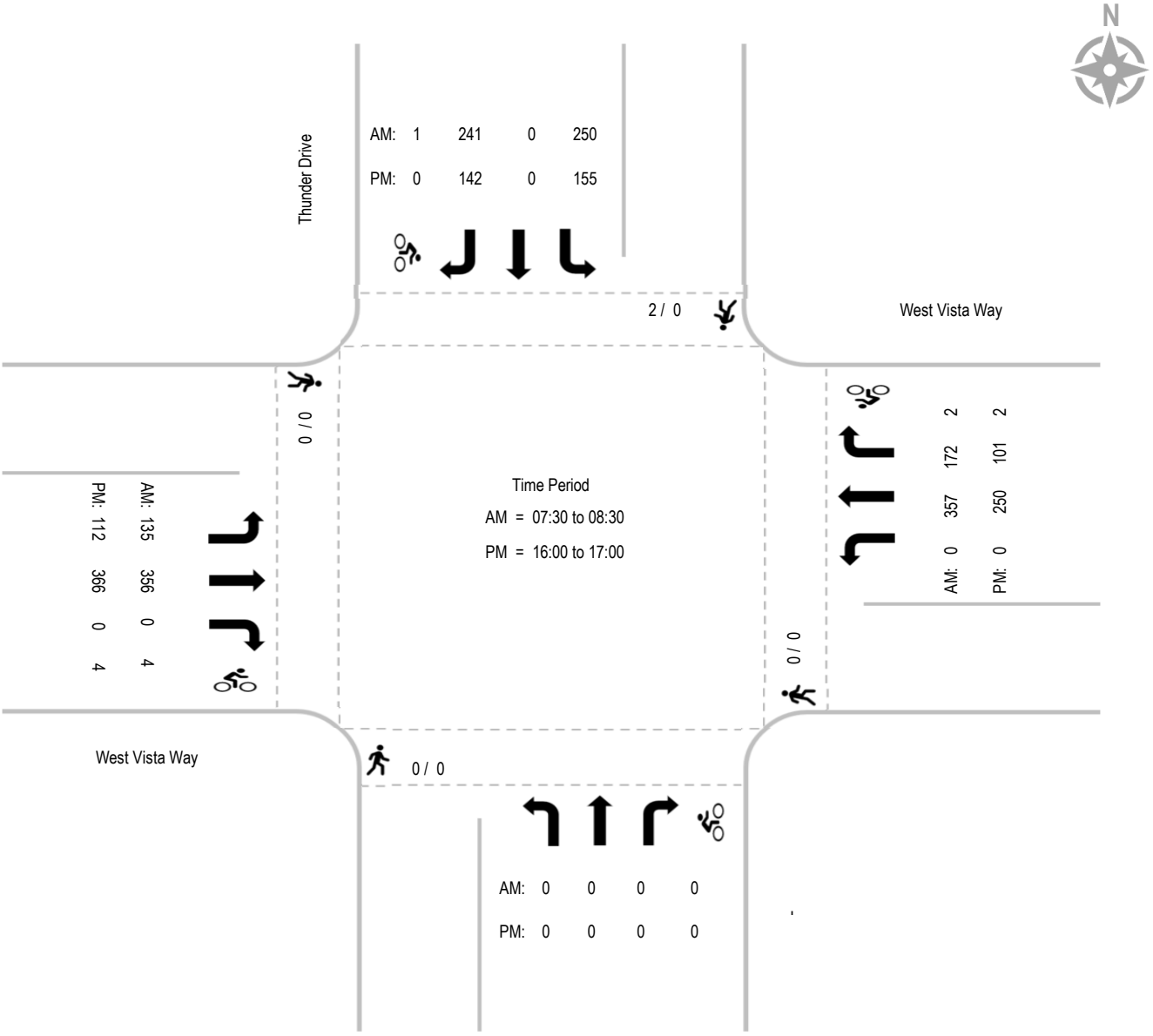
Location:	#03	File Name:	ITM-21-057-03
Intersection:	W. Vista Way / Thunder Drive	Project:	LLG Ref. 3--21-3448
Date of Count:	Wednesday, September 22, 2021		Tri-City Hospital Oceanside

AM	Thunder Drive Southbound				West Vista Way Westbound				- Northbound				West Vista Way Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	3
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Ped Total	2				0				0				0				2	
Bike Total		0	0	1		0	0	2		0	0	0		0	4	0		7

PM	Thunder Drive Southbound				West Vista Way Westbound				- Northbound				West Vista Way Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
17:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Ped Total	0				0				0				0				0	
Bike Total		0	0	0		0	2	0		0	0	0		0	4	0		6

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#03	File Name: ITM-21-057-03
	Intersection:	W. Vista Way / Thunder Drive	Project: LLG Ref. 3--21-3448
	Date of Count:	Wednesday, September 22, 2021	Tri-City Hospital Oceanside



APPENDIX C

SIGNAL TIMING PLANS

INTERSECTION: Vista Way & Tri-City Medical

Group Assignment: **NONE**
Field Master Assignment: **NONE**
System Reference Number: **180**

N/S Street Name: **Tri-City Medical**
E/W Street Name: **Vista Way**

Last Database Change: **1/22/2018 10:35**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	19	<C+0+0>
Zone Number		<C+0+1>
Area Number	1	<C+0+2>
Area Address	176	<C+0+3>
QuicNet Channel	Serial:COM19:	(QuicNet)

Communication Addresses

Manual Plan		<C+A+1>
Manual Offset		<C+B+1>

Manual Selection

Max Initial	30	<F+0+E>
Red Revert	2.0	<F+0+F>
All Red Start	5.0	<F+C+0>

Start / Revert Times

Row	Column Numbers —> / Phase Names —>	Phase 1	2	3	4	5	6	7	8
0	Ped Walk	0	0	0	0	0	7	0	7
1	Ped FDW	0	0	0	0	0	20	0	10
2	Min Green	3	8	3	6	5	8	3	7
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	1.0	0.0	0.0	0.0	1.0	0.0	1.2
5	Veh Extension	0.5	4.0	0.5	3.0	2.5	4.0	0.5	3.5
6	Max Gap	0.5	6.0	0.5	3.0	2.5	6.0	0.5	5.0
7	Min Gap	0.5	2.5	0.5	3.0	2.5	2.5	0.5	2.0
8	Max Limit	17	40	17	20	30	40	17	40
9	Max Limit 2	30	40	30	30	30	40	30	70
A	------	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1
D	Reduce Every	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.8	3.0	3.6	4.1	4.8	3.0	4.0
F	Red Clear	0.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0

Phase Timing - Bank 1 <F Page>

Row	E	
	RR-1 Delay	0
	RR-1 Clear	5
	EV-A Delay	0
	EV-A Clear	5
	EV-B Delay	0
	EV-B Clear	5
	EV-C Delay	0
	EV-C Clear	5
	EV-D Delay	0
	EV-D Clear	1
	RR-2 Delay	0
	RR-2 Clear	10
	View EV Delay	---
	View EV Clear	---
	View RR Delay	---
	View RR Clear	---

Preempt Timing

Row	F	
0	Permit	_2_456__
1	Red Lock	_____
2	Yellow Lock	_____
3	Min Recall	_2___6__
4	Ped Recall	_____
5	*View Set Peds*	-----
6	Rest In Walk	_____
7	Red Rest	_____
8	Dual Entry	_2___6__
9	Max Recall	_____
A	Soft Recall	_____
B	Max 2	_____
C	Cond. Service	_____
D	Man Cntrl Calls	_____
E	Yellow Start	___4___
F	First Phases	_2___6__

Phase Functions <F Page>

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

(* = Coordination Recall)

Row	Column Numbers ---->	Plan 1	2	3	4	5	6	7	8	9	Row
	Plan Name ---->										
0	Cycle Length	100	100	100	100	100	100	100	100	100	0
1	Phase 1 - ForceOff	65	65	65	65	65	65	65	65	65	1
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0	2
3	Phase 3 - ForceOff	25	25	25	25	25	25	25	25	25	3
4	Phase 4 - ForceOff	40	40	40	40	40	40	40	40	40	4
5	Phase 5 - ForceOff	65	65	65	65	65	65	65	65	65	5
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0	6
7	Phase 7 - ForceOff	25	25	25	25	25	25	25	25	25	7
8	Phase 8 - ForceOff	40	40	40	40	40	40	40	40	40	8
9	Ring Offset	0	0	0	0	0	0	0	0	0	9
A	Offset 1	0	0	0	0	0	0	0	0	0	A
B	Offset 2	0	0	0	0	0	0	0	0	0	B
C	Offset 3	0	0	0	0	0	0	0	0	0	C
D	Permissive	12	12	12	12	12	12	12	12	0	D
E	Hold Release	255	255	255	255	255	255	255	255	0	E
F	Zone Offset	0	0	0	0	0	0	0	0	0	F

Coordination <C Page>

Row		E	Row
0			0
1	Plan 1 - Sync	2 6	1
2	Plan 2 - Sync	2 6	2
3	Plan 3 - Sync	2 6	3
4	Plan 4 - Sync	2 6	4
5	Plan 5 - Sync	2 6	5
6	Plan 6 - Sync	2 6	6
7	Plan 7 - Sync	2 6	7
8	Plan 8 - Sync	2 6	8
9	Plan 9 - Sync	2 6	9
A	Coord Ped *		A
B	NEMA Hold		B
C			C
D			D
E			E
F			F

Sync Phases <C Page>

Row	Column Numbers ---->	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 4
F	IC Select (Interconnect)	2

Configuration <E Page>

	F
RR Overlap A - Phases	
RR Overlap B - Phases	
RR Overlap C - Phases	
RR Overlap D - Phases	
Ped 2P	
Ped 6P	6
Ped 4P	
Ped 8P	
Yellow Flash Phases	
Overlap A - Phases	
Overlap B - Phases	
Overlap C - Phases	
Overlap D - Phases	
Restricted Phases	
Assign 5 Outputs	

Configuration <E Page>

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 =
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

Assign 5 Outputs
(Ped Loadswitch Yellows)
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Force-Off Adjust	0

Coord Force-Off Adjust for Ped Service <C+D+F>

Transition Type	0

TBC Transition <C+D+D>

Transition Type
0 = Shortway
Non-zero = Lengthen

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Row		F	Row
0	Free Lag	2 4 6 8	0
1	Plan 1 - Lag	2 4 6 8	1
2	Plan 2 - Lag	2 4 6 8	2
3	Plan 3 - Lag	2 4 6 8	3
4	Plan 4 - Lag	2 4 6 8	4
5	Plan 5 - Lag	2 4 6 8	5
6	Plan 6 - Lag	2 4 6 8	6
7	Plan 7 - Lag	2 4 6 8	7
8	Plan 8 - Lag	2 4 6 8	8
9	Plan 9 - Lag	2 4 6 8	9
A	Coord Max *		A
B	Coord Lag *		B
C			C
D			D
E			E
F			F

Lag Phases <C Page>

Row	Time	Plan	Offset	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Coordination
<9 Key with C+D+9=0>

Time	Funct.	Day of Week	Column F Phases/Bits
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		

TOD Function
<7 Key>

<D Page>

Time	Plan	Offset	Day of Week
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday # 1
TOD Coordination
<9 Key with C+D+9=1>

Time	Plan	Offset	Day of Week
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday # 2
TOD Coordination
<9 Key with C+D+9=2>

Time	Plan	Offset	Day of Week
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday # 3
TOD Coordination
<9 Key with C+D+9=3>

Time	Plan	Offset	Day of Week	Row
00 : 00	0	0		0
00 : 00	0	0		1
00 : 00	0	0		2
00 : 00	0	0		3
00 : 00	0	0		4
00 : 00	0	0		5
00 : 00	0	0		6
00 : 00	0	0		7
00 : 00	0	0		8
00 : 00	0	0		9
00 : 00	0	0		A
00 : 00	0	0		B
00 : 00	0	0		C
00 : 00	0	0		D
00 : 00	0	0		E
00 : 00	0	0		F

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Offset Select
A = Offset A
B = Offset B
C = Offset C

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Month Select
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Row		Day	Year	Month	Day of Week
A	Holiday # 1 Date	0	0	0	
B	Holiday # 2 Date	0	0	0	
C	Holiday # 3 Date	0	0	0	

Holiday Dates
<8 Key>

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		I-1	14
1	0.0	0.0		I-2U	1
2	0.0	0.0		I-2L	5
3	0.0	0.0		I-3U	21
4	0.0	0.0		I-3L	25
5	10.0	0.0		I-4	9
6	0.0	0.0		I-5	16
7	0.0	0.0		I-6U	3
8	0.0	0.0		I-6L	7
9	0.0	0.0		I-7U	23
A	0.0	0.0		I-7L	27
B	0.0	0.0		I-8	11
C	0.0	0.0		I-9U	18
D	0.0	0.0		I-9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		J-1	13
1	0.0	0.0		J-2U	2
2	0.0	0.0		J-2L	6
3	0.0	0.0		J-3U	22
4	0.0	0.0		J-3L	26
5	0.0	0.0		J-4	10
6	0.0	0.0		J-5	15
7	0.0	0.0		J-6U	4
8	0.0	0.0		J-6L	8
9	0.0	0.0		J-7U	24
A	0.0	0.0		J-7L	28
B	0.0	0.0		J-8	12
C	0.0	0.0		J-9U	17
D	0.0	0.0		J-9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A	0.0	0.0	0.0	0
B	Overlap B	0.0	0.0	0.0	0
C	Overlap C	0.0	0.0	0.0	0
D	Overlap D	0.0	0.0	0.0	0

Overlap Timing <F Page> <D Page>

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Note: Initialized data is for all detectors to be active (ie, all flag bits set). A Detector which is "not flagged", will not be active as a Phase Detector, and WILL NOT call or extend its associated phase. It will still function as a System Detector.

Row		0 Detector Number
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (minutes)	5	<D+A+E>
Max OFF (minutes)	60	<D+A+F>

Detector Failure Monitor

Phase Number	0	<F+C+1>
Time Before Yellow	0.0	<F+C+3>

Advance Warning Beacon - Sign 1

Phase Number	0	<F+D+1>
Time Before Yellow	0.0	<F+D+3>

Advance Warning Beacon - Sign 2

Long Failure	0.0	<F+0+6>
Short Failure	0.0	<F+0+7>

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8
	Phase Names ---->								
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	10	0	10	0	10	0	10
2	Min Green	3	7	3	7	3	7	3	7
3	Type 3 Limit	0	0	0	0	0	0	0	0
4	Added Initial	0.0	1.2	0.0	1.2	0.0	1.2	0.0	1.2
5	Veh Extension	0.5	3.5	0.5	3.5	0.5	3.5	0.5	3.5
6	Max Gap	0.5	5.0	0.5	5.0	0.5	5.0	0.5	5.0
7	Min Gap	0.5	2.0	0.5	2.0	0.5	2.0	0.5	2.0
8	Max Limit	17	40	17	40	17	40	17	40
9	Max Limit 2	30	70	30	70	30	70	30	70
A	------	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
F	Red Clear	0.0	0.5	0.0	1.0	0.0	0.5	0.0	1.0

Phase Timing - Bank 2 <F Page>

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8	Row
	Phase Names ---->									
0	Ped Walk	0	7	0	7	0	7	0	7	0
1	Ped FDW	0	10	0	10	0	10	0	10	1
2	Min Green	3	7	3	7	3	7	3	7	2
3	Type 3 Limit	0	0	0	0	0	0	0	0	3
4	Added Initial	0.0	1.2	0.0	1.2	0.0	1.2	0.0	1.2	4
5	Veh Extension	0.5	3.5	0.5	3.5	0.5	3.5	0.5	3.5	5
6	Max Gap	0.5	5.0	0.5	5.0	0.5	5.0	0.5	5.0	6
7	Min Gap	0.5	2.0	0.5	2.0	0.5	2.0	0.5	2.0	7
8	Max Limit	17	40	17	40	17	40	17	40	8
9	Max Limit 2	30	70	30	70	30	70	30	70	9
A	------	0	0	0	0	0	0	0	0	A
B	Call To Phase	0	0	0	0	0	0	0	0	B
C	Reduce By	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	C
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	D
E	Yellow Change	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0	E
F	Red Clear	0.0	0.5	0.0	1.0	0.0	0.5	0.0	1.0	F

Phase Timing - Bank 3 <F Page>

Row		7 Time	8 Dwell	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output	Row
0	Delay Only --->	0	---	---	---	---	---	---	---	---	0
1		0	0								1
2		0	0								2
3		0	0								3
4		0	0								4
5		0	0								5
6		0	0								6
7		0	0								7
8		0	0								8
9	Limited Service	0	0								9
A	Int. --->	---	0								A
B		0	0								B
C		0	0								C
D		0	0								D
E		0	0								E
F		0	0								F

<--- Limited Service Interval (Set Dwell = 255)

Special Event Schedule <C Page with F+9+F=22>

INTERSECTION: Vista Way & Thunder

Group Assignment: **NONE**
Field Master Assignment: **NONE**
System Reference Number: **105**

N/S Street Name: **Not Assigned**
E/W Street Name: **Not Assigned**

Last Database Change: **1/22/2018 10:36**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	18	<C+0+0>
Zone Number		<C+0+1>
Area Number	1	<C+0+2>
Area Address	105	<C+0+3>
QuicNet Channel	Serial:COM19:	(QuicNet)

Communication Addresses

Manual Plan		<C+A+1>
Manual Offset		<C+B+1>

Manual Selection

Max Initial	30	<F+0+E>
Red Revert	2.0	<F+0+F>
All Red Start	5.0	<F+C+0>

Start / Revert Times

Row	Column Numbers ----> / Phase Names ---->	Phase 1	2	3	4	5	6	7	8
0	Ped Walk	0	0	0	7	0	7	0	7
1	Ped FDW	0	0	0	17	0	14	0	17
2	Min Green	3	8	3	6	5	8	3	4
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
5	Veh Extension	2.5	4.0	0.5	3.0	2.5	4.0	0.5	3.0
6	Max Gap	2.5	6.0	0.5	3.0	2.5	6.0	0.5	3.0
7	Min Gap	2.5	2.5	0.5	3.0	2.5	2.5	0.5	3.0
8	Max Limit	20	40	17	30	30	40	17	25
9	Max Limit 2	20	40	30	30	30	40	30	25
A	------	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0
D	Reduce Every	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
E	Yellow Change	3.0	4.8	3.0	3.6	4.1	4.8	3.0	3.0
F	Red Clear	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0

Phase Timing - Bank 1 <F Page>

Row	E	
0	RR-1 Delay	0
1	RR-1 Clear	10
2	EV-A Delay	0
3	EV-A Clear	5
4	EV-B Delay	0
5	EV-B Clear	5
6	EV-C Delay	0
7	EV-C Clear	5
8	EV-D Delay	0
9	EV-D Clear	0
A	RR-2 Delay	0
B	RR-2 Clear	10
C	*View EV Delay*	---
D	*View EV Clear*	---
E	*View RR Delay*	---
F	*View RR Clear*	---

Preempt Timing

Row	F	
0	Permit	_2_456__
1	Red Lock	
2	Yellow Lock	
3	Min Recall	_2___6__
4	Ped Recall	
5	*View Set Peds*	-----
6	Rest In Walk	
7	Red Rest	
8	Dual Entry	_2___6__
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond. Service	
D	Man Cntrl Calls	
E	Yellow Start	___4____
F	First Phases	_2___6__

Phase Functions <F Page>

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Row	Column Numbers --->	Plan 1	2	3	4	5	6	7	8	9	Row
	Plan Name --->										
0	Cycle Length	100	100	100	100	100	100	100	100	100	0
1	Phase 1 - ForceOff	55	60	60	63	60	61	65	65	65	1
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0	2
3	Phase 3 - ForceOff	20	15	20	25	20	25	25	25	25	3
4	Phase 4 - ForceOff	40	40	40	40	40	40	40	40	40	4
5	Phase 5 - ForceOff	55	60	60	61	60	63	65	65	65	5
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0	6
7	Phase 7 - ForceOff	20	15	20	25	20	25	25	25	25	7
8	Phase 8 - ForceOff	40	40	40	40	40	40	40	40	40	8
9	Ring Offset	0	0	0	0	0	0	0	0	0	9
A	Offset 1	0	0	0	0	0	0	0	0	0	A
B	Offset 2	0	0	0	0	0	0	0	0	0	B
C	Offset 3	0	0	0	0	0	0	0	0	0	C
D	Permissive	12	12	12	12	12	12	12	12	0	D
E	Hold Release	255	255	255	255	255	255	255	255	0	E
F	Zone Offset	0	0	0	0	0	0	0	0	0	F

Coordination <C Page>

(* = Coordination Recall)

	E	Row
		0
Plan 1 - Sync	2 6	1
Plan 2 - Sync	2 6	2
Plan 3 - Sync	2 6	3
Plan 4 - Sync	2 6	4
Plan 5 - Sync	2 6	5
Plan 6 - Sync	2 6	6
Plan 7 - Sync	2 6	7
Plan 8 - Sync	2 6	8
Plan 9 - Sync	2 6	9
Coord Ped *		A
NEMA Hold		B
		C
		D
		E
		F

Sync Phases <C Page>

Row	Column Numbers --->	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 34
F	IC Select (Interconnect)	2

Configuration <E Page>

	F
RR Overlap A - Phases	
RR Overlap B - Phases	
RR Overlap C - Phases	
RR Overlap D - Phases	
Ped 2P	
Ped 6P	6
Ped 4P	4
Ped 8P	
Yellow Flash Phases	
Overlap A - Phases	
Overlap B - Phases	
Overlap C - Phases	
Overlap D - Phases	
Restricted Phases	
Assign 5 Outputs	

Configuration <E Page>

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 =
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

Assign 5 Outputs
(Ped Loadswitch Yellows)
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Force-Off Adjust	0

Coord Force-Off Adjust for Ped Service <C+D+F>

Transition Type	0

TBC Transition <C+D+D>

Transition Type
0 = Shortway
Non-zero = Lengthen

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

	F	Row
Free Lag	2 4 6 8	0
Plan 1 - Lag	2 4 6 8	1
Plan 2 - Lag	2 4 6 8	2
Plan 3 - Lag	2 4 6 8	3
Plan 4 - Lag	2 4 6 8	4
Plan 5 - Lag	2 4 6 8	5
Plan 6 - Lag	2 4 6 8	6
Plan 7 - Lag	2 4 6 8	7
Plan 8 - Lag	2 4 6 8	8
Plan 9 - Lag	2 4 6 8	9
Coord Max *		A
Coord Lag *		B
		C
		D
		E
		F

Lag Phases <C Page>

Row	Time	Plan	Offset	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Coordination
<9 Key with C+D+9=0>

Time	Funct.	Day of Week	Column F Phases/Bits
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		

TOD Function
<7 Key>

<D Page>

Time	Plan	Offset	Day of Week
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday # 1
TOD Coordination
<9 Key with C+D+9=1>

Time	Plan	Offset	Day of Week
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday # 2
TOD Coordination
<9 Key with C+D+9=2>

Time	Plan	Offset	Day of Week	Row
00 : 00	0	0		0
00 : 00	0	0		1
00 : 00	0	0		2
00 : 00	0	0		3
00 : 00	0	0		4
00 : 00	0	0		5
00 : 00	0	0		6
00 : 00	0	0		7
00 : 00	0	0		8
00 : 00	0	0		9
00 : 00	0	0		A
00 : 00	0	0		B
00 : 00	0	0		C
00 : 00	0	0		D
00 : 00	0	0		E
00 : 00	0	0		F

Holiday # 3
TOD Coordination
<9 Key with C+D+9=3>

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Offset Select
A = Offset A
B = Offset B
C = Offset C

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Month Select
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Row		Day	Year	Month	Day of Week
A	Holiday # 1 Date	0	0	0	
B	Holiday # 2 Date	0	0	0	
C	Holiday # 3 Date	0	0	0	

Holiday Dates
<8 Key>

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		I-1	14
1	2.0	0.0		I-2U	1
2	0.0	0.0		I-2L	5
3	0.0	0.0		I-3U	21
4	0.0	0.0		I-3L	25
5	2.0	0.0		I-4	9
6	0.0	0.0		I-5	16
7	0.0	0.0		I-6U	3
8	0.0	0.0		I-6L	7
9	10.0	0.0		I-7U	23
A	0.0	0.0		I-7L	27
B	0.0	0.0		I-8	11
C	0.0	0.0		I-9U	18
D	0.0	0.0		I-9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		J-1	13
1	0.0	0.0		J-2U	2
2	0.0	0.0		J-2L	6
3	2.0	0.0		J-3U	22
4	0.0	0.0		J-3L	26
5	0.0	0.0		J-4	10
6	2.0	0.0		J-5	15
7	0.0	0.0		J-6U	4
8	12.0	0.0		J-6L	8
9	0.0	0.0		J-7U	24
A	0.0	0.0		J-7L	28
B	0.0	0.0		J-8	12
C	0.0	0.0		J-9U	17
D	0.0	0.0		J-9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A	0.0	0.0	0.0	0
B	Overlap B	0.0	0.0	0.0	0
C	Overlap C	0.0	0.0	0.0	0
D	Overlap D	0.0	0.0	0.0	0

Overlap Timing <F Page> <D Page>

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Note: Initialized data is for all detectors to be active (ie, all flag bits set). A Detector which is "not flagged", will not be active as a Phase Detector, and WILL NOT call or extend its associated phase. It will still function as a System Detector.

Row		0 Detector Number
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (minutes)	5	<D+A+E>
Max OFF (minutes)	60	<D+A+F>

Detector Failure Monitor

Phase Number	0	<F+C+1>
Time Before Yellow	0.0	<F+C+3>

Advance Warning Beacon - Sign 1

Phase Number	0	<F+D+1>
Time Before Yellow	0.0	<F+D+3>

Advance Warning Beacon - Sign 2

Long Failure	0.0	<F+0+6>
Short Failure	0.0	<F+0+7>

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8
	Phase Names ---->								
0	Ped Walk	0	0	0	7	0	7	0	7
1	Ped FDW	0	0	0	17	0	14	0	17
2	Min Green	3	6	3	4	3	6	3	4
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
5	Veh Extension	2.5	4.0	0.5	3.0	2.5	4.0	0.5	3.0
6	Max Gap	2.5	6.0	0.5	3.0	2.5	6.0	0.5	3.0
7	Min Gap	2.5	2.5	0.5	3.0	2.5	2.5	0.5	3.0
8	Max Limit	20	40	17	30	30	40	17	25
9	Max Limit 2	20	40	30	30	30	40	30	25
A	------	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0
D	Reduce Every	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
E	Yellow Change	3.0	4.3	3.0	3.6	3.6	4.3	3.0	3.0
F	Red Clear	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0

Phase Timing - Bank 2 <F Page>

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8
	Phase Names ---->								
0	Ped Walk	0	0	0	7	0	7	0	7
1	Ped FDW	0	0	0	17	0	14	0	17
2	Min Green	3	6	3	4	3	6	3	4
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
5	Veh Extension	2.5	4.0	0.5	3.0	2.5	4.0	0.5	3.0
6	Max Gap	2.5	6.0	0.5	3.0	2.5	6.0	0.5	3.0
7	Min Gap	2.5	2.5	0.5	3.0	2.5	2.5	0.5	3.0
8	Max Limit	20	40	17	30	30	40	17	25
9	Max Limit 2	20	40	30	30	30	40	30	25
A	------	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0
D	Reduce Every	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
E	Yellow Change	3.0	4.3	3.0	3.6	3.6	4.3	3.0	3.0
F	Red Clear	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0

Phase Timing - Bank 3 <F Page>

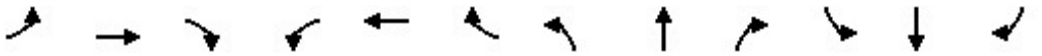
Row	Delay Only --->	7 Time	8 Dwell	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0		0	---	---	---	---	---	---	---	---
1		0	0							
2		0	0							
3		0	0							
4		0	0							
5		0	0							
6		0	0							
7		0	0							
8		0	0							
9	Limited Service	0	0							
A	Int. --->	---	0							
B		0	0							
C		0	0							
D		0	0							
E		0	0							
F		0	0							

Special Event Schedule <C Page with F+9+F=22>

<--- **Limited Service Interval** (Set Dwell = 255)

APPENDIX D

PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS – EXISTING



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	418	302	261	375	33	732	74	139	67	68	70
Future Volume (veh/h)	106	418	302	261	375	33	732	74	139	67	68	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.94	1.00		0.97	1.00		0.95
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	116	459	332	339	487	43	892	0	158	75	76	79
Peak Hour Factor	0.91	0.91	0.91	0.77	0.77	0.77	0.88	0.88	0.88	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	205	791	807	420	752	66	1048	0	453	146	149	156
Arrive On Green	0.12	0.22	0.22	0.12	0.23	0.23	0.29	0.00	0.29	0.13	0.13	0.13
Sat Flow, veh/h	1781	3554	1530	3456	3286	289	3563	0	1538	1099	1121	1179
Grp Volume(v), veh/h	116	459	332	339	262	268	892	0	158	124	0	106
Grp Sat Flow(s),veh/h/ln	1781	1777	1530	1728	1777	1798	1781	0	1538	1815	0	1585
Q Serve(g_s), s	5.6	10.4	12.1	8.6	12.1	12.2	21.3	0.0	7.3	5.7	0.0	5.6
Cycle Q Clear(g_c), s	5.6	10.4	12.1	8.6	12.1	12.2	21.3	0.0	7.3	5.7	0.0	5.6
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	0.61		0.74
Lane Grp Cap(c), veh/h	205	791	807	420	407	411	1048	0	453	241	0	210
V/C Ratio(X)	0.57	0.58	0.41	0.81	0.65	0.65	0.85	0.00	0.35	0.51	0.00	0.51
Avail Cap(c_a), veh/h	223	791	807	509	435	440	1338	0	578	241	0	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.8	31.3	13.5	38.6	31.5	31.5	30.0	0.0	25.1	36.5	0.0	36.4
Incr Delay (d2), s/veh	2.8	3.1	1.6	7.9	3.0	3.1	4.4	0.0	0.5	1.9	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.7	7.4	4.1	5.4	5.5	9.5	0.0	2.7	2.6	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.6	34.4	15.0	46.5	34.5	34.6	34.4	0.0	25.5	38.3	0.0	38.3
LnGrp LOS	D	C	B	D	C	C	C	A	C	D	A	D
Approach Vol, veh/h		907			869			1050			230	
Approach Delay, s/veh		28.1			39.2			33.1			38.3	
Approach LOS		C			D			C			D	

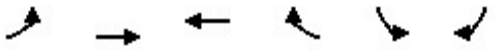
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.7	25.9		17.1	15.1	26.5		31.7				
Change Period (Y+Rc), s	* 4.7	5.8		5.1	* 4.7	5.8		5.1				
Max Green Setting (Gmax), s	* 13	20.1		12.0	* 11	22.1		33.9				
Max Q Clear Time (g_c+I1), s	10.6	14.1		7.7	7.6	14.2		23.3				
Green Ext Time (p_c), s	0.3	2.2		0.5	0.1	2.0		3.3				

Intersection Summary		
HCM 6th Ctrl Delay		33.7
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

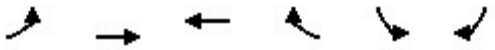
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	130	527	591	28	17	47
Future Volume (veh/h)	130	527	591	28	17	47
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	159	643	778	37	22	62
Peak Hour Factor	0.82	0.82	0.76	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	193	2992	2352	112	97	258
Arrive On Green	0.11	0.84	0.23	0.23	0.05	0.05
Sat Flow, veh/h	1781	3647	3541	164	1781	1585
Grp Volume(v), veh/h	159	643	401	414	22	62
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1834	1781	1585
Q Serve(g_s), s	8.7	3.5	18.9	18.9	1.2	3.4
Cycle Q Clear(g_c), s	8.7	3.5	18.9	18.9	1.2	3.4
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	193	2992	1212	1252	97	258
V/C Ratio(X)	0.82	0.21	0.33	0.33	0.23	0.24
Avail Cap(c_a), veh/h	444	2992	1212	1252	167	321
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.90	0.90	1.00	1.00
Uniform Delay (d), s/veh	43.6	1.5	19.6	19.6	45.3	36.5
Incr Delay (d2), s/veh	5.4	0.1	0.7	0.6	1.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.7	9.1	9.4	0.6	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	49.0	1.7	20.3	20.3	46.5	37.0
LnGrp LOS	D	A	C	C	D	D
Approach Vol, veh/h		802	815		84	
Approach Delay, s/veh		11.0	20.3		39.4	
Approach LOS		B	C		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		90.0		10.0	16.0	74.0
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		80.2		9.4	24.9	50.2
Max Q Clear Time (g_c+I1), s		5.5		5.4	10.7	20.9
Green Ext Time (p_c), s		7.8		0.1	0.3	8.4

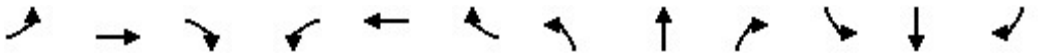
Intersection Summary		
HCM 6th Ctrl Delay		16.9
HCM 6th LOS		B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	142	374	375	181	263	253
Future Volume (veh/h)	142	374	375	181	263	253
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.96	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	180	473	493	238	286	275
Peak Hour Factor	0.79	0.79	0.76	0.76	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	211	2508	1233	591	339	489
Arrive On Green	0.24	1.00	0.54	0.54	0.19	0.19
Sat Flow, veh/h	1781	3647	2391	1102	1781	1585
Grp Volume(v), veh/h	180	473	380	351	286	275
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1623	1781	1585
Q Serve(g_s), s	9.7	0.0	12.6	12.8	15.5	14.5
Cycle Q Clear(g_c), s	9.7	0.0	12.6	12.8	15.5	14.5
Prop In Lane	1.00			0.68	1.00	1.00
Lane Grp Cap(c), veh/h	211	2508	953	871	339	489
V/C Ratio(X)	0.85	0.19	0.40	0.40	0.84	0.56
Avail Cap(c_a), veh/h	372	2508	953	871	524	653
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	13.7	13.7	39.1	28.9
Incr Delay (d2), s/veh	7.2	0.2	1.2	1.4	7.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.1	5.2	4.8	7.4	13.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.5	0.2	14.9	15.1	46.5	29.9
LnGrp LOS	D	A	B	B	D	C
Approach Vol, veh/h		653	731		561	
Approach Delay, s/veh		12.4	15.0		38.4	
Approach LOS		B	B		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		76.4		23.6	16.9	59.5
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		60.2		29.4	20.9	34.2
Max Q Clear Time (g_c+I1), s		2.0		17.5	11.7	14.8
Green Ext Time (p_c), s		5.3		1.5	0.2	6.4

Intersection Summary	
HCM 6th Ctrl Delay	20.9
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	328	356	207	314	33	671	65	37	71	82	66
Future Volume (veh/h)	127	328	356	207	314	33	671	65	37	71	82	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.94	1.00		0.97	1.00		0.95
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	138	357	387	223	338	35	797	0	41	79	91	73
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	944	831	307	748	77	951	0	410	153	178	146
Arrive On Green	0.12	0.27	0.27	0.09	0.23	0.23	0.27	0.00	0.27	0.14	0.14	0.14
Sat Flow, veh/h	1781	3554	1535	3456	3232	332	3563	0	1536	1100	1285	1049
Grp Volume(v), veh/h	138	357	387	223	184	189	797	0	41	130	0	113
Grp Sat Flow(s),veh/h/ln	1781	1777	1535	1728	1777	1787	1781	0	1536	1815	0	1618
Q Serve(g_s), s	6.4	7.1	13.6	5.4	7.7	7.8	18.2	0.0	1.7	5.7	0.0	5.6
Cycle Q Clear(g_c), s	6.4	7.1	13.6	5.4	7.7	7.8	18.2	0.0	1.7	5.7	0.0	5.6
Prop In Lane	1.00		1.00	1.00		0.19	1.00		1.00	0.61		0.65
Lane Grp Cap(c), veh/h	219	944	831	307	411	414	951	0	410	252	0	225
V/C Ratio(X)	0.63	0.38	0.47	0.73	0.45	0.46	0.84	0.00	0.10	0.52	0.00	0.50
Avail Cap(c_a), veh/h	254	944	831	461	455	458	1359	0	586	253	0	225
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.0	25.9	12.6	38.3	28.4	28.5	29.9	0.0	23.8	34.5	0.0	34.4
Incr Delay (d2), s/veh	3.9	1.2	1.9	3.3	0.8	0.8	3.3	0.0	0.1	1.8	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	3.1	8.0	2.4	3.3	3.4	8.0	0.0	0.6	2.6	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.8	27.0	14.5	41.6	29.2	29.3	33.2	0.0	23.9	36.3	0.0	36.1
LnGrp LOS	D	C	B	D	C	C	C	A	C	D	A	D
Approach Vol, veh/h		882			596			838			243	
Approach Delay, s/veh		23.5			33.8			32.7			36.2	
Approach LOS		C			C			C			D	

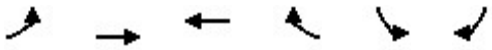
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.4	28.7		17.1	15.3	25.8		28.1				
Change Period (Y+Rc), s	* 4.7	5.8		5.1	* 4.7	5.8		5.1				
Max Green Setting (Gmax), s	* 12	22.9		12.0	* 12	22.1		32.9				
Max Q Clear Time (g_c+I1), s	7.4	15.6		7.7	8.4	9.8		20.2				
Green Ext Time (p_c), s	0.3	2.3		0.5	0.1	1.7		2.8				

Intersection Summary		
HCM 6th Ctrl Delay		30.1
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

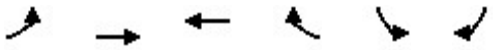
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	439	415	6	58	119
Future Volume (veh/h)	34	439	415	6	58	119
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	472	432	6	73	151
Peak Hour Factor	0.93	0.93	0.96	0.96	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	57	2779	2507	35	203	231
Arrive On Green	0.03	0.78	0.23	0.23	0.11	0.11
Sat Flow, veh/h	1781	3647	3680	50	1781	1585
Grp Volume(v), veh/h	37	472	214	224	73	151
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1859	1781	1585
Q Serve(g_s), s	2.1	3.3	9.6	9.7	3.8	9.0
Cycle Q Clear(g_c), s	2.1	3.3	9.6	9.7	3.8	9.0
Prop In Lane	1.00			0.03	1.00	1.00
Lane Grp Cap(c), veh/h	57	2779	1242	1300	203	231
V/C Ratio(X)	0.65	0.17	0.17	0.17	0.36	0.65
Avail Cap(c_a), veh/h	372	2779	1242	1300	346	358
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.98	0.98	1.00	1.00
Uniform Delay (d), s/veh	47.8	2.7	15.3	15.3	40.9	40.3
Incr Delay (d2), s/veh	8.2	0.1	0.3	0.3	1.1	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.9	4.4	4.7	1.7	8.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	56.0	2.9	15.6	15.6	42.0	43.4
LnGrp LOS	E	A	B	B	D	D
Approach Vol, veh/h		509	438		224	
Approach Delay, s/veh		6.7	15.6		42.9	
Approach LOS		A	B		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		84.0		16.0	8.3	75.7
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		70.2		19.4	20.9	44.2
Max Q Clear Time (g_c+I1), s		5.3		11.0	4.1	11.7
Green Ext Time (p_c), s		5.3		0.4	0.0	4.0

Intersection Summary		
HCM 6th Ctrl Delay		17.0
HCM 6th LOS		B



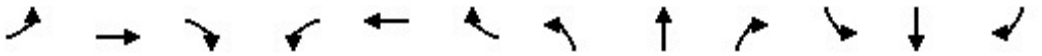
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	118	384	263	106	163	149
Future Volume (veh/h)	118	384	263	106	163	149
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	133	431	299	120	179	164
Peak Hour Factor	0.89	0.89	0.88	0.88	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	163	2731	1546	604	227	347
Arrive On Green	0.18	1.00	0.63	0.63	0.13	0.13
Sat Flow, veh/h	1781	3647	2563	965	1781	1585
Grp Volume(v), veh/h	133	431	213	206	179	164
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1657	1781	1585
Q Serve(g_s), s	7.2	0.0	5.1	5.3	9.7	9.0
Cycle Q Clear(g_c), s	7.2	0.0	5.1	5.3	9.7	9.0
Prop In Lane	1.00			0.58	1.00	1.00
Lane Grp Cap(c), veh/h	163	2731	1113	1038	227	347
V/C Ratio(X)	0.82	0.16	0.19	0.20	0.79	0.47
Avail Cap(c_a), veh/h	390	2731	1113	1038	559	642
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	0.0	7.9	8.0	42.3	34.0
Incr Delay (d2), s/veh	7.3	0.1	0.4	0.4	6.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	1.9	1.9	4.6	8.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	47.3	0.1	8.3	8.4	48.3	35.0
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		564	419		343	
Approach Delay, s/veh		11.3	8.4		41.9	
Approach LOS		B	A		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.6		17.4	14.2	68.4
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		58.2		31.4	21.9	31.2
Max Q Clear Time (g_c+I1), s		2.0		11.7	9.2	7.3
Green Ext Time (p_c), s		4.7		1.0	0.2	3.7

Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

APPENDIX E

PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS – EXISTING + PROJECT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	428	302	263	379	33	732	74	143	67	68	70
Future Volume (veh/h)	106	428	302	263	379	33	732	74	143	67	68	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.94	1.00		0.97	1.00		0.95
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	116	470	332	342	492	43	892	0	162	75	76	79
Peak Hour Factor	0.91	0.91	0.91	0.77	0.77	0.77	0.88	0.88	0.88	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	205	790	806	422	755	66	1048	0	453	145	148	156
Arrive On Green	0.12	0.22	0.22	0.12	0.23	0.23	0.29	0.00	0.29	0.13	0.13	0.13
Sat Flow, veh/h	1781	3554	1530	3456	3289	286	3563	0	1538	1099	1121	1179
Grp Volume(v), veh/h	116	470	332	342	265	270	892	0	162	124	0	106
Grp Sat Flow(s),veh/h/ln	1781	1777	1530	1728	1777	1798	1781	0	1538	1815	0	1584
Q Serve(g_s), s	5.6	10.7	12.1	8.7	12.2	12.3	21.3	0.0	7.5	5.7	0.0	5.6
Cycle Q Clear(g_c), s	5.6	10.7	12.1	8.7	12.2	12.3	21.3	0.0	7.5	5.7	0.0	5.6
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	0.61		0.74
Lane Grp Cap(c), veh/h	205	790	806	422	408	413	1048	0	453	240	0	210
V/C Ratio(X)	0.57	0.59	0.41	0.81	0.65	0.65	0.85	0.00	0.36	0.52	0.00	0.51
Avail Cap(c_a), veh/h	223	790	806	508	434	440	1336	0	577	241	0	210
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.9	31.5	13.5	38.7	31.5	31.6	30.0	0.0	25.2	36.5	0.0	36.5
Incr Delay (d2), s/veh	2.8	3.3	1.6	8.1	3.1	3.2	4.4	0.0	0.5	1.9	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.9	7.4	4.1	5.5	5.6	9.5	0.0	2.7	2.6	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.7	34.8	15.0	46.7	34.7	34.8	34.5	0.0	25.6	38.4	0.0	38.4
LnGrp LOS	D	C	B	D	C	C	C	A	C	D	A	D
Approach Vol, veh/h		918			877			1054			230	
Approach Delay, s/veh		28.4			39.4			33.1			38.4	
Approach LOS		C			D			C			D	

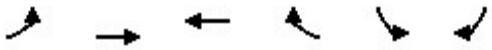
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.7	25.9		17.1	15.1	26.5		31.7				
Change Period (Y+Rc), s	* 4.7	5.8		5.1	* 4.7	5.8		5.1				
Max Green Setting (Gmax), s	* 13	20.1		12.0	* 11	22.1		33.9				
Max Q Clear Time (g_c+I1), s	10.7	14.1		7.7	7.6	14.3		23.3				
Green Ext Time (p_c), s	0.3	2.3		0.5	0.1	2.0		3.3				

Intersection Summary		
HCM 6th Ctrl Delay		33.9
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

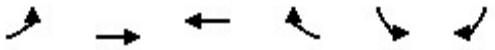
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	144	527	591	33	19	53
Future Volume (veh/h)	144	527	591	33	19	53
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	176	643	778	43	25	70
Peak Hour Factor	0.82	0.82	0.76	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	211	2986	2291	127	99	276
Arrive On Green	0.12	0.84	0.22	0.22	0.06	0.06
Sat Flow, veh/h	1781	3647	3510	189	1781	1585
Grp Volume(v), veh/h	176	643	404	417	25	70
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1829	1781	1585
Q Serve(g_s), s	9.7	3.5	19.2	19.2	1.3	3.8
Cycle Q Clear(g_c), s	9.7	3.5	19.2	19.2	1.3	3.8
Prop In Lane	1.00			0.10	1.00	1.00
Lane Grp Cap(c), veh/h	211	2986	1192	1226	99	276
V/C Ratio(X)	0.83	0.22	0.34	0.34	0.25	0.25
Avail Cap(c_a), veh/h	479	2986	1192	1226	167	337
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.90	0.90	1.00	1.00
Uniform Delay (d), s/veh	43.1	1.6	20.3	20.3	45.2	35.7
Incr Delay (d2), s/veh	5.2	0.1	0.7	0.7	1.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.7	9.3	9.6	0.6	3.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	48.3	1.7	21.0	21.0	46.5	36.1
LnGrp LOS	D	A	C	C	D	D
Approach Vol, veh/h		819	821		95	
Approach Delay, s/veh		11.7	21.0		38.9	
Approach LOS		B	C		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		89.8		10.2	17.0	72.9
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		80.2		9.4	26.9	48.2
Max Q Clear Time (g_c+I1), s		5.5		5.8	11.7	21.2
Green Ext Time (p_c), s		7.8		0.1	0.3	8.2

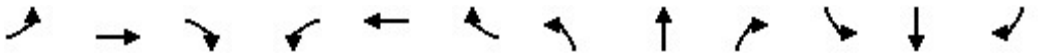
Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	142	376	379	181	263	254
Future Volume (veh/h)	142	376	379	181	263	254
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.96	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	180	476	499	238	286	276
Peak Hour Factor	0.79	0.79	0.76	0.76	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	211	2510	1239	588	338	488
Arrive On Green	0.24	1.00	0.54	0.54	0.19	0.19
Sat Flow, veh/h	1781	3647	2401	1094	1781	1585
Grp Volume(v), veh/h	180	476	383	354	286	276
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1625	1781	1585
Q Serve(g_s), s	9.7	0.0	12.7	12.9	15.5	14.6
Cycle Q Clear(g_c), s	9.7	0.0	12.7	12.9	15.5	14.6
Prop In Lane	1.00			0.67	1.00	1.00
Lane Grp Cap(c), veh/h	211	2510	954	873	338	488
V/C Ratio(X)	0.85	0.19	0.40	0.41	0.85	0.57
Avail Cap(c_a), veh/h	372	2510	954	873	506	638
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	13.7	13.7	39.1	29.0
Incr Delay (d2), s/veh	7.2	0.2	1.3	1.4	8.3	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.1	5.2	4.9	7.5	13.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.5	0.2	14.9	15.1	47.4	30.0
LnGrp LOS	D	A	B	B	D	C
Approach Vol, veh/h		656	737		562	
Approach Delay, s/veh		12.3	15.0		38.9	
Approach LOS		B	B		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		76.4		23.6	16.9	59.5
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		61.2		28.4	20.9	35.2
Max Q Clear Time (g_c+I1), s		2.0		17.5	11.7	14.9
Green Ext Time (p_c), s		5.3		1.5	0.2	6.6

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	335	356	213	323	33	671	65	40	71	82	66
Future Volume (veh/h)	127	335	356	213	323	33	671	65	40	71	82	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.94	1.00		0.97	1.00		0.95
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	138	364	387	229	347	35	797	0	44	79	91	73
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	936	828	313	749	75	951	0	410	153	178	146
Arrive On Green	0.12	0.26	0.26	0.09	0.23	0.23	0.27	0.00	0.27	0.14	0.14	0.14
Sat Flow, veh/h	1781	3554	1535	3456	3242	324	3563	0	1536	1100	1285	1049
Grp Volume(v), veh/h	138	364	387	229	189	193	797	0	44	130	0	113
Grp Sat Flow(s),veh/h/ln	1781	1777	1535	1728	1777	1789	1781	0	1536	1815	0	1618
Q Serve(g_s), s	6.3	7.2	13.6	5.6	7.9	8.0	18.2	0.0	1.9	5.7	0.0	5.5
Cycle Q Clear(g_c), s	6.3	7.2	13.6	5.6	7.9	8.0	18.2	0.0	1.9	5.7	0.0	5.5
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	0.61		0.65
Lane Grp Cap(c), veh/h	219	936	828	313	411	413	951	0	410	252	0	225
V/C Ratio(X)	0.63	0.39	0.47	0.73	0.46	0.47	0.84	0.00	0.11	0.52	0.00	0.50
Avail Cap(c_a), veh/h	254	936	828	469	456	459	1360	0	586	253	0	225
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.9	26.1	12.7	38.2	28.5	28.6	29.8	0.0	23.8	34.4	0.0	34.3
Incr Delay (d2), s/veh	3.9	1.2	1.9	3.3	0.8	0.8	3.3	0.0	0.1	1.8	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	3.1	8.1	2.5	3.4	3.5	8.0	0.0	0.7	2.6	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.8	27.3	14.6	41.4	29.3	29.4	33.1	0.0	24.0	36.3	0.0	36.1
LnGrp LOS	D	C	B	D	C	C	C	A	C	D	A	D
Approach Vol, veh/h		889			611			841			243	
Approach Delay, s/veh		23.7			33.9			32.6			36.2	
Approach LOS		C			C			C			D	

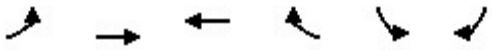
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.5	28.5		17.1	15.3	25.7		28.1				
Change Period (Y+Rc), s	* 4.7	5.8		5.1	* 4.7	5.8		5.1				
Max Green Setting (Gmax), s	* 12	22.7		12.0	* 12	22.1		32.9				
Max Q Clear Time (g_c+I1), s	7.6	15.6		7.7	8.3	10.0		20.2				
Green Ext Time (p_c), s	0.3	2.3		0.5	0.1	1.7		2.8				

Intersection Summary		
HCM 6th Ctrl Delay		30.2
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

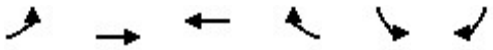
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	44	439	415	9	63	133
Future Volume (veh/h)	44	439	415	9	63	133
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	472	432	9	80	168
Peak Hour Factor	0.93	0.93	0.96	0.96	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	65	2744	2435	51	221	254
Arrive On Green	0.04	0.77	0.23	0.23	0.12	0.12
Sat Flow, veh/h	1781	3647	3650	74	1781	1585
Grp Volume(v), veh/h	47	472	216	225	80	168
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1854	1781	1585
Q Serve(g_s), s	2.6	3.5	9.8	9.8	4.1	10.0
Cycle Q Clear(g_c), s	2.6	3.5	9.8	9.8	4.1	10.0
Prop In Lane	1.00			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	65	2744	1216	1269	221	254
V/C Ratio(X)	0.72	0.17	0.18	0.18	0.36	0.66
Avail Cap(c_a), veh/h	390	2744	1216	1269	346	365
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.98	0.98	1.00	1.00
Uniform Delay (d), s/veh	47.7	3.0	16.0	16.0	40.2	39.4
Incr Delay (d2), s/veh	10.0	0.1	0.3	0.3	1.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.0	4.5	4.7	1.9	8.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.7	3.1	16.3	16.3	41.2	42.4
LnGrp LOS	E	A	B	B	D	D
Approach Vol, veh/h		519	441		248	
Approach Delay, s/veh		8.1	16.3		42.0	
Approach LOS		A	B		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		83.0		17.0	8.7	74.3
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		70.2		19.4	21.9	43.2
Max Q Clear Time (g_c+I1), s		5.5		12.0	4.6	11.8
Green Ext Time (p_c), s		5.3		0.5	0.1	4.0

Intersection Summary		
HCM 6th Ctrl Delay		18.0
HCM 6th LOS		B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	119	388	266	106	163	150
Future Volume (veh/h)	119	388	266	106	163	150
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	134	436	302	120	179	165
Peak Hour Factor	0.89	0.89	0.88	0.88	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	163	2735	1554	601	225	345
Arrive On Green	0.18	1.00	0.63	0.63	0.13	0.13
Sat Flow, veh/h	1781	3647	2570	958	1781	1585
Grp Volume(v), veh/h	134	436	214	208	179	165
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1658	1781	1585
Q Serve(g_s), s	7.2	0.0	5.1	5.3	9.8	9.1
Cycle Q Clear(g_c), s	7.2	0.0	5.1	5.3	9.8	9.1
Prop In Lane	1.00			0.58	1.00	1.00
Lane Grp Cap(c), veh/h	163	2735	1115	1040	225	345
V/C Ratio(X)	0.82	0.16	0.19	0.20	0.80	0.48
Avail Cap(c_a), veh/h	265	2735	1115	1040	435	531
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	0.0	7.9	7.9	42.4	34.2
Incr Delay (d2), s/veh	7.9	0.1	0.4	0.4	6.3	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	1.9	1.9	4.6	8.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	48.0	0.1	8.3	8.4	48.7	35.2
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		570	422		344	
Approach Delay, s/veh		11.4	8.3		42.2	
Approach LOS		B	A		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.8		17.2	14.2	68.5
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		65.2		24.4	14.9	45.2
Max Q Clear Time (g_c+I1), s		2.0		11.8	9.2	7.3
Green Ext Time (p_c), s		4.8		0.9	0.1	4.1

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.