FOCUSED TRAFFIC IMPACT STUDY UPDATE

New Commercial and Office Plaza

At NWC of Alessandro Blvd and Lasselle St

Moreno Valley

Date: April 6, 2021

Prepared For:

Northwest Moreno Properties

3017 East Edinger Ave

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Prepared By:

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Focused Traffic Impact Study Update

For New Commercial and Office Plaza

At NWC of Alessandro Blvd and Lasselle St, Moreno Valley

Prepared under the supervision of

Jende Kay Hsu, P.E., T. E.

Lic. # T2285

EXECUTIVE SUMMARY

This is an update study report for the commercial development located on an unimproved land at the northwest corner of Alessandro Boulevard and Lasselle Street in the City of Moreno Valley. The proposed development includes a new gas station with convenient store (3,825 sq. ft.) and 16 fueling positions, quick-service restaurant (1,600 sq. ft.), two drive-thru restaurants (3,320 sq. ft. each), a sit-down dining (5,500 sq. ft. with a patio of 1,750 sq. ft.), retail uses (1,600 sq. ft. x 2), office uses (4,950 sq. ft. x 2), an express carwash (3,850 sq. ft.), and a bank (3,775 sq. ft.). With pass-by considerations, the project would generate 204 inbound and 184 outbound trips in the AM peak hour, and 210 inbound and 201 outbound trips in the PM peak hour, and 4,482 daily trips.

The project will include the following off-site improvements:

- Widen Lasselle Street to its ultimate width on the west half (50 feet from centerline to ROW) and provide two southbound lanes, one northbound lane, a two-way-left-turn lane, and a southbound bike lane.
- Widen Alessandro Boulevard to its ultimate width on the north half (67 feet from centerline to ROW) and provide two westbound lanes. Provide a transition of the two-lane section to join the one-lane section west of Chara Street.
- Construct raised median islands along Alessandro Boulevard between Chervil Court and Lasselle Street.
- Construct a bus bay on the north side of Alessandro Boulevard immediately west of Lasselle Street.

According to the approved scoping agreement, this study collected traffic count data and conducted level of service analysis for eight (8) intersections in project vicinity and three (3) project driveways. With the proposed mitigation measures, all studied intersections will maintain level of service "D" or better for both AM and PM peak hours in each of the study scenarios except the intersection (#3) of Alessandro Boulevard and Lasselle Street which will operate at LOS E in the AM peak hour.

The project will result in no or less than significant traffic impact with the following mitigation measures:

- For the east approach of Alessandro Boulevard at Lasselle Street, convert the existing westbound right-turn lane to a shared through/right-turn lane and extend the lane length to a minimum of 250 feet.

The study examined the 95th percentile queue for left-turn pockets at the project-adjacent intersection in the AM and PM peak hours. In order to provide adequate queuing lengths, the following improvements are recommended:

- Provide 260 feet of storage length for eastbound left-turn lane on Alessandro Boulevard at Lasselle Street.
- Provide 400 feet of storage length for northbound left-turn lane on Lasselle Street at Alessandro Boulevard.
- Provide 180 feet of storage length for southbound left-turn lane on Lasselle Street at Alessandro Boulevard.

The study examined signal warrant for the following stop-controlled intersection:

- The intersection of Lasselle Street at Brodiaea Avenue does NOT meet the traffic signal warrant after completion of the project.

In accordance with the “Project Type Screening” recommended in the *City of Moreno Valley Traffic Impact Preparation Guide, June 2020,* this local servicing retail project of less than 50,000 square feet can be presumed to have less than significant impacts. Complete project-level VMT analysis and forecasting through regional model is, therefore, not required for the project.

Site access is adequately and properly provided via two new right-in-right-out driveways on Alessandro Boulevard and a full access driveway on Lasselle Street. The proposed two-way-left-turn lane on Lasselle Street is expected to provide additional space to shelter turning movements and enhance traffic safety. The proposed raised median on Alessandro Boulevard will provide a physical constrain for the proposed driveway to

right turns only. The “One Way” sign (R6-1) is recommended installation at the proposed median island of Alessandro Boulevard facing the proposed driveways. Adequate driveway throat lengths of at least 60 feet have been provided to ensure on-site circulation does not negatively affect public streets.

INTRODUCTION

The purpose of this study is to evaluate traffic impact of the proposed development located at the northwest corner of Alessandro Boulevard and Lasselle Street in the City of Moreno Valley. Vicinity map is shown in **Exhibit 1**.

Project site is currently unimproved and vacant. The proposed development includes a new gas station with convenient store (3,825 sq. ft.) and 16 fueling positions, quick-service restaurant (1,600 sq. ft.), two drive-thru restaurants (3,320 sq. ft. each), a sit-down dining (5,500 sq. ft. with a patio of 1,750 sq. ft.), retail uses (1,600 sq. ft. x 2), office uses (4,950 sq. ft. x 2), an express carwash (3,850 sq. ft.), and a bank (3,775 sq. ft.). The proposed site plan is shown in **Exhibit 2**.

The project will include the following off-site improvements:

- Widen Lasselle Street to its ultimate width on the west half (50 feet from centerline to ROW) and provide two southbound lanes, one northbound lane, a two-way-left-turn lane, and a southbound bike lane.
- Widen Alessandro Boulevard to its ultimate width on the north half (67 feet from centerline to ROW) and provide two westbound lanes. Provide a transition of the two-lane section to join the one-lane section west of Chara Street.
- Construct raised median islands along Alessandro Boulevard between Chervil Court and Lasselle Street.
- Construct a bus bay on the north side of Alessandro Boulevard immediately west of Lasselle Street.

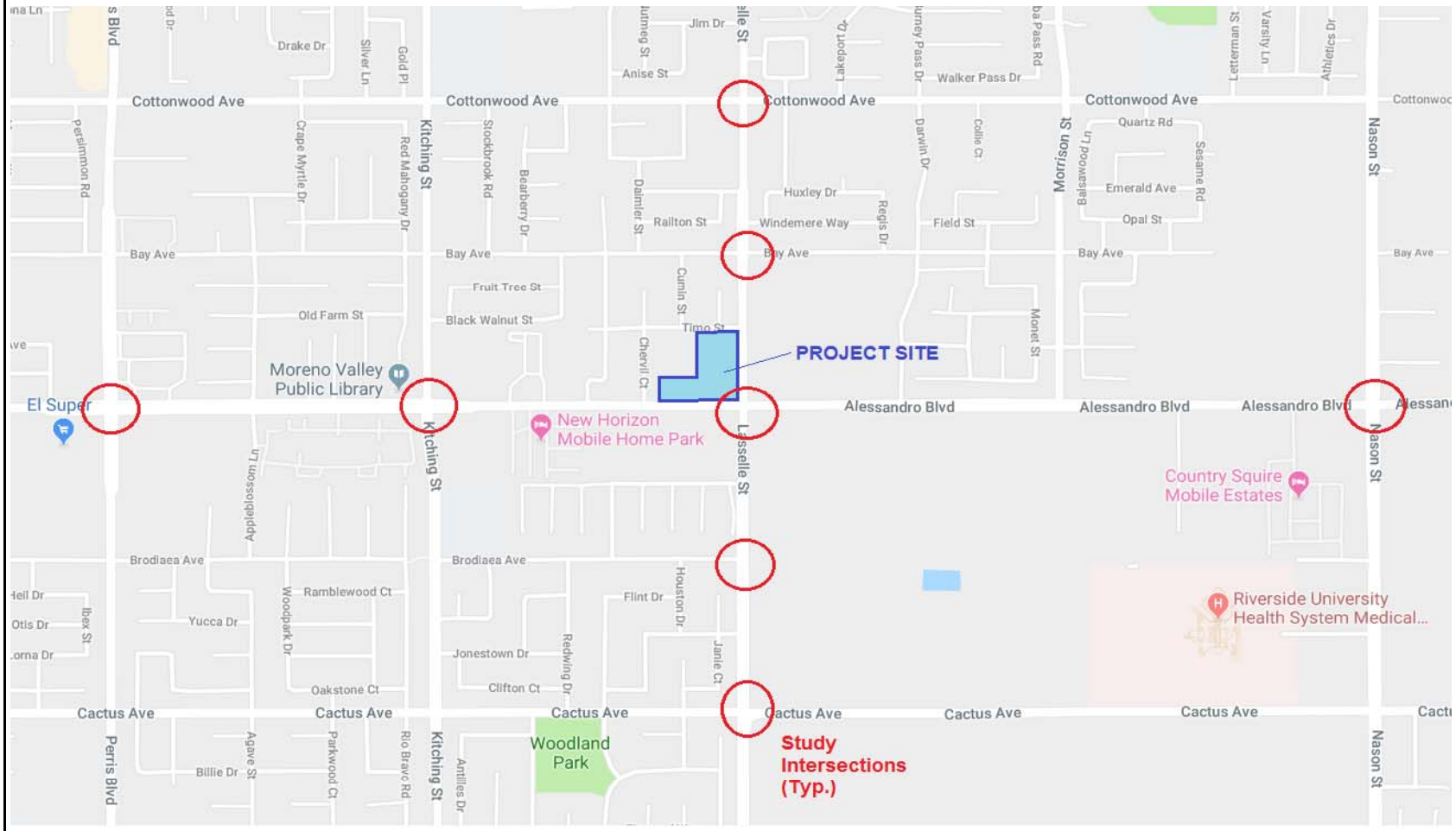
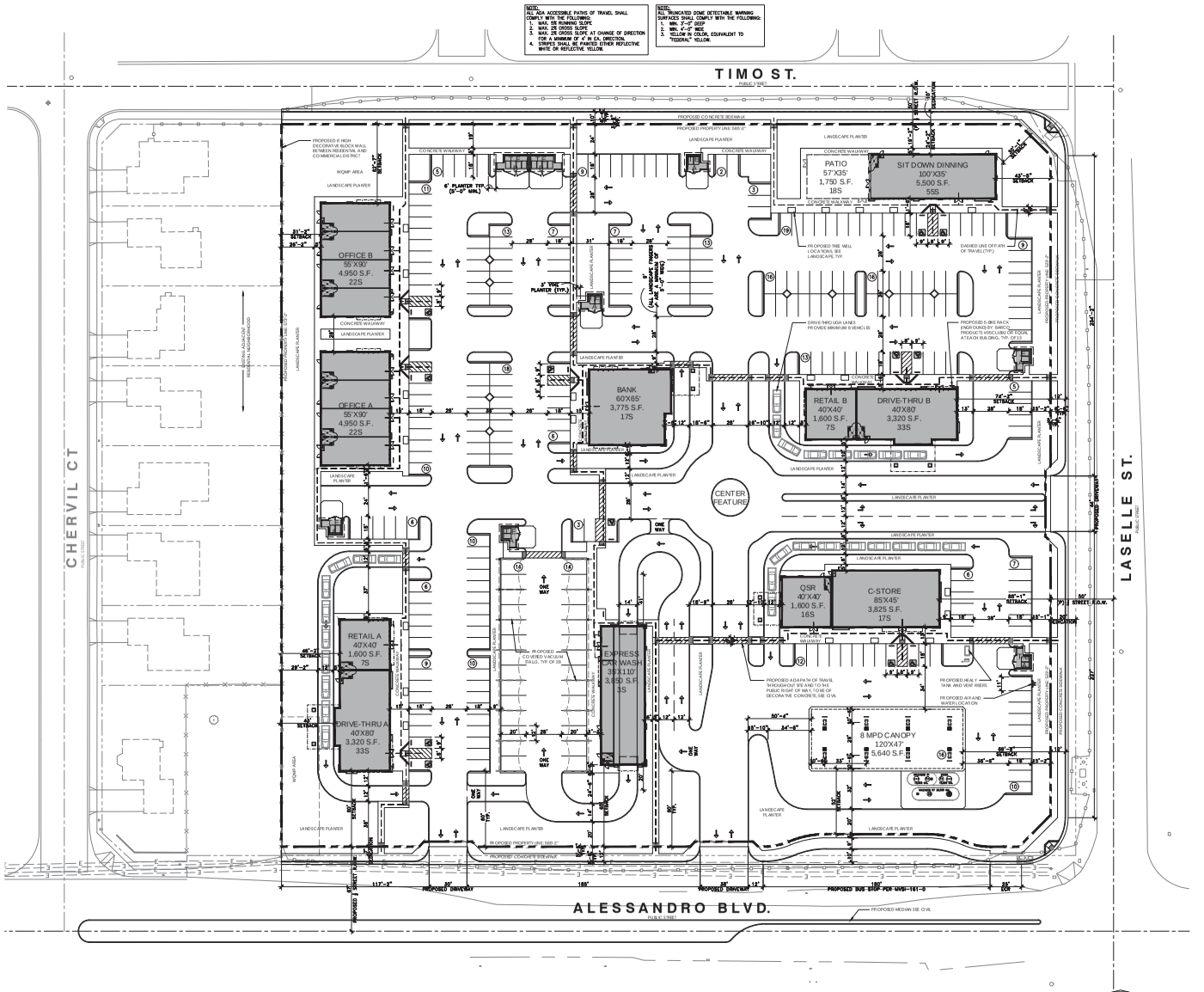


Exhibit 1. Vicinity Map
No Scale



CONCEPTUAL SITE PLAN

SCALE: 1" = 40'-0"

0 20 40 80

SITE DATA

ADDRESS:	NWC ALESSANDRO BLVD. & LASSELLE ST. MORENO VALLEY, CA 92553
PERMIT NUMBER:	PEN19-0040
APN:	479-631-010
LEGAL:	8.37 ACRES M/L IN LOT 8 BLK 102 MB 011/010 SB BEAR VALLEY & ALESSANDRO DEVELOPMENT CO
LOT SIZE:	EXISTING NET: 8.51 ACRES (370,591 S.F.) PROPOSED NET: 8.01 ACRES (349,073 S.F.)
BUILDING AREAS:	C-STORE: 3,825 S.F. QSR: 1,600 S.F. CANOPY: 5,640 S.F. EXPRESS CAR WASH: 3,850 S.F. DRIVE-THRU A: 3,320 S.F. RETAIL A: 1,600 S.F. DRIVE-THRU B: 3,320 S.F. RETAIL B: 1,650 S.F. SIT DOWN DINNING: 5,500 S.F. W/ 1,715 S.F. PATIO BANK: 3,775 S.F. OFFICE A: 4,950 S.F. OFFICE B: 4,950 S.F. TRASH ENCLOSURE A: 176 S.F. (TYP. OF 6) TRASH ENCLOSURE B: 287 S.F. (TYP. OF 2)
FLOOR AREA RATIO:	.13
BUILDING HEIGHT:	MAX HEIGHT: 30'-0"
STORIES:	SINGLE
COUNTY:	RIVERSIDE
CONSTRUCTION TYPE:	V-B/(SPRINKLERED)
ALCOHOL SALES:	YES
OCCUPANCY:	M
SPECIFIC PLAN:	N/A
FEMA ZONE:	06065C0765G (ZONE X)
EXISTING LAND USE:	VACANT
PROPOSED LAND USE:	RETAIL / COMMERCIAL
EXISTING ZONE:	NC - NEIGHBORHOOD COMMERCIAL
PROPOSED ZONE:	NC - NEIGHBORHOOD COMMERCIAL
SURROUNDING LAND USE AND ZONING:	NORTH: NC - NEIGHBORHOOD COMMERCIAL SOUTH: R1 - SINGLE FAMILY RESIDENTIAL EAST: MURDOCK ALBERHILL RANCH SPECIFIC PLAN WEST: R1 - SINGLE FAMILY RESIDENTIAL
PARKING REQUIREMENTS:	C-STORE: (3,825/225) = 17 QSR: (1,600/100) = 16 CANOPY: (N/A) EXPRESS CAR WASH: (3,850/EMPLOYEES) = 3 DRIVE-THRU A: (3,320/100) = 33 RETAIL A: (1,600/225) = 7 DRIVE-THRU B: (3,320/100) = 33 RETAIL B: (1,600/225) = 7 SIT DOWN DINNING: ((5,500 + 1,715)/100) = 73 BANK: (3,775/225) = 17 OFFICE A: (4,950/225) = 22 OFFICE B: (4,950/225) = 22 ~~PARKING REQUIRED = 250~~ ~~PARKING PROVIDED = 255 (9X18 RECIPROCAL) (NOT INCLUDING 28 VACUUM & 18 CANOPY~~
LOT COVERAGE:	BUILDING: 45,610 S.F. (13%) LANDSCAPING: 88,099 S.F. (25%) IMPERVIOUS: 215,364 S.F. (62%) TOTAL: 349,073 S.F. (100%)

PROJECT OWNER / APPLICANT

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E-MAIL: dbhatia2006@yahoo.com

ARCHITECT / APPLICANT'S REP.

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PO BOX 944
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PHONE: (951) 696-1490
FAX: (951) 696-1443
CELL PHONE: (951) 809-7601
E-MAIL: ghann@empiregr.biz
C CONTACT: GREGORY HANN, ARCHITECT

PHYSICAL ADDRESS:
24861 WASHINGTON AVE.
MURRIETA, CA 92562

GENERAL NOTES

1. ANY DRIVE-UP OR DRIVE-THROUGH SPEAK SYSTEM SHALL NOT BE DETECTABLE ABOVE DAYTIME AMBIENT NOISE LEVELS BEYOND THE PROPERTY BOUNDARIES. THE SYSTEM SHALL BE DESIGNED TO COMPENSATE FOR AMBIENT NOISE LEVELS IN THE IMMEDIATE AREA, AND SHALL NOT BE LOCATED WITHIN ONE HUNDRED (100) FEET OF ANY RESIDENTIAL DISTRICT OF ANY PROPERTY USED FOR RESIDENTIAL USES.

VICINITY MAP

EMPIRE DESIGN GROUP Inc.
24861 Washington Ave.
Murrieta, Calif. 92562
Tel 951-696-1490 Fax 951-696-1443

CLIENT:

NORTHWEST MORENO PROPERTIES LLC

NORTHWEST COMMERCIAL CENTER
APN: 479-631-010
NWC ALESSANDRO BLVD. & LASSELLE ST.
MORENO VALLEY, CA 92553

Architect of Record:
GREGORY S. HANN, AIA
24861 WASHINGTON AVE.
MURRIETA, CA 92562
TEL: 951-696-1490
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FAX: 951-696-1443
E-MAIL: ghann@empiregr.biz

SEAL:

STATE OF CALIFORNIA
GREGORY SCOTT HANN
C-26863
REN. 9/30/21
LICENSED ARCHITECT

Date: MAY 20, 2020
Project Number: EDG#04360

NO.	DATE	REVISION DESCRIPTION
1	3-4-20	1ST CUP COMMENTS PER PEN19-004 DATED 3/5/19
2	1-11-21	2ND PC COMMENTS

DESIGNED BY: GH
CHECKED BY: GH
DRAWN BY: AH

DRAWING TITLE:

CONCEPTUAL SITE PLAN

SHEET NO:

AS 1.0

EXHIBIT 2. PROPOSED SITE PLAN

STUDY SCENARIOS

Based on the scoping agreement approved by the City of Moreno Valley, this study includes the following study scenarios:

i. Existing: Year 2018

ii. Existing: Year 2018 plus Project

iii. Pre-Project Conditions: Year 2025 plus Cumulative Projects

iv. Post-Project Conditions: Year 2025 plus Cumulative Projects plus Project

v. Post-Project Conditions: Year 2025 plus Cumulative Projects plus Project with Mitigation, if necessary

This proposed development is consistent with the General Plan of the City of Moreno Valley. Long term scenarios at Horizon Year has been sought by the regional planning of the City of Moreno Valley and Riverside County, and therefore not discussed in this study.

According to the approved scoping agreement, shown in **Appendix A**, the following intersections were included in this study:

1. Alessandro Blvd at Perris Blvd
2. Alessandro Blvd at Kitching St
3. Alessandro Blvd at Lasselle St
4. Alessandro Blvd at Nason St
5. Lasselle St at Cottonwood Ave
6. Lasselle St at Bay Ave
7. Lasselle St at Broadiaea
8. Lasselle St at Cactus Ave
9. Alessandro Blvd at Project Driveway "A"
10. Alessandro Blvd at Project Driveway "B"
11. Lasselle St at Project Driveway "C"

EXISTING CONDITIONS

Project site is an unimproved and vacant lot situated at the southwest corner of Alessandro Boulevard at Lasselle Street. Alessandro Boulevard is designated as a six-lane Divided Arterial in the east-west directions per City Standard Plan. At the project frontage, Alessandro Boulevard is currently undivided with one lane in each direction with a left turn lane. The posted speed limit is 45 mph.

Lasselle Street is classified as an Arterial in the north-south directions per City Standard Plan. At the project frontage, Lasselle Street is currently undivided with one lane in each direction with a left turn lane at the intersection. The posted speed limit is 40 mph north of Alessandro Boulevard and 45 mph south of Alessandro Boulevard.

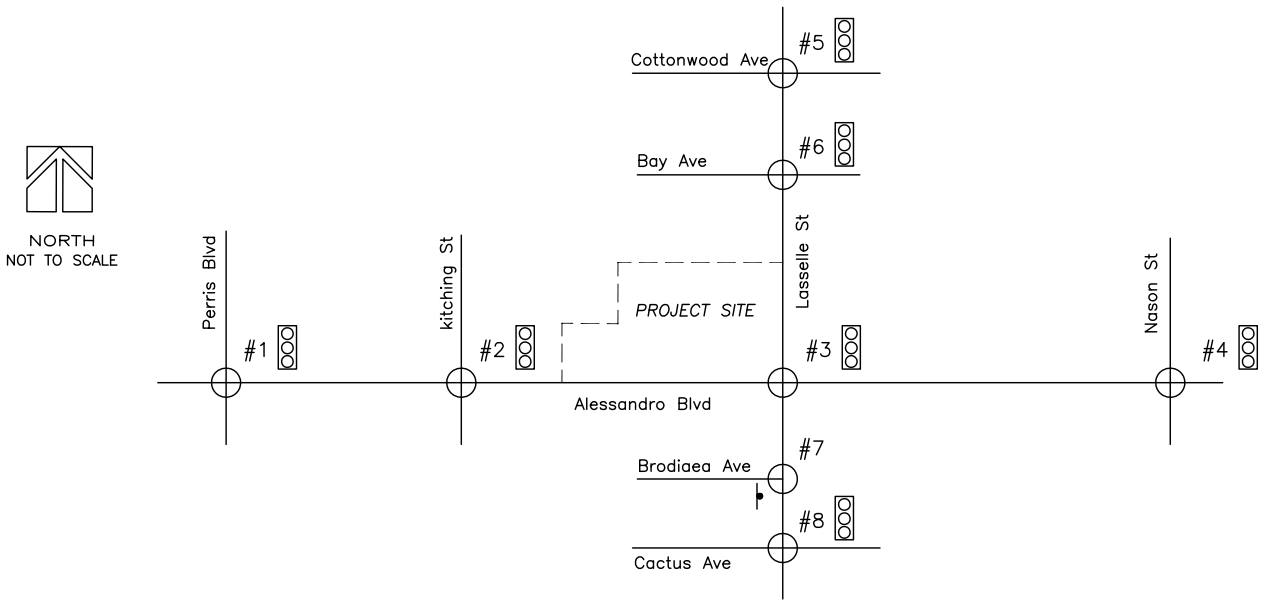
Timo Street is classified as a local residential street. The project does not provide any direct commercial access on a local residential street.

Traffic counts of AM and PM peak hour turning movements were collected on Thursday, August 23, 2018. Lane configurations and traffic volumes at the study intersections are shown in **Exhibit 3 and 4**, respectively. Complete traffic data can be found in **Appendix B**.

The study intersections currently operate at LOS "D" or better for both AM and PM peak hours as shown in **Table 1**. The analysis worksheets can be found in **Appendix D**.

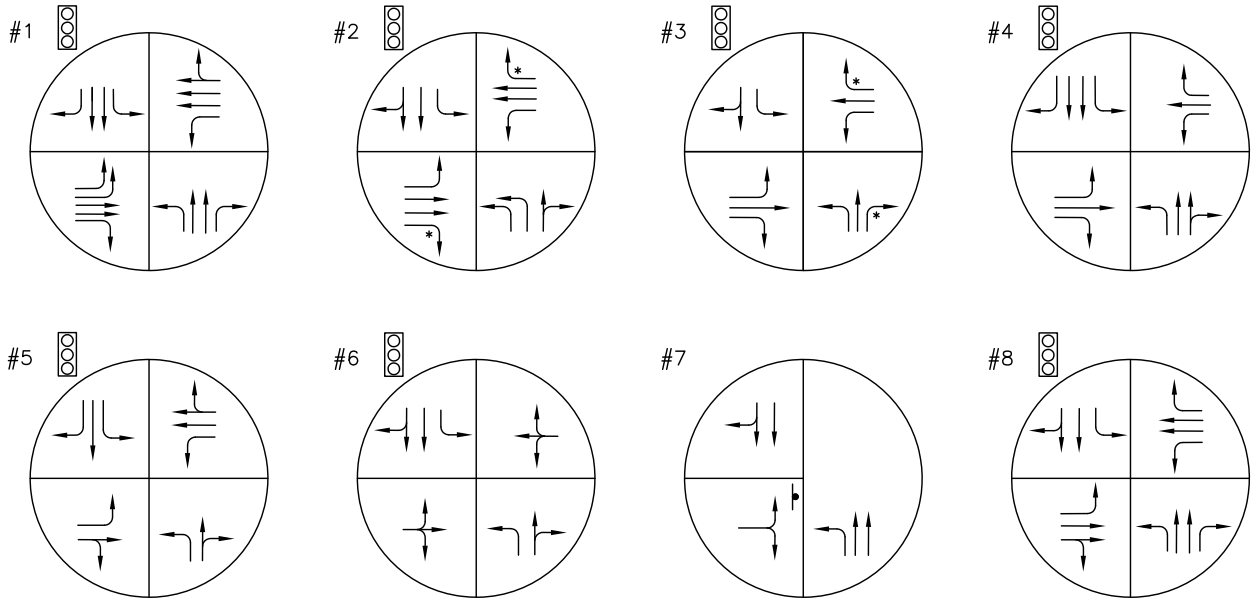
Table 1. Existing Conditions

No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
1	Alessandro Blvd at Perris Rd	D	36.0	D	36.5
2	Alessandro Blvd at Kitchin St	C	28.4	C	26.3
3	Alessandro Blvd at Lasselle St	D	37.1	C	26.7
4	Alessandro Blvd at Nasson St	C	21.9	C	23.2
5	Lasselle St at Cottonwood Ave	C	34.0	C	31.9
6	Lasselle St at Bay Ave	B	12.0	C	26.7
7	Lasselle St at Brodiaea Ave	B	14.4	C	15.3
8	Lasselle St at Cactus Ave	C	31.0	C	27.1



LEGEND:

- INTERSECTION
- TRAFFIC SIGNAL
- STOP SIGN
- * OVERLAP PHASE

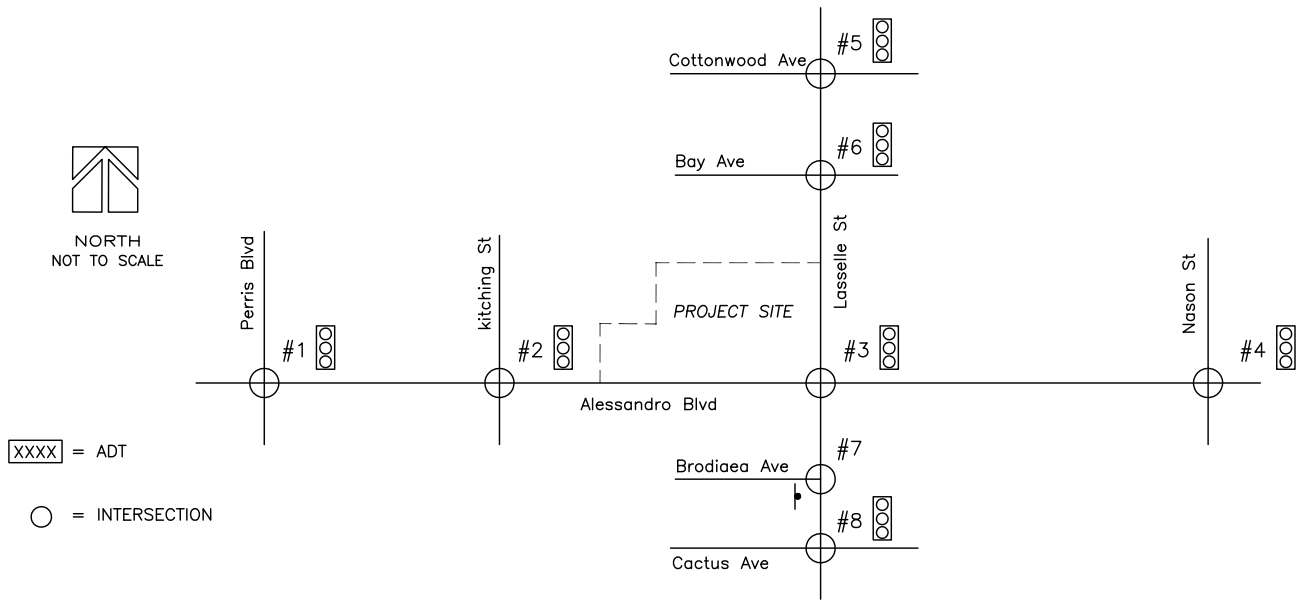


EXISTING LANE CONFIGURATION

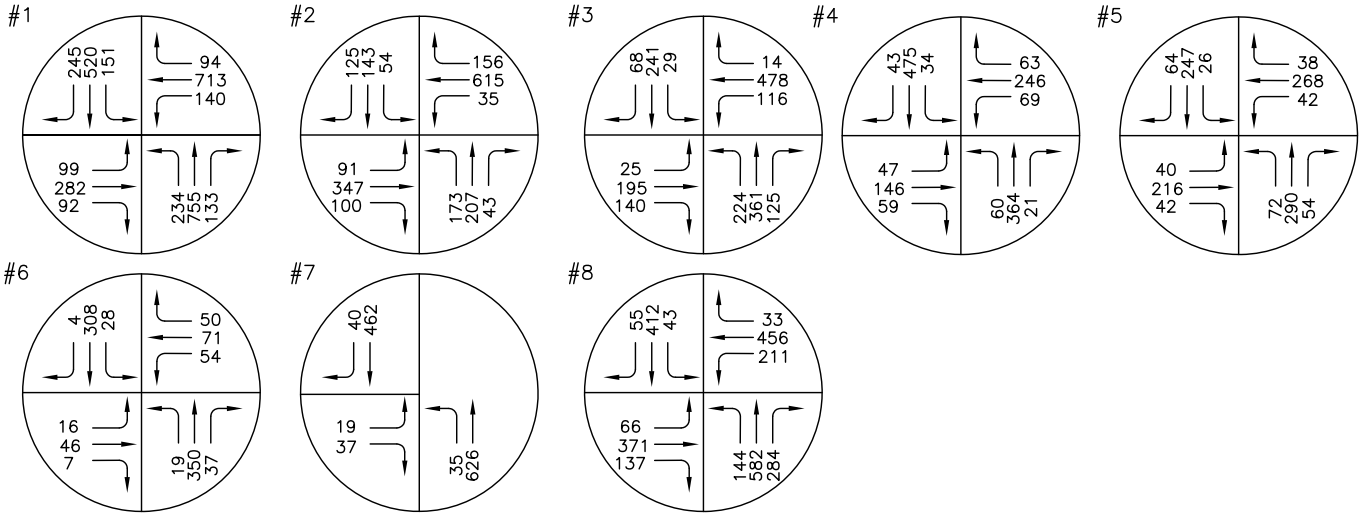
PROPOSED GAS STATION, C-STORE, RESTAURANT, RETAIL, OFFICE, CARWASH
AT NWC OF ALESSANDRO BLVD AND LASSELLE ST

K2 TRAFFIC ENGINEERING

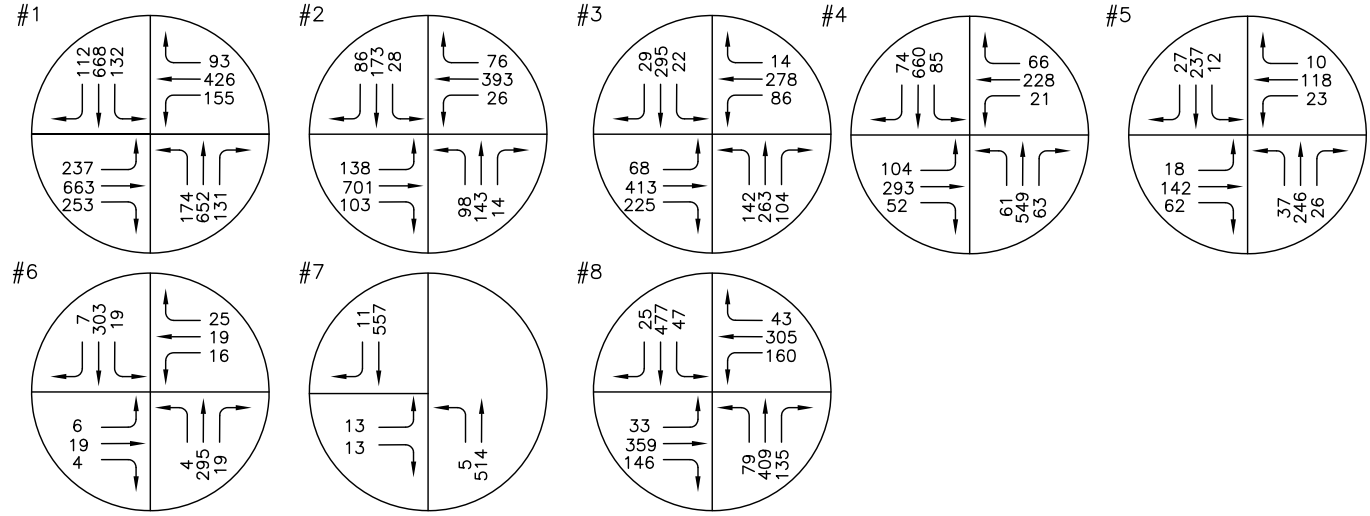
EXHIBIT 3



AM PEAK



PM PEAK



PROPOSED GAS STATION, C-STORE, RESTAURANT, RETAIL, OFFICE, CARWASH
AT NWC OF ALESSANDRO BLVD AND LASSELLE ST

EXISTING YEAR TRAFFIC VOLUMES

K2 TRAFFIC ENGINEERING

EXHIBIT 4

TRIP GENERATION

Passenger vehicle trips are estimated using the rates and methodologies outlined in *"Trip Generation"*, 10th Edition, published by the Institute of Transportation Engineers (ITE). Applicable trip generation rates are shown in **Table 2**.

Table 2. Trip Generation Rate

LAND USE (ITE CODE)	UNIT	DAILY	AM PEAK HOUR			PM PEAK HOUR		
			Rate	IN	OUT	Rate	IN	OUT
Gas Station with Convenience Market (945)	Fueling Station	205.36	12.47	51%	49%	13.99	51%	49%
Fast-Food Restaurant with Drive-Through Windows (934)	1000SF	470.95	40.19	51%	49%	32.67	52%	48%
High-Turnover (Sit-Down) Restaurant (932)	1000SF	112.18	9.94	55%	45%	9.77	62%	38%
Fast Casual Restaurant (930)	1000SF	315.17	2.07	67%	33%	14.13	55%	45%
Shopping Center (820)	1000SF	37.75	0.94	62%	38%	3.81	48%	52%
General Office Building (710)	1000SF	9.74	1.16	86%	14%	1.15	16%	84%
Automated Car Wash (948)*	1000SF	142.00	6.31	50%	50%	14.20	50%	50%
Drive-in Bank (912)	1000SF	100.03	9.50	58%	42%	20.45	50%	50%

* Daily and AM peak hour volumes of Automated Car Wash were derived from SANDAG's "*Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region".*

Based on ITE's Trip Generation Handbook, Third Edition, the study applies pass-by rates applicable for the proposed uses. With pass-by considerations, the project would generate 204 inbound and 184 outbound trips in the AM peak hour, and 210 inbound and 201 outbound trips in the PM peak hour, and 4,482 daily trips. The projected trips associated with the project are provided in **Table 3**.

The approved internal trip deduction of 5% was applied to the trip generation, which is lower than the calculated projected internal trip capture, shown in **Appendix C**.

Table 3. Project Trip Generation

Land Use	Unit	Quantity	AM Peak Hour			PM Peak Hour			Daily
			Total	In	Out	Total	In	Out	
Super Convenience Market/Gas Station (960)	Veh Fueling Position	16	449	225	224	367	184	183	3,688
	Pass-By Trip Deduction**	AM 28%, PM 50% Daily 28%	-278	-140	-138	-206	-103	-103	-2,176
Fast-Food Restaurant with Drive-Through Windows (934)	1,000 Sq. Ft.	6.64	267	136	131	217	113	104	3,127
	Pass-By Trip Deduction*	43%	-115	-58	-57	-93	-49	-44	-1,345
High-Turnover (Sit-Down) Restaurant (932)	1,000 Sq. Ft.	7.25	72	40	32	71	44	27	813
	Pass-By Trip Deduction*	43%	-31	-17	-14	-31	-19	-12	-350
Fast Casual Restaurant (930)	1,000 Sq. Ft.	1.6	16	9	7	16	10	6	504
	Pass-By Trip Deduction*	43%	-7	-4	-3	-7	-4	-3	-217
Shopping Center (820)	1,000 Sq. Ft.	3.2	3	2	1	12	6	6	121
	Pass-By Trip Deduction*	PM 34%	0	0	0	-4	-2	-2	0
General Office Building (710)	1,000 Sq. Ft.	9.9	11	9	2	11	2	10	96
Automated Car Wash (948)	1,000 Sq. Ft.	3.85	24	12	12	55	28	27	547
	Pass-By Trip Deduction**	28%	-7	-3	-4	-15	-8	-7	-153
Drive-in Bank (912)	1,000 Sq. Ft.	3.775	36	21	15	77	39	38	378
	Pass-By Trip Deduction*	AM 23%, PM 25% Daily 23%	-8	-5	-3	-19	-10	-9	-87
Gross Trip Generation (Before Deduction)			878	454	424	826	426	401	9,274
Internal Trip Deduction (5%)			-44	-23	-21	-41	-21	-20	-464
Trip Generation with Internal Trip Deduction			834	431	403	785	405	381	8,810
Pass-By Trip Deduction			-446	-227	-219	-375	-195	-179	-4,328
Trip Generation (NET)			**388**	204	184	**410**	210	201	**4,482**

* Per Trip Generation Handbook, 3rd Edition

** Per SANDAG's "*Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*"

TRIP DISTRIBUTION

Trip distribution represents the directional orientation of traffic to and from the proposed project. Directional orientation is largely influenced by the geographical location of the site, among many other factors. The trip distribution pattern for the project is illustrated on **Exhibit 5**. Pass-by trip distribution is provided in **Exhibit 6**.

TRAFFIC ASSIGNMENT

The traffic assignment to and from the site has been based upon the results of trip generation, trip distribution, and access layouts. Project's net and pass-by traffic assignments for the AM and PM peak hours are provided in **Exhibits 7** and **8**, respectively. **Exhibit 9** illustrates the traffic assignment of the proposed project for the AM and PM peak hours.

EXHIBIT 5. TRIP DISTRIBUTION

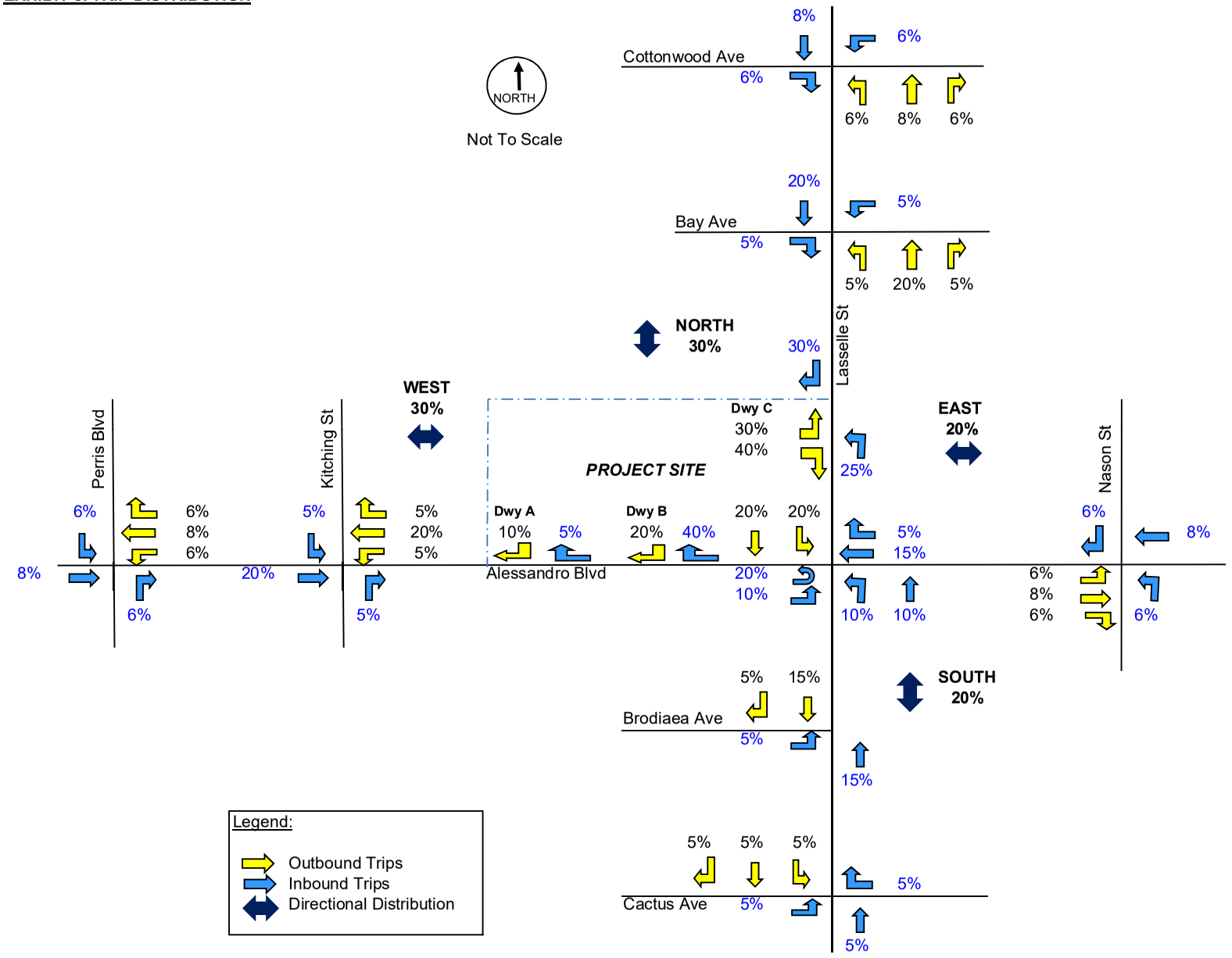


EXHIBIT 6. TRIP DISTRIBUTION (PASS-BY ONLY)

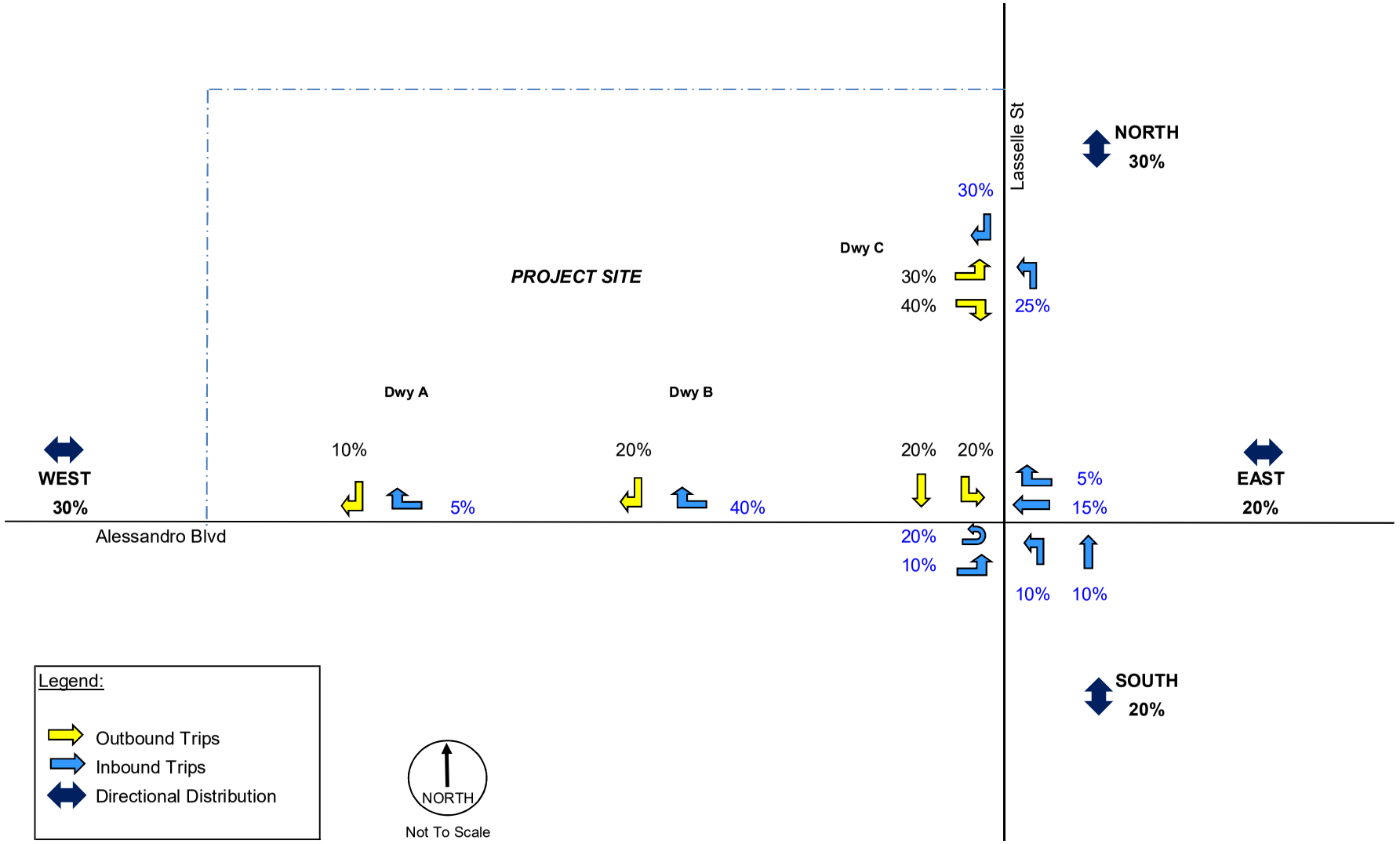


EXHIBIT 7. TRAFFIC ASSIGNMENT (PROJECT NET)

NET TRIPS

IN	OUT	
204	184	AM Peak Hour
210	201	PM Peak Hour

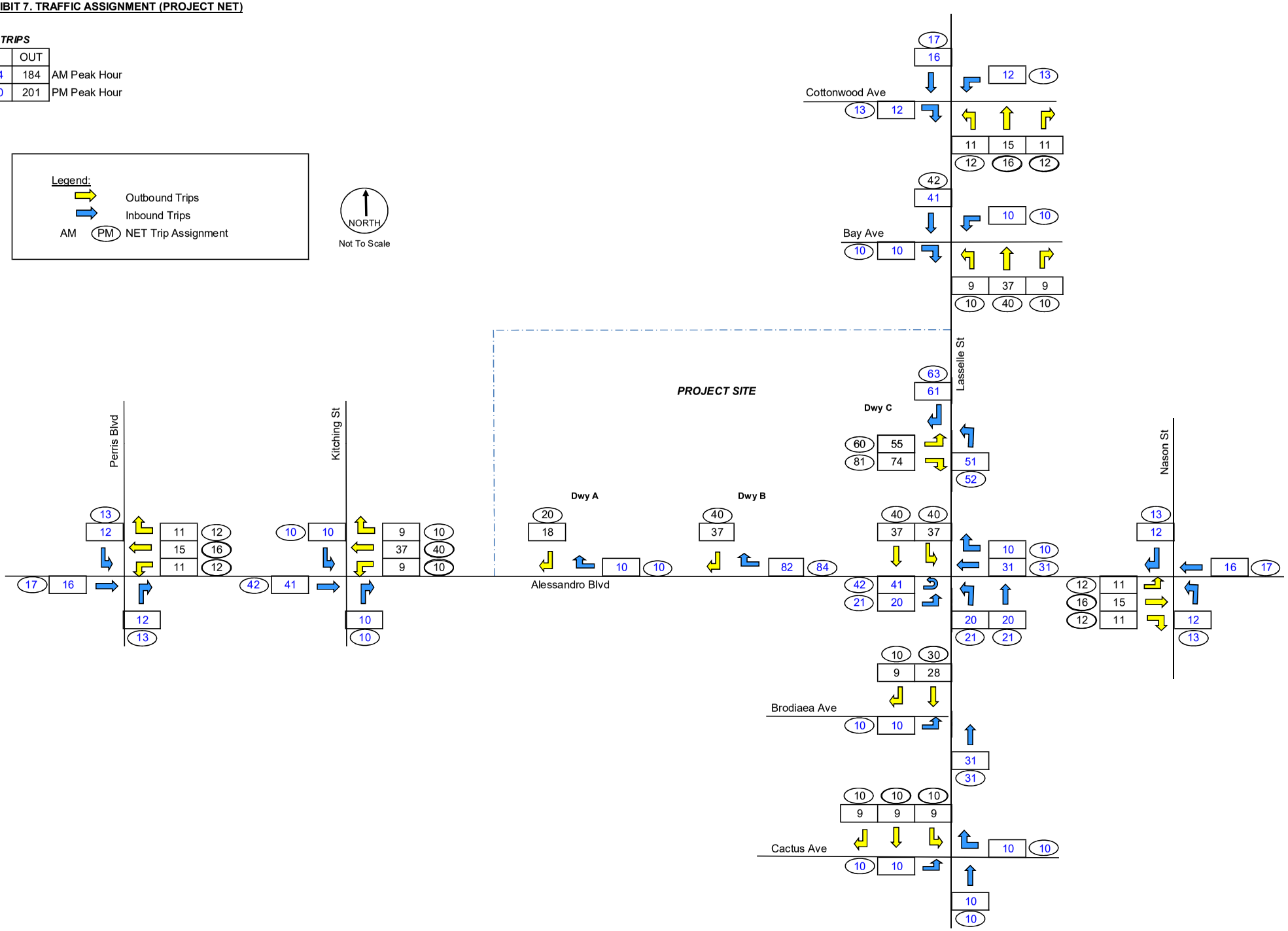
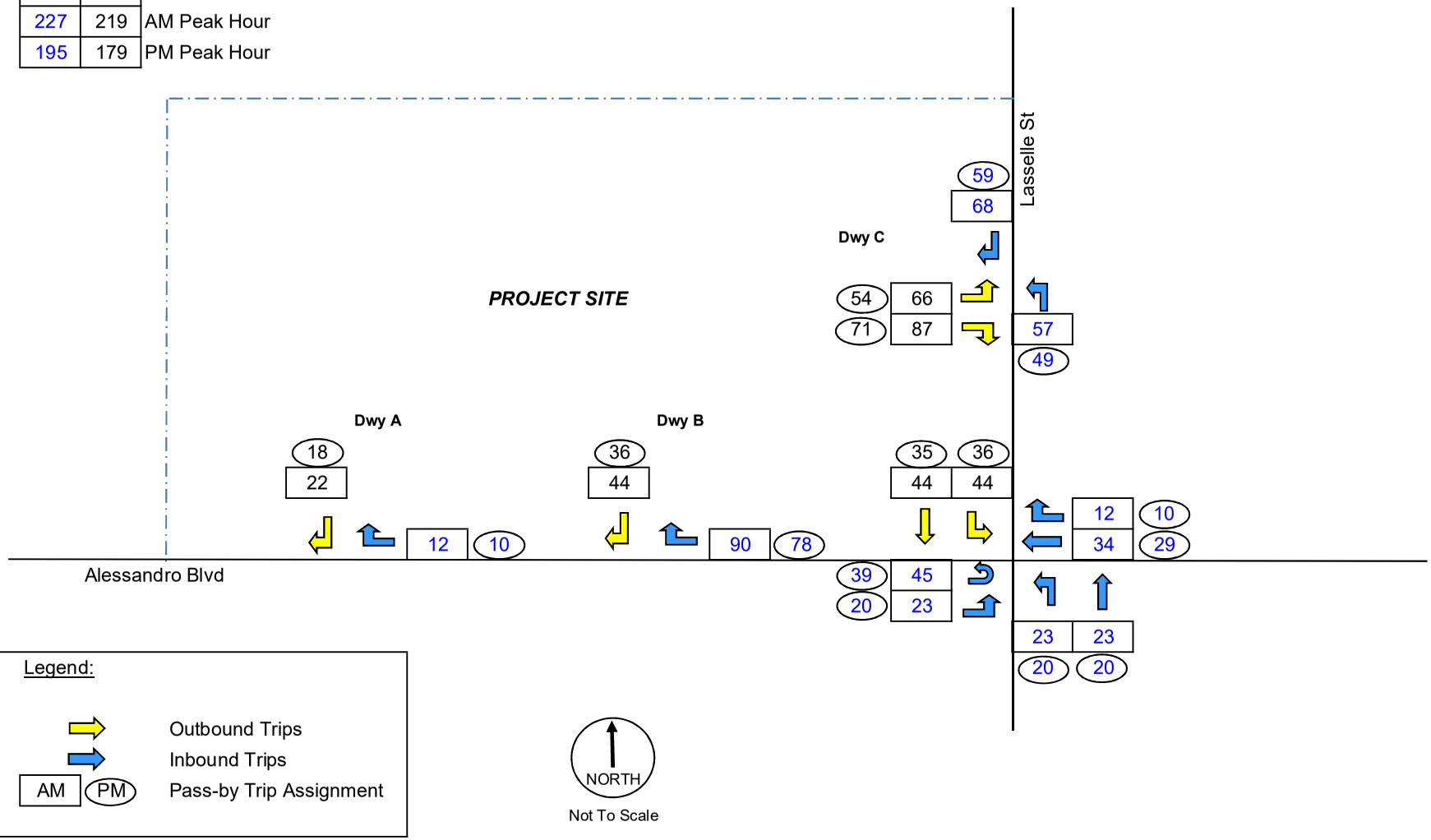


EXHIBIT 8. TRIP ASSIGNMENT (PASS-BY ONLY*)

PASS-BY TRIPS

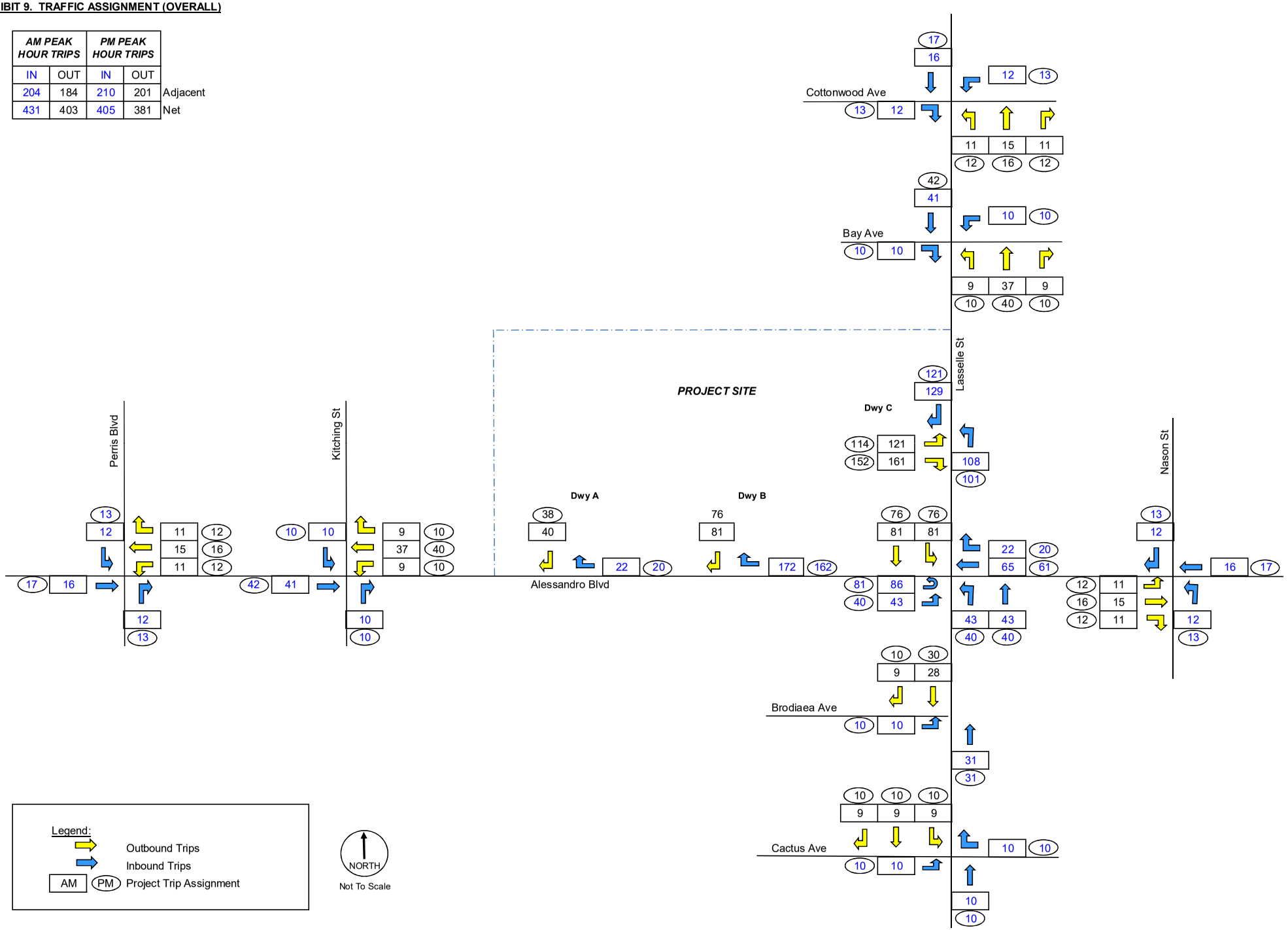
IN	OUT	
227	219	AM Peak Hour
195	179	PM Peak Hour



* Pass-by trips are additions to the existing traffic volumes. No reductions will be shifted from adjacent movements as a conservative approach.

EXHIBIT 9. TRAFFIC ASSIGNMENT (OVERALL)

AM PEAK HOUR TRIPS		*PM PEAK HOUR TRIPS*		
IN	OUT	IN	OUT	
204	184	210	201	Adjacent
431	403	405	381	Net



EXISTING CONDITIONS PLUS PROJECT

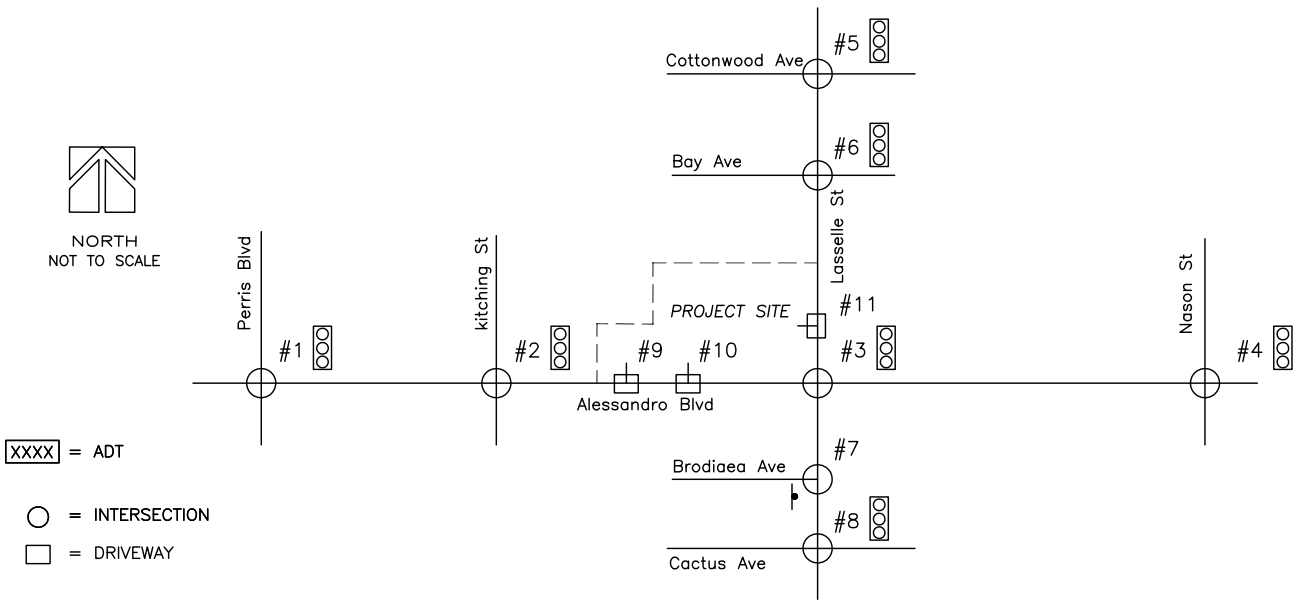
Traffic volumes of the existing condition plus project traffic are shown in **Exhibits 10**.

The project's level of significance of traffic impact under existing conditions for the AM and PM peak hour are shown in **Table 4**. The analysis worksheets can be found in **Appendix D**. All studied intersections will maintain level of service "D" or better for the existing conditions plus project, except the following locations:

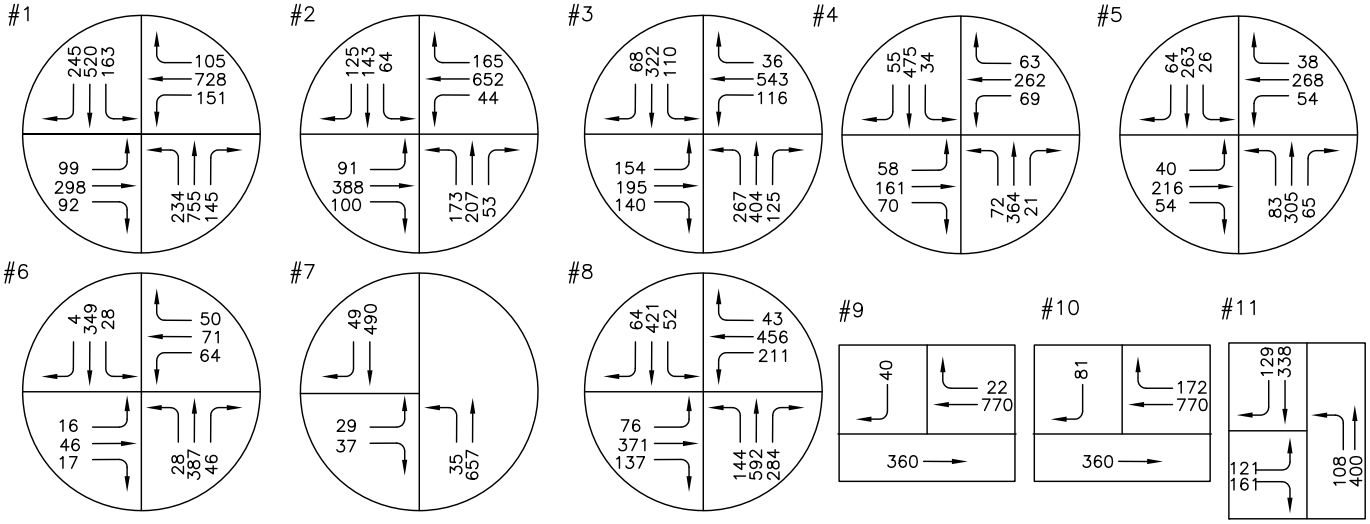
- #3 Alessandro Boulevard at Lasselle Street: LOS E in the AM peak hour

Table 4. Existing Conditions Plus Project

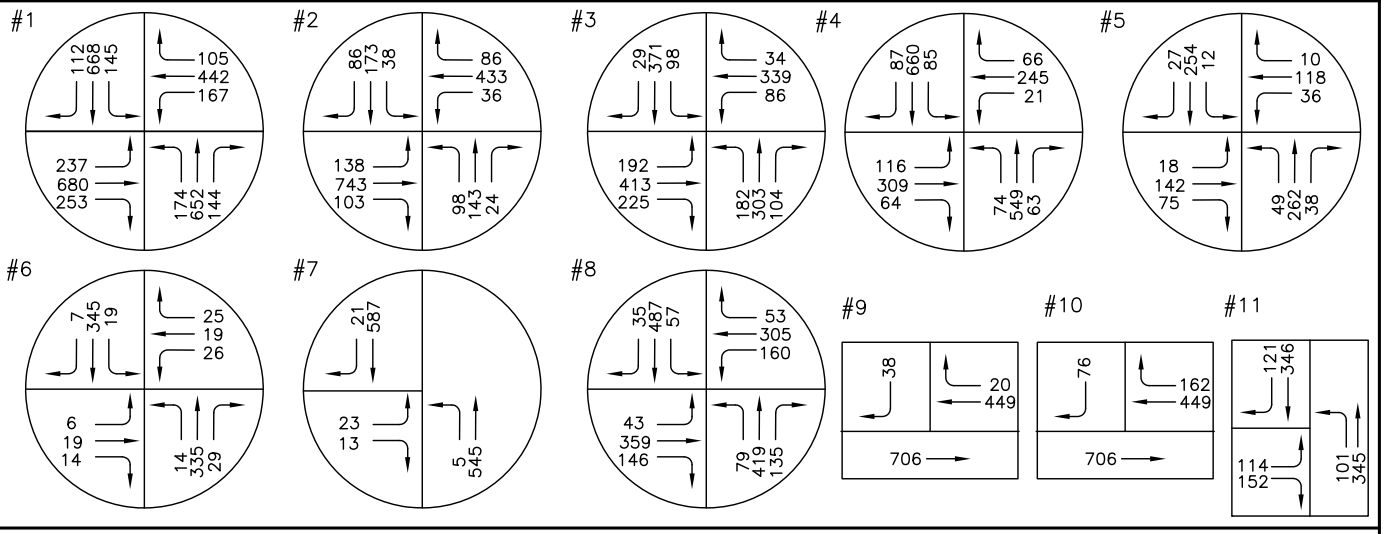
No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
1	Alessandro Blvd at Perris Rd	D	36.2	D	37.4
2	Alessandro Blvd at Kitchin St	C	29.0	C	26.3
3	Alessandro Blvd at Lasselle St	**E**	**59.1**	D	38.7
4	Alessandro Blvd at Nason St	C	23.5	C	24.6
5	Lasselle St at Cottonwood Ave	C	35.5	C	32.1
6	Lasselle St at Bay Ave	B	12.2	C	26.7
7	Lasselle St at Broderia Ave	B	16.9	C	18.3
8	Lasselle St at Cactus Ave	C	31.1	C	27.3
9	Alessandro Blvd at Driveway "A"	C	16.3	B	11.8
10	Alessandro Blvd at Driveway "B"	C	20.2	B	13.3
11	Lasselle St at Driveway "C"	D	30.3	C	24.4



AM PEAK



PM PEAK



PROPOSED GAS STATION, C-STORE, RESTAURANT, RETAIL, OFFICE, CARWASH
AT NWC OF ALESSANDRO BLVD AND LASSELLE ST

EXISTING (2018) PLUS PROJECT TRAFFIC

K2 TRAFFIC ENGINEERING

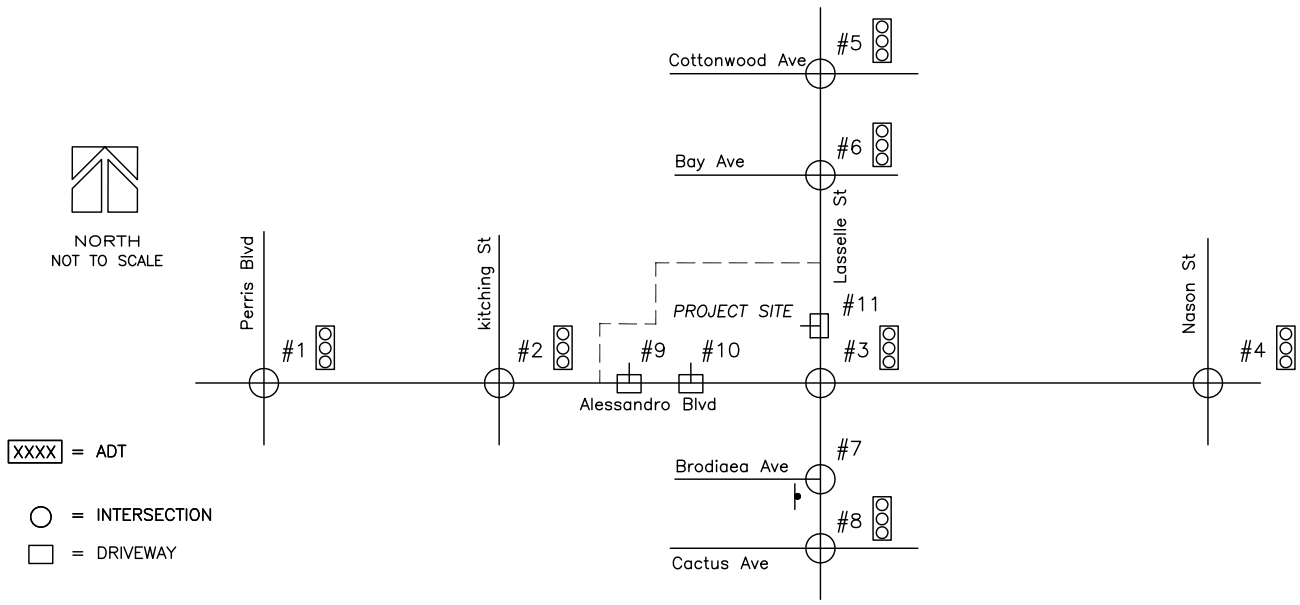
EXHIBIT 10

PRE-PROJECT COMPLETION

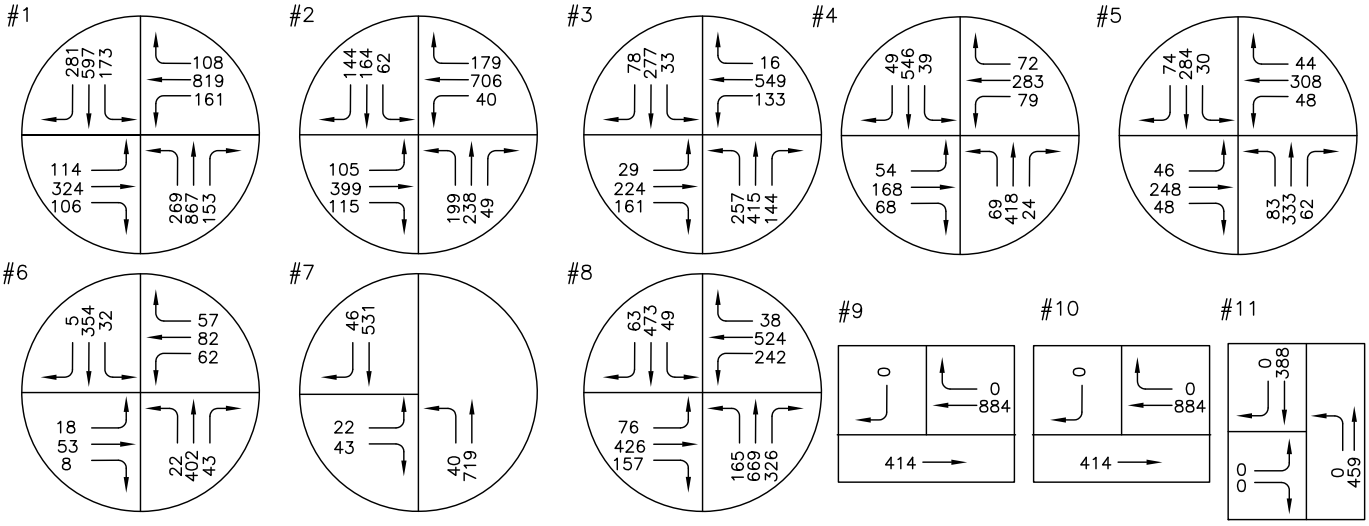
Traffic conditions prior to completion of the proposed development is estimated by applying an annual growth rate of two percent (2%) over existing traffic counts for year 2025 conditions. Traffic volumes for the pre-project completion are illustrated in **Exhibit 11**. The level of services and intersection delays are shown in **Table 5.** The analysis worksheets can be found in **Appendix D**. All studied intersections will maintain level of service "D" or better.

Table 5. Pre-Project Completion (2025) Level of Service

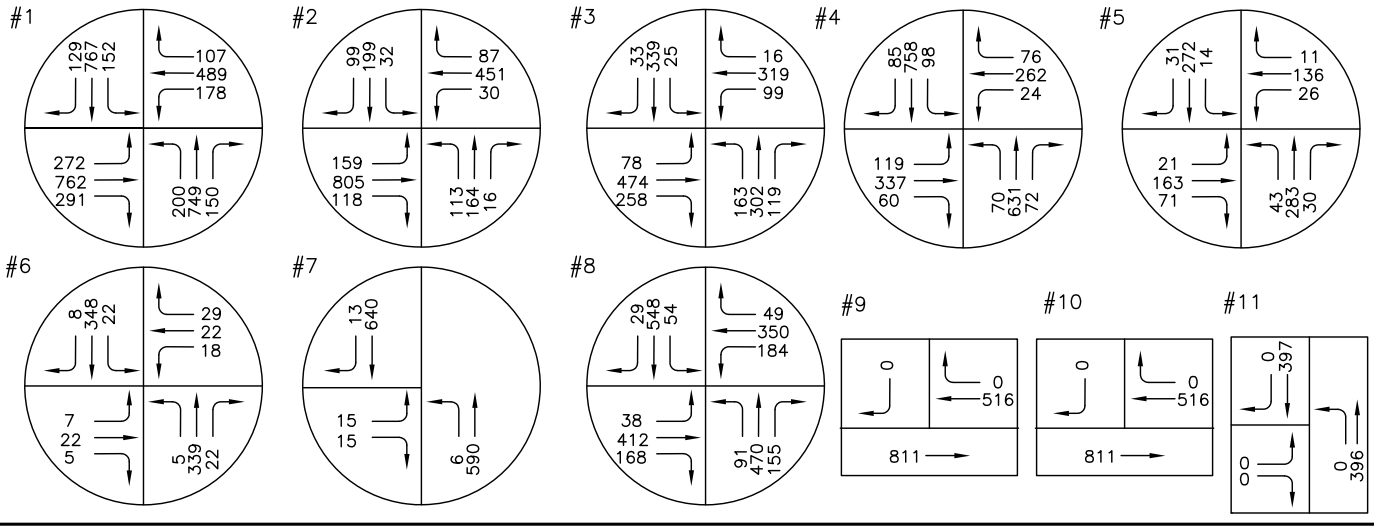
No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
1	Alessandro Blvd at Perris Rd	D	38.7	D	42.7
2	Alessandro Blvd at Kitchin St	C	31.5	C	23.8
3	Alessandro Blvd at Lasselle St	D	48.1	C	32.9
4	Alessandro Blvd at Nason St	C	24.1	C	27.0
5	Lasselle St at Cottonwood Ave	D	37.9	C	32.5
6	Lasselle St at Bay Ave	C	24.5	C	26.1
7	Lasselle St at Brodiaea Ave	C	16.7	C	17.7
8	Lasselle St at Cactus Ave	D	36.6	C	29.3



AM PEAK



PM PEAK



PRE-PROJECT COMPLETION (2025)
TRAFFIC VOLUMES

PROPOSED GAS STATION, C-STORE, RESTAURANT, RETAIL, OFFICE, CARWASH
AT NWC OF ALESSANDRO BLVD AND LASSELLE ST

K2 TRAFFIC ENGINEERING

EXHIBIT 11

POST-PROJECT COMPLETION

Traffic volumes for year 2025 after project completion (existing plus ambient growth plus cumulative plus project) are illustrated in **Exhibit 12**. The level of services and intersection delays are shown in **Table 6**. Analysis worksheets are provided in **Appendix D**.

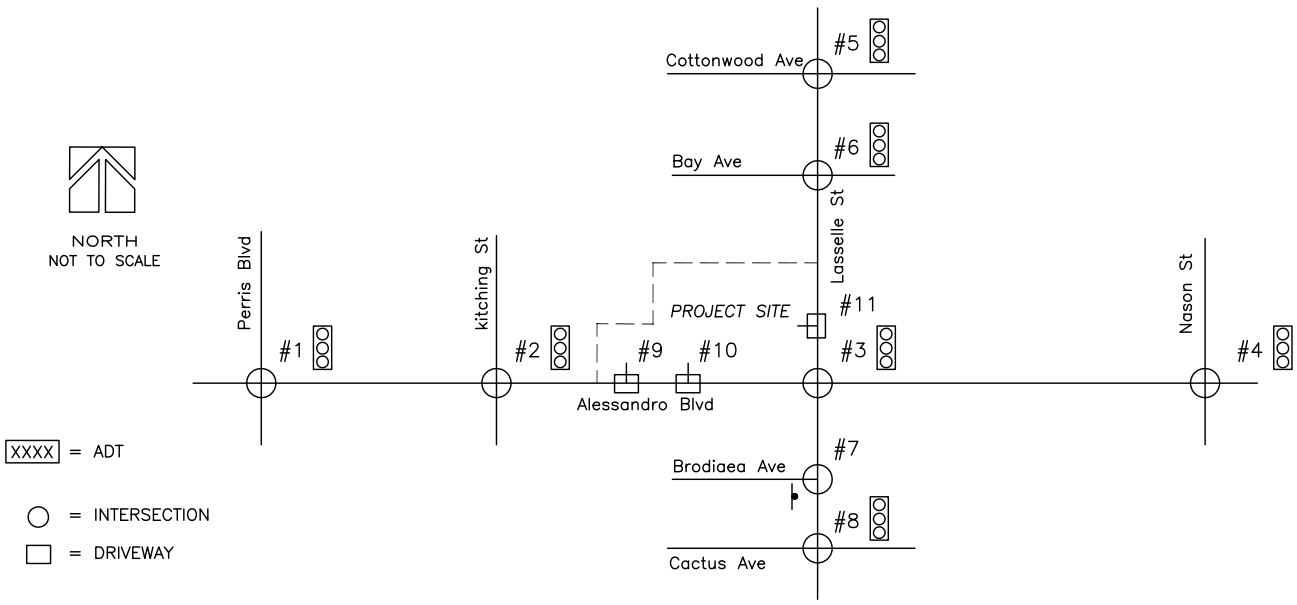
Table 6. Post-Project Completion (2025) Level of Service

No.	Intersection	AM		PM	
		LOS	Delay	LOS	Delay
1	Alessandro Blvd at Perris Rd	D	40.6	D	44.8
2	Alessandro Blvd at Kitchin St	C	32.1	C	29.0
3	Alessandro Blvd at Lasselle St	**E**	**69.6**	D	35.8
4	Alessandro Blvd at Nason St	C	25.4	C	29.0
5	Lasselle St at Cottonwood Ave	D	38.8	C	32.9
6	Lasselle St at Bay Ave	C	28.2	C	28.0
7	Lasselle St at Brodiaea Ave	C	20.1	C	21.5
8	Lasselle St at Cactus Ave	D	38.2	C	31.5
9	Alessandro Blvd at Driveway "A"	B	12.5	B	10.4
10	Alessandro Blvd at Driveway "B"	B	14.6	B	11.6
11	Lasselle St at Driveway "C" [1]	**E**	**42.3**	D	31.5

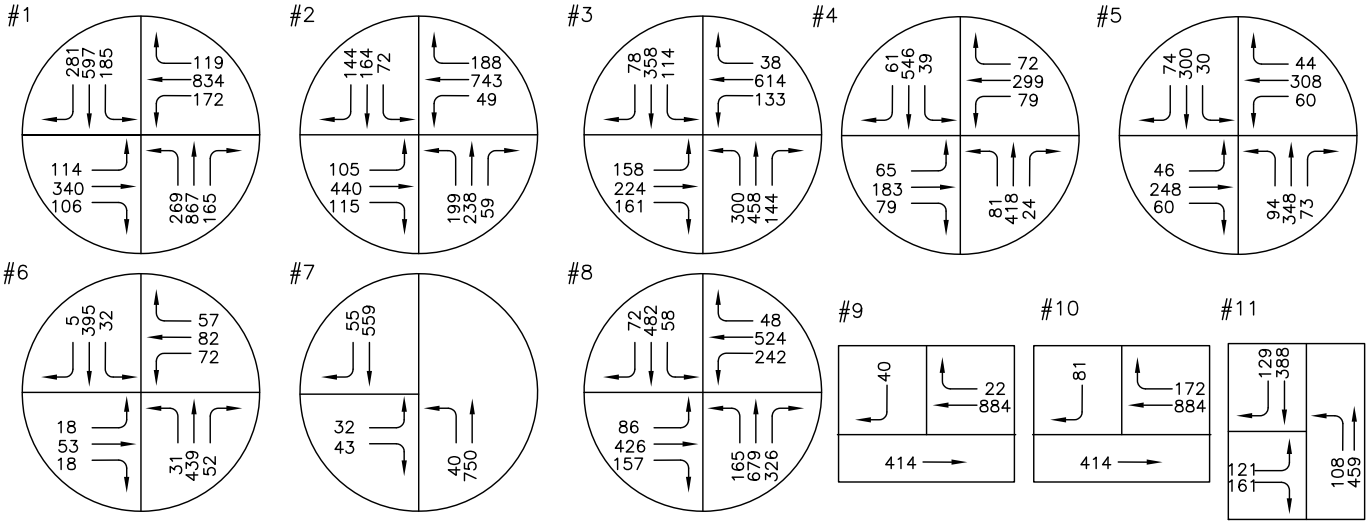
[1] Synchro program is unable to factor in the proposed two-way-left-turn lane on Laselle Street that will provide a mid-way shelter for the eastbound left-turn movements and reduce delays for the egress.

All studied intersections will maintain level of service "D" or better, except the following:

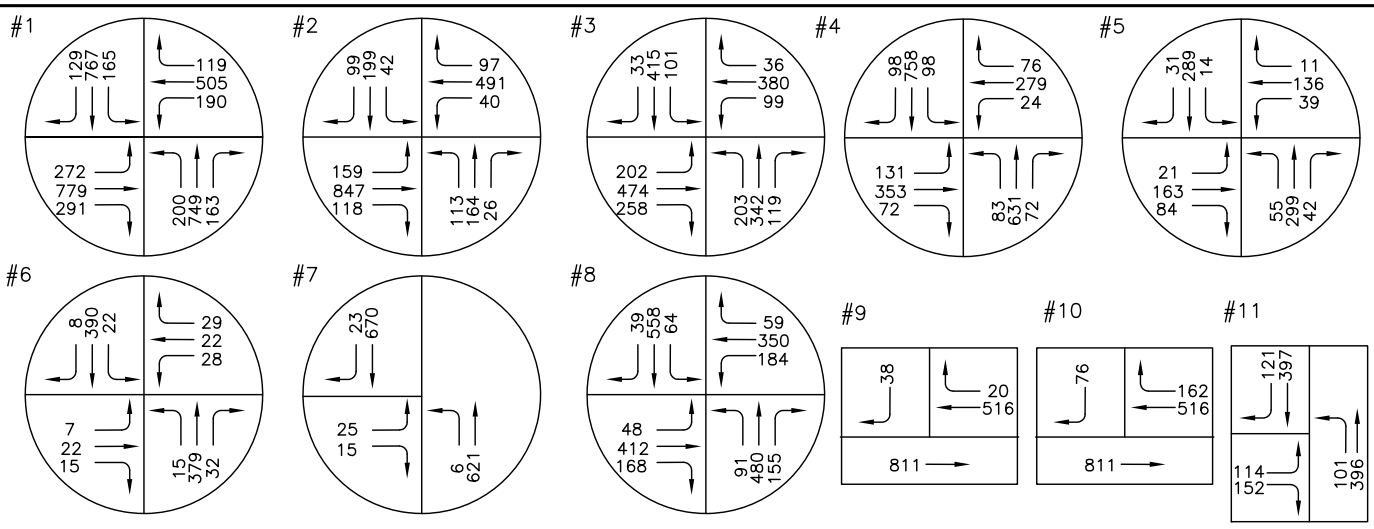
- #3. Alessandro Boulevard at Lasselle Street: LOS E in the AM peak hour.
- #11. Project Driveway ”C” at Lasselle Street: LOS E in the AM peak hour.



AM PEAK



PM PEAK



POST-PROJECT COMPLETION TRAFFIC VOLUMES

PROPOSED GAS STATION, C-STORE, RESTAURANT, RETAIL, OFFICE, CARWASH
AT NWC OF ALESSANDRO BLVD AND LASSELLE ST

K2 TRAFFIC ENGINEERING

EXHIBIT 12

SIGNIFICANT IMPACT ANALYSIS

The City's Level of Service Standards, as published in the City of Moreno Valley General Plan are shown in **Exhibit 13** The operational goal and intersection requirements are LOS D along Alessandro Boulevard and LOS C for all other study intersections.

To determine whether the addition of project-generated trips will result in a significant impact, the following criteria are used when identifying operational deficiency for signalized intersections:

- Any signalized study intersection operating at acceptable LOS without project traffic in which the addition of project traffic causes the intersection to degrade to unacceptable LOS.
- Any signalized study intersection that is operating at unacceptable LOS without project traffic where the project increases delay by 5.0 or more seconds

The following criteria are used when identifying operational deficiency for unsignalized intersections:

a) The addition of project related traffic causes the intersection to degrade from an acceptable LOS to unacceptable LOS.

OR

b) The project adds 5,0 seconds or more of delay to an intersection that is already projected to operate without project traffic at unacceptable LOS,

AND

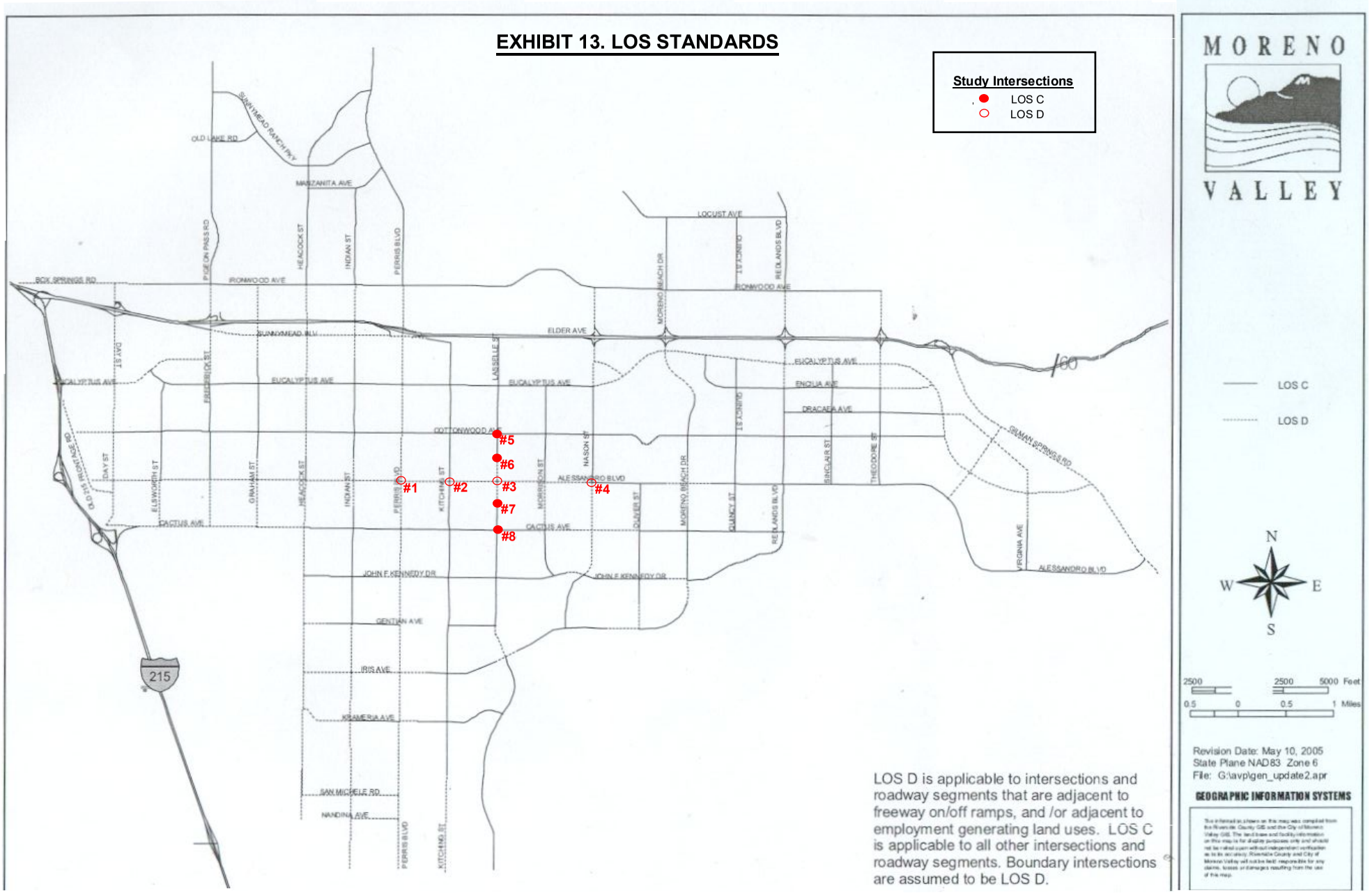
c) The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

With consideration of the proposed project together with other developments in the area, the combined traffic impacts are shown in **Table 7**. Based on the threshold shown above, mitigation measures are required for the following intersection:

- Intersection #3 of Alessandro Boulevard at Lasselle Street in the AM peak hour

Table 7. Project Impact Analysis

Intersection	Pre-Project Conditions		Post Project Conditions			Delay Increase	Significant Impact
	LOS	Delay	LOS	Delay	Target LOS		
AM PEAK							
1. Alessandro Blvd at Perris Rd	D	38.7	D	40.6	D (OK)	-	No
2. Alessandro Blvd at Kitchin St	C	31.5	C	32.1	D (OK)	-	No
3. Alessandro Blvd at Lasselle St	D	48.1	**E**	**69.6**	**D**	**21.5 (>5)**	**Yes**
4. Alessandro Blvd at Nason St	C	24.1	C	25.4	D (OK)	-	No
5. Lasselle St at Cottonwood Ave	D	37.9	D	38.8	C	0.9 (<5)	No
6. Lasselle St at Bay Ave	C	24.5	C	28.2	C (OK)	-	No
7. Lasselle St at Brodiaea Ave	C	16.7	C	20.1	C (OK)	-	No
8. Lasselle St at Cactus Ave	D	36.6	D	38.2	C	1.6 (<5)	No
PM PEAK							
1. Alessandro Blvd at Perris Rd	D	42.7	D	44.8	D (OK)	-	No
2. Alessandro Blvd at Kitchin St	C	23.8	C	29.0	D (OK)	-	No
3. Alessandro Blvd at Lasselle St	C	32.9	D	35.8	D (OK)	-	No
4. Alessandro Blvd at Nason St	C	27.0	C	29.0	D (OK)	-	No
5. Lasselle St at Cottonwood Ave	C	32.5	C	32.9	C (OK)	-	No
6. Lasselle St at Bay Ave	C	26.1	C	28.0	C (OK)	-	No
7. Lasselle St at Brodiaea Ave	C	17.7	C	21.5	C (OK)	-	No
8. Lasselle St at Cactus Ave	C	29.3	C	31.5	C (OK)	-	No



Source: Urban Crossroads, June 2004.

Figure 5.2-7
LOS Standards

MITIGATION MEASURE

The project will result no or less than significant traffic impact with the following mitigation measures:

- For the east approach of Alessandro Boulevard at Lasselle Street, convert the existing westbound right-turn lane to a shared through/right-turn lane and extend the lane length to a minimum of 250 feet.

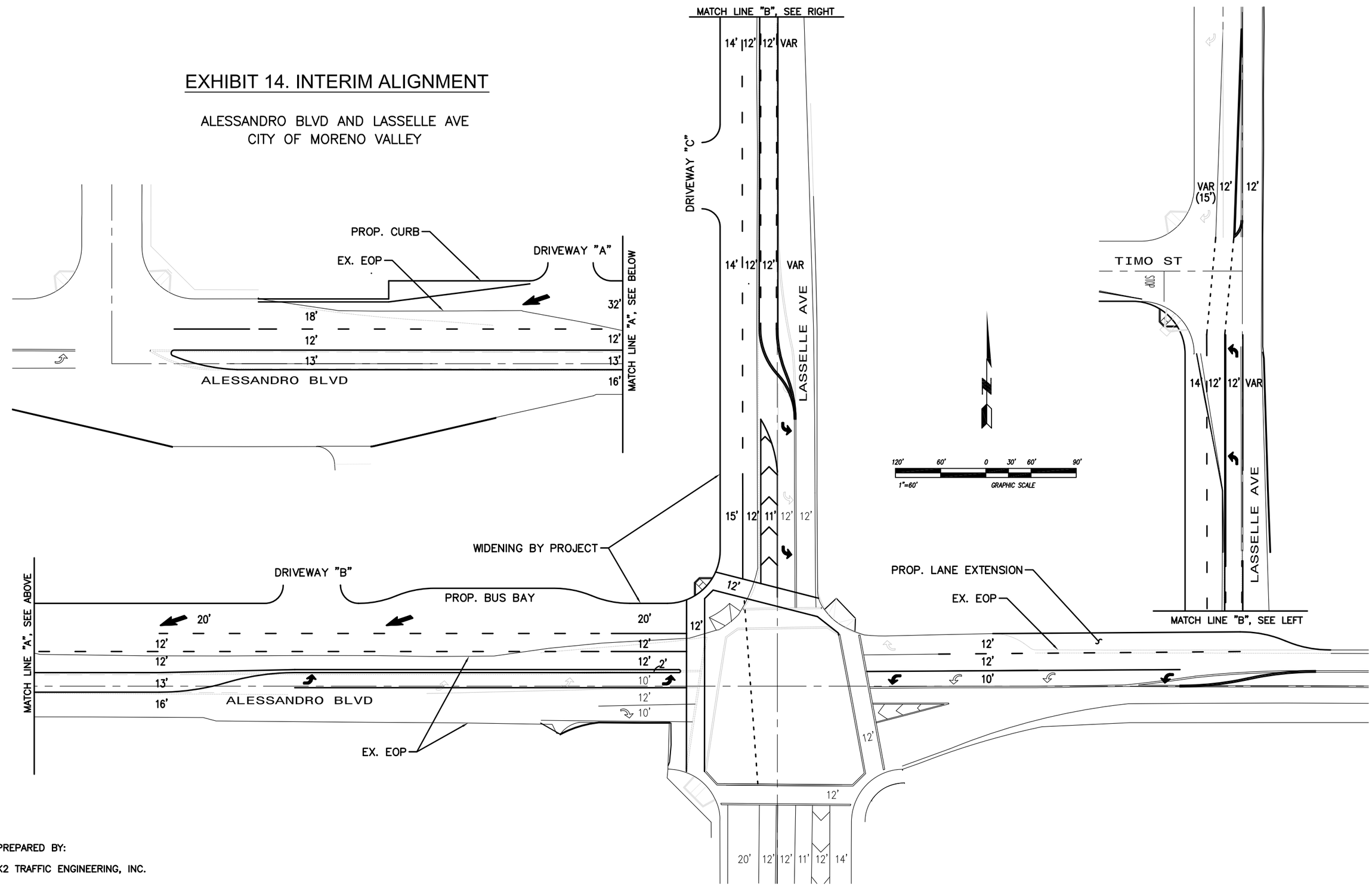
The interim and ultimate alignments for the intersection of Alessandro Boulevard and Lasselle Avenue are illustrated in **Exhibits 14 and 15**, respectively. With mitigation measures, level of services and average delays for the project completion year are shown in **Table 8**. Analysis worksheets are provided in **Appendix D**.

Table 8. Project Impact Analysis with Mitigation Measure

Intersection #3	Pre-Project Conditions		Post Project with Mitigation			
Alessandro Blvd at Lasselle St	LOS	Delay	LOS	Delay	Target LOS	Significant Impact
AM PEAK	D	48.1	D	51.2	D	No
PM PEAK	C	32.9	D	35.8	D	No

EXHIBIT 14. INTERIM ALIGNMENT

ALESSANDRO BLVD AND LASSELLE AVE
CITY OF MORENO VALLEY



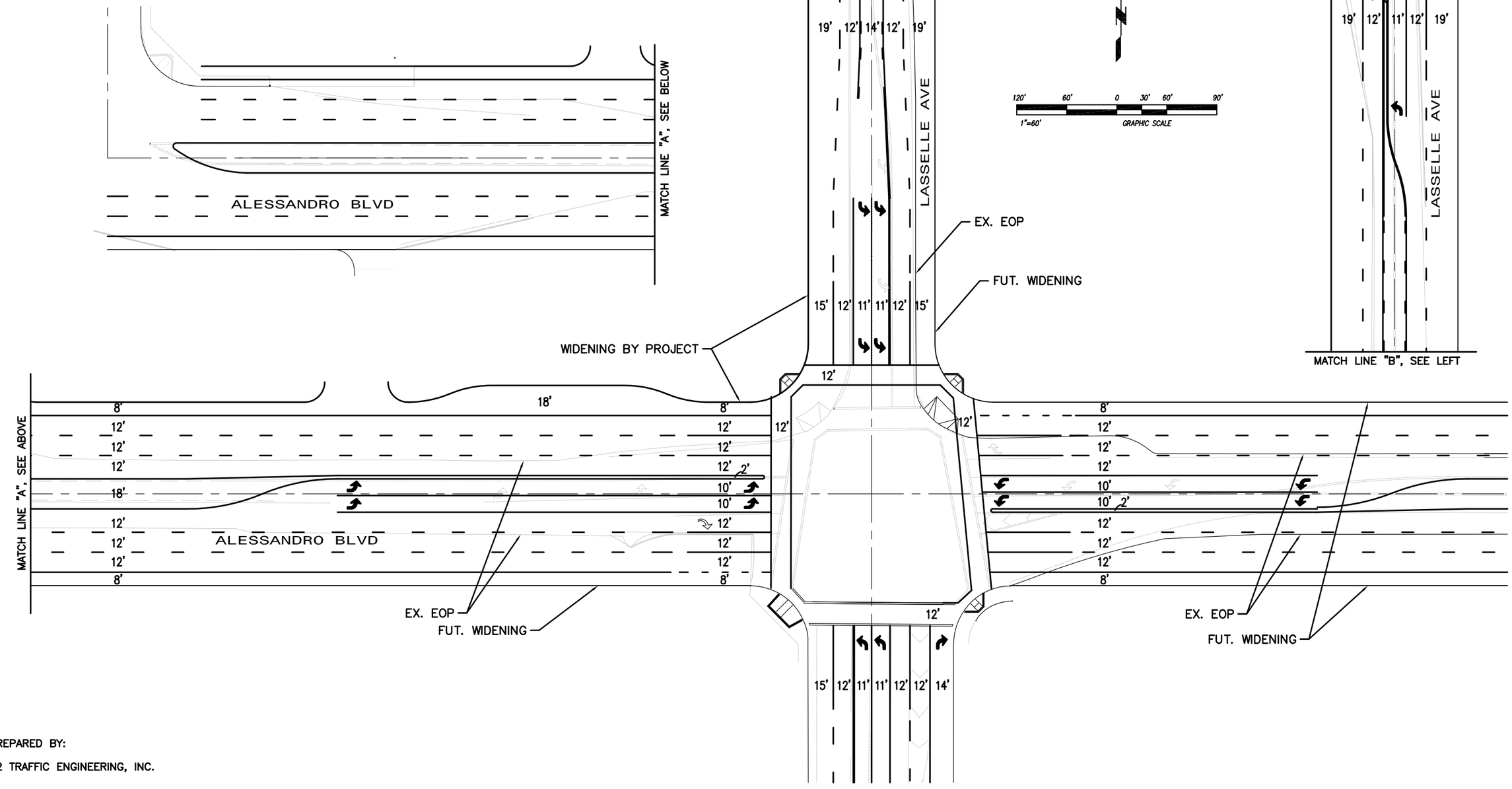
PREPARED BY:

K2 TRAFFIC ENGINEERING, INC.

PLOT: 4/6/2021

EXHIBIT 15. ULTIMATE ALIGNMENT

ALESSANDRO BLVD AND LASSELLE AVE
CITY OF MORENO VALLEY



PREPARED BY:

K2 TRAFFIC ENGINEERING, INC.

PLOT: 4/6/2021

VEHICLE MILES TRAVELED (VMT) ASSESSMENT

For purpose of SB743 compliance, a VMT analysis should be conducted for land use projects that have the potential to increase the average VMT per capita/employee compared to the City's threshold. A set of initial screening tools has been developed to identify projects with presumably less VMT impact and eliminate the requirement for a full project-level VMT analysis.

In accordance with the "Project Type Screening" recommended in the *City of Moreno Valley Traffic Impact Preparation Guide, June 2020,* this local servicing retail project of less than 50,000 square feet can be presumed to have less than significant impacts. Complete project-level VMT analysis and forecasting through regional model is, therefore, not required for the project.

QUEUE ANALYSIS

The study examined the 95th percentile queue for left-turn pockets at the project-adjacent intersection of Lasselle Street and Alessandro Boulevard in the AM and PM peak hours. The queuing conditions are shown in **Table 9**. Queue analysis outputs can be found in **Appendix E.**

Table 9. Queue Analysis - After Project Completion

Intersection #3	Turn Movement	95th Percentile Queue (ft) AM Peak	95th Percentile Queue (ft) PM Peak	Existing Turn Bay Length (ft)	Exceeds Capacity
Alessandro Blvd at Lasselle St	**EBL**	**260**	**182**	180	**Yes**
	WBL	136	144	160	No
	NBL	**396**	**238**	200	**Yes**
	SBL	**180**	140	150	**Yes**

The excess demand of left turns in general should be addressed in the ultimate lane configuration with consideration of additional turn lanes, signal optimization and coordination, enhanced phasing, and travel demand management measures. As an interim solution to minimize the effects of left-turn queuing, the following improvements are recommended:

- Provide 260 feet of storage length for eastbound left-turn lane on Alessandro Boulevard at Lasselle Street.
- Provide 400 feet of storage length for northbound left-turn lane on Lasselle Street at Alessandro Boulevard.
- Provide 180 feet of storage length for southbound left-turn lane on Lasselle Street at Alessandro Boulevard.

PEAK-HOUR SIGNAL WARRANT

According to the approved scoping agreement, this study examined peak-hour signal warrant for the following stop-controlled intersection:

- #7. Lasselle Street at Brodiaea Avenue

The worksheets of peak-hour signal warrant (Warrant 3) are shown in **Appendix F**. The results show that this stop-controlled intersection does NOT meet the traffic signal warrant after completion of the project.

PEDESTRIAN, BICYCLE, PUBLIC TRANSIT

The project will dedicate 20 feet right-of-way along Lasselle Street and 7 feet along Alessandro Boulevard. Pedestrian sidewalks will be provided at project frontage on both Lasselle Street and Alessandro Boulevard in the project vicinity with adequate width clear of any apparent obstruction. The adjacent intersection of Alessandro Boulevard and Lasselle Street provides pedestrian crosswalk for each approach and ADA compliant access ramp at each corner along with pedestrian push buttons to activate pedestrian crossing phases.

Lasselle Street is a Class 2 Bike Lanes south of Alessandro Boulevard. The proposed Lasselle Street widening to its ultimate width will allow future bike lane extension and integration. Public transportation is provided currently on Alessandro Boulevard operated by Riverside Transit Agency (RTA) Bus Route 20. A new bus stop will be added on Alessandro Boulevard just west of Lasselle Street.

SITE ACCESS

Site access is adequately and properly provided via two new right-in-right-out driveways on Alessandro Boulevard and a full access driveway on Lasselle Street. The locations and spacings of these driveways are conformant to the City's standards. The proposed two-way-left-turn lane on Lasselle Street is expected to provide additional space to shelter turning movements and enhance traffic safety. The proposed raised median on Alessandro Boulevard will provide a physical constraint for the proposed driveway to right turns only. The "One Way" sign (R6-1) is recommended for installation at the proposed median island of Alessandro Boulevard facing the proposed driveways.

ON-SITE CIRCULATION

Adequate driveway throat lengths of at least 60 feet have been provided to ensure on-site circulation does not negatively affect public streets. The site sufficiently provides drive aisles of 28 feet wide for two-way circulation. Lasselle Street is not a truck route in the City; therefore, fuel delivery truck access is restricted to approach from the east on Alessandro Boulevard through Driveway "B". On-site circulation appears efficient and safe without bottleneck. Nonetheless, the site plan is subject to review and approval by the Fire Department, Planning Department and Traffic Engineer.

APPENDIX A
APPROVED SCOPING AGREEMENT

EXHIBIT A

Project Scoping Form

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

Approved 8/11/20

Project Identification:

Case Number:	PPA18-0002
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	Commercial Development
Project Address:	Northwest Corner of Alessandro Blvd and Lasselle St
Project Opening Year:	2025
Project Description:	Commercial developments including gas station (3,000 sf) with 12 fueling positions, quick-service restaurant (1,200 sf), drive-thru restaurant (1,475 sf), retail (5,700 sf), office (10,080 sf), and express car wash (3,960 sf).

	Consultant:	**Developer:**
Name:	K2 Traffic Engineering (by Kay Hsu, TE)	Empire Design Group (by Gregory Hann, Architect)
Address:	1442 Irvine Blvd, Suite 210	PO Box 944
	Tustin, CA 92780	Murrieta, CA 92564
Telephone:	714-832-2116	951-696-1490
Email:	khsu@k2traffic.com	ghann@empiregr.biz

Trip Generation Information:

Trip Generation Data Source: ITE's Trip Generation Manual, 10th Edition

Current General Plan Land Use: Commercial

Proposed General Plan Land Use: Commercial

Current Zoning: C-2 (General Commercial)

Proposed Zoning: C-2 (General Commercial)

	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips	0	0	0	200	180	380
PM Trips	0	0	0	204	198	401

Trip Internalization: [x] Yes [ ] No (5 % Trip Discount)

Pass-By Allowance: [x] Yes [ ] No (_____% Trip Discount)
See Table A2

Potential Screening Checks

Is your project screened from specific analyses (see Page 3 of the guidelines related to LOS assessment and Pages 22-23 for VMT screening criteria).

Is the project screened from LOS assessment? [ ] Yes [x] No

LOS screening justification (see Page 3 of the guidelines): _____

Is the project screened from VMT assessment? [x] Yes [ ] No

VMT screening justification (see Pages 22-23 of the guidelines):
1. Within a low VMT generating TAZ based on Total VMT
2. Within a low VMT generating TAZ based on Home-Based Work VMT
See Exhibit 1.

Level of Service Scoping

- Proposed Trip Distribution (Attach Graphic for Detailed Distribution): See Exhibit 2

North	South	East	West
30 %	20 %	20 %	30 %

Link level of service and data collection:

____ will be required

_x_ will not be required

- Attach list of study intersections (and roadway segments if applicable)
- Attach site plan See Exhibit 3. Site Plan
- Other specific items to be addressed:
  - Site access
  - On-site circulation
  - Parking
  - Consistency with Plans supporting Bikes/Peds/Transit
  - Other _____
- Date of Traffic Counts 8/23/2018
- Attach proposed analysis scenarios (years plus proposed forecasting approach)
- Attach proposed phasing approach (if the project is phased) N/A

See Exhibit 4 for Study Intersection and Analysis Scenarios

VMT Scoping

For projects that are not screened, identify the following:

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

TABLE A1. TRIP GENERATION RATE (ITE)

Land Use	Unit	Daily	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Super Convenience Market/Gas Station (960)	Veh Fueling Position	230.52	28.08	50%	50%	22.96	50%	50%
Fast-Food Restaurant with Drive-Through Windows (934)	1,000 Sq. Ft.	470.95	40.19	51%	49%	32.67	52%	48%
High-Turnover (Sit-Down) Restaurant (932)	1,000 Sq. Ft.	112.18	9.94	55%	45%	9.77	62%	38%
Shopping Center (820)	1,000 Sq. Ft.	37.75	0.94	62%	38%	3.81	48%	52%
General Office Building (710)	1,000 Sq. Ft.	9.74	1.16	86%	14%	1.15	16%	84%
Automated Car Wash (948)*	1,000 Sq. Ft.	142.00	6.31	50%	50%	14.20	50%	50%
Drive-in Bank (912)	1,000 Sq. Ft.	100.03	9.50	58%	42%	20.45	50%	50%

Source: *Trip Generation Manual, 10th Edition*

* Daily and AM peak hour volumes derived from SANDAG's *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*

TABLE A2. TRIP GENERATION

Land Use	Unit	Quantity	AM Peak Hour			PM Peak Hour			Daily
			Total	In	Out	Total	In	Out	
Super Convenience Market/Gas Station (960)	Veh Fueling Position	16	449	225	224	367	184	183	3,688
	Pass-By Trip Deduction**	AM 28%, PM 50% Daily 28%	-278	-140	-138	-206	-103	-103	-2,176
Fast-Food Restaurant with Drive-Through Windows (934)	1,000 Sq. Ft.	6.64	267	136	131	217	113	104	3,127
	Pass-By Trip Deduction*	43%	-115	-58	-57	-93	-49	-44	-1,345
High-Turnover (Sit-Down) Restaurant (932)	1,000 Sq. Ft.	7.25	72	40	32	71	44	27	813
	Pass-By Trip Deduction*	43%	-31	-17	-14	-31	-19	-12	-350
Shopping Center (820)	1,000 Sq. Ft.	3.2	3	2	1	12	6	6	121
	Pass-By Trip Deduction*	PM 34%	0	0	0	-4	-2	-2	0
General Office Building (710)	1,000 Sq. Ft.	9.9	11	9	2	11	2	10	96
Automated Car Wash (948)	1,000 Sq. Ft.	3.85	24	12	12	55	28	27	547
	Pass-By Trip Deduction**	28%	-7	-3	-4	-15	-8	-7	-153
Drive-in Bank (912)	1,000 Sq. Ft.	3.775	36	21	15	77	39	38	378
	Pass-By Trip Deduction*	AM 23%, PM 25% Daily 23%	-8	-5	-3	-19	-10	-9	-87
Gross Trip Generation (Before Deduction)			862	445	417	810	416	395	8,770
Internal Trip Deduction (5%)			-43	-22	-21	-41	-21	-20	-439
Trip Generation with Internal Trip Deduction			**819**	423	396	**769**	395	375	**8,331**
Pass-By Trip Deduction			-439	-223	-216	-368	-191	-177	-4,111
Trip Generation (NET)			**380**	200	180	**401**	204	198	**4,220**

* Per *Trip Generation Handbook, 3rd Edition*

** Per SANDAG's *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*

EXHIBIT 1.

APN:479631010; TAZ:3,829

Within a Transit Priority Area (TPA)?
No (Fail)

Within a low VMT generating TAZ based on Total VMT?
Yes (Pass)
Jurisdictional average 2012 daily total VMT per service population = 24.49
Project TAZ 2012 daily total VMT per service population = 23.80

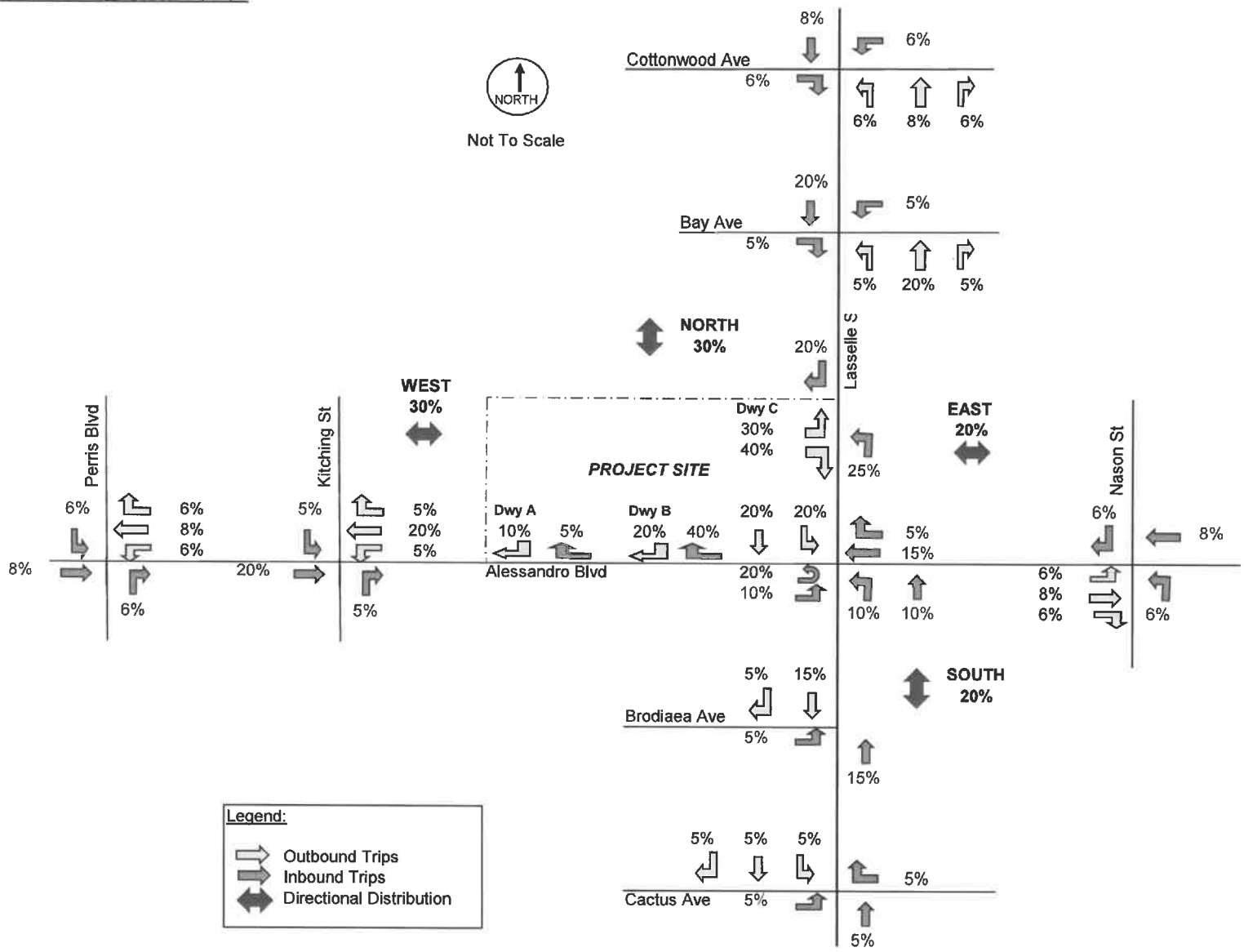
Within a low VMT generating TAZ based on Residential Home-Based VMT?
No (Fail)
Jurisdictional average 2012 daily residential home-based VMT per capita = 12.79
Project TAZ 2012 daily residential home-based VMT per capita = 12.81

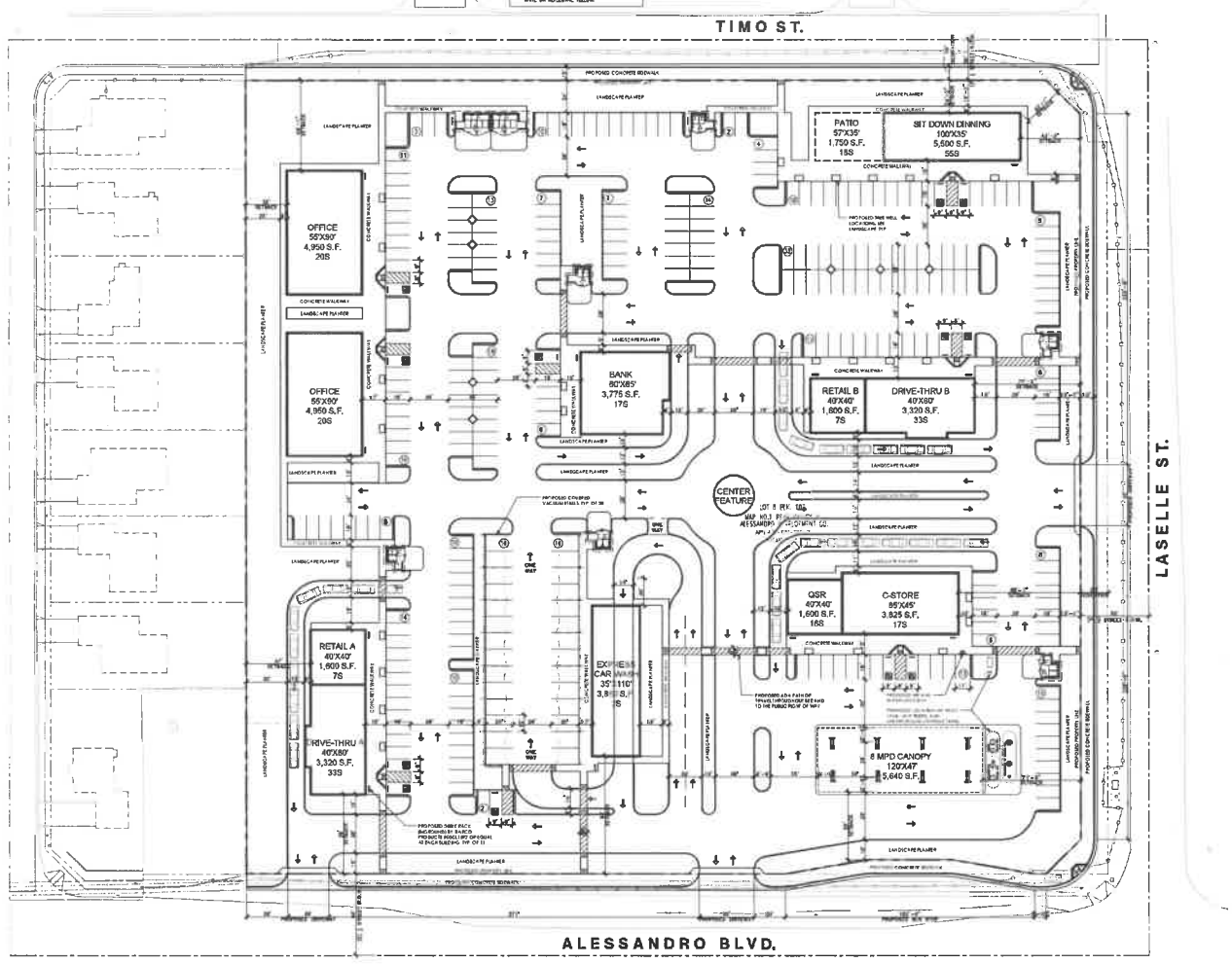
Within a low VMT generating TAZ based on Home-Based Work VMT?
Yes (Pass)
Jurisdictional average 2012 daily home-based work VMT per worker = 11.01
Project TAZ 2012 daily home-based work VMT per worker = 7.48

Notes:

- TPA designation is based on October 2018 conditions.
- Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.
- If VMT screening is desired for current baseline conditions, contact WRCOG for 2012 and 2040 VMT data. Interpolated VMT results can be obtained using the complete data set.
- VMT results do not account for full length of trips that occur beyond the SCAG region.

EXHIBIT 2. TRIP DISTRIBUTION





CONCEPTUAL SITE PLAN

SCALE: 1" = 40'-0"

0 20 40 80

SITE DATA

ADDRESS:	NWC ALESSANDRO BLVD. & LASSELLE ST. MORENO VALLEY, CA 92553
PERMIT NUMBER:	PEN19-0040
APN:	479-631-010-7
	PROPOSED: 5.63 ACRES (245,324 S.F.)
BUILDING AREAS:	C-STORE: 3,400 S.F. QSR: 1,525 S.F. CANOPY: 4,089 S.F. EXPRESS CAR WASH: 3,150 S.F. DRIVE-THRU A: 3,320 S.F. DRIVE-THRU B: 2,520 S.F. RETAIL A: 4,850 S.F. RETAIL B: 4,850 S.F. RETAIL C: 1,600 S.F. RETAIL D: 2,400 S.F. TRASH ENCLOSURE A: 176 S.F. (1 OF 4) TRASH ENCLOSURE B: 267 S.F. (1 OF 1)
FLOOR AREA RATIO:	.13
BUILDING HEIGHT:	MAX HEIGHT: 45'-0"
COUNTY:	RIVERSIDE
CONSTRUCTION TYPE:	V-B/SPRINKLERED
OCCUPANCY'S:	M
SPECIFIC PLAN:	N/A
EXISTING LAND USE:	VACANT
PROPOSED LAND USE:	RETAIL / COMMERCIAL
EXISTING ZONE:	C2 - GENERAL COMMERCIAL
PROPOSED ZONE:	C2 - GENERAL COMMERCIAL
HAZARDOUS FIRE AREA:	VERY HIGH FIRE HAZARD SEVERITY ZONE COMPLY WITH CFC, IEMC & CBC
SURROUNDING LAND USE AND ZONING:	NORTH: C2 - GENERAL COMMERCIAL SOUTH: R1 - SINGLE FAMILY RESIDENTIAL EAST: MURDOCK VILLE/HILL RANCH SPECIFIC PLAN WEST: R1 - SINGLE FAMILY RESIDENTIAL
PARKING REQUIREMENTS:	RESTAURANT: 1/45 S.F. CUSTOMER & 1/200 S.F. NON RETAIL: 1/250 S.F. LOADING SPACES REQUIRED FOR COMMERCIAL BUILDING OVER 1,000 SQ. FT. - 20,000 S.F. MAX. C-STORE: 3,400 S.F. / 250 = 14 QSR: 1,525 S.F. (500 S.F. / 45 + 1,025 S.F. / 200) = 16 CANOPY: 4,089 S.F. / 0 = 0 EXPRESS CAR WASH: 3,150 S.F. / 0 = 0 DRIVE-THRU A: 3,320 S.F. = 37 (1,200 S.F. / 45 + 2,120 S.F. / 200) DRIVE-THRU B: 2,520 S.F. = 30 (1,000 S.F. / 45 + 1,520 S.F. / 200) RETAIL A: 4,850 S.F. / 250 = 19 RETAIL B: 4,850 S.F. / 250 = 19 RETAIL C: 1,600 S.F. / 250 = 6 RETAIL D: 2,400 S.F. / 250 = 10 TOTAL PARKING REQUIRED = 151 STALLS TOTAL PARKING PROVIDED = 181STALLS (INCLUDING 11 ADA & 20 VACUUM STALLS)
LOT COVERAGE:	BUILDING: 32,495 S.F. (13%) LANDSCAPING: 64,573 S.F. (27%) IMPERVIOUS: 146,781 S.F. (60%) TOTAL: 243,324 S.F. (100%)

APPLICANT

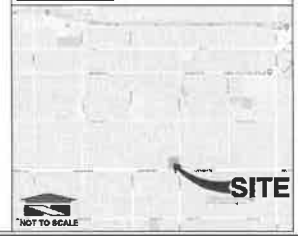
DANNY SINGH
TIGER PETROLEUM, INC.
3017 E. EDINGER AVE.
TUSTIN, CA 92780
CELL PHONE: (949) 630-5345
E-MAIL: dannysingh79@gmail.com

ARCHITECT / EXHIBIT PREPARER

EMPIRE DESIGN GROUP, INC.
PO BOX 944
MURRIETA, CA 92564
PHONE: (951) 694-1490
FAX: (951) 694-1443
CELL PHONE: (951) 809-7601
E-MAIL: ghone@empiredg.biz
CONTACT: GREGORY HANN, ARCHITECT

PHYSICAL ADDRESS:
24861 WASHINGTON AVE.
MURRIETA, CA 92562

VICINITY MAP



EMPIRE DESIGN GROUP Inc.

24861 Washington Ave.
Murrieta, Calif. 92562
tel 951-694-1490 FAX 951-694-1443

CLIENT:
NORTHWEST MORENO PROPERTIES LLC

COMMERCIAL CENTER
APN: 479-631-010-7
NWC ALESSANDRO BLVD. & LASSELLE ST.
MORENO VALLEY, CA 92553

Architect of Record:
GREGORY S. HANN, AIA
24861 WASHINGTON AVE.
MURRIETA, CA 92562
TEL: 951-696-1490
CEL: 951-809-7601
FAX: 951-696-1443
E-MAIL: ghann@empiredg.biz

SEAL:

Date: FEBRUARY 28, 2020
Project Number: EDG#04580

NO.	DATE	REVISION DESCRIPTION
1	3-4-20	1ST CP COMMENTS PER PCNE-RDR DATED

DRAWN BY: GH
CHECKED BY: GH
ENGR BY: AH

DRAWING TITLE:
CONCEPTUAL SITE PLAN

SHEET NO:
AS 1.0

EXHIBIT 3. SITE PLAN

Exhibit 4.

A. List of Study Intersection

1 Alessandro Blvd at Perris Blvd
2 Alessandro Blvd at Lasselle St
3 Alessandro Blvd at Nason St
4 Lasselle St at Cactus Ave
5 Lasselle St at Cottonwood Ave
6 Alessandro Blvd at Kitching St;
7 Lasselle St at Bay Ave
8 Lasselle St at Brodiaea Ave;
9 Alessandro Blvd at Driveway "A"
10 Alessandro Blvd at Driveway "B"
11 Lasselle St at Driveway "C"

B. List of Analysis Scenarios

1 Existing: Year 2018
2 Existing: Year 2018 + Project condition
3 Pre-Project Conditions: Year 2025 (Existing + Growth)
4 Post-Project Conditions: Year 2026 (Pre-Project Conditions + Project)
5 Post-Project Conditions: Year 2026 with Mitigation Measure, if necessary

C. Phasing Approach

The project will be construction in one phase.

D. Note

1 Cumulative analysis is not required
2 Segment analysis is not required

APPENDIX B
TURNING MOVEMENT COUNT DATA

INTERSECTION TURNING MOVEMENT COUNTS

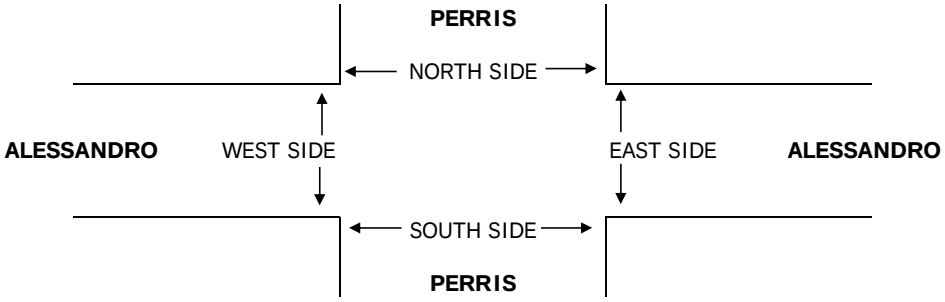
PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	MORENO VALLEY	PROJECT #:	
8/23/18	NORTH & SOUTH:	PERRIS	LOCATION #:	1
THURSDAY	EAST & WEST:	ALESSANDRO	CONTROL:	SIGNAL

NOTES:

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

		NORTHBOUND PERRIS			SOUTHBOUND PERRIS			EASTBOUND ALESSANDRO			WESTBOUND ALESSANDRO			
	LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 2	ET 2	ER 1	WL 2	WT 3	WR 0	TOTAL
AM	7:00 AM	57	180	14	26	112	37	20	59	13	17	175	14	724
	7:15 AM	51	165	24	35	104	45	16	55	31	23	171	9	729
	7:30 AM	65	206	51	47	143	54	19	82	22	35	198	27	949
	7:45 AM	49	177	40	36	129	74	30	78	18	44	161	35	871
	8:00 AM	69	207	18	33	144	72	34	67	21	38	183	23	909
	8:15 AM	46	124	16	29	76	42	36	71	16	22	151	12	641
	8:30 AM	50	118	18	24	83	42	35	73	37	26	122	18	646
	8:45 AM	43	116	14	26	92	37	35	61	26	14	153	19	636
	VOLUMES	430	1,293	195	256	883	403	225	546	184	219	1,314	157	6,105
	APPROACH %	22%	67%	10%	17%	57%	26%	24%	57%	19%	13%	78%	9%	
	APP/DEPART	1,918	/	1,675	1,542	/	1,286	955	/	997	1,690	/	2,147	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	234	755	133	151	520	245	99	282	92	140	713	94	3,458
	APPROACH %	21%	67%	12%	16%	57%	27%	21%	60%	19%	15%	75%	10%	
	PEAK HR FACTOR		0.871			0.920			0.938			0.911		0.911
	APP/DEPART	1,122	/	948	916	/	752	473	/	566	947	/	1,192	0
PM	4:00 PM	54	173	20	35	144	36	57	141	50	40	99	17	866
	4:15 PM	52	181	20	42	180	36	46	149	60	35	91	19	911
	4:30 PM	27	150	42	29	153	31	62	165	66	42	95	28	890
	4:45 PM	52	179	33	34	203	30	60	159	57	39	103	22	971
	5:00 PM	50	162	26	36	168	23	54	162	68	42	97	24	912
	5:15 PM	45	161	30	33	144	28	61	177	62	32	131	19	923
	5:30 PM	38	143	23	41	138	28	56	169	67	37	106	16	862
	5:45 PM	58	146	20	79	163	16	42	145	53	35	102	16	875
	VOLUMES	376	1,295	214	329	1,293	228	438	1,267	483	302	824	161	7,210
	APPROACH %	20%	69%	11%	18%	70%	12%	20%	58%	22%	23%	64%	13%	
	APP/DEPART	1,885	/	1,894	1,850	/	2,078	2,188	/	1,810	1,287	/	1,428	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	174	652	131	132	668	112	237	663	253	155	426	93	3,696
	APPROACH %	18%	68%	14%	14%	73%	12%	21%	58%	22%	23%	63%	14%	
	PEAK HR FACTOR		0.906			0.854			0.961			0.926		0.952
	APP/DEPART	957	/	982	912	/	1,076	1,153	/	926	674	/	712	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

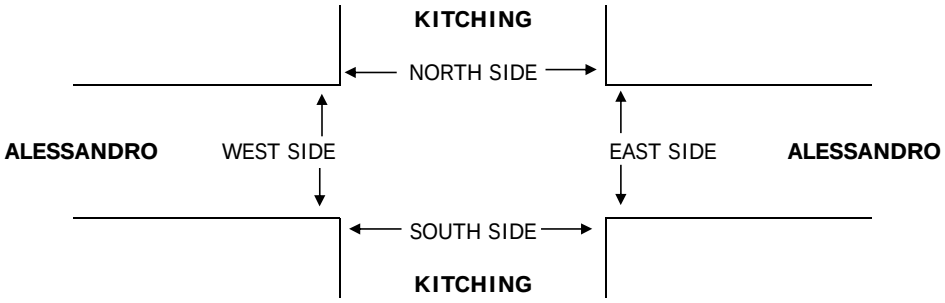
DATE:	LOCATION:	MORENO VALLEY	PROJECT #:	
8/23/18	NORTH & SOUTH:	KITCHING	LOCATION #:	2
THURSDAY	EAST & WEST:	ALESSANDRO	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND KITCHING			SOUTHBOUND KITCHING			EASTBOUND ALESSANDRO			WESTBOUND ALESSANDRO			
	LANES:	NL 2	NT 1	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL
AM	7:00 AM	33	31	1	8	21	23	14	51	31	3	152	4	372
	7:15 AM	38	41	4	12	38	25	11	83	15	2	147	12	428
	7:30 AM	46	61	8	14	42	20	29	100	45	5	146	18	534
	7:45 AM	42	51	11	15	49	15	30	107	34	4	137	19	514
	8:00 AM	43	56	17	10	32	60	21	61	12	22	203	52	589
	8:15 AM	42	39	7	15	20	30	11	79	9	4	129	67	452
	8:30 AM	30	23	0	4	19	14	22	75	10	1	110	61	369
	8:45 AM	25	34	3	3	17	13	7	79	16	11	118	6	332
	VOLUMES	299	336	51	81	238	200	145	635	172	52	1,142	239	3,590
	APPROACH %	44%	49%	7%	16%	46%	39%	15%	67%	18%	4%	80%	17%	
	APP/DEPART	686	/	720	519	/	462	952	/	767	1,433	/	1,641	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	173	207	43	54	143	125	91	347	100	35	615	156	2,089
	APPROACH %	41%	49%	10%	17%	44%	39%	17%	64%	19%	4%	76%	19%	
	PEAK HR FACTOR		0.912			0.789			0.773			0.727		0.887
	APP/DEPART	423	/	454	322	/	278	538	/	444	806	/	913	0
PM	4:00 PM	26	37	3	12	37	17	30	138	19	6	85	11	421
	4:15 PM	28	53	5	6	43	18	21	161	31	3	99	12	480
	4:30 PM	18	31	3	4	43	17	33	178	19	11	103	27	487
	4:45 PM	23	42	2	7	37	21	44	157	21	6	99	16	475
	5:00 PM	29	30	6	7	44	26	32	154	28	6	90	19	471
	5:15 PM	28	40	3	10	49	22	29	212	35	3	101	14	546
	5:30 PM	23	41	4	5	40	11	30	150	17	2	92	13	428
	5:45 PM	31	48	5	7	63	28	28	153	21	0	103	11	498
	VOLUMES	206	322	31	58	356	160	247	1,303	191	37	772	123	3,806
	APPROACH %	37%	58%	6%	10%	62%	28%	14%	75%	11%	4%	83%	13%	
	APP/DEPART	559	/	692	574	/	584	1,741	/	1,392	932	/	1,138	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	98	143	14	28	173	86	138	701	103	26	393	76	1,979
	APPROACH %	38%	56%	5%	10%	60%	30%	15%	74%	11%	5%	79%	15%	
	PEAK HR FACTOR		0.898			0.886			0.853			0.878		0.906
	APP/DEPART	255	/	357	287	/	302	942	/	743	495	/	577	0



INTERSECTION TURNING MOVEMENT COUNTS

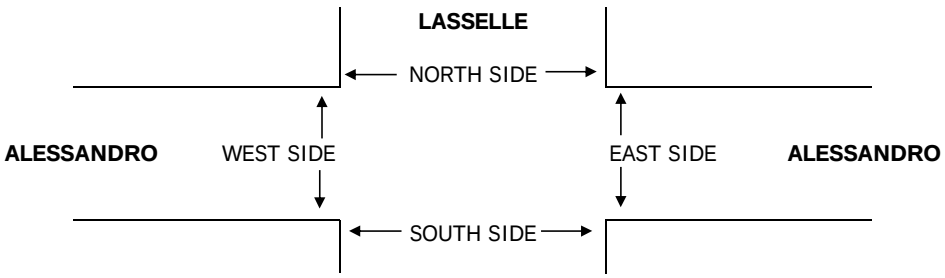
PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	MORENO VALLEY	PROJECT #:	
8/23/18	NORTH & SOUTH:	LASSELLE	LOCATION #:	3
THURSDAY	EAST & WEST:	ALESSANDRO	CONTROL:	SIGNAL

NOTES:

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

		NORTHBOUND LASSELLE			SOUTHBOUND LASSELLE			EASTBOUND ALESSANDRO			WESTBOUND ALESSANDRO			
	LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	48	67	15	1	46	21	3	24	28	16	86	1	356
	7:15 AM	53	90	34	6	59	17	4	34	32	21	109	5	464
	7:30 AM	60	115	33	8	75	14	6	57	42	35	136	7	588
	7:45 AM	65	74	35	12	70	19	9	59	35	35	143	0	556
	8:00 AM	46	82	23	3	37	18	6	45	31	25	90	2	408
	8:15 AM	36	57	5	7	52	4	4	45	16	8	78	1	313
	8:30 AM	37	50	13	2	24	7	6	48	19	12	78	5	301
	8:45 AM	42	50	11	4	35	7	2	39	17	13	82	4	306
	VOLUMES	387	585	169	43	398	107	40	351	220	165	802	25	3,292
	APPROACH %	34%	51%	15%	8%	73%	20%	7%	57%	36%	17%	81%	3%	
	APP/DEPART	1,141	/	650	548	/	783	611	/	563	992	/	1,296	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	224	361	125	29	241	68	25	195	140	116	478	14	2,016
	APPROACH %	32%	51%	18%	9%	71%	20%	7%	54%	39%	19%	79%	2%	
	PEAK HR FACTOR		0.853			0.837			0.857			0.854		0.857
	APP/DEPART	710	/	400	338	/	497	360	/	349	608	/	770	0
PM	4:00 PM	26	61	21	3	58	12	15	87	55	21	58	5	422
	4:15 PM	36	53	26	1	63	8	15	91	48	11	70	3	425
	4:30 PM	37	61	34	3	61	4	15	94	42	20	69	3	443
	4:45 PM	40	60	30	1	51	10	14	122	55	23	57	3	466
	5:00 PM	38	70	27	3	57	10	17	101	40	23	61	3	450
	5:15 PM	25	68	21	8	70	7	17	138	74	19	91	2	540
	5:30 PM	42	60	28	6	78	7	17	90	53	28	58	5	472
	5:45 PM	37	65	28	5	90	5	17	84	58	16	68	4	477
	VOLUMES	281	498	215	30	528	63	127	807	425	161	532	28	3,695
	APPROACH %	28%	50%	22%	5%	85%	10%	9%	59%	31%	22%	74%	4%	
	APP/DEPART	994	/	653	621	/	1,114	1,359	/	1,052	721	/	876	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	142	263	104	22	295	29	68	413	225	86	278	14	1,939
	APPROACH %	28%	52%	20%	6%	85%	8%	10%	58%	32%	23%	74%	4%	
	PEAK HR FACTOR		0.943			0.865			0.771			0.844		0.898
	APP/DEPART	509	/	345	346	/	606	706	/	539	378	/	449	0



INTERSECTION TURNING MOVEMENT COUNTS

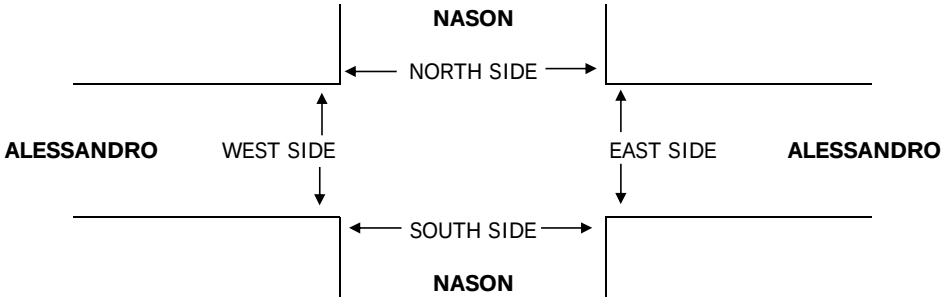
PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	MORENO VALLEY	PROJECT #:	
8/23/18	NORTH & SOUTH:	NASON	LOCATION #:	4
THURSDAY	EAST & WEST:	ALESSANDRO	CONTROL:	SIGNAL

NOTES:

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

		NORTHBOUND NASON			SOUTHBOUND NASON			EASTBOUND ALESSANDRO			WESTBOUND ALESSANDRO			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	20	108	9	13	155	12	12	40	16	20	67	14	486
	7:15 AM	16	88	3	9	131	12	11	34	17	16	46	15	398
	7:30 AM	15	80	5	8	97	10	10	43	17	18	63	16	382
	7:45 AM	9	88	4	4	92	9	14	29	9	15	70	18	361
	8:00 AM	12	90	4	3	85	7	16	25	16	10	35	11	314
	8:15 AM	12	87	4	4	74	10	19	31	10	10	38	10	309
	8:30 AM	8	90	8	6	96	7	11	31	19	4	32	11	323
	8:45 AM	15	101	8	10	93	12	12	29	15	4	52	10	361
	VOLUMES	107	732	45	57	823	79	105	262	119	97	403	105	2,934
	APPROACH %	12%	83%	5%	6%	86%	8%	22%	54%	24%	16%	67%	17%	
	APP/DEPART	884	/	942	959	/	1,039	486	/	364	605	/	589	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	60	364	21	34	475	43	47	146	59	69	246	63	1,627
	APPROACH %	13%	82%	5%	6%	86%	8%	19%	58%	23%	18%	65%	17%	
	PEAK HR FACTOR		0.812			0.767			0.900			0.917		0.837
	APP/DEPART	445	/	474	552	/	603	252	/	201	378	/	349	0
PM	4:00 PM	19	165	23	13	157	19	27	82	8	2	49	13	577
	4:15 PM	15	131	14	24	150	18	23	92	13	9	65	18	572
	4:30 PM	11	128	14	21	179	19	29	55	14	4	58	19	551
	4:45 PM	16	125	12	27	174	18	25	64	17	6	56	16	556
	5:00 PM	6	107	6	14	165	21	19	63	19	4	33	19	476
	5:15 PM	11	107	8	8	142	15	19	51	8	7	40	13	429
	5:30 PM	8	118	7	12	149	15	12	60	14	6	39	13	453
	5:45 PM	10	105	5	16	155	13	15	50	11	15	40	15	450
	VOLUMES	96	986	89	135	1,271	138	169	517	104	53	380	126	4,064
	APPROACH %	8%	84%	8%	9%	82%	9%	21%	65%	13%	9%	68%	23%	
	APP/DEPART	1,171	/	1,281	1,544	/	1,428	790	/	741	559	/	614	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	61	549	63	85	660	74	104	293	52	21	228	66	2,256
	APPROACH %	9%	82%	9%	10%	81%	9%	23%	65%	12%	7%	72%	21%	
	PEAK HR FACTOR		0.813			0.935			0.877			0.856		0.977
	APP/DEPART	673	/	719	819	/	733	449	/	441	315	/	363	0



INTERSECTION TURNING MOVEMENT COUNTS

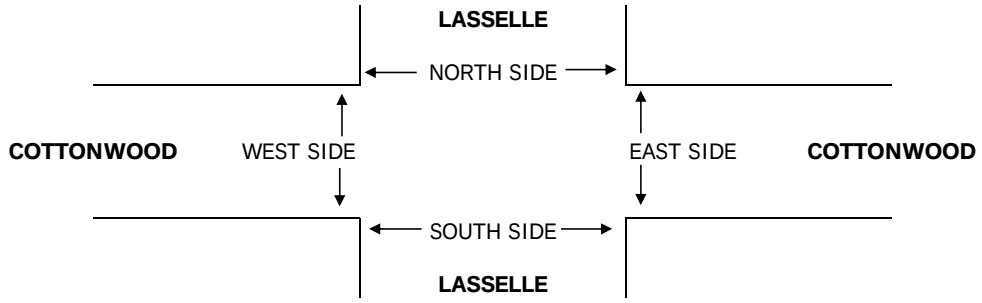
PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	MORENO VALLEY	PROJECT #:	
8/23/18	NORTH & SOUTH:	LASSELLE	LOCATION #:	5
THURSDAY	EAST & WEST:	COTTONWOOD	CONTROL:	SIGNAL

NOTES:

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

		NORTHBOUND LASSELLE			SOUTHBOUND LASSELLE			EASTBOUND COTTONWOOD			WESTBOUND COTTONWOOD			
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 1	EL 1	ET 1	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	14	58	6	1	46	4	1	26	6	5	40	3	210
	7:15 AM	11	71	14	5	44	8	5	22	4	3	36	6	229
	7:30 AM	15	78	17	5	65	23	7	77	12	9	62	7	377
	7:45 AM	29	76	13	12	68	16	18	72	15	17	84	16	436
	8:00 AM	17	65	10	4	70	17	10	45	11	13	86	9	357
	8:15 AM	13	58	4	1	44	10	1	19	17	8	38	5	218
	8:30 AM	7	45	2	3	27	5	2	8	9	2	23	2	135
	8:45 AM	13	45	0	0	22	7	1	16	7	6	28	2	147
	VOLUMES	119	496	66	31	386	90	45	285	81	63	397	50	2,109
	APPROACH %	17%	73%	10%	6%	76%	18%	11%	69%	20%	12%	78%	10%	
	APP/DEPART	681	/	591	507	/	530	411	/	382	510	/	606	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	72	290	54	26	247	64	40	216	42	42	268	38	1,399
	APPROACH %	17%	70%	13%	8%	73%	19%	13%	72%	14%	12%	77%	11%	
	PEAK HR FACTOR		0.881			0.878			0.710			0.744		0.802
	APP/DEPART	416	/	368	337	/	331	298	/	296	348	/	404	0
PM	4:00 PM	15	56	9	4	55	3	7	30	20	6	22	3	230
	4:15 PM	4	65	6	2	49	6	11	26	11	8	21	5	214
	4:30 PM	6	60	8	2	51	11	5	30	15	7	36	5	236
	4:45 PM	11	71	5	3	49	3	11	35	19	8	19	1	235
	5:00 PM	5	58	4	2	66	7	5	30	10	5	31	4	227
	5:15 PM	11	72	7	4	59	8	4	38	20	4	24	0	251
	5:30 PM	12	76	5	3	49	5	2	35	18	6	33	1	245
	5:45 PM	9	40	10	3	63	7	7	39	14	8	30	5	235
	VOLUMES	73	498	54	23	441	50	52	263	127	52	216	24	1,873
	APPROACH %	12%	80%	9%	4%	86%	10%	12%	60%	29%	18%	74%	8%	
	APP/DEPART	625	/	574	514	/	620	442	/	340	292	/	339	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	37	246	26	12	237	27	18	142	62	23	118	10	958
	APPROACH %	12%	80%	8%	4%	86%	10%	8%	64%	28%	15%	78%	7%	
	PEAK HR FACTOR		0.831			0.920			0.854			0.878		0.954
	APP/DEPART	309	/	274	276	/	322	222	/	180	151	/	182	0



INTERSECTION TURNING MOVEMENT COUNTS

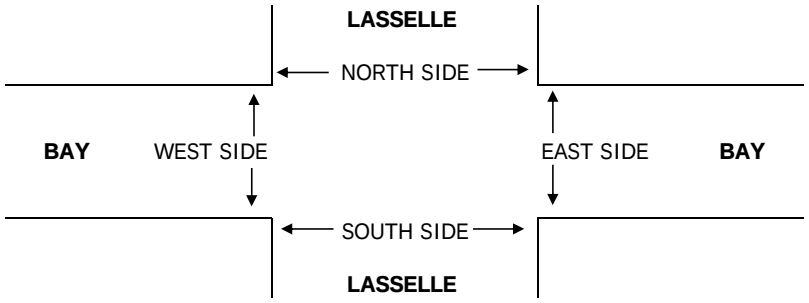
PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	MORENO VALLEY	PROJECT #:	
8/23/18	NORTH & SOUTH:	LASSELLE	LOCATION #:	6
THURSDAY	EAST & WEST:	BAY	CONTROL:	SIGNAL

NOTES:

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

		NORTHBOUND LASSELLE			SOUTHBOUND LASSELLE			EASTBOUND BAY			WESTBOUND BAY			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	8	65	7	1	65	2	3	5	2	6	10	7	181
	7:15 AM	0	90	6	9	79	0	4	8	0	9	18	10	233
	7:30 AM	9	108	8	11	80	1	3	12	1	17	23	14	287
	7:45 AM	2	87	16	7	84	1	6	21	4	22	20	19	289
	8:00 AM	2	65	23	12	42	1	1	3	2	9	6	6	172
	8:15 AM	1	63	7	8	55	1	0	2	0	2	2	5	146
	8:30 AM	0	53	0	5	39	0	0	1	1	0	2	3	104
	8:45 AM	0	56	2	2	33	0	0	1	1	4	4	9	112
	VOLUMES	22	587	69	55	477	6	17	53	11	69	85	73	1,524
	APPROACH %	3%	87%	10%	10%	89%	1%	21%	65%	14%	30%	37%	32%	
	APP/DEPART	678	/	677	538	/	557	81	/	177	227	/	113	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	19	350	37	28	308	4	16	46	7	54	71	50	990
	APPROACH %	5%	86%	9%	8%	91%	1%	23%	67%	10%	31%	41%	29%	
	PEAK HR FACTOR		0.812			0.924			0.556			0.717		0.856
	APP/DEPART	406	/	416	340	/	369	69	/	111	175	/	94	0
PM	4:00 PM	0	80	3	5	85	3	1	7	0	5	1	2	192
	4:15 PM	0	60	7	5	75	1	2	5	2	3	4	10	174
	4:30 PM	0	59	17	7	70	0	0	4	3	2	5	6	173
	4:45 PM	1	68	1	5	82	0	1	4	1	5	3	3	174
	5:00 PM	0	60	3	6	77	0	1	3	0	3	1	2	156
	5:15 PM	2	77	4	11	73	3	1	1	1	4	9	1	187
	5:30 PM	1	73	5	2	87	2	3	10	1	4	5	6	199
	5:45 PM	1	85	7	0	66	2	1	5	2	5	4	16	194
	VOLUMES	5	562	47	41	615	11	10	39	10	31	32	46	1,449
	APPROACH %	1%	92%	8%	6%	92%	2%	17%	66%	17%	28%	29%	42%	
	APP/DEPART	614	/	618	667	/	656	59	/	127	109	/	48	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	4	295	19	19	303	7	6	19	4	16	19	25	736
	APPROACH %	1%	93%	6%	6%	92%	2%	21%	66%	14%	27%	32%	42%	
	PEAK HR FACTOR		0.855			0.904			0.518			0.600		0.925
	APP/DEPART	318	/	326	329	/	323	29	/	57	60	/	30	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

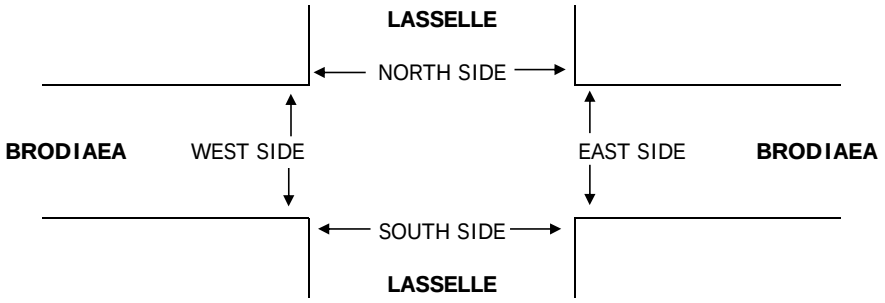
DATE:	LOCATION:	MORENO VALLEY	PROJECT #:	
8/23/18	NORTH & SOUTH:	LASSELLE	LOCATION #:	7
THURSDAY	EAST & WEST:	BRODIAEA	CONTROL:	ONE WAY STOP EB

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND LASSELLE			SOUTHBOUND LASSELLE			EASTBOUND BRODIAEA			WESTBOUND BRODIAEA			
	LANES:	NL 1	NT 2	NR X	SL X	ST 2	SR 0	EL 0.5	ET X	ER 0.5	WL X	WT X	WR X	TOTAL
AM	7:00 AM	0	129			88	1	3		3				224
	7:15 AM	7	177			102	6	3		5				300
	7:30 AM	11	141			142	13	6		10				323
	7:45 AM	12	164			123	17	4		12				332
	8:00 AM	5	144			95	4	6		10				264
	8:15 AM	5	96			74	1	1		7				184
	8:30 AM	2	86			60	1	0		6				155
	8:45 AM	3	44			62	1	1		1				112
	VOLUMES	45	981	0	0	746	44	24	0	54	0	0	0	1,894
	APPROACH %	4%	96%	0%	0%	94%	6%	31%	0%	69%	0%	0%	0%	
	APP/DEPART	1,026	/	1,005	790	/	800	78	/	0	0	/	89	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	35	626	0	0	462	40	19	0	37	0	0	0	1,219
	APPROACH %	5%	95%	0%	0%	92%	8%	34%	0%	66%	0%	0%	0%	
	PEAK HR FACTOR		0.898			0.810			0.875			0.000		0.918
	APP/DEPART	661	/	645	502	/	499	56	/	0	0	/	75	0
PM	4:00 PM	0	116			117	4	1		3				241
	4:15 PM	0	112			118	3	1		1				235
	4:30 PM	1	135			112	5	2		1				256
	4:45 PM	0	123			121	6	2		2				254
	5:00 PM	1	129			116	6	0		2				254
	5:15 PM	1	120			128	3	2		6				260
	5:30 PM	1	126			151	1	2		5				286
	5:45 PM	2	139			162	1	9		0				313
	VOLUMES	6	1,000	0	0	1,025	29	19	0	20	0	0	0	2,099
	APPROACH %	1%	99%	0%	0%	97%	3%	49%	0%	51%	0%	0%	0%	
	APP/DEPART	1,006	/	1,019	1,054	/	1,045	39	/	0	0	/	35	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	5	514	0	0	557	11	13	0	13	0	0	0	1,113
	APPROACH %	1%	99%	0%	0%	98%	2%	50%	0%	50%	0%	0%	0%	
	PEAK HR FACTOR		0.920			0.871			0.722			0.000		0.889
	APP/DEPART	519	/	527	568	/	570	26	/	0	0	/	16	0



INTERSECTION TURNING MOVEMENT COUNTS

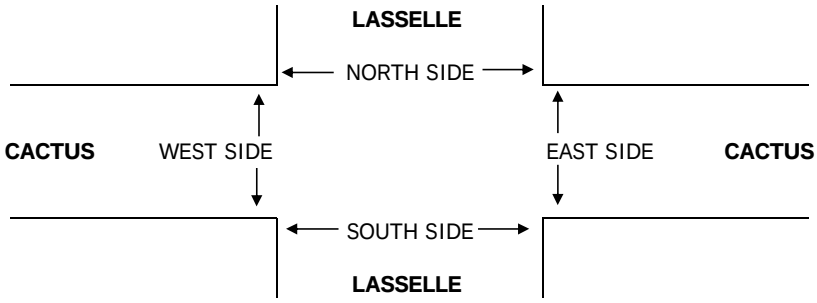
PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	MORENO VALLEY	PROJECT #:	
8/23/18	NORTH & SOUTH:	LASSELLE	LOCATION #:	8
THURSDAY	EAST & WEST:	CACTUS	CONTROL:	SIGNAL

NOTES:

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

		NORTHBOUND LASSELLE			SOUTHBOUND LASSELLE			EASTBOUND CACTUS			WESTBOUND CACTUS			
	LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 1	TOTAL
AM	7:00 AM	22	117	40	11	92	10	3	54	12	16	71	4	452
	7:15 AM	33	129	51	7	73	12	12	63	16	44	94	4	538
	7:30 AM	24	164	58	15	121	16	25	88	71	69	120	16	787
	7:45 AM	56	139	91	11	133	16	20	117	40	71	133	8	835
	8:00 AM	31	150	84	10	85	11	9	103	10	27	109	5	634
	8:15 AM	13	93	31	20	71	8	2	95	14	13	73	8	441
	8:30 AM	17	65	38	18	38	4	1	76	21	24	65	21	388
	8:45 AM	15	77	33	9	49	4	2	75	9	25	73	23	394
	VOLUMES	211	934	426	101	662	81	74	671	193	289	738	89	4,469
	APPROACH %	13%	59%	27%	12%	78%	10%	8%	72%	21%	26%	66%	8%	
	APP/DEPART	1,571	/	1,097	844	/	1,144	938	/	1,198	1,116	/	1,030	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	144	582	284	43	412	55	66	371	137	211	456	33	2,794
	APPROACH %	14%	58%	28%	8%	81%	11%	11%	65%	24%	30%	65%	5%	
	PEAK HR FACTOR		0.883			0.797			0.780			0.825		0.837
	APP/DEPART	1,010	/	681	510	/	760	574	/	698	700	/	655	0
PM	4:00 PM	9	90	37	11	89	6	14	81	40	29	65	12	483
	4:15 PM	26	103	31	7	111	6	13	67	40	29	61	4	498
	4:30 PM	16	87	30	9	100	3	17	85	42	45	121	11	566
	4:45 PM	21	109	30	5	104	5	11	95	31	38	84	12	545
	5:00 PM	14	105	30	11	87	6	5	83	31	40	95	12	519
	5:15 PM	20	110	22	13	132	5	7	92	44	49	72	7	573
	5:30 PM	15	103	36	10	119	11	12	86	39	34	68	13	546
	5:45 PM	30	91	47	13	139	3	9	98	32	37	70	11	580
	VOLUMES	151	798	263	79	881	45	88	687	299	301	636	82	4,310
	APPROACH %	12%	66%	22%	8%	88%	4%	8%	64%	28%	30%	62%	8%	
	APP/DEPART	1,212	/	968	1,005	/	1,481	1,074	/	1,029	1,019	/	832	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	79	409	135	47	477	25	33	359	146	160	305	43	2,218
	APPROACH %	13%	66%	22%	9%	87%	5%	6%	67%	27%	31%	60%	8%	
	PEAK HR FACTOR		0.927			0.885			0.941			0.864		0.956
	APP/DEPART	623	/	485	549	/	783	538	/	541	508	/	409	0



APPENDIX C
INTERNAL TRIP CAPTURE

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	New Commercial and Office Plaza	**Organization:**	K2 Traffic Engineering, Inc.
Project Location:	NWC of Alessandro Blvd and Laselle St	**Performed By:**	E. Tan
Scenario Description:	Project Trip Generation	**Date:**	2/22/2021
Analysis Year:		**Checked By:**	Kay Hsu
Analysis Period:	**AM Street Peak Hour**	**Date:**	2/22/2021

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				11	9	2
Retail				452	227	225
Restaurant				355	185	170
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				60	33	27
				878	454	424

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	1	0	0	0
Retail	0		29	0	0	0
Restaurant	1	18		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	878	454	424
Internal Capture Percentage	11%	11%	12%
External Vehicle-Trips[5]	780	405	375
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	11%	50%
Retail	8%	13%
Restaurant	16%	11%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Project Name:	New Commercial and Office Plaza
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	9	9	1.00	2	2
Retail	1.00	227	227	1.00	225	225
Restaurant	1.00	185	185	1.00	170	170
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	0	0	1.00	0	0
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	1	0	0	0
Retail	65		29	0	32	0
Restaurant	53	24		0	7	5
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		73	43	0	0	0
Retail	0		93	0	0	0
Restaurant	1	18		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	39	37	0		0
Hotel	0	9	11	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	1	8	9	8	0	0
Retail	18	209	227	209	0	0
Restaurant	30	155	185	155	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	33	33	33	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	1	1	2	1	0	0
Retail	29	196	225	196	0	0
Restaurant	19	151	170	151	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	27	27	27	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	New Commercial and Office Plaza	**Organization:**	K2 Traffic Engineering, Inc.
Project Location:	NWC of Alessandro Blvd and Laselle St	**Performed By:**	E. Tan
Scenario Description:	Project Trip Generation	**Date:**	2/22/2021
Analysis Year:		**Checked By:**	Kay Hsu
Analysis Period:	**PM Street Peak Hour**	**Date:**	2/22/2021

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				12	2	10
Retail				379	190	189
Restaurant				304	167	137
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				132	67	65
				827	426	401

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		2	0	0	0	0
Retail	1		48	0	0	0
Restaurant	0	56		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	827	426	401
Internal Capture Percentage	26%	25%	27%
External Vehicle-Trips[5]	613	319	294
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	50%	20%
Retail	31%	26%
Restaurant	29%	41%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Project Name:	New Commercial and Office Plaza
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	2	2	1.00	10	10
Retail	1.00	190	190	1.00	189	189
Restaurant	1.00	167	167	1.00	137	137
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	0	0	1.00	0	0
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		2	0	0	0	0
Retail	4		55	8	49	9
Restaurant	4	56		11	25	10
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		15	3	0	0	0
Retail	1		48	0	0	0
Restaurant	1	95		0	0	0
Cinema/Entertainment	0	8	5		0	0
Residential	1	19	23	0		0
Hotel	0	4	8	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	1	1	2	1	0	0
Retail	58	132	190	132	0	0
Restaurant	48	119	167	119	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	67	67	67	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	2	8	10	8	0	0
Retail	49	140	189	140	0	0
Restaurant	56	81	137	81	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	65	65	65	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

APPENDIX D
LEVEL OF SERVICE ANALYSIS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	282	92	140	713	94	234	755	133	151	520	245
Future Volume (veh/h)	99	282	92	140	713	94	234	755	133	151	520	245
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	109	310	101	154	784	103	257	830	146	166	571	269
Adj No. of Lanes	2	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	463	207	263	1012	132	241	909	407	266	960	429
Arrive On Green	0.06	0.13	0.13	0.15	0.22	0.22	0.14	0.26	0.26	0.15	0.27	0.27
Sat Flow, veh/h	3442	3539	1583	1774	4554	594	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	109	310	101	154	582	305	257	830	146	166	571	269
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1695	1758	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	2.2	5.8	2.7	5.7	11.3	11.4	9.5	15.9	5.3	6.1	9.8	10.4
Cycle Q Clear(g_c), s	2.2	5.8	2.7	5.7	11.3	11.4	9.5	15.9	5.3	6.1	9.8	10.4
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	195	463	207	263	753	391	241	909	407	266	960	429
V/C Ratio(X)	0.56	0.67	0.49	0.59	0.77	0.78	1.07	0.91	0.36	0.62	0.59	0.63
Avail Cap(c_a), veh/h	221	809	362	263	872	452	241	910	407	266	960	429
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	0.66	0.66	0.66	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	29.0	12.4	27.8	25.6	25.6	30.3	25.3	21.3	27.9	22.2	22.4
Incr Delay (d2), s/veh	2.5	1.7	1.8	2.2	2.5	5.0	77.0	15.0	2.5	4.5	2.7	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.9	1.8	2.9	5.5	6.0	9.8	9.6	2.6	3.3	5.1	5.4
LnGrp Delay(d),s/veh	34.7	30.7	14.2	30.1	28.1	30.6	107.2	40.3	23.8	32.4	24.9	29.2
LnGrp LOS	C	C	B	C	C	C	F	D	C	C	C	C
Approach Vol, veh/h		520			1041			1233			1006	
Approach Delay, s/veh		28.3			29.1			52.3			27.3	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	23.5	15.9	14.7	15.0	24.5	9.5	21.1
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	7.5	18.0	6.5	16.0	9.5	16.0	4.5	18.0
Max Q Clear Time (g_c+I1), s	8.1	17.9	7.7	7.8	11.5	12.4	4.2	13.4
Green Ext Time (p_c), s	0.0	0.0	0.0	1.3	0.0	1.6	0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	36.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	347	100	35	615	156	173	207	43	54	143	125
Future Volume (veh/h)	91	347	100	35	615	156	173	207	43	54	143	125
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	102	390	112	39	691	175	194	233	48	61	161	140
Adj No. of Lanes	1	2	1	1	2	1	2	1	0	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	542	635	269	821	438	852	505	104	79	248	202
Arrive On Green	0.15	0.31	0.31	0.15	0.23	0.23	0.25	0.34	0.34	0.04	0.13	0.13
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	1499	309	1774	1857	1509
Grp Volume(v), veh/h	102	390	112	39	691	175	194	0	281	61	153	148
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	0	1808	1774	1770	1596
Q Serve(g_s), s	3.9	6.9	0.0	1.3	13.0	3.6	3.1	0.0	8.5	2.4	5.7	6.2
Cycle Q Clear(g_c), s	3.9	6.9	0.0	1.3	13.0	3.6	3.1	0.0	8.5	2.4	5.7	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		0.95
Lane Grp Cap(c), veh/h	129	542	635	269	821	438	852	0	608	79	236	213
V/C Ratio(X)	0.79	0.72	0.18	0.15	0.84	0.40	0.23	0.00	0.46	0.77	0.65	0.69
Avail Cap(c_a), veh/h	165	935	811	269	885	467	852	0	608	114	468	422
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	22.9	10.9	25.8	25.7	7.7	21.0	0.0	18.2	33.1	28.8	29.0
Incr Delay (d2), s/veh	15.0	1.5	0.1	0.2	7.0	0.6	0.1	0.0	2.5	17.6	12.9	17.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	3.4	1.1	0.7	7.1	2.0	1.5	0.0	4.6	1.6	3.7	3.7
LnGrp Delay(d),s/veh	44.4	24.4	11.0	26.0	32.6	8.3	21.1	0.0	20.8	50.7	41.7	46.1
LnGrp LOS	D	C	B	C	C	A	C		C	D	D	D
Approach Vol, veh/h		604			905			475			362	
Approach Delay, s/veh		25.3			27.6			20.9			45.0	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	29.1	16.1	16.2	22.8	14.8	10.6	21.7
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	19.5	5.5	18.5	5.5	18.5	6.5	17.5
Max Q Clear Time (g_c+I1), s	4.4	10.5	3.3	8.9	5.1	8.2	5.9	15.0
Green Ext Time (p_c), s	0.0	1.0	0.0	1.9	0.0	1.1	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	28.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	195	140	116	478	14	224	361	125	29	241	68
Future Volume (veh/h)	25	195	140	116	478	14	224	361	125	29	241	68
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	29	227	163	135	556	16	260	420	145	34	280	79
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	328	245	282	532	468	334	715	859	93	348	98
Arrive On Green	0.05	0.18	0.15	0.16	0.29	0.26	0.38	0.77	0.77	0.02	0.08	0.07
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	1399	395
Grp Volume(v), veh/h	29	227	163	135	556	16	260	420	145	34	0	359
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	0	1793
Q Serve(g_s), s	1.1	8.0	6.8	4.9	20.0	0.5	9.1	6.7	0.3	1.3	0.0	13.8
Cycle Q Clear(g_c), s	1.1	8.0	6.8	4.9	20.0	0.5	9.1	6.7	0.3	1.3	0.0	13.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	87	328	245	282	532	468	334	715	859	93	0	446
V/C Ratio(X)	0.33	0.69	0.67	0.48	1.04	0.03	0.78	0.59	0.17	0.36	0.00	0.81
Avail Cap(c_a), veh/h	152	479	373	282	532	468	334	715	859	152	0	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.2	27.1	27.9	26.8	25.0	17.6	20.6	5.8	0.7	33.2	0.0	30.5
Incr Delay (d2), s/veh	2.2	2.6	3.1	1.1	47.8	0.0	11.2	3.5	0.4	2.4	0.0	14.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	4.3	3.2	2.4	17.3	0.2	5.4	3.9	0.3	0.7	0.0	8.6
LnGrp Delay(d),s/veh	34.4	29.7	31.0	27.9	72.8	17.6	31.7	9.3	1.1	35.6	0.0	44.9
LnGrp LOS	C	C	C	C	F	B	C	A	A	D		D
Approach Vol, veh/h		419			707			825			393	
Approach Delay, s/veh		30.5			63.0			14.9			44.1	
Approach LOS		C			E			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	30.9	15.1	16.3	17.2	21.4	7.4	24.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	20.5	6.5	16.5	8.5	16.5	4.5	18.5
Max Q Clear Time (g_c+I1), s	3.3	8.7	6.9	10.0	11.1	15.8	3.1	22.0
Green Ext Time (p_c), s	0.0	1.8	0.0	0.8	0.0	0.1	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	146	59	69	246	63	60	364	21	34	475	43
Future Volume (veh/h)	47	146	59	69	246	63	60	364	21	34	475	43
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	56	174	70	82	293	75	71	433	25	40	565	51
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	347	295	104	369	314	95	1114	64	66	1100	492
Arrive On Green	0.05	0.19	0.19	0.06	0.20	0.20	0.05	0.33	0.33	0.04	0.31	0.31
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3402	196	1774	3539	1583
Grp Volume(v), veh/h	56	174	70	82	293	75	71	225	233	40	565	51
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1828	1774	1770	1583
Q Serve(g_s), s	1.7	4.7	2.1	2.6	8.4	2.2	2.2	5.5	5.5	1.3	7.4	1.3
Cycle Q Clear(g_c), s	1.7	4.7	2.1	2.6	8.4	2.2	2.2	5.5	5.5	1.3	7.4	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	83	347	295	104	369	314	95	579	598	66	1100	492
V/C Ratio(X)	0.68	0.50	0.24	0.79	0.79	0.24	0.75	0.39	0.39	0.61	0.51	0.10
Avail Cap(c_a), veh/h	142	546	464	142	546	464	142	579	598	142	1100	492
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	20.6	19.5	26.1	21.5	19.0	26.3	14.6	14.6	26.7	15.9	13.8
Incr Delay (d2), s/veh	9.3	1.1	0.4	18.3	4.9	0.4	11.0	2.0	1.9	8.7	1.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.5	1.0	1.8	4.8	1.0	1.4	3.0	3.1	0.8	3.8	0.6
LnGrp Delay(d),s/veh	35.7	21.7	19.9	44.5	26.4	19.4	37.3	16.5	16.5	35.4	17.6	14.2
LnGrp LOS	D	C	B	D	C	B	D	B	B	D	B	B
Approach Vol, veh/h		300			450			529			656	
Approach Delay, s/veh		23.9			28.5			19.3			18.4	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	23.9	8.8	16.0	8.5	23.0	8.1	16.6
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	17.5	4.5	16.5	4.5	17.5	4.5	16.5
Max Q Clear Time (g_c+I1), s	3.3	7.5	4.6	6.7	4.2	9.4	3.7	10.4
Green Ext Time (p_c), s	0.0	1.2	0.0	0.6	0.0	1.8	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	216	42	42	268	38	72	290	54	26	247	64
Future Volume (veh/h)	40	216	42	42	268	38	72	290	54	26	247	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	50	270	52	52	335	48	90	362	68	32	309	80
Adj No. of Lanes	1	1	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	313	60	73	644	92	115	412	77	299	696	592
Arrive On Green	0.04	0.21	0.21	0.04	0.21	0.21	0.06	0.27	0.27	0.17	0.37	0.37
Sat Flow, veh/h	1774	1519	292	1774	3112	442	1774	1526	287	1774	1863	1583
Grp Volume(v), veh/h	50	0	322	52	189	194	90	0	430	32	309	80
Grp Sat Flow(s),veh/h/ln	1774	0	1811	1774	1770	1785	1774	0	1812	1774	1863	1583
Q Serve(g_s), s	1.9	0.0	12.0	2.0	6.6	6.8	3.5	0.0	15.9	1.1	8.7	2.3
Cycle Q Clear(g_c), s	1.9	0.0	12.0	2.0	6.6	6.8	3.5	0.0	15.9	1.1	8.7	2.3
Prop In Lane	1.00		0.16	1.00		0.25	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	71	0	373	73	366	369	115	0	489	299	696	592
V/C Ratio(X)	0.71	0.00	0.86	0.72	0.52	0.52	0.78	0.00	0.88	0.11	0.44	0.14
Avail Cap(c_a), veh/h	114	0	427	114	417	421	139	0	582	299	696	592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	0.0	26.8	33.2	24.6	24.7	32.2	0.0	24.5	24.6	16.5	14.5
Incr Delay (d2), s/veh	12.0	0.0	15.0	12.4	1.1	1.2	20.6	0.0	19.6	0.2	2.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	7.5	1.2	3.4	3.5	2.4	0.0	10.6	0.5	4.9	1.1
LnGrp Delay(d),s/veh	45.2	0.0	41.8	45.5	25.8	25.8	52.8	0.0	44.1	24.8	18.5	14.9
LnGrp LOS	D		D	D	C	C	D		D	C	B	B
Approach Vol, veh/h		372			435			520			421	
Approach Delay, s/veh		42.3			28.2			45.6			18.3	
Approach LOS		D			C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	24.4	8.4	19.9	10.0	31.7	8.3	20.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	22.5	4.5	16.5	5.5	21.5	4.5	16.5
Max Q Clear Time (g_c+I1), s	3.1	17.9	4.0	14.0	5.5	10.7	3.9	8.8
Green Ext Time (p_c), s	0.0	1.0	0.0	0.4	0.0	1.4	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	34.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	46	7	54	71	50	19	350	37	28	308	4
Future Volume (veh/h)	16	46	7	54	71	50	19	350	37	28	308	4
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	19	53	8	63	83	58	22	407	43	33	358	5
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	214	28	129	120	72	40	959	101	54	2097	29
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.04	1.00	1.00	0.03	0.59	0.59
Sat Flow, veh/h	230	1380	179	401	772	466	1774	1657	175	1774	3574	50
Grp Volume(v), veh/h	80	0	0	204	0	0	22	0	450	33	177	186
Grp Sat Flow(s),veh/h/ln	1789	0	0	1639	0	0	1774	0	1832	1774	1770	1854
Q Serve(g_s), s	0.0	0.0	0.0	5.6	0.0	0.0	0.9	0.0	0.0	1.3	3.2	3.2
Cycle Q Clear(g_c), s	2.7	0.0	0.0	8.3	0.0	0.0	0.9	0.0	0.0	1.3	3.2	3.2
Prop In Lane	0.24		0.10	0.31		0.28	1.00		0.10	1.00		0.03
Lane Grp Cap(c), veh/h	341	0	0	322	0	0	40	0	1060	54	1038	1088
V/C Ratio(X)	0.23	0.00	0.00	0.63	0.00	0.00	0.55	0.00	0.42	0.61	0.17	0.17
Avail Cap(c_a), veh/h	497	0	0	472	0	0	114	0	1060	139	1038	1088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	0.0	0.0	28.4	0.0	0.0	33.1	0.0	0.0	33.5	6.6	6.6
Incr Delay (d2), s/veh	0.3	0.0	0.0	2.1	0.0	0.0	11.5	0.0	1.2	10.7	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	4.0	0.0	0.0	0.5	0.0	0.4	0.8	1.7	1.8
LnGrp Delay(d),s/veh	26.5	0.0	0.0	30.5	0.0	0.0	44.6	0.0	1.2	44.2	7.0	7.0
LnGrp LOS	C			C			D		A	D	A	A
Approach Vol, veh/h		80			204			472			396	
Approach Delay, s/veh		26.5			30.5			3.3			10.1	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	46.0		16.4	7.1	46.6		16.4
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5
Max Green Setting (Gmax), s	5.5	30.5		17.5	4.5	31.5		17.5
Max Q Clear Time (g_c+I1), s	3.3	2.0		4.7	2.9	5.2		10.3
Green Ext Time (p_c), s	0.0	2.7		0.2	0.0	1.9		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	12.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	37	35	626	462	40
Future Vol, veh/h	19	37	35	626	462	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
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	21	40	38	680	502	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	940	273	545	0	-	0
Stage 1	524	-	-	-	-	-
Stage 2	416	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	262	725	1020	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	634	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	252	725	1020	-	-	-
Mov Cap-2 Maneuver	252	-	-	-	-	-
Stage 1	538	-	-	-	-	-
Stage 2	634	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1020	-	443	-	-
HCM Lane V/C Ratio	0.037	-	0.137	-	-
HCM Control Delay (s)	8.7	-	14.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	371	137	211	456	33	144	582	284	43	412	55
Future Volume (veh/h)	66	371	137	211	456	33	144	582	284	43	412	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	79	442	163	251	543	39	171	693	0	51	490	65
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	572	209	279	759	340	332	1159	518	110	635	84
Arrive On Green	0.17	0.23	0.20	0.16	0.21	0.21	0.19	0.33	0.00	0.12	0.40	0.36
Sat Flow, veh/h	1774	2540	928	1774	3539	1583	1774	3539	1583	1774	3144	415
Grp Volume(v), veh/h	79	307	298	251	543	39	171	693	0	51	275	280
Grp Sat Flow(s),veh/h/ln	1774	1770	1699	1774	1770	1583	1774	1770	1583	1774	1770	1789
Q Serve(g_s), s	2.7	11.4	11.6	9.7	10.0	1.0	6.1	11.5	0.0	1.9	9.4	9.6
Cycle Q Clear(g_c), s	2.7	11.4	11.6	9.7	10.0	1.0	6.1	11.5	0.0	1.9	9.4	9.6
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	298	398	382	279	759	340	332	1159	518	110	357	361
V/C Ratio(X)	0.27	0.77	0.78	0.90	0.72	0.11	0.51	0.60	0.00	0.46	0.77	0.77
Avail Cap(c_a), veh/h	298	442	425	279	1036	464	332	1159	518	152	468	473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.4	25.4	25.9	29.0	25.5	11.5	25.6	19.7	0.0	29.6	19.5	19.8
Incr Delay (d2), s/veh	0.5	7.3	8.2	29.6	1.5	0.1	1.4	2.3	0.0	3.0	14.7	14.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	6.4	6.3	7.0	5.0	0.6	3.1	5.9	0.0	1.0	5.9	6.2
LnGrp Delay(d),s/veh	25.8	32.8	34.1	58.6	27.0	11.7	27.0	22.0	0.0	32.6	34.2	34.8
LnGrp LOS	C	C	C	E	C	B	C	C		C	C	C
Approach Vol, veh/h		684			833			864			606	
Approach Delay, s/veh		32.6			35.8			23.0			34.3	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	26.9	15.0	19.8	17.1	18.1	15.7	19.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	18.0	9.5	16.0	5.5	17.0	6.5	19.0
Max Q Clear Time (g_c+I1), s	3.9	13.5	11.7	13.6	8.1	11.6	4.7	12.0
Green Ext Time (p_c), s	0.0	1.4	0.0	0.7	0.0	1.1	0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	31.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	298	92	151	728	105	234	755	145	163	520	245
Future Volume (veh/h)	99	298	92	151	728	105	234	755	145	163	520	245
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	109	327	101	166	800	115	257	830	159	179	571	269
Adj No. of Lanes	2	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	481	215	261	1019	146	241	909	407	259	944	423
Arrive On Green	0.06	0.14	0.14	0.15	0.23	0.23	0.14	0.26	0.26	0.15	0.27	0.27
Sat Flow, veh/h	3442	3539	1583	1774	4497	642	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	109	327	101	166	602	313	257	830	159	179	571	269
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1695	1749	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	2.2	6.2	2.7	6.2	11.7	11.8	9.5	15.9	5.8	6.7	9.9	10.5
Cycle Q Clear(g_c), s	2.2	6.2	2.7	6.2	11.7	11.8	9.5	15.9	5.8	6.7	9.9	10.5
Prop In Lane	1.00		1.00	1.00		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	195	481	215	261	768	396	241	909	407	259	944	423
V/C Ratio(X)	0.56	0.68	0.47	0.64	0.78	0.79	1.07	0.91	0.39	0.69	0.60	0.64
Avail Cap(c_a), veh/h	221	809	362	261	872	450	241	910	407	259	944	423
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	0.63	0.63	0.63	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	28.8	12.2	28.1	25.5	25.5	30.3	25.3	21.5	28.4	22.4	22.7
Incr Delay (d2), s/veh	2.5	1.7	1.6	3.2	2.7	5.4	77.0	15.0	2.8	7.7	2.9	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.1	1.8	3.2	5.7	6.2	9.8	9.6	2.8	3.8	5.2	5.4
LnGrp Delay(d),s/veh	34.7	30.5	13.8	31.3	28.1	30.9	107.2	40.3	24.3	36.1	25.3	29.8
LnGrp LOS	C	C	B	C	C	C	F	D	C	D	C	C
Approach Vol, veh/h		537			1081			1246			1019	
Approach Delay, s/veh		28.2			29.4			52.1			28.4	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	23.5	15.8	15.0	15.0	24.2	9.5	21.4
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	7.5	18.0	6.5	16.0	9.5	16.0	4.5	18.0
Max Q Clear Time (g_c+I1), s	8.7	17.9	8.2	8.2	11.5	12.5	4.2	13.8
Green Ext Time (p_c), s	0.0	0.0	0.0	1.4	0.0	1.5	0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	36.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	388	100	44	652	165	173	207	53	64	143	125
Future Volume (veh/h)	91	388	100	44	652	165	173	207	53	64	143	125
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	102	436	112	49	733	185	194	233	60	72	161	140
Adj No. of Lanes	1	2	1	1	2	1	2	1	0	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	587	643	259	847	461	827	460	119	92	248	202
Arrive On Green	0.15	0.33	0.33	0.15	0.24	0.24	0.24	0.32	0.32	0.05	0.13	0.13
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	1430	368	1774	1857	1509
Grp Volume(v), veh/h	102	436	112	49	733	185	194	0	293	72	153	148
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	0	1798	1774	1770	1596
Q Serve(g_s), s	3.9	7.6	0.0	1.7	13.9	3.7	3.2	0.0	9.2	2.8	5.7	6.2
Cycle Q Clear(g_c), s	3.9	7.6	0.0	1.7	13.9	3.7	3.2	0.0	9.2	2.8	5.7	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		0.95
Lane Grp Cap(c), veh/h	129	587	643	259	847	461	827	0	579	92	236	213
V/C Ratio(X)	0.79	0.74	0.17	0.19	0.87	0.40	0.23	0.00	0.51	0.78	0.65	0.69
Avail Cap(c_a), veh/h	165	935	799	259	885	478	827	0	579	114	468	422
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	22.1	10.5	26.2	25.5	7.3	21.4	0.0	19.2	32.8	28.8	29.0
Incr Delay (d2), s/veh	14.5	1.5	0.1	0.3	8.7	0.6	0.1	0.0	3.1	24.1	12.9	17.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	3.8	1.1	0.9	7.7	2.0	1.5	0.0	5.1	2.0	3.7	3.7
LnGrp Delay(d),s/veh	43.9	23.5	10.6	26.6	34.3	7.8	21.6	0.0	22.4	56.9	41.7	46.1
LnGrp LOS	D	C	B	C	C	A	C		C	E	D	D
Approach Vol, veh/h		650			967			487			373	
Approach Delay, s/veh		24.5			28.8			22.0			46.4	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	28.0	15.7	17.1	22.3	14.8	10.6	22.3
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	19.5	5.5	18.5	5.5	18.5	6.5	17.5
Max Q Clear Time (g_c+I1), s	4.8	11.2	3.7	9.6	5.2	8.2	5.9	15.9
Green Ext Time (p_c), s	0.0	1.0	0.0	2.0	0.0	1.1	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	29.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	195	140	116	543	36	267	404	125	110	322	68
Future Volume (veh/h)	154	195	140	116	543	36	267	404	125	110	322	68
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	179	227	163	135	631	42	310	470	145	128	374	79
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	328	245	346	532	520	374	585	807	152	552	115
Arrive On Green	0.09	0.18	0.15	0.20	0.29	0.26	0.42	0.63	0.63	0.03	0.06	0.06
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	2915	610
Grp Volume(v), veh/h	179	227	163	135	631	42	310	470	145	128	226	227
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	1770	1755
Q Serve(g_s), s	6.0	8.0	6.8	4.6	20.0	1.3	10.9	13.2	0.5	5.0	8.7	8.9
Cycle Q Clear(g_c), s	6.0	8.0	6.8	4.6	20.0	1.3	10.9	13.2	0.5	5.0	8.7	8.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	152	328	245	346	532	520	374	585	807	152	335	332
V/C Ratio(X)	1.18	0.69	0.67	0.39	1.19	0.08	0.83	0.80	0.18	0.84	0.67	0.68
Avail Cap(c_a), veh/h	152	479	373	346	532	520	374	585	807	152	455	451
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.76	0.76	0.76	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	27.1	27.9	24.5	25.0	16.2	19.1	11.4	1.2	33.5	30.7	30.8
Incr Delay (d2), s/veh	128.5	2.6	3.1	0.5	97.7	0.1	14.5	11.1	0.5	32.5	10.3	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	4.3	3.2	2.3	24.6	0.6	6.7	8.3	0.5	3.9	5.2	5.3
LnGrp Delay(d),s/veh	160.5	29.7	31.0	25.1	122.7	16.3	33.6	22.5	1.7	66.0	41.0	41.7
LnGrp LOS	F	C	C	C	F	B	C	C	A	E	D	D
Approach Vol, veh/h		569			808			925			581	
Approach Delay, s/veh		71.2			100.8			23.0			46.8	
Approach LOS		E			F			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	26.0	17.7	16.3	18.7	17.3	10.0	24.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	20.5	6.5	16.5	8.5	16.5	4.5	18.5
Max Q Clear Time (g_c+I1), s	7.0	15.2	6.6	10.0	12.9	10.9	8.0	22.0
Green Ext Time (p_c), s	0.0	1.2	0.0	0.8	0.0	0.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	59.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	161	70	69	262	63	72	364	21	34	475	55
Future Volume (veh/h)	58	161	70	69	262	63	72	364	21	34	475	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	69	192	83	82	312	75	86	433	25	40	565	65
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	371	316	104	384	326	109	1110	64	65	1067	477
Arrive On Green	0.05	0.20	0.20	0.06	0.21	0.21	0.06	0.33	0.33	0.04	0.30	0.30
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3402	196	1774	3539	1583
Grp Volume(v), veh/h	69	192	83	82	312	75	86	225	233	40	565	65
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1828	1774	1770	1583
Q Serve(g_s), s	2.2	5.3	2.6	2.6	9.3	2.3	2.8	5.7	5.7	1.3	7.7	1.7
Cycle Q Clear(g_c), s	2.2	5.3	2.6	2.6	9.3	2.3	2.8	5.7	5.7	1.3	7.7	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	92	371	316	104	384	326	109	577	596	65	1067	477
V/C Ratio(X)	0.75	0.52	0.26	0.79	0.81	0.23	0.79	0.39	0.39	0.61	0.53	0.14
Avail Cap(c_a), veh/h	137	529	450	137	529	450	137	577	596	137	1067	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	20.8	19.6	27.0	22.0	19.2	26.9	15.1	15.1	27.6	16.9	14.8
Incr Delay (d2), s/veh	11.5	1.1	0.4	19.5	6.7	0.4	20.5	2.0	1.9	8.9	1.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.8	1.2	1.9	5.5	1.0	2.0	3.1	3.2	0.8	4.0	0.8
LnGrp Delay(d),s/veh	38.6	21.9	20.1	46.5	28.7	19.6	47.4	17.1	17.0	36.5	18.8	15.4
LnGrp LOS	D	C	C	D	C	B	D	B	B	D	B	B
Approach Vol, veh/h		344			469			544			670	
Approach Delay, s/veh		24.8			30.3			21.9			19.5	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	24.4	8.9	17.1	9.1	23.0	8.5	17.5
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	17.5	4.5	16.5	4.5	17.5	4.5	16.5
Max Q Clear Time (g_c+I1), s	3.3	7.7	4.6	7.3	4.8	9.7	4.2	11.3
Green Ext Time (p_c), s	0.0	1.2	0.0	0.6	0.0	1.8	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	23.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	216	54	54	268	38	83	305	65	26	263	64
Future Volume (veh/h)	40	216	54	54	268	38	83	305	65	26	263	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	50	270	68	68	335	48	104	381	81	32	329	80
Adj No. of Lanes	1	1	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	309	78	87	696	99	133	426	91	242	647	550
Arrive On Green	0.04	0.21	0.21	0.05	0.22	0.22	0.07	0.29	0.29	0.14	0.35	0.35
Sat Flow, veh/h	1774	1437	362	1774	3112	442	1774	1490	317	1774	1863	1583
Grp Volume(v), veh/h	50	0	338	68	189	194	104	0	462	32	329	80
Grp Sat Flow(s),veh/h/ln	1774	0	1799	1774	1770	1785	1774	0	1807	1774	1863	1583
Q Serve(g_s), s	1.9	0.0	12.7	2.7	6.5	6.6	4.0	0.0	17.2	1.1	9.8	2.4
Cycle Q Clear(g_c), s	1.9	0.0	12.7	2.7	6.5	6.6	4.0	0.0	17.2	1.1	9.8	2.4
Prop In Lane	1.00		0.20	1.00		0.25	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	71	0	387	87	396	399	133	0	517	242	647	550
V/C Ratio(X)	0.71	0.00	0.87	0.79	0.48	0.49	0.78	0.00	0.89	0.13	0.51	0.15
Avail Cap(c_a), veh/h	114	0	424	114	417	421	139	0	581	242	647	550
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	0.0	26.6	32.9	23.6	23.7	31.8	0.0	24.0	26.6	18.1	15.7
Incr Delay (d2), s/veh	12.0	0.0	17.0	22.7	0.9	0.9	23.8	0.0	20.6	0.2	2.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	8.1	1.8	3.3	3.3	2.8	0.0	11.4	0.6	5.5	1.1
LnGrp Delay(d),s/veh	45.2	0.0	43.6	55.6	24.5	24.6	55.6	0.0	44.6	26.8	21.0	16.3
LnGrp LOS	D		D	E	C	C	E		D	C	C	B
Approach Vol, veh/h		388			451			566			441	
Approach Delay, s/veh		43.8			29.2			46.6			20.5	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	25.5	8.9	20.5	10.7	29.8	8.3	21.2
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	22.5	4.5	16.5	5.5	21.5	4.5	16.5
Max Q Clear Time (g_c+I1), s	3.1	19.2	4.7	14.7	6.0	11.8	3.9	8.6
Green Ext Time (p_c), s	0.0	0.8	0.0	0.3	0.0	1.4	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	35.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	46	17	64	71	50	28	387	46	28	349	4
Future Volume (veh/h)	16	46	17	64	71	50	28	387	46	28	349	4
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	19	53	20	74	83	58	33	450	53	33	406	5
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	193	62	144	118	71	54	935	110	54	2047	25
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.06	1.00	1.00	0.03	0.57	0.57
Sat Flow, veh/h	198	1190	385	462	730	440	1774	1636	193	1774	3581	44
Grp Volume(v), veh/h	92	0	0	215	0	0	33	0	503	33	201	210
Grp Sat Flow(s),veh/h/ln	1773	0	0	1632	0	0	1774	0	1829	1774	1770	1855
Q Serve(g_s), s	0.0	0.0	0.0	5.6	0.0	0.0	1.3	0.0	0.0	1.3	3.8	3.8
Cycle Q Clear(g_c), s	3.2	0.0	0.0	8.8	0.0	0.0	1.3	0.0	0.0	1.3	3.8	3.8
Prop In Lane	0.21		0.22	0.34		0.27	1.00		0.11	1.00		0.02
Lane Grp Cap(c), veh/h	349	0	0	334	0	0	54	0	1046	54	1012	1061
V/C Ratio(X)	0.26	0.00	0.00	0.64	0.00	0.00	0.61	0.00	0.48	0.61	0.20	0.20
Avail Cap(c_a), veh/h	493	0	0	471	0	0	114	0	1046	139	1012	1061
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.9	0.0	0.0	28.1	0.0	0.0	32.5	0.0	0.0	33.5	7.2	7.2
Incr Delay (d2), s/veh	0.4	0.0	0.0	2.1	0.0	0.0	10.7	0.0	1.6	10.7	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	4.2	0.0	0.0	0.8	0.0	0.5	0.8	2.0	2.1
LnGrp Delay(d),s/veh	26.3	0.0	0.0	30.2	0.0	0.0	43.1	0.0	1.6	44.2	7.7	7.7
LnGrp LOS	C			C			D		A	D	A	A
Approach Vol, veh/h		92			215			536			444	
Approach Delay, s/veh		26.3			30.2			4.1			10.4	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	45.5		16.8	7.6	45.5		16.8
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5
Max Green Setting (Gmax), s	5.5	30.5		17.5	4.5	31.5		17.5
Max Q Clear Time (g_c+I1), s	3.3	2.0		5.2	3.3	5.8		10.8
Green Ext Time (p_c), s	0.0	3.1		0.3	0.0	2.1		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	37	35	657	490	49
Future Vol, veh/h	29	37	35	657	490	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
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	32	40	38	714	533	53

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	993	293	586	0	-	0
Stage 1	560	-	-	-	-	-
Stage 2	433	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	242	703	985	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	621	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	233	703	985	-	-	-
Mov Cap-2 Maneuver	233	-	-	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	621	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.9	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	985	-	373	-	-
HCM Lane V/C Ratio	0.039	-	0.192	-	-
HCM Control Delay (s)	8.8	-	16.9	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	371	137	211	456	43	144	592	284	52	421	64
Future Volume (veh/h)	76	371	137	211	456	43	144	592	284	52	421	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	90	442	163	251	543	51	171	705	0	62	501	76
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	572	209	279	761	340	322	1142	511	118	641	97
Arrive On Green	0.17	0.23	0.20	0.16	0.21	0.21	0.18	0.32	0.00	0.13	0.42	0.37
Sat Flow, veh/h	1774	2540	928	1774	3539	1583	1774	3539	1583	1774	3084	466
Grp Volume(v), veh/h	90	307	298	251	543	51	171	705	0	62	287	290
Grp Sat Flow(s),veh/h/ln	1774	1770	1699	1774	1770	1583	1774	1770	1583	1774	1770	1781
Q Serve(g_s), s	3.1	11.4	11.6	9.7	10.0	1.3	6.1	11.8	0.0	2.3	9.8	10.0
Cycle Q Clear(g_c), s	3.1	11.4	11.6	9.7	10.0	1.3	6.1	11.8	0.0	2.3	9.8	10.0
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	297	398	382	279	761	340	322	1142	511	118	368	370
V/C Ratio(X)	0.30	0.77	0.78	0.90	0.71	0.15	0.53	0.62	0.00	0.53	0.78	0.79
Avail Cap(c_a), veh/h	297	442	425	279	1036	464	322	1142	511	152	468	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	25.4	25.9	29.0	25.5	11.4	25.9	20.0	0.0	29.3	19.1	19.5
Incr Delay (d2), s/veh	0.6	7.3	8.2	29.6	1.5	0.2	1.7	2.5	0.0	3.6	15.0	15.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	6.4	6.3	7.0	5.0	0.8	3.1	6.2	0.0	1.2	6.1	6.4
LnGrp Delay(d),s/veh	26.1	32.8	34.1	58.6	27.0	11.6	27.6	22.6	0.0	32.9	34.1	34.8
LnGrp LOS	C	C	C	E	C	B	C	C		C	C	C
Approach Vol, veh/h		695			845			876			639	
Approach Delay, s/veh		32.5			35.4			23.5			34.3	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	26.6	15.0	19.8	16.7	18.5	15.7	19.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	18.0	9.5	16.0	5.5	17.0	6.5	19.0
Max Q Clear Time (g_c+I1), s	4.3	13.8	11.7	13.6	8.1	12.0	5.1	12.0
Green Ext Time (p_c), s	0.0	1.3	0.0	0.7	0.0	1.1	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	31.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↗
Traffic Vol, veh/h	0	360	770	22	0	40
Future Vol, veh/h	0	360	770	22	0	40
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	391	837	24	0	43

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	849
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	361
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	361
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	16.3
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	361
HCM Lane V/C Ratio	-	-	-	0.12
HCM Control Delay (s)	-	-	-	16.3
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.4

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↗
Traffic Vol, veh/h	0	360	770	172	0	81
Future Vol, veh/h	0	360	770	172	0	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
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	391	837	187	0	88

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	931
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	324
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	324
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	20.2
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	324
HCM Lane V/C Ratio	-	-	-	0.272
HCM Control Delay (s)	-	-	-	20.2
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	1.1

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	121	161	108	400	338	129
Future Vol, veh/h	121	161	108	400	338	129
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	80	-	-	-
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	132	175	117	435	367	140

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1106	254	507	0	-	0
Stage 1	437	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	218	746	1056	-	-	-
Stage 1	619	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	194	746	1056	-	-	-
Mov Cap-2 Maneuver	194	-	-	-	-	-
Stage 1	550	-	-	-	-	-
Stage 2	508	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.3	1.9	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1056	-	194	746	-	-
HCM Lane V/C Ratio	0.111	-	0.678	0.235	-	-
HCM Control Delay (s)	8.8	-	55.6	11.3	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.4	-	4.1	0.9	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	324	106	161	819	108	269	867	153	173	597	281
Future Volume (veh/h)	114	324	106	161	819	108	269	867	153	173	597	281
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	125	356	116	177	900	119	296	953	168	190	656	309
Adj No. of Lanes	2	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	487	218	272	1068	141	360	1043	467	247	818	366
Arrive On Green	0.06	0.14	0.14	0.15	0.23	0.23	0.20	0.29	0.29	0.14	0.23	0.23
Sat Flow, veh/h	3442	3539	1583	1774	4548	599	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	125	356	116	177	670	349	296	953	168	190	656	309
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1695	1757	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	2.8	7.7	5.5	7.5	15.1	15.2	12.8	20.8	6.7	8.3	14.0	14.9
Cycle Q Clear(g_c), s	2.8	7.7	5.5	7.5	15.1	15.2	12.8	20.8	6.7	8.3	14.0	14.9
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	194	487	218	272	796	413	360	1043	467	247	818	366
V/C Ratio(X)	0.65	0.73	0.53	0.65	0.84	0.85	0.82	0.91	0.36	0.77	0.80	0.84
Avail Cap(c_a), veh/h	194	708	317	272	848	439	360	1062	475	247	885	396
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	0.61	0.61	0.61	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	33.1	32.1	31.9	29.2	29.2	30.5	27.2	22.3	33.2	29.0	29.4
Incr Delay (d2), s/veh	7.2	2.2	2.0	3.3	4.6	8.7	14.2	13.5	2.2	13.7	8.2	20.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	3.9	2.5	3.9	7.6	8.4	7.7	12.0	3.2	5.0	7.8	8.6
LnGrp Delay(d),s/veh	44.2	35.2	34.1	35.2	33.8	38.0	44.7	40.7	24.4	46.9	37.2	50.1
LnGrp LOS	D	D	C	D	C	D	D	D	C	D	D	D
Approach Vol, veh/h		597			1196			1417			1155	
Approach Delay, s/veh		36.9			35.2			39.6			42.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	29.1	17.8	16.5	21.7	24.0	10.0	24.3
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	24.0	8.5	16.0	13.5	20.0	4.5	20.0
Max Q Clear Time (g_c+I1), s	10.3	22.8	9.5	9.7	14.8	16.9	4.8	17.2
Green Ext Time (p_c), s	0.0	0.8	0.0	1.3	0.0	1.6	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	38.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	399	115	40	706	179	199	238	49	62	164	144
Future Volume (veh/h)	105	399	115	40	706	179	199	238	49	62	164	144
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	118	448	129	45	793	201	224	267	55	70	184	162
Adj No. of Lanes	1	2	1	1	2	1	2	1	0	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	147	602	647	308	923	493	820	496	102	90	263	218
Arrive On Green	0.17	0.34	0.34	0.17	0.26	0.26	0.24	0.33	0.33	0.05	0.14	0.14
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	1499	309	1774	1838	1525
Grp Volume(v), veh/h	118	448	129	45	793	201	224	0	322	70	177	169
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	0	1808	1774	1770	1594
Q Serve(g_s), s	5.1	8.9	0.0	1.7	17.1	4.6	4.2	0.0	11.6	3.1	7.6	8.1
Cycle Q Clear(g_c), s	5.1	8.9	0.0	1.7	17.1	4.6	4.2	0.0	11.6	3.1	7.6	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		0.96
Lane Grp Cap(c), veh/h	147	602	647	308	923	493	820	0	598	90	253	228
V/C Ratio(X)	0.80	0.74	0.20	0.15	0.86	0.41	0.27	0.00	0.54	0.78	0.70	0.74
Avail Cap(c_a), veh/h	188	1128	882	308	995	525	820	0	598	122	431	388
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	24.9	11.9	28.0	28.2	8.4	24.8	0.0	21.8	37.5	32.6	32.9
Incr Delay (d2), s/veh	13.6	1.4	0.1	0.2	7.2	0.5	0.2	0.0	3.5	19.8	14.9	19.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	4.5	1.4	0.9	9.3	2.4	2.0	0.0	6.3	2.0	4.8	4.8
LnGrp Delay(d),s/veh	46.3	26.3	12.0	28.2	35.4	8.9	25.0	0.0	25.3	57.3	47.5	52.5
LnGrp LOS	D	C	B	C	D	A	C		C	E	D	D
Approach Vol, veh/h		695			1039			546			416	
Approach Delay, s/veh		27.0			30.0			25.2			51.2	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	32.0	19.4	19.1	24.6	16.9	12.1	26.4
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	5.5	21.5	5.5	25.5	7.5	19.5	8.5	22.5
Max Q Clear Time (g_c+I1), s	5.1	13.6	3.7	10.9	6.2	10.1	7.1	19.1
Green Ext Time (p_c), s	0.0	1.1	0.0	2.7	0.1	1.3	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	31.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	224	161	133	549	16	257	415	144	33	277	78
Future Volume (veh/h)	29	224	161	133	549	16	257	415	144	33	277	78
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	34	260	187	155	638	19	299	483	167	38	322	91
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	349	267	353	629	678	335	532	767	228	315	89
Arrive On Green	0.05	0.19	0.17	0.20	0.34	0.32	0.38	0.57	0.57	0.17	0.30	0.27
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	1398	395
Grp Volume(v), veh/h	34	260	187	155	638	19	299	483	167	38	0	413
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	0	1793
Q Serve(g_s), s	1.5	10.5	8.9	6.1	27.0	0.0	12.7	18.5	0.0	1.5	0.0	18.0
Cycle Q Clear(g_c), s	1.5	10.5	8.9	6.1	27.0	0.0	12.7	18.5	0.0	1.5	0.0	18.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	86	349	267	353	629	678	335	532	767	228	0	403
V/C Ratio(X)	0.39	0.75	0.70	0.44	1.01	0.03	0.89	0.91	0.22	0.17	0.00	1.02
Avail Cap(c_a), veh/h	133	466	366	353	629	678	335	582	810	228	0	403
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	0.79	0.79	0.79	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.9	30.7	31.4	28.1	26.5	13.2	24.1	16.2	6.8	29.5	0.0	28.2
Incr Delay (d2), s/veh	2.9	4.5	3.6	0.7	35.7	0.0	24.5	21.9	0.7	0.3	0.0	51.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	5.9	4.1	3.1	20.0	0.2	8.4	12.3	1.3	0.7	0.0	14.5
LnGrp Delay(d),s/veh	39.8	35.2	35.0	28.8	62.2	13.2	48.6	38.1	7.5	29.9	0.0	79.2
LnGrp LOS	D	D	C	C	F	B	D	D	A	C		F
Approach Vol, veh/h		481			812			949			451	
Approach Delay, s/veh		35.4			54.7			36.0			75.1	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	26.8	19.9	19.0	19.1	22.0	7.9	31.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	23.5	11.5	18.5	11.5	16.5	4.5	25.5
Max Q Clear Time (g_c+I1), s	3.5	20.5	8.1	12.5	14.7	20.0	3.5	29.0
Green Ext Time (p_c), s	0.0	0.9	0.1	0.9	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	168	68	79	283	72	69	418	24	39	546	49
Future Volume (veh/h)	54	168	68	79	283	72	69	418	24	39	546	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	64	200	81	94	337	86	82	498	29	46	650	58
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	376	320	120	409	348	104	1057	61	72	1036	464
Arrive On Green	0.05	0.20	0.20	0.07	0.22	0.22	0.06	0.31	0.31	0.04	0.29	0.29
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3400	198	1774	3539	1583
Grp Volume(v), veh/h	64	200	81	94	337	86	82	259	268	46	650	58
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1828	1774	1770	1583
Q Serve(g_s), s	2.1	5.6	2.5	3.0	10.0	2.6	2.6	6.9	6.9	1.5	9.2	1.6
Cycle Q Clear(g_c), s	2.1	5.6	2.5	3.0	10.0	2.6	2.6	6.9	6.9	1.5	9.2	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	89	376	320	120	409	348	104	550	568	72	1036	464
V/C Ratio(X)	0.72	0.53	0.25	0.78	0.82	0.25	0.79	0.47	0.47	0.64	0.63	0.13
Avail Cap(c_a), veh/h	137	513	436	168	545	464	137	550	568	137	1036	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	20.7	19.5	26.6	21.6	18.7	27.0	16.1	16.2	27.4	17.8	15.1
Incr Delay (d2), s/veh	10.6	1.2	0.4	14.5	7.5	0.4	19.5	2.9	2.8	9.0	2.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.0	1.1	2.0	6.0	1.2	1.9	3.7	3.9	0.9	4.9	0.7
LnGrp Delay(d),s/veh	37.8	21.9	19.9	41.1	29.1	19.1	46.5	19.0	19.0	36.5	20.7	15.6
LnGrp LOS	D	C	B	D	C	B	D	B	B	D	C	B
Approach Vol, veh/h		345			517			609			754	
Approach Delay, s/veh		24.4			29.6			22.7			21.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	23.6	9.4	17.2	8.9	22.5	8.4	18.3
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	17.0	5.5	16.0	4.5	17.0	4.5	17.0
Max Q Clear Time (g_c+I1), s	3.5	8.9	5.0	7.6	4.6	11.2	4.1	12.0
Green Ext Time (p_c), s	0.0	1.3	0.0	0.6	0.0	1.7	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	24.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	248	48	48	308	44	83	333	62	30	284	74
Future Volume (veh/h)	46	248	48	48	308	44	83	333	62	30	284	74
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	310	60	60	385	55	104	416	78	38	355	92
Adj No. of Lanes	1	1	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	348	67	76	718	102	132	463	87	265	704	598
Arrive On Green	0.04	0.23	0.23	0.04	0.23	0.23	0.07	0.30	0.30	0.15	0.38	0.38
Sat Flow, veh/h	1774	1517	294	1774	3113	442	1774	1526	286	1774	1863	1583
Grp Volume(v), veh/h	58	0	370	60	218	222	104	0	494	38	355	92
Grp Sat Flow(s),veh/h/ln	1774	0	1811	1774	1770	1785	1774	0	1812	1774	1863	1583
Q Serve(g_s), s	2.6	0.0	15.8	2.7	8.6	8.8	4.6	0.0	20.9	1.5	11.7	3.1
Cycle Q Clear(g_c), s	2.6	0.0	15.8	2.7	8.6	8.8	4.6	0.0	20.9	1.5	11.7	3.1
Prop In Lane	1.00		0.16	1.00		0.25	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	74	0	415	76	408	412	132	0	550	265	704	598
V/C Ratio(X)	0.78	0.00	0.89	0.79	0.53	0.54	0.79	0.00	0.90	0.14	0.50	0.15
Avail Cap(c_a), veh/h	144	0	464	100	409	413	166	0	646	265	704	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	0.0	29.9	37.9	27.0	27.0	36.4	0.0	26.7	29.6	19.1	16.4
Incr Delay (d2), s/veh	16.3	0.0	17.7	25.5	1.3	1.4	17.4	0.0	20.1	0.2	2.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	10.0	1.9	4.4	4.5	2.9	0.0	13.5	0.7	6.5	1.4
LnGrp Delay(d),s/veh	54.3	0.0	47.5	63.4	28.3	28.4	53.8	0.0	46.8	29.8	21.7	17.0
LnGrp LOS	D		D	E	C	C	D		D	C	C	B
Approach Vol, veh/h		428			500			598			485	
Approach Delay, s/veh		48.5			32.6			48.0			21.4	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	29.8	8.9	23.9	11.5	35.7	8.8	24.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	28.5	4.5	20.5	7.5	25.5	6.5	18.5
Max Q Clear Time (g_c+I1), s	3.5	22.9	4.7	17.8	6.6	13.7	4.6	10.8
Green Ext Time (p_c), s	0.0	1.4	0.0	0.5	0.0	1.7	0.0	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	37.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	53	8	62	82	57	22	402	43	32	354	5
Future Volume (veh/h)	18	53	8	62	82	57	22	402	43	32	354	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	62	9	72	95	66	26	467	50	37	412	6
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	231	29	130	130	79	818	978	105	56	578	8
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.92	1.00	1.00	0.03	0.16	0.16
Sat Flow, veh/h	228	1351	171	414	760	464	1774	1654	177	1774	3571	52
Grp Volume(v), veh/h	92	0	0	233	0	0	26	0	517	37	204	214
Grp Sat Flow(s),veh/h/ln	1750	0	0	1638	0	0	1774	0	1831	1774	1770	1854
Q Serve(g_s), s	0.0	0.0	0.0	7.4	0.0	0.0	0.1	0.0	0.0	1.7	8.7	8.8
Cycle Q Clear(g_c), s	3.5	0.0	0.0	10.9	0.0	0.0	0.1	0.0	0.0	1.7	8.7	8.8
Prop In Lane	0.23		0.10	0.31		0.28	1.00		0.10	1.00		0.03
Lane Grp Cap(c), veh/h	354	0	0	339	0	0	818	0	1083	56	286	300
V/C Ratio(X)	0.26	0.00	0.00	0.69	0.00	0.00	0.03	0.00	0.48	0.66	0.71	0.71
Avail Cap(c_a), veh/h	515	0	0	494	0	0	818	0	1083	122	807	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	0.0	31.9	0.0	0.0	1.7	0.0	0.0	38.3	31.8	31.8
Incr Delay (d2), s/veh	0.4	0.0	0.0	2.5	0.0	0.0	0.0	0.0	1.5	12.6	14.1	13.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.5	1.0	5.4	5.6
LnGrp Delay(d),s/veh	29.3	0.0	0.0	34.4	0.0	0.0	1.7	0.0	1.5	50.9	45.8	45.3
LnGrp LOS	C			C			A		A	D	D	D
Approach Vol, veh/h		92			233			543			455	
Approach Delay, s/veh		29.3			34.4			1.5			46.0	
Approach LOS		C			C			A			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	52.8		19.2	42.4	18.4		19.2
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5
Max Green Setting (Gmax), s	5.5	36.5		21.5	5.5	36.5		21.5
Max Q Clear Time (g_c+I1), s	3.7	2.0		5.5	2.1	10.8		12.9
Green Ext Time (p_c), s	0.0	3.3		0.3	0.0	2.2		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	24.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	43	40	719	531	46
Future Vol, veh/h	22	43	40	719	531	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
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	24	47	43	782	577	50

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1079	314	627	0	-	0
Stage 1	602	-	-	-	-	-
Stage 2	477	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	213	682	951	-	-	-
Stage 1	510	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	203	682	951	-	-	-
Mov Cap-2 Maneuver	203	-	-	-	-	-
Stage 1	487	-	-	-	-	-
Stage 2	590	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.7	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	951	-	379	-	-
HCM Lane V/C Ratio	0.046	-	0.186	-	-
HCM Control Delay (s)	9	-	16.7	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	426	157	242	524	38	165	669	326	49	473	63
Future Volume (veh/h)	76	426	157	242	524	38	165	669	326	49	473	63
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	90	507	187	288	624	45	196	796	0	58	563	75
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	339	600	220	333	825	369	284	1120	501	106	678	90
Arrive On Green	0.19	0.24	0.22	0.19	0.23	0.23	0.16	0.32	0.00	0.12	0.43	0.39
Sat Flow, veh/h	1774	2537	931	1774	3539	1583	1774	3539	1583	1774	3141	417
Grp Volume(v), veh/h	90	353	341	288	624	45	196	796	0	58	317	321
Grp Sat Flow(s),veh/h/ln	1774	1770	1698	1774	1770	1583	1774	1770	1583	1774	1770	1789
Q Serve(g_s), s	3.5	15.2	15.4	12.6	13.1	1.3	8.3	15.9	0.0	2.5	12.7	12.8
Cycle Q Clear(g_c), s	3.5	15.2	15.4	12.6	13.1	1.3	8.3	15.9	0.0	2.5	12.7	12.8
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	339	419	402	333	825	369	284	1120	501	106	382	386
V/C Ratio(X)	0.27	0.84	0.85	0.87	0.76	0.12	0.69	0.71	0.00	0.55	0.83	0.83
Avail Cap(c_a), veh/h	339	420	403	333	1106	495	284	1120	501	133	442	447
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	29.1	29.6	31.5	28.6	13.4	31.7	24.1	0.0	34.2	21.4	21.8
Incr Delay (d2), s/veh	0.4	14.3	15.5	20.6	2.1	0.1	6.9	3.8	0.0	4.4	18.4	18.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	9.1	9.0	8.1	6.7	0.8	4.6	8.3	0.0	1.3	7.9	8.3
LnGrp Delay(d),s/veh	28.0	43.5	45.1	52.1	30.7	13.5	38.6	28.0	0.0	38.6	39.8	40.4
LnGrp LOS	C	D	D	D	C	B	D	C		D	D	D
Approach Vol, veh/h		784			957			992			696	
Approach Delay, s/veh		42.4			36.3			30.1			40.0	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	29.3	19.0	22.9	16.8	21.3	19.3	22.7
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	22.5	13.5	17.5	8.5	18.5	7.5	23.5
Max Q Clear Time (g_c+I1), s	4.5	17.9	14.6	17.4	10.3	14.8	5.5	15.1
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	1.0	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	340	106	172	834	119	269	867	165	185	597	281
Future Volume (veh/h)	114	340	106	172	834	119	269	867	165	185	597	281
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	125	374	116	189	916	131	296	953	181	203	656	309
Adj No. of Lanes	2	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	172	484	216	262	1053	150	420	1094	489	288	831	372
Arrive On Green	0.05	0.14	0.14	0.15	0.23	0.23	0.24	0.31	0.31	0.16	0.23	0.23
Sat Flow, veh/h	3442	3539	1583	1774	4499	641	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	125	374	116	189	689	358	296	953	181	203	656	309
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1695	1750	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	3.2	9.2	6.1	9.1	17.6	17.7	13.8	22.9	8.0	9.7	15.7	16.7
Cycle Q Clear(g_c), s	3.2	9.2	6.1	9.1	17.6	17.7	13.8	22.9	8.0	9.7	15.7	16.7
Prop In Lane	1.00		1.00	1.00		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	172	484	216	262	794	410	420	1094	489	288	831	372
V/C Ratio(X)	0.73	0.77	0.54	0.72	0.87	0.87	0.71	0.87	0.37	0.70	0.79	0.83
Avail Cap(c_a), veh/h	172	629	281	262	829	428	420	1180	528	288	944	422
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	0.51	0.51	0.51	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.1	37.5	36.2	36.6	33.1	33.2	31.5	29.4	24.3	35.7	32.3	32.7
Incr Delay (d2), s/veh	14.2	4.4	2.1	5.0	5.2	9.8	5.3	9.6	2.1	7.6	7.5	19.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	4.8	2.8	4.8	8.8	9.7	7.4	12.6	3.8	5.4	8.5	9.3
LnGrp Delay(d),s/veh	56.4	41.9	38.2	41.6	38.3	43.0	36.8	38.9	26.4	43.2	39.9	51.8
LnGrp LOS	E	D	D	D	D	D	D	D	C	D	D	D
Approach Vol, veh/h		615			1236			1430			1168	
Approach Delay, s/veh		44.2			40.2			36.9			43.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.1	33.3	18.8	17.8	26.8	26.6	10.0	26.6
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	11.5	30.0	10.5	16.0	17.5	24.0	4.5	22.0
Max Q Clear Time (g_c+I1), s	11.7	24.9	11.1	11.2	15.8	18.7	5.2	19.7
Green Ext Time (p_c), s	0.0	2.9	0.0	1.1	0.2	2.4	0.0	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	40.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	440	115	49	743	188	199	238	59	72	164	144
Future Volume (veh/h)	105	440	115	49	743	188	199	238	59	72	164	144
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	118	494	129	55	835	211	224	267	66	81	184	162
Adj No. of Lanes	1	2	1	1	2	1	2	1	0	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	1114	637	70	963	731	301	306	76	336	577	478
Arrive On Green	0.16	0.63	0.63	0.04	0.27	0.27	0.09	0.21	0.21	0.19	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	1443	357	1774	1838	1525
Grp Volume(v), veh/h	118	494	129	55	835	211	224	0	333	81	177	169
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	0	1800	1774	1770	1594
Q Serve(g_s), s	5.8	6.5	2.8	2.8	20.2	2.0	5.7	0.0	16.1	3.5	6.9	7.3
Cycle Q Clear(g_c), s	5.8	6.5	2.8	2.8	20.2	2.0	5.7	0.0	16.1	3.5	6.9	7.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		0.96
Lane Grp Cap(c), veh/h	146	1114	637	70	963	731	301	0	381	336	555	500
V/C Ratio(X)	0.81	0.44	0.20	0.78	0.87	0.29	0.74	0.00	0.87	0.24	0.32	0.34
Avail Cap(c_a), veh/h	187	1160	658	128	1042	766	402	0	490	336	555	500
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	12.6	9.2	42.8	31.2	4.9	40.1	0.0	34.3	31.0	23.6	23.7
Incr Delay (d2), s/veh	13.9	0.2	0.1	16.9	7.5	0.2	5.1	0.0	23.2	0.4	1.5	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.0	1.2	1.7	10.9	1.6	2.9	0.0	10.4	1.7	3.6	3.5
LnGrp Delay(d),s/veh	50.8	12.8	9.3	59.7	38.7	5.2	45.2	0.0	57.5	31.4	25.1	25.6
LnGrp LOS	D	B	A	E	D	A	D		E	C	C	C
Approach Vol, veh/h		741			1101			557			427	
Approach Delay, s/veh		18.3			33.3			52.5			26.4	
Approach LOS		B			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	24.6	9.1	33.8	13.4	33.7	12.9	30.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	7.5	24.5	6.5	29.5	10.5	21.5	9.5	26.5
Max Q Clear Time (g_c+I1), s	5.5	18.1	4.8	8.5	7.7	9.3	7.8	22.2
Green Ext Time (p_c), s	0.0	1.0	0.0	3.3	0.2	1.5	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	32.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	224	161	133	614	38	300	458	144	114	358	78
Future Volume (veh/h)	158	224	161	133	614	38	300	458	144	114	358	78
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	184	260	187	155	714	44	349	533	167	133	416	91
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	342	264	424	642	625	370	589	879	149	554	120
Arrive On Green	0.08	0.18	0.17	0.24	0.34	0.33	0.21	0.32	0.32	0.03	0.06	0.06
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	2894	628
Grp Volume(v), veh/h	184	260	187	155	714	44	349	533	167	133	253	254
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	1770	1752
Q Serve(g_s), s	7.0	11.9	10.0	6.6	31.0	0.0	17.4	24.7	0.0	6.7	12.7	12.8
Cycle Q Clear(g_c), s	7.0	11.9	10.0	6.6	31.0	0.0	17.4	24.7	0.0	6.7	12.7	12.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	138	342	264	424	642	625	370	589	879	149	339	335
V/C Ratio(X)	1.33	0.76	0.71	0.37	1.11	0.07	0.94	0.90	0.19	0.90	0.75	0.76
Avail Cap(c_a), veh/h	138	476	378	424	642	625	370	600	888	149	413	409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.74	0.74	0.74	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	34.9	35.4	28.6	29.5	17.0	35.1	29.5	10.0	43.4	40.0	40.2
Incr Delay (d2), s/veh	191.1	4.6	3.5	0.4	66.4	0.0	32.3	19.8	0.5	44.5	14.0	14.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	6.6	4.6	3.3	27.7	0.7	11.9	15.8	2.2	5.2	7.5	7.6
LnGrp Delay(d),s/veh	232.6	39.5	38.9	29.0	95.9	17.0	67.4	49.3	10.4	87.9	54.0	55.0
LnGrp LOS	F	D	D	C	F	B	E	D	B	F	D	D
Approach Vol, veh/h		631			913			1049			640	
Approach Delay, s/veh		95.6			80.7			49.1			61.4	
Approach LOS		F			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	32.5	25.5	20.5	22.8	21.2	11.0	35.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	5.5	27.5	13.5	21.5	13.5	19.5	5.5	29.5
Max Q Clear Time (g_c+I1), s	8.7	26.7	8.6	13.9	19.4	14.8	9.0	33.0
Green Ext Time (p_c), s	0.0	0.3	0.2	1.1	0.0	0.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	69.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	183	79	79	299	72	81	418	24	39	546	61
Future Volume (veh/h)	65	183	79	79	299	72	81	418	24	39	546	61
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	77	218	94	94	356	86	96	498	29	46	650	73
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	402	342	120	426	362	123	1024	60	72	965	432
Arrive On Green	0.06	0.22	0.22	0.07	0.23	0.23	0.07	0.30	0.30	0.04	0.27	0.27
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3400	198	1774	3539	1583
Grp Volume(v), veh/h	77	218	94	94	356	86	96	259	268	46	650	73
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1828	1774	1770	1583
Q Serve(g_s), s	2.5	6.1	2.9	3.1	10.7	2.6	3.1	7.0	7.1	1.5	9.6	2.1
Cycle Q Clear(g_c), s	2.5	6.1	2.9	3.1	10.7	2.6	3.1	7.0	7.1	1.5	9.6	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	98	402	342	120	426	362	123	533	551	72	965	432
V/C Ratio(X)	0.79	0.54	0.28	0.78	0.84	0.24	0.78	0.49	0.49	0.64	0.67	0.17
Avail Cap(c_a), veh/h	136	508	432	166	539	459	166	533	551	166	965	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	20.4	19.2	26.9	21.6	18.5	26.9	16.8	16.8	27.7	19.0	16.3
Incr Delay (d2), s/veh	18.4	1.1	0.4	14.9	9.0	0.3	15.4	3.1	3.1	9.2	3.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.3	1.3	2.0	6.5	1.2	2.0	3.8	4.0	0.9	5.2	1.0
LnGrp Delay(d),s/veh	45.8	21.6	19.6	41.8	30.6	18.8	42.3	19.9	19.9	36.9	22.8	17.1
LnGrp LOS	D	C	B	D	C	B	D	B	B	D	C	B
Approach Vol, veh/h		389			536			623			769	
Approach Delay, s/veh		25.9			30.7			23.3			23.1	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	23.2	9.5	18.2	9.6	21.5	8.7	18.9
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	5.5	16.0	5.5	16.0	5.5	16.0	4.5	17.0
Max Q Clear Time (g_c+I1), s	3.5	9.1	5.1	8.1	5.1	11.6	4.5	12.7
Green Ext Time (p_c), s	0.0	1.2	0.0	0.7	0.0	1.4	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	248	60	60	308	44	94	348	73	30	300	74
Future Volume (veh/h)	46	248	60	60	308	44	94	348	73	30	300	74
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	310	75	75	385	55	118	435	91	38	375	92
Adj No. of Lanes	1	1	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	343	83	96	774	110	410	649	136	54	436	370
Arrive On Green	0.04	0.24	0.24	0.05	0.25	0.25	0.23	0.43	0.43	0.03	0.23	0.23
Sat Flow, veh/h	1774	1450	351	1774	3113	442	1774	1495	313	1774	1863	1583
Grp Volume(v), veh/h	58	0	385	75	218	222	118	0	526	38	375	92
Grp Sat Flow(s),veh/h/ln	1774	0	1801	1774	1770	1785	1774	0	1808	1774	1863	1583
Q Serve(g_s), s	2.9	0.0	18.7	3.8	9.5	9.6	4.9	0.0	20.9	1.9	17.4	3.3
Cycle Q Clear(g_c), s	2.9	0.0	18.7	3.8	9.5	9.6	4.9	0.0	20.9	1.9	17.4	3.3
Prop In Lane	1.00		0.19	1.00		0.25	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	74	0	426	96	440	444	410	0	785	54	436	370
V/C Ratio(X)	0.78	0.00	0.90	0.78	0.49	0.50	0.29	0.00	0.67	0.70	0.86	0.25
Avail Cap(c_a), veh/h	128	0	470	128	462	466	410	0	785	89	611	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	0.0	33.4	42.0	29.0	29.0	28.5	0.0	20.3	43.2	33.1	17.3
Incr Delay (d2), s/veh	16.0	0.0	19.7	19.4	0.9	0.9	0.4	0.0	4.5	14.9	19.5	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	11.6	2.4	4.8	4.9	2.5	0.0	11.4	1.2	11.3	1.9
LnGrp Delay(d),s/veh	58.7	0.0	53.1	61.4	29.8	29.9	28.9	0.0	24.8	58.1	52.5	18.9
LnGrp LOS	E		D	E	C	C	C		C	E	D	B
Approach Vol, veh/h		443			515			644			505	
Approach Delay, s/veh		53.8			34.5			25.6			46.8	
Approach LOS		D			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	44.6	10.4	26.8	26.3	26.6	9.3	27.9
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	33.5	6.5	23.5	8.5	29.5	6.5	23.5
Max Q Clear Time (g_c+I1), s	3.9	22.9	5.8	20.7	6.9	19.4	4.9	11.6
Green Ext Time (p_c), s	0.0	2.3	0.0	0.6	0.0	1.7	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	38.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	53	18	72	82	57	31	439	52	32	395	5
Future Volume (veh/h)	18	53	18	72	82	57	31	439	52	32	395	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	62	21	84	95	66	36	510	60	37	459	6
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	207	61	139	125	77	53	545	64	546	2185	29
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.06	0.67	0.67	0.31	0.61	0.61
Sat Flow, veh/h	197	1177	348	482	711	440	1774	1636	193	1774	3577	47
Grp Volume(v), veh/h	104	0	0	245	0	0	36	0	570	37	227	238
Grp Sat Flow(s),veh/h/ln	1722	0	0	1633	0	0	1774	0	1829	1774	1770	1854
Q Serve(g_s), s	0.0	0.0	0.0	8.4	0.0	0.0	1.8	0.0	24.9	1.3	5.2	5.2
Cycle Q Clear(g_c), s	4.6	0.0	0.0	12.9	0.0	0.0	1.8	0.0	24.9	1.3	5.2	5.2
Prop In Lane	0.20		0.20	0.34		0.27	1.00		0.11	1.00		0.03
Lane Grp Cap(c), veh/h	351	0	0	341	0	0	53	0	609	546	1081	1133
V/C Ratio(X)	0.30	0.00	0.00	0.72	0.00	0.00	0.68	0.00	0.94	0.07	0.21	0.21
Avail Cap(c_a), veh/h	508	0	0	491	0	0	108	0	884	546	1081	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	0.0	0.0	35.7	0.0	0.0	41.9	0.0	14.2	22.0	7.8	7.8
Incr Delay (d2), s/veh	0.5	0.0	0.0	2.8	0.0	0.0	14.5	0.0	23.7	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	6.1	0.0	0.0	1.1	0.0	16.0	0.7	2.7	2.8
LnGrp Delay(d),s/veh	32.9	0.0	0.0	38.5	0.0	0.0	56.4	0.0	37.8	22.1	8.3	8.2
LnGrp LOS	C			D			E		D	C	A	A
Approach Vol, veh/h		104			245			606			502	
Approach Delay, s/veh		32.9			38.5			38.9			9.3	
Approach LOS		C			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	33.2	35.5		21.3	8.2	60.5		21.3
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5
Max Green Setting (Gmax), s	5.5	43.5		24.5	5.5	43.5		24.5
Max Q Clear Time (g_c+I1), s	3.3	26.9		6.6	3.8	7.2		14.9
Green Ext Time (p_c), s	0.0	3.1		0.4	0.0	2.6		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	28.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	43	40	750	559	55
Future Vol, veh/h	32	43	40	750	559	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
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	35	47	43	815	608	60

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1132	334	668	0	-	0
Stage 1	638	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	197	662	918	-	-	-
Stage 1	488	-	-	-	-	-
Stage 2	579	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	188	662	918	-	-	-
Mov Cap-2 Maneuver	188	-	-	-	-	-
Stage 1	465	-	-	-	-	-
Stage 2	579	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.1	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	918	-	319	-	-
HCM Lane V/C Ratio	0.047	-	0.256	-	-
HCM Control Delay (s)	9.1	-	20.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	426	157	242	524	48	165	679	326	58	482	72
Future Volume (veh/h)	86	426	157	242	524	48	165	679	326	58	482	72
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	102	507	187	288	624	57	196	808	0	69	574	86
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	598	220	347	1211	542	311	1154	516	115	666	100
Arrive On Green	0.09	0.24	0.22	0.20	0.34	0.34	0.18	0.33	0.00	0.13	0.43	0.40
Sat Flow, veh/h	1774	2537	931	1774	3539	1583	1774	3539	1583	1774	3089	462
Grp Volume(v), veh/h	102	353	341	288	624	57	196	808	0	69	328	332
Grp Sat Flow(s),veh/h/ln	1774	1770	1698	1774	1770	1583	1774	1770	1583	1774	1770	1781
Q Serve(g_s), s	5.0	17.1	17.3	14.0	12.7	2.2	9.2	17.9	0.0	3.3	15.1	15.2
Cycle Q Clear(g_c), s	5.0	17.1	17.3	14.0	12.7	2.2	9.2	17.9	0.0	3.3	15.1	15.2
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	158	417	401	347	1211	542	311	1154	516	115	382	384
V/C Ratio(X)	0.65	0.85	0.85	0.83	0.52	0.11	0.63	0.70	0.00	0.60	0.86	0.86
Avail Cap(c_a), veh/h	217	433	415	355	1211	542	311	1154	516	118	413	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	32.8	33.3	34.8	23.6	20.2	34.4	26.5	0.0	38.0	24.4	24.8
Incr Delay (d2), s/veh	4.4	14.0	15.1	15.0	0.4	0.1	4.0	3.6	0.0	7.7	21.6	21.9
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	9.9	9.8	8.3	6.2	1.0	4.9	9.3	0.0	1.9	9.6	9.7
LnGrp Delay(d),s/veh	44.0	46.8	48.4	49.8	24.0	20.3	38.4	30.1	0.0	45.7	45.9	46.7
LnGrp LOS	D	D	D	D	C	C	D	C		D	D	D
Approach Vol, veh/h		796			969			1004			729	
Approach Delay, s/veh		47.1			31.5			31.7			46.2	
Approach LOS		D			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	33.3	21.6	25.2	19.8	23.4	12.0	34.8
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	26.5	16.5	20.5	11.5	19.5	9.5	27.5
Max Q Clear Time (g_c+I1), s	5.3	19.9	16.0	19.3	11.2	17.2	7.0	14.7
Green Ext Time (p_c), s	0.0	2.1	0.1	0.4	0.0	0.7	0.1	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	38.2
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑↑			↱
Traffic Vol, veh/h	0	414	884	22	0	40
Future Vol, veh/h	0	414	884	22	0	40
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	450	961	24	0	43

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	493
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	-	0	523
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	523
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	523
HCM Lane V/C Ratio	-	-	-	0.083
HCM Control Delay (s)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑↑			↱
Traffic Vol, veh/h	0	414	884	172	0	81
Future Vol, veh/h	0	414	884	172	0	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
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	450	961	187	0	88

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	574
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	-	0	463
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	463
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	463
HCM Lane V/C Ratio	-	-	-	0.19
HCM Control Delay (s)	-	-	-	14.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.7

Intersection	
Int Delay, s/veh	9.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	121	161	108	459	388	129
Future Vol, veh/h	121	161	108	459	388	129
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	40	0	80	-	-	-
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	132	175	117	499	422	140

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1225	281	562	0	-	0
Stage 1	492	-	-	-	-	-
Stage 2	733	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	184	717	1007	-	-	-
Stage 1	581	-	-	-	-	-
Stage 2	474	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	163	717	1007	-	-	-
Mov Cap-2 Maneuver	163	-	-	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	474	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	42.3	1.7	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1007	-	163	717	-	-
HCM Lane V/C Ratio	0.117	-	0.807	0.244	-	-
HCM Control Delay (s)	9	-	83.2	11.6	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.4	-	5.3	1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	224	161	133	614	38	300	458	144	114	358	78
Future Volume (veh/h)	158	224	161	133	614	38	300	458	144	114	358	78
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	184	260	187	155	714	44	349	533	167	133	416	91
Adj No. of Lanes	1	1	1	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	342	264	276	884	54	518	589	747	297	554	120
Arrive On Green	0.08	0.18	0.17	0.16	0.26	0.24	0.29	0.32	0.32	0.06	0.06	0.06
Sat Flow, veh/h	1774	1863	1583	1774	3387	209	1774	1863	1583	1774	2894	628
Grp Volume(v), veh/h	184	260	187	155	373	385	349	533	167	133	253	254
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1770	1826	1774	1863	1583	1774	1770	1752
Q Serve(g_s), s	7.0	11.9	10.0	7.3	17.8	17.8	15.6	24.7	0.0	6.5	12.7	12.8
Cycle Q Clear(g_c), s	7.0	11.9	10.0	7.3	17.8	17.8	15.6	24.7	0.0	6.5	12.7	12.8
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	138	342	264	276	462	476	518	589	747	297	339	335
V/C Ratio(X)	1.33	0.76	0.71	0.56	0.81	0.81	0.67	0.90	0.22	0.45	0.75	0.76
Avail Cap(c_a), veh/h	138	476	378	296	610	629	518	600	756	297	413	409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.74	0.74	0.74	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	34.9	35.4	35.2	31.1	31.2	28.1	29.5	14.0	38.5	40.0	40.2
Incr Delay (d2), s/veh	191.1	4.6	3.5	1.6	4.5	4.4	3.4	19.8	0.7	1.1	14.0	14.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	6.6	4.6	3.7	9.3	9.6	8.1	15.8	2.6	3.3	7.5	7.6
LnGrp Delay(d),s/veh	232.6	39.5	38.9	36.7	35.7	35.6	31.5	49.3	14.7	39.5	54.0	55.0
LnGrp LOS	F	D	D	D	D	D	C	D	B	D	D	D
Approach Vol, veh/h		631			913			1049			640	
Approach Delay, s/veh		95.6			35.8			37.9			51.4	
Approach LOS		F			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.1	32.5	18.0	20.5	30.3	21.2	11.0	27.5
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	5.5	27.5	13.5	21.5	13.5	19.5	5.5	29.5
Max Q Clear Time (g_c+I1), s	8.5	26.7	9.3	13.9	17.6	14.8	9.0	19.8
Green Ext Time (p_c), s	0.0	0.3	0.2	1.1	0.0	0.9	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	51.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	237	663	253	155	426	93	174	652	131	132	668	112
Future Volume (veh/h)	237	663	253	155	426	93	174	652	131	132	668	112
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	249	698	266	163	448	98	183	686	138	139	703	118
Adj No. of Lanes	2	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	334	793	355	188	981	209	278	854	382	272	842	377
Arrive On Green	0.10	0.22	0.22	0.11	0.23	0.23	0.16	0.24	0.24	0.15	0.24	0.24
Sat Flow, veh/h	3442	3539	1583	1774	4201	894	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	249	698	266	163	359	187	183	686	138	139	703	118
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1695	1705	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	5.6	15.2	12.5	7.2	7.3	7.5	7.8	14.6	5.8	5.8	15.1	3.4
Cycle Q Clear(g_c), s	5.6	15.2	12.5	7.2	7.3	7.5	7.8	14.6	5.8	5.8	15.1	3.4
Prop In Lane	1.00		1.00	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	334	793	355	188	792	398	278	854	382	272	842	377
V/C Ratio(X)	0.75	0.88	0.75	0.86	0.45	0.47	0.66	0.80	0.36	0.51	0.83	0.31
Avail Cap(c_a), veh/h	409	818	366	188	792	398	278	1040	465	272	951	426
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	0.79	0.79	0.79	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.2	30.0	28.9	35.2	26.3	26.4	31.7	28.6	25.2	31.1	29.0	12.0
Incr Delay (d2), s/veh	5.8	10.7	8.1	26.5	0.3	0.7	5.6	7.9	2.6	1.6	9.5	2.2
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	2.9	8.6	6.3	4.9	3.4	3.6	4.2	8.1	2.8	2.9	8.4	2.2
LnGrp Delay(d),s/veh	41.0	40.6	37.0	61.7	26.6	27.1	37.4	36.5	27.9	32.7	38.5	14.2
LnGrp LOS	D	D	D	E	C	C	D	D	C	C	D	B
Approach Vol, veh/h		1213			709			1007			960	
Approach Delay, s/veh		39.9			34.8			35.4			34.7	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	24.8	14.0	23.4	18.0	24.5	13.3	24.2
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	7.5	23.5	8.5	18.5	9.5	21.5	9.5	17.5
Max Q Clear Time (g_c+I1), s	7.8	16.6	9.2	17.2	9.8	17.1	7.6	9.5
Green Ext Time (p_c), s	0.0	2.7	0.0	0.7	0.0	1.9	0.2	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	701	103	26	393	76	98	143	14	28	173	86
Future Volume (veh/h)	138	701	103	26	393	76	98	143	14	28	173	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	152	770	113	29	432	84	108	157	15	31	190	95
Adj No. of Lanes	1	2	1	1	2	1	2	1	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	909	488	47	633	787	176	206	20	565	906	435
Arrive On Green	0.21	0.51	0.51	0.03	0.18	0.18	0.05	0.12	0.12	0.32	0.39	0.39
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	1675	160	1774	2322	1114
Grp Volume(v), veh/h	152	770	113	29	432	84	108	0	172	31	143	142
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	0	1835	1774	1770	1666
Q Serve(g_s), s	6.5	15.0	2.0	1.3	9.1	0.8	2.5	0.0	7.3	1.0	4.3	4.5
Cycle Q Clear(g_c), s	6.5	15.0	2.0	1.3	9.1	0.8	2.5	0.0	7.3	1.0	4.3	4.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		0.67
Lane Grp Cap(c), veh/h	186	909	488	47	633	787	176	0	226	565	690	650
V/C Ratio(X)	0.82	0.85	0.23	0.61	0.68	0.11	0.61	0.00	0.76	0.05	0.21	0.22
Avail Cap(c_a), veh/h	299	1172	605	122	818	870	237	0	470	565	690	650
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	18.1	6.1	38.5	30.7	2.8	37.2	0.0	34.0	18.9	16.2	16.3
Incr Delay (d2), s/veh	5.4	2.8	0.1	12.1	1.6	0.1	3.4	0.0	21.3	0.0	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	7.4	1.0	0.8	4.6	0.5	1.3	0.0	5.0	0.5	2.2	2.2
LnGrp Delay(d),s/veh	36.2	20.9	6.2	50.6	32.3	2.9	40.6	0.0	55.3	19.0	16.9	17.0
LnGrp LOS	D	C	A	D	C	A	D		E	B	B	B
Approach Vol, veh/h		1035			545			280			316	
Approach Delay, s/veh		21.5			28.7			49.6			17.1	
Approach LOS		C			C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.0	15.3	7.6	26.1	9.6	36.7	13.9	19.8
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	5.5	20.5	5.5	26.5	5.5	20.5	13.5	18.5
Max Q Clear Time (g_c+I1), s	3.0	9.3	3.3	17.0	4.5	6.5	8.5	11.1
Green Ext Time (p_c), s	0.0	0.6	0.0	3.6	0.0	1.2	0.1	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	26.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	413	225	86	278	14	142	263	104	22	295	29
Future Volume (veh/h)	68	413	225	86	278	14	142	263	104	22	295	29
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	76	459	250	96	309	16	158	292	116	24	328	32
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	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	134	542	427	152	561	481	275	651	689	81	401	39
Arrive On Green	0.08	0.29	0.27	0.09	0.30	0.28	0.31	0.70	0.70	0.05	0.24	0.22
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	1671	163
Grp Volume(v), veh/h	76	459	250	96	309	16	158	292	116	24	0	360
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	0	1834
Q Serve(g_s), s	2.9	16.2	9.6	3.7	9.7	0.5	5.2	4.8	0.2	0.9	0.0	13.0
Cycle Q Clear(g_c), s	2.9	16.2	9.6	3.7	9.7	0.5	5.2	4.8	0.2	0.9	0.0	13.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	134	542	427	152	561	481	275	651	689	81	0	440
V/C Ratio(X)	0.57	0.85	0.59	0.63	0.55	0.03	0.57	0.45	0.17	0.30	0.00	0.82
Avail Cap(c_a), veh/h	177	575	455	152	561	481	275	651	689	152	0	482
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.89	0.89	0.89	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.3	23.4	22.2	30.9	20.5	17.1	22.2	7.6	1.9	32.3	0.0	25.2
Incr Delay (d2), s/veh	3.7	10.9	1.7	7.3	1.0	0.0	2.9	2.2	0.5	2.0	0.0	15.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	9.9	4.4	2.1	5.1	0.2	2.8	2.7	0.4	0.5	0.0	8.5
LnGrp Delay(d),s/veh	35.0	34.2	23.9	38.2	21.5	17.2	25.1	9.8	2.4	34.4	0.0	40.8
LnGrp LOS	C	C	C	D	C	B	C	A	A	C		D
Approach Vol, veh/h		785			421			566			384	
Approach Delay, s/veh		31.0			25.2			12.6			40.4	
Approach LOS		C			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	28.5	10.0	24.4	14.9	20.8	9.3	25.1
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	18.9	4.5	20.1	6.5	16.9	5.5	19.1
Max Q Clear Time (g_c+I1), s	2.9	6.8	5.7	18.2	7.2	15.0	4.9	11.7
Green Ext Time (p_c), s	0.0	1.2	0.0	0.6	0.0	0.3	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	26.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	293	52	21	228	66	61	549	63	85	660	74
Future Volume (veh/h)	104	293	52	21	228	66	61	549	63	85	660	74
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	106	299	53	21	233	67	62	560	64	87	673	76
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	410	348	40	309	263	88	971	111	111	1117	500
Arrive On Green	0.08	0.22	0.22	0.02	0.17	0.17	0.05	0.30	0.30	0.06	0.32	0.32
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3203	365	1774	3539	1583
Grp Volume(v), veh/h	106	299	53	21	233	67	62	309	315	87	673	76
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1798	1774	1770	1583
Q Serve(g_s), s	3.3	8.4	1.5	0.7	6.7	2.1	1.9	8.3	8.3	2.7	9.0	1.9
Cycle Q Clear(g_c), s	3.3	8.4	1.5	0.7	6.7	2.1	1.9	8.3	8.3	2.7	9.0	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	135	410	348	40	309	263	88	536	545	111	1117	500
V/C Ratio(X)	0.78	0.73	0.15	0.53	0.75	0.25	0.70	0.58	0.58	0.79	0.60	0.15
Avail Cap(c_a), veh/h	174	565	480	142	531	452	142	536	545	142	1117	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.4	20.3	17.7	27.1	22.3	20.4	26.2	16.5	16.5	25.9	16.2	13.8
Incr Delay (d2), s/veh	16.0	3.0	0.2	10.5	3.7	0.5	9.7	4.5	4.4	19.5	2.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.6	0.7	0.4	3.7	0.9	1.2	4.7	4.8	1.9	4.8	0.9
LnGrp Delay(d),s/veh	41.4	23.4	17.9	37.6	26.0	20.9	36.0	21.0	20.9	45.4	18.6	14.4
LnGrp LOS	D	C	B	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		458			321			686			836	
Approach Delay, s/veh		26.9			25.7			22.3			21.0	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	22.5	6.8	17.8	8.3	23.2	9.8	14.8
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	17.0	4.5	17.0	4.5	17.0	5.5	16.0
Max Q Clear Time (g_c+I1), s	4.7	10.3	2.7	10.4	3.9	11.0	5.3	8.7
Green Ext Time (p_c), s	0.0	1.4	0.0	0.7	0.0	1.8	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	142	62	23	118	10	37	246	26	12	237	27
Future Volume (veh/h)	18	142	62	23	118	10	37	246	26	12	237	27
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	19	149	65	24	124	11	39	259	27	13	249	28
Adj No. of Lanes	1	1	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	34	184	80	41	506	44	681	892	93	25	313	266
Arrive On Green	0.02	0.15	0.15	0.02	0.15	0.15	0.38	0.54	0.54	0.01	0.17	0.17
Sat Flow, veh/h	1774	1231	537	1774	3292	289	1774	1659	173	1774	1863	1583
Grp Volume(v), veh/h	19	0	214	24	66	69	39	0	286	13	249	28
Grp Sat Flow(s),veh/h/ln	1774	0	1768	1774	1770	1812	1774	0	1832	1774	1863	1583
Q Serve(g_s), s	0.8	0.0	9.4	1.1	2.6	2.7	1.1	0.0	6.8	0.6	10.3	1.0
Cycle Q Clear(g_c), s	0.8	0.0	9.4	1.1	2.6	2.7	1.1	0.0	6.8	0.6	10.3	1.0
Prop In Lane	1.00		0.30	1.00		0.16	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	34	0	265	41	272	278	681	0	985	25	313	266
V/C Ratio(X)	0.55	0.00	0.81	0.58	0.24	0.25	0.06	0.00	0.29	0.52	0.80	0.11
Avail Cap(c_a), veh/h	100	0	431	100	431	442	681	0	985	100	664	564
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	0.0	32.9	38.7	29.8	29.8	15.5	0.0	10.1	39.2	32.0	18.6
Incr Delay (d2), s/veh	13.1	0.0	5.8	12.3	0.5	0.5	0.0	0.0	0.7	15.6	18.6	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	5.0	0.7	1.3	1.4	0.5	0.0	3.6	0.4	6.9	0.6
LnGrp Delay(d),s/veh	52.0	0.0	38.7	51.0	30.2	30.2	15.6	0.0	10.9	54.8	50.6	19.4
LnGrp LOS	D		D	D	C	C	B		B	D	D	B
Approach Vol, veh/h		233			159			325			290	
Approach Delay, s/veh		39.8			33.4			11.4			47.8	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	48.5	7.4	17.5	36.2	18.9	7.0	17.8
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	29.5	4.5	19.5	5.5	28.5	4.5	19.5
Max Q Clear Time (g_c+I1), s	2.6	8.8	3.1	11.4	3.1	12.3	2.8	4.7
Green Ext Time (p_c), s	0.0	1.4	0.0	0.6	0.0	1.2	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	31.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	19	4	16	19	25	4	295	19	19	303	7
Future Volume (veh/h)	6	19	4	16	19	25	4	295	19	19	303	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	6	20	4	17	20	27	4	317	20	20	326	8
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	75	14	77	34	39	8	383	24	915	2584	63
Arrive On Green	0.06	0.06	0.06	0.06	0.06	0.06	0.00	0.22	0.22	0.52	0.73	0.73
Sat Flow, veh/h	231	1316	238	350	600	693	1774	1734	109	1774	3531	86
Grp Volume(v), veh/h	30	0	0	64	0	0	4	0	337	20	163	171
Grp Sat Flow(s),veh/h/ln	1785	0	0	1644	0	0	1774	0	1843	1774	1770	1847
Q Serve(g_s), s	0.0	0.0	0.0	1.7	0.0	0.0	0.2	0.0	13.9	0.4	2.2	2.2
Cycle Q Clear(g_c), s	1.3	0.0	0.0	3.0	0.0	0.0	0.2	0.0	13.9	0.4	2.2	2.2
Prop In Lane	0.20		0.13	0.27		0.42	1.00		0.06	1.00		0.05
Lane Grp Cap(c), veh/h	156	0	0	151	0	0	8	0	407	915	1295	1352
V/C Ratio(X)	0.19	0.00	0.00	0.43	0.00	0.00	0.47	0.00	0.83	0.02	0.13	0.13
Avail Cap(c_a), veh/h	472	0	0	449	0	0	144	0	864	915	1295	1352
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.2	0.0	0.0	37.0	0.0	0.0	39.7	0.0	29.7	9.5	3.2	3.2
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.9	0.0	0.0	35.5	0.0	17.3	0.0	0.2	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	0.7	0.0	0.0	1.5	0.0	0.0	0.2	0.0	9.1	0.2	1.1	1.2
LnGrp Delay(d),s/veh	36.8	0.0	0.0	38.9	0.0	0.0	75.2	0.0	47.0	9.5	3.4	3.4
LnGrp LOS	D			D			E		D	A	A	A
Approach Vol, veh/h		30			64			341			354	
Approach Delay, s/veh		36.8			38.9			47.3			3.7	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	46.8	23.2		10.1	5.9	64.1		10.1
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5
Max Green Setting (Gmax), s	6.5	37.5		19.5	6.5	37.5		19.5
Max Q Clear Time (g_c+I1), s	2.4	15.9		3.3	2.2	4.2		5.0
Green Ext Time (p_c), s	0.0	1.7		0.1	0.0	1.8		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	26.7
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	13	5	514	557	11
Future Vol, veh/h	13	13	5	514	557	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	15	6	578	626	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	933	319	638	0	-	0
Stage 1	632	-	-	-	-	-
Stage 2	301	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	265	677	942	-	-	-
Stage 1	492	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	263	677	942	-	-	-
Mov Cap-2 Maneuver	263	-	-	-	-	-
Stage 1	489	-	-	-	-	-
Stage 2	725	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.3	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	942	-	379	-	-
HCM Lane V/C Ratio	0.006	-	0.077	-	-
HCM Control Delay (s)	8.8	-	15.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	359	146	160	305	43	79	409	135	47	477	25
Future Volume (veh/h)	33	359	146	160	305	43	79	409	135	47	477	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	34	374	152	167	318	45	82	426	0	49	497	26
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	510	204	241	1027	459	418	1302	583	108	661	35
Arrive On Green	0.05	0.21	0.19	0.14	0.29	0.29	0.24	0.37	0.00	0.12	0.39	0.34
Sat Flow, veh/h	1774	2469	989	1774	3539	1583	1774	3539	1583	1774	3422	179
Grp Volume(v), veh/h	34	267	259	167	318	45	82	426	0	49	257	266
Grp Sat Flow(s),veh/h/ln	1774	1770	1688	1774	1770	1583	1774	1770	1583	1774	1770	1831
Q Serve(g_s), s	1.3	9.9	10.1	6.3	4.9	1.5	2.6	6.1	0.0	1.8	8.8	8.8
Cycle Q Clear(g_c), s	1.3	9.9	10.1	6.3	4.9	1.5	2.6	6.1	0.0	1.8	8.8	8.8
Prop In Lane	1.00		0.59	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	93	365	349	241	1027	459	418	1302	583	108	342	354
V/C Ratio(X)	0.36	0.73	0.74	0.69	0.31	0.10	0.20	0.33	0.00	0.45	0.75	0.75
Avail Cap(c_a), veh/h	152	442	422	279	1138	509	418	1302	583	152	493	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	25.9	26.5	28.8	19.4	18.2	21.4	15.9	0.0	29.7	20.0	20.2
Incr Delay (d2), s/veh	2.4	4.8	5.7	6.0	0.2	0.1	0.2	0.7	0.0	2.9	14.1	13.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	5.3	5.3	3.5	2.4	0.6	1.3	3.1	0.0	1.0	5.5	5.7
LnGrp Delay(d),s/veh	34.4	30.8	32.1	34.8	19.6	18.2	21.7	16.6	0.0	32.6	34.1	34.0
LnGrp LOS	C	C	C	C	B	B	C	B		C	C	C
Approach Vol, veh/h		560			530			508			572	
Approach Delay, s/veh		31.6			24.2			17.4			33.9	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	29.8	13.5	18.5	20.5	17.5	7.7	24.3
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	18.0	9.5	16.0	4.5	18.0	4.5	21.0
Max Q Clear Time (g_c+I1), s	3.8	8.1	8.3	12.1	4.6	10.8	3.3	6.9
Green Ext Time (p_c), s	0.0	1.3	0.1	0.8	0.0	1.2	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	27.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	237	680	253	167	442	105	174	652	144	145	668	112
Future Volume (veh/h)	237	680	253	167	442	105	174	652	144	145	668	112
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	249	716	266	176	465	111	183	686	152	153	703	118
Adj No. of Lanes	2	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	334	803	359	188	974	226	273	855	383	267	842	377
Arrive On Green	0.10	0.23	0.23	0.11	0.24	0.24	0.15	0.24	0.24	0.15	0.24	0.24
Sat Flow, veh/h	3442	3539	1583	1774	4126	958	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	249	716	266	176	380	196	183	686	152	153	703	118
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1695	1694	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	5.6	15.7	12.5	7.9	7.7	8.0	7.8	14.6	6.4	6.4	15.1	3.4
Cycle Q Clear(g_c), s	5.6	15.7	12.5	7.9	7.7	8.0	7.8	14.6	6.4	6.4	15.1	3.4
Prop In Lane	1.00		1.00	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	334	803	359	188	801	400	273	855	383	267	842	377
V/C Ratio(X)	0.75	0.89	0.74	0.93	0.47	0.49	0.67	0.80	0.40	0.57	0.83	0.31
Avail Cap(c_a), veh/h	409	818	366	188	801	400	273	1040	465	267	951	426
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	0.78	0.78	0.78	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.2	30.0	28.7	35.5	26.3	26.4	31.9	28.5	25.4	31.6	29.0	12.0
Incr Delay (d2), s/veh	5.8	11.9	7.7	40.2	0.3	0.7	6.2	7.8	3.1	3.0	9.5	2.2
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	2.9	9.0	6.2	6.0	3.6	3.8	4.3	8.1	3.1	3.4	8.4	2.2
LnGrp Delay(d),s/veh	41.0	41.9	36.4	75.6	26.6	27.1	38.2	36.4	28.5	34.6	38.5	14.2
LnGrp LOS	D	D	D	E	C	C	D	D	C	C	D	B
Approach Vol, veh/h		1231			752			1021			974	
Approach Delay, s/veh		40.5			38.2			35.5			35.0	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	24.8	14.0	23.7	17.8	24.5	13.3	24.4
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	7.5	23.5	8.5	18.5	9.5	21.5	9.5	17.5
Max Q Clear Time (g_c+I1), s	8.4	16.6	9.9	17.7	9.8	17.1	7.6	10.0
Green Ext Time (p_c), s	0.0	2.7	0.0	0.5	0.0	1.9	0.2	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	743	103	36	433	86	98	143	24	38	173	86
Future Volume (veh/h)	138	743	103	36	433	86	98	143	24	38	173	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	152	816	113	40	476	95	108	157	26	42	190	95
Adj No. of Lanes	1	2	1	1	2	1	2	1	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	948	505	59	694	776	176	203	34	521	865	415
Arrive On Green	0.21	0.54	0.54	0.03	0.20	0.20	0.05	0.13	0.13	0.29	0.37	0.37
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	1559	258	1774	2322	1114
Grp Volume(v), veh/h	152	816	113	40	476	95	108	0	183	42	143	142
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	0	1817	1774	1770	1666
Q Serve(g_s), s	6.5	15.9	1.9	1.8	10.0	0.9	2.5	0.0	7.8	1.4	4.4	4.7
Cycle Q Clear(g_c), s	6.5	15.9	1.9	1.8	10.0	0.9	2.5	0.0	7.8	1.4	4.4	4.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.67
Lane Grp Cap(c), veh/h	186	948	505	59	694	776	176	0	236	521	660	621
V/C Ratio(X)	0.82	0.86	0.22	0.68	0.69	0.12	0.61	0.00	0.77	0.08	0.22	0.23
Avail Cap(c_a), veh/h	299	1172	605	122	818	831	237	0	466	521	660	621
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.55	0.55	0.55	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	17.3	5.5	38.3	29.9	3.0	37.2	0.0	33.7	20.4	17.1	17.2
Incr Delay (d2), s/veh	5.1	3.2	0.1	12.9	1.9	0.1	3.4	0.0	21.5	0.1	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	7.9	0.9	1.1	5.1	0.6	1.3	0.0	5.3	0.7	2.3	2.3
LnGrp Delay(d),s/veh	36.0	20.5	5.6	51.2	31.8	3.0	40.6	0.0	55.2	20.5	17.9	18.1
LnGrp LOS	D	C	A	D	C	A	D		E	C	B	B
Approach Vol, veh/h		1081			611			291			327	
Approach Delay, s/veh		21.1			28.6			49.8			18.3	
Approach LOS		C			C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.0	15.9	8.1	26.9	9.6	35.3	13.9	21.2
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	5.5	20.5	5.5	26.5	5.5	20.5	13.5	18.5
Max Q Clear Time (g_c+I1), s	3.4	9.8	3.8	17.9	4.5	6.7	8.5	12.0
Green Ext Time (p_c), s	0.0	0.6	0.0	3.5	0.0	1.2	0.1	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	26.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	413	225	86	339	34	182	303	104	98	371	29
Future Volume (veh/h)	192	413	225	86	339	34	182	303	104	98	371	29
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	213	459	250	96	377	38	202	337	116	109	412	32
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	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	177	542	427	152	515	506	381	576	625	152	599	46
Arrive On Green	0.10	0.29	0.27	0.09	0.28	0.26	0.43	0.62	0.62	0.09	0.18	0.16
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	3329	258
Grp Volume(v), veh/h	213	459	250	96	377	38	202	337	116	109	218	226
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	1770	1817
Q Serve(g_s), s	7.0	16.2	9.6	3.7	12.8	1.2	5.9	7.6	0.4	4.2	8.1	8.2
Cycle Q Clear(g_c), s	7.0	16.2	9.6	3.7	12.8	1.2	5.9	7.6	0.4	4.2	8.1	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	177	542	427	152	515	506	381	576	625	152	318	327
V/C Ratio(X)	1.20	0.85	0.59	0.63	0.73	0.08	0.53	0.59	0.19	0.72	0.69	0.69
Avail Cap(c_a), veh/h	177	575	455	152	548	534	381	576	625	152	465	478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.5	23.4	22.2	30.9	23.0	16.6	17.3	10.7	2.4	31.2	26.8	27.0
Incr Delay (d2), s/veh	131.9	10.9	1.7	7.1	4.1	0.1	1.4	4.3	0.7	14.9	11.4	11.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	9.9	4.4	2.1	7.2	0.5	2.9	4.4	0.5	2.7	4.9	5.1
LnGrp Delay(d),s/veh	163.4	34.2	23.9	38.0	27.0	16.7	18.7	15.0	3.1	46.1	38.2	38.3
LnGrp LOS	F	C	C	D	C	B	B	B	A	D	D	D
Approach Vol, veh/h		922			511			655			553	
Approach Delay, s/veh		61.3			28.3			14.0			39.8	
Approach LOS		E			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.6	10.0	24.4	19.0	16.6	11.0	23.4
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	18.9	4.5	20.1	6.5	16.9	5.5	19.1
Max Q Clear Time (g_c+I1), s	6.2	9.6	5.7	18.2	7.9	10.2	9.0	14.8
Green Ext Time (p_c), s	0.0	1.2	0.0	0.6	0.0	0.9	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	38.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	309	64	21	245	66	74	549	63	85	660	87
Future Volume (veh/h)	116	309	64	21	245	66	74	549	63	85	660	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	118	315	65	21	250	67	76	560	64	87	673	89
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	440	374	40	324	275	98	948	108	111	1073	480
Arrive On Green	0.08	0.24	0.24	0.02	0.17	0.17	0.06	0.30	0.30	0.06	0.30	0.30
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3203	365	1774	3539	1583
Grp Volume(v), veh/h	118	315	65	21	250	67	76	309	315	87	673	89
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1798	1774	1770	1583
Q Serve(g_s), s	3.7	8.9	1.9	0.7	7.4	2.1	2.4	8.5	8.6	2.8	9.4	2.4
Cycle Q Clear(g_c), s	3.7	8.9	1.9	0.7	7.4	2.1	2.4	8.5	8.6	2.8	9.4	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	150	440	374	40	324	275	98	524	532	111	1073	480
V/C Ratio(X)	0.78	0.72	0.17	0.53	0.77	0.24	0.78	0.59	0.59	0.79	0.63	0.19
Avail Cap(c_a), veh/h	170	551	469	139	519	441	139	524	532	139	1073	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	20.2	17.5	27.8	22.6	20.5	26.8	17.2	17.3	26.6	17.2	14.8
Incr Delay (d2), s/veh	19.0	3.3	0.2	10.6	3.9	0.5	16.1	4.8	4.8	20.4	2.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	5.0	0.8	0.4	4.1	1.0	1.6	4.8	4.9	2.0	5.0	1.2
LnGrp Delay(d),s/veh	44.7	23.4	17.7	38.4	26.6	20.9	42.9	22.1	22.1	46.9	20.0	15.6
LnGrp LOS	D	C	B	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		498			338			700			849	
Approach Delay, s/veh		27.7			26.2			24.3			22.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	22.5	6.8	19.1	8.7	22.9	10.4	15.5
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	17.0	4.5	17.0	4.5	17.0	5.5	16.0
Max Q Clear Time (g_c+I1), s	4.8	10.6	2.7	10.9	4.4	11.4	5.7	9.4
Green Ext Time (p_c), s	0.0	1.4	0.0	0.8	0.0	1.8	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	24.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	142	75	36	118	10	49	262	38	12	254	27
Future Volume (veh/h)	18	142	75	36	118	10	49	262	38	12	254	27
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	19	149	79	38	124	11	52	276	40	13	267	28
Adj No. of Lanes	1	1	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	34	182	96	57	564	49	632	828	120	25	332	282
Arrive On Green	0.02	0.16	0.16	0.03	0.17	0.17	0.36	0.52	0.52	0.01	0.18	0.18
Sat Flow, veh/h	1774	1147	608	1774	3292	289	1774	1591	231	1774	1863	1583
Grp Volume(v), veh/h	19	0	228	38	66	69	52	0	316	13	267	28
Grp Sat Flow(s),veh/h/ln	1774	0	1755	1774	1770	1812	1774	0	1822	1774	1863	1583
Q Serve(g_s), s	0.8	0.0	10.0	1.7	2.6	2.6	1.6	0.0	8.1	0.6	11.0	1.0
Cycle Q Clear(g_c), s	0.8	0.0	10.0	1.7	2.6	2.6	1.6	0.0	8.1	0.6	11.0	1.0
Prop In Lane	1.00		0.35	1.00		0.16	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	34	0	278	57	303	310	632	0	948	25	332	282
V/C Ratio(X)	0.55	0.00	0.82	0.67	0.22	0.22	0.08	0.00	0.33	0.52	0.81	0.10
Avail Cap(c_a), veh/h	100	0	428	100	431	442	632	0	948	100	664	564
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	0.0	32.5	38.3	28.5	28.6	17.1	0.0	11.1	39.2	31.5	18.0
Incr Delay (d2), s/veh	13.1	0.0	7.2	12.7	0.4	0.4	0.1	0.0	0.9	15.6	18.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	5.4	1.0	1.3	1.3	0.8	0.0	4.3	0.4	7.3	0.6
LnGrp Delay(d),s/veh	52.0	0.0	39.8	51.0	28.9	28.9	17.1	0.0	12.1	54.8	50.1	18.7
LnGrp LOS	D		D	D	C	C	B		B	D	D	B
Approach Vol, veh/h		247			173			368			308	
Approach Delay, s/veh		40.7			33.8			12.8			47.4	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	47.1	8.1	18.2	34.0	19.7	7.0	19.2
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	29.5	4.5	19.5	5.5	28.5	4.5	19.5
Max Q Clear Time (g_c+I1), s	2.6	10.1	3.7	12.0	3.6	13.0	2.8	4.6
Green Ext Time (p_c), s	0.0	1.6	0.0	0.6	0.0	1.2	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	32.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	19	14	26	19	25	14	335	29	19	345	7
Future Volume (veh/h)	6	19	14	26	19	25	14	335	29	19	345	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	6	20	15	28	20	27	15	360	31	20	371	8
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	63	42	96	35	39	28	427	37	843	2521	54
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.02	0.25	0.25	0.48	0.71	0.71
Sat Flow, veh/h	151	956	639	512	534	589	1774	1691	146	1774	3543	76
Grp Volume(v), veh/h	41	0	0	75	0	0	15	0	391	20	185	194
Grp Sat Flow(s),veh/h/ln	1746	0	0	1635	0	0	1774	0	1837	1774	1770	1849
Q Serve(g_s), s	0.0	0.0	0.0	1.7	0.0	0.0	0.7	0.0	16.2	0.5	2.7	2.7
Cycle Q Clear(g_c), s	1.8	0.0	0.0	3.5	0.0	0.0	0.7	0.0	16.2	0.5	2.7	2.7
Prop In Lane	0.15		0.37	0.37		0.36	1.00		0.08	1.00		0.04
Lane Grp Cap(c), veh/h	167	0	0	170	0	0	28	0	464	843	1259	1316
V/C Ratio(X)	0.25	0.00	0.00	0.44	0.00	0.00	0.53	0.00	0.84	0.02	0.15	0.15
Avail Cap(c_a), veh/h	463	0	0	446	0	0	144	0	861	843	1259	1316
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	0.0	0.0	36.5	0.0	0.0	39.1	0.0	28.4	11.1	3.7	3.7
Incr Delay (d2), s/veh	0.8	0.0	0.0	1.8	0.0	0.0	14.5	0.0	16.8	0.0	0.2	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	0.9	0.0	0.0	1.7	0.0	0.0	0.4	0.0	10.3	0.2	1.4	1.4
LnGrp Delay(d),s/veh	36.5	0.0	0.0	38.3	0.0	0.0	53.6	0.0	45.2	11.2	4.0	4.0
LnGrp LOS	D			D			D		D	B	A	A
Approach Vol, veh/h		41			75			406			399	
Approach Delay, s/veh		36.5			38.3			45.5			4.3	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	43.5	25.7		10.8	6.8	62.4		10.8
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5
Max Green Setting (Gmax), s	6.5	37.5		19.5	6.5	37.5		19.5
Max Q Clear Time (g_c+I1), s	2.5	18.2		3.8	2.7	4.7		5.5
Green Ext Time (p_c), s	0.0	2.0		0.1	0.0	2.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	26.7
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	13	5	545	587	21
Future Vol, veh/h	23	13	5	545	587	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	15	6	612	660	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	990	342	684	0	-	0
Stage 1	672	-	-	-	-	-
Stage 2	318	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	243	654	905	-	-	-
Stage 1	469	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	241	654	905	-	-	-
Mov Cap-2 Maneuver	241	-	-	-	-	-
Stage 1	466	-	-	-	-	-
Stage 2	710	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.3	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	905	-	312	-	-
HCM Lane V/C Ratio	0.006	-	0.13	-	-
HCM Control Delay (s)	9	-	18.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	359	146	160	305	53	79	419	135	57	487	35
Future Volume (veh/h)	43	359	146	160	305	53	79	419	135	57	487	35
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	45	374	152	167	318	55	82	436	0	59	507	36
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	510	204	241	1004	449	408	1287	576	116	666	47
Arrive On Green	0.06	0.21	0.19	0.14	0.28	0.28	0.23	0.36	0.00	0.13	0.40	0.35
Sat Flow, veh/h	1774	2469	989	1774	3539	1583	1774	3539	1583	1774	3353	238
Grp Volume(v), veh/h	45	267	259	167	318	55	82	436	0	59	267	276
Grp Sat Flow(s),veh/h/ln	1774	1770	1688	1774	1770	1583	1774	1770	1583	1774	1770	1821
Q Serve(g_s), s	1.7	9.9	10.1	6.3	5.0	1.8	2.6	6.3	0.0	2.2	9.1	9.2
Cycle Q Clear(g_c), s	1.7	9.9	10.1	6.3	5.0	1.8	2.6	6.3	0.0	2.2	9.1	9.2
Prop In Lane	1.00		0.59	1.00		1.00	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	105	365	349	241	1004	449	408	1287	576	116	352	362
V/C Ratio(X)	0.43	0.73	0.74	0.69	0.32	0.12	0.20	0.34	0.00	0.51	0.76	0.76
Avail Cap(c_a), veh/h	152	442	422	279	1138	509	408	1287	576	152	493	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	25.9	26.5	28.8	19.7	18.6	21.8	16.2	0.0	29.4	19.6	19.9
Incr Delay (d2), s/veh	2.8	4.8	5.7	6.0	0.2	0.1	0.2	0.7	0.0	3.4	14.3	14.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	5.3	5.3	3.5	2.5	0.8	1.3	3.2	0.0	1.2	5.7	5.9
LnGrp Delay(d),s/veh	34.6	30.8	32.1	34.8	19.9	18.7	22.0	16.9	0.0	32.8	33.9	34.0
LnGrp LOS	C	C	C	C	B	B	C	B		C	C	C
Approach Vol, veh/h		571			540			518			602	
Approach Delay, s/veh		31.7			24.4			17.7			33.8	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	29.4	13.5	18.5	20.1	17.9	8.1	23.9
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	18.0	9.5	16.0	4.5	18.0	4.5	21.0
Max Q Clear Time (g_c+I1), s	4.2	8.3	8.3	12.1	4.6	11.2	3.7	7.0
Green Ext Time (p_c), s	0.0	1.3	0.1	0.8	0.0	1.2	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	27.3
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↗
Traffic Vol, veh/h	0	706	449	20	0	38
Future Vol, veh/h	0	706	449	20	0	38
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	767	488	22	0	41

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	499
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	572
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	572
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	572
HCM Lane V/C Ratio	-	-	-	0.072
HCM Control Delay (s)	-	-	-	11.8
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↗
Traffic Vol, veh/h	0	706	449	162	0	76
Future Vol, veh/h	0	706	449	162	0	76
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	767	488	176	0	83

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	576
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	517
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	517
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	517
HCM Lane V/C Ratio	-	-	-	0.16
HCM Control Delay (s)	-	-	-	13.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.6

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	114	152	101	345	346	121
Future Vol, veh/h	114	152	101	345	346	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	80	-	-	-
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	124	165	110	375	376	132

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1037	254	508	0	-	0
Stage 1	442	-	-	-	-	-
Stage 2	595	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	241	746	1055	-	-	-
Stage 1	616	-	-	-	-	-
Stage 2	550	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	216	746	1055	-	-	-
Mov Cap-2 Maneuver	216	-	-	-	-	-
Stage 1	552	-	-	-	-	-
Stage 2	550	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.4	2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1055	-	216	746	-	-
HCM Lane V/C Ratio	0.104	-	0.574	0.221	-	-
HCM Control Delay (s)	8.8	-	41.9	11.2	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.3	-	3.2	0.8	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	272	762	291	178	489	107	200	749	150	152	767	129
Future Volume (veh/h)	272	762	291	178	489	107	200	749	150	152	767	129
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	286	802	306	187	515	113	211	788	158	160	807	136
Adj No. of Lanes	2	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	372	845	378	188	993	213	211	926	414	210	925	414
Arrive On Green	0.11	0.24	0.24	0.11	0.24	0.24	0.12	0.26	0.26	0.12	0.26	0.26
Sat Flow, veh/h	3442	3539	1583	1774	4194	900	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	286	802	306	187	414	214	211	788	158	160	807	136
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1695	1704	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	6.5	17.8	9.7	8.4	8.5	8.8	9.5	16.9	6.5	7.0	17.5	5.6
Cycle Q Clear(g_c), s	6.5	17.8	9.7	8.4	8.5	8.8	9.5	16.9	6.5	7.0	17.5	5.6
Prop In Lane	1.00		1.00	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	372	845	378	188	803	404	211	926	414	210	925	414
V/C Ratio(X)	0.77	0.95	0.81	0.99	0.52	0.53	1.00	0.85	0.38	0.76	0.87	0.33
Avail Cap(c_a), veh/h	452	845	378	188	803	404	211	1013	453	210	925	414
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	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	30.0	12.6	35.7	26.5	26.6	35.3	28.0	24.2	34.2	28.3	23.9
Incr Delay (d2), s/veh	6.4	19.7	12.4	54.5	0.4	1.0	62.4	9.7	2.7	15.1	11.2	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	11.0	6.3	7.0	4.0	4.2	8.3	9.5	3.2	4.3	10.0	2.7
LnGrp Delay(d),s/veh	41.1	49.6	25.0	90.2	27.0	27.6	97.7	37.7	26.9	49.3	39.5	26.0
LnGrp LOS	D	D	C	F	C	C	F	D	C	D	D	C
Approach Vol, veh/h		1394			815			1157			1103	
Approach Delay, s/veh		42.5			41.6			47.2			39.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	26.4	14.0	24.6	15.0	26.4	14.2	24.4
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	7.5	22.9	8.5	19.1	9.5	20.9	10.5	17.1
Max Q Clear Time (g_c+I1), s	9.0	18.9	10.4	19.8	11.5	19.5	8.5	10.8
Green Ext Time (p_c), s	0.0	2.0	0.0	0.0	0.0	0.8	0.2	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	42.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	805	118	30	451	87	113	164	16	32	199	99
Future Volume (veh/h)	159	805	118	30	451	87	113	164	16	32	199	99
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	175	885	130	33	496	96	124	180	18	35	219	109
Adj No. of Lanes	1	2	1	1	2	1	2	1	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	210	1021	547	52	705	363	196	628	63	54	813	390
Arrive On Green	0.24	0.58	0.58	0.03	0.20	0.20	0.06	0.38	0.38	0.03	0.35	0.35
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	1667	167	1774	2321	1114
Grp Volume(v), veh/h	175	885	130	33	496	96	124	0	198	35	165	163
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	0	1833	1774	1770	1666
Q Serve(g_s), s	7.5	16.9	2.0	1.5	10.4	4.0	2.8	0.0	6.0	1.6	5.3	5.6
Cycle Q Clear(g_c), s	7.5	16.9	2.0	1.5	10.4	4.0	2.8	0.0	6.0	1.6	5.3	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		0.67
Lane Grp Cap(c), veh/h	210	1021	547	52	705	363	196	0	691	54	620	584
V/C Ratio(X)	0.83	0.87	0.24	0.64	0.70	0.26	0.63	0.00	0.29	0.65	0.27	0.28
Avail Cap(c_a), veh/h	322	1261	654	122	863	434	280	0	691	122	620	584
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.44	0.44	0.44	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	15.6	4.7	38.4	29.8	25.3	36.9	0.0	17.4	38.4	18.6	18.7
Incr Delay (d2), s/veh	5.0	2.6	0.1	12.2	2.0	0.4	3.3	0.0	1.0	12.4	1.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	8.2	0.9	0.9	5.3	1.8	1.4	0.0	3.2	1.0	2.8	2.8
LnGrp Delay(d),s/veh	34.7	18.2	4.8	50.6	31.8	25.7	40.2	0.0	18.5	50.7	19.7	19.9
LnGrp LOS	C	B	A	D	C	C	D		B	D	B	B
Approach Vol, veh/h		1190			625			322			363	
Approach Delay, s/veh		19.1			31.9			26.8			22.8	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	35.7	7.8	28.6	10.1	33.5	15.0	21.4
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	5.5	18.5	5.5	28.5	6.5	17.5	14.5	19.5
Max Q Clear Time (g_c+I1), s	3.6	8.0	3.5	18.9	4.8	7.6	9.5	12.4
Green Ext Time (p_c), s	0.0	0.7	0.0	4.1	0.1	1.2	0.2	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	23.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	474	258	99	319	16	163	302	119	25	339	33
Future Volume (veh/h)	78	474	258	99	319	16	163	302	119	25	339	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	87	527	287	110	354	18	181	336	132	28	377	37
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	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	148	559	441	152	563	488	213	628	670	86	444	44
Arrive On Green	0.08	0.30	0.28	0.09	0.30	0.28	0.24	0.67	0.67	0.05	0.27	0.24
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	1670	164
Grp Volume(v), veh/h	87	527	287	110	354	18	181	336	132	28	0	414
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	0	1834
Q Serve(g_s), s	3.3	19.3	11.2	4.2	11.5	0.6	6.8	6.4	0.3	1.1	0.0	15.0
Cycle Q Clear(g_c), s	3.3	19.3	11.2	4.2	11.5	0.6	6.8	6.4	0.3	1.1	0.0	15.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	148	559	441	152	563	488	213	628	670	86	0	487
V/C Ratio(X)	0.59	0.94	0.65	0.72	0.63	0.04	0.85	0.53	0.20	0.33	0.00	0.85
Avail Cap(c_a), veh/h	152	559	441	152	563	488	213	628	670	152	0	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.9	23.9	22.2	31.2	21.0	17.0	26.0	8.6	2.1	32.2	0.0	24.4
Incr Delay (d2), s/veh	5.6	24.7	3.4	13.2	1.9	0.0	26.3	3.2	0.7	2.2	0.0	16.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	13.6	5.2	2.6	6.2	0.2	4.9	3.7	0.6	0.6	0.0	9.9
LnGrp Delay(d),s/veh	36.5	48.6	25.6	44.4	22.9	17.0	52.3	11.8	2.8	34.4	0.0	41.2
LnGrp LOS	D	D	C	D	C	B	D	B	A	C		D
Approach Vol, veh/h		901			482			649			442	
Approach Delay, s/veh		40.1			27.6			21.3			40.8	
Approach LOS		D			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	27.6	10.0	25.0	12.4	22.6	9.8	25.2
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	19.5	4.5	19.5	6.5	17.5	4.5	19.5
Max Q Clear Time (g_c+I1), s	3.1	8.4	6.2	21.3	8.8	17.0	5.3	13.5
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	0.1	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	32.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	337	60	24	262	76	70	631	72	98	758	85
Future Volume (veh/h)	119	337	60	24	262	76	70	631	72	98	758	85
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	121	344	61	24	267	78	71	644	73	100	773	87
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	454	386	44	339	288	93	921	104	128	1087	486
Arrive On Green	0.09	0.24	0.24	0.02	0.18	0.18	0.05	0.29	0.29	0.07	0.31	0.31
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3205	363	1774	3539	1583
Grp Volume(v), veh/h	121	344	61	24	267	78	71	355	362	100	773	87
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1799	1774	1770	1583
Q Serve(g_s), s	4.0	10.1	1.8	0.8	8.1	2.5	2.3	10.6	10.6	3.3	11.5	2.4
Cycle Q Clear(g_c), s	4.0	10.1	1.8	0.8	8.1	2.5	2.3	10.6	10.6	3.3	11.5	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	154	454	386	44	339	288	93	509	517	128	1087	486
V/C Ratio(X)	0.79	0.76	0.16	0.55	0.79	0.27	0.76	0.70	0.70	0.78	0.71	0.18
Avail Cap(c_a), veh/h	165	535	455	135	504	428	135	509	517	135	1087	486
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	20.7	17.6	28.5	23.1	20.8	27.7	18.8	18.8	27.0	18.2	15.0
Incr Delay (d2), s/veh	20.5	5.2	0.2	10.1	5.0	0.5	14.2	7.7	7.7	24.2	4.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	5.8	0.8	0.5	4.6	1.1	1.5	6.2	6.3	2.5	6.2	1.1
LnGrp Delay(d),s/veh	47.0	25.9	17.8	38.6	28.1	21.3	41.9	26.5	26.5	51.2	22.1	15.8
LnGrp LOS	D	C	B	D	C	C	D	C	C	D	C	B
Approach Vol, veh/h		526			369			788			960	
Approach Delay, s/veh		29.8			27.3			27.9			24.6	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	22.5	7.0	19.9	8.6	23.7	10.6	16.2
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	17.0	4.5	17.0	4.5	17.0	5.5	16.0
Max Q Clear Time (g_c+I1), s	5.3	12.6	2.8	12.1	4.3	13.5	6.0	10.1
Green Ext Time (p_c), s	0.0	1.2	0.0	0.7	0.0	1.4	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	27.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	163	71	26	136	11	43	283	30	14	272	31
Future Volume (veh/h)	21	163	71	26	136	11	43	283	30	14	272	31
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	22	172	75	27	143	12	45	298	32	15	286	33
Adj No. of Lanes	1	1	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	207	90	45	569	47	609	852	92	28	351	298
Arrive On Green	0.02	0.17	0.17	0.03	0.17	0.17	0.34	0.52	0.52	0.02	0.19	0.19
Sat Flow, veh/h	1774	1231	537	1774	3309	275	1774	1654	178	1774	1863	1583
Grp Volume(v), veh/h	22	0	247	27	76	79	45	0	330	15	286	33
Grp Sat Flow(s),veh/h/ln	1774	0	1768	1774	1770	1814	1774	0	1831	1774	1863	1583
Q Serve(g_s), s	1.0	0.0	10.8	1.2	3.0	3.0	1.4	0.0	8.5	0.7	11.8	1.1
Cycle Q Clear(g_c), s	1.0	0.0	10.8	1.2	3.0	3.0	1.4	0.0	8.5	0.7	11.8	1.1
Prop In Lane	1.00		0.30	1.00		0.15	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	39	0	297	45	304	312	609	0	944	28	351	298
V/C Ratio(X)	0.57	0.00	0.83	0.60	0.25	0.25	0.07	0.00	0.35	0.53	0.82	0.11
Avail Cap(c_a), veh/h	100	0	431	122	453	465	609	0	944	100	640	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	0.0	32.2	38.6	28.7	28.7	17.7	0.0	11.5	39.1	31.1	17.4
Incr Delay (d2), s/veh	12.6	0.0	8.8	12.1	0.4	0.4	0.1	0.0	1.0	14.5	18.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	6.0	0.7	1.5	1.6	0.7	0.0	4.6	0.4	7.8	0.6
LnGrp Delay(d),s/veh	51.3	0.0	41.0	50.7	29.1	29.1	17.8	0.0	12.5	53.6	49.7	18.1
LnGrp LOS	D		D	D	C	C	B		B	D	D	B
Approach Vol, veh/h		269			182			375			334	
Approach Delay, s/veh		41.8			32.3			13.1			46.7	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	46.7	7.5	19.0	32.9	20.6	7.2	19.2
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	28.5	5.5	19.5	5.5	27.5	4.5	20.5
Max Q Clear Time (g_c+I1), s	2.7	10.5	3.2	12.8	3.4	13.8	3.0	5.0
Green Ext Time (p_c), s	0.0	1.6	0.0	0.7	0.0	1.3	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	32.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	22	5	18	22	29	5	339	22	22	348	8
Future Volume (veh/h)	7	22	5	18	22	29	5	339	22	22	348	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	8	24	5	19	24	31	5	365	24	24	374	9
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	85	16	78	41	45	10	433	28	848	2553	61
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.25	0.25	0.48	0.72	0.72
Sat Flow, veh/h	242	1298	241	324	633	690	1774	1729	114	1774	3532	85
Grp Volume(v), veh/h	37	0	0	74	0	0	5	0	389	24	187	196
Grp Sat Flow(s),veh/h/ln	1780	0	0	1647	0	0	1774	0	1843	1774	1770	1848
Q Serve(g_s), s	0.0	0.0	0.0	1.9	0.0	0.0	0.2	0.0	16.0	0.6	2.6	2.6
Cycle Q Clear(g_c), s	1.6	0.0	0.0	3.5	0.0	0.0	0.2	0.0	16.0	0.6	2.6	2.6
Prop In Lane	0.22		0.14	0.26		0.42	1.00		0.06	1.00		0.05
Lane Grp Cap(c), veh/h	171	0	0	164	0	0	10	0	462	848	1279	1335
V/C Ratio(X)	0.22	0.00	0.00	0.45	0.00	0.00	0.48	0.00	0.84	0.03	0.15	0.15
Avail Cap(c_a), veh/h	471	0	0	449	0	0	144	0	864	848	1279	1335
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	0.0	0.0	36.5	0.0	0.0	39.6	0.0	28.5	11.1	3.4	3.4
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.9	0.0	0.0	29.9	0.0	16.8	0.0	0.2	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	0.8	0.0	0.0	1.7	0.0	0.0	0.2	0.0	10.3	0.3	1.3	1.4
LnGrp Delay(d),s/veh	36.3	0.0	0.0	38.5	0.0	0.0	69.6	0.0	45.3	11.1	3.7	3.7
LnGrp LOS	D			D			E		D	B	A	A
Approach Vol, veh/h		37			74			394			407	
Approach Delay, s/veh		36.3			38.5			45.6			4.1	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	43.7	25.6		10.7	6.0	63.3		10.7
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5
Max Green Setting (Gmax), s	6.5	37.5		19.5	6.5	37.5		19.5
Max Q Clear Time (g_c+I1), s	2.6	18.0		3.6	2.2	4.6		5.5
Green Ext Time (p_c), s	0.0	2.0		0.1	0.0	2.1		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	26.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	15	6	590	640	13
Future Vol, veh/h	15	15	6	590	640	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	17	7	663	719	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1073	367	734	0	-	0
Stage 1	727	-	-	-	-	-
Stage 2	346	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	215	630	867	-	-	-
Stage 1	439	-	-	-	-	-
Stage 2	688	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	213	630	867	-	-	-
Mov Cap-2 Maneuver	213	-	-	-	-	-
Stage 1	435	-	-	-	-	-
Stage 2	688	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.7	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	867	-	318	-	-
HCM Lane V/C Ratio	0.008	-	0.106	-	-
HCM Control Delay (s)	9.2	-	17.7	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	412	168	184	350	49	91	470	155	54	548	29
Future Volume (veh/h)	38	412	168	184	350	49	91	470	155	54	548	29
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	40	429	175	192	365	51	95	490	0	56	571	30
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	372	555	224	267	588	263	325	1174	525	114	727	38
Arrive On Green	0.21	0.23	0.20	0.15	0.17	0.17	0.18	0.33	0.00	0.13	0.42	0.38
Sat Flow, veh/h	1774	2462	995	1774	3539	1583	1774	3539	1583	1774	3421	180
Grp Volume(v), veh/h	40	307	297	192	365	51	95	490	0	56	295	306
Grp Sat Flow(s),veh/h/ln	1774	1770	1687	1774	1770	1583	1774	1770	1583	1774	1770	1831
Q Serve(g_s), s	1.3	11.4	11.6	7.2	6.7	1.4	3.2	7.5	0.0	2.1	10.1	10.1
Cycle Q Clear(g_c), s	1.3	11.4	11.6	7.2	6.7	1.4	3.2	7.5	0.0	2.1	10.1	10.1
Prop In Lane	1.00		0.59	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	372	399	380	267	588	263	325	1174	525	114	376	389
V/C Ratio(X)	0.11	0.77	0.78	0.72	0.62	0.19	0.29	0.42	0.00	0.49	0.78	0.79
Avail Cap(c_a), veh/h	372	442	422	279	1138	509	325	1174	525	152	493	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.4	25.4	25.9	28.3	27.1	13.6	24.7	18.1	0.0	29.5	18.8	18.9
Incr Delay (d2), s/veh	0.1	7.3	8.3	8.4	1.1	0.4	0.5	1.1	0.0	3.3	15.1	14.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	6.4	6.3	4.1	3.4	0.8	1.6	3.9	0.0	1.1	6.3	6.5
LnGrp Delay(d),s/veh	22.5	32.8	34.2	36.7	28.2	13.9	25.2	19.2	0.0	32.7	33.9	33.7
LnGrp LOS	C	C	C	D	C	B	C	B		C	C	C
Approach Vol, veh/h		644			608			585			657	
Approach Delay, s/veh		32.8			29.7			20.2			33.7	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	27.2	14.5	19.8	16.8	18.9	18.7	15.6
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	18.0	9.5	16.0	4.5	18.0	4.5	21.0
Max Q Clear Time (g_c+I1), s	4.1	9.5	9.2	13.6	5.2	12.1	3.3	8.7
Green Ext Time (p_c), s	0.0	1.4	0.0	0.7	0.0	1.2	0.0	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	29.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	272	779	291	190	505	119	200	749	163	165	767	129
Future Volume (veh/h)	272	779	291	190	505	119	200	749	163	165	767	129
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	286	820	306	200	532	125	211	788	172	174	807	136
Adj No. of Lanes	2	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	651	863	386	211	716	165	211	882	395	201	863	386
Arrive On Green	0.19	0.24	0.24	0.12	0.17	0.17	0.12	0.25	0.25	0.11	0.24	0.24
Sat Flow, veh/h	3442	3539	1583	1774	4135	950	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	286	820	306	200	434	223	211	788	172	174	807	136
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1695	1695	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	5.9	18.2	9.6	9.0	9.7	10.0	9.5	17.2	7.3	7.7	17.9	3.2
Cycle Q Clear(g_c), s	5.9	18.2	9.6	9.0	9.7	10.0	9.5	17.2	7.3	7.7	17.9	3.2
Prop In Lane	1.00		1.00	1.00		0.56	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	651	863	386	211	587	294	211	882	395	201	863	386
V/C Ratio(X)	0.44	0.95	0.79	0.95	0.74	0.76	1.00	0.89	0.44	0.87	0.94	0.35
Avail Cap(c_a), veh/h	651	863	386	211	742	371	211	907	406	201	863	386
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	0.72	0.72	0.72	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	29.8	12.4	35.0	31.4	31.5	35.3	29.0	25.3	34.9	29.6	8.1
Incr Delay (d2), s/veh	0.5	19.6	10.8	39.1	2.1	5.0	62.4	13.3	3.5	30.5	18.5	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	11.2	6.2	6.7	4.7	5.1	8.3	10.1	3.6	5.5	11.0	2.5
LnGrp Delay(d),s/veh	29.1	49.4	23.2	74.1	33.5	36.5	97.7	42.3	28.8	65.4	48.1	10.6
LnGrp LOS	C	D	C	E	C	D	F	D	C	E	D	B
Approach Vol, veh/h		1412			857			1171			1117	
Approach Delay, s/veh		39.6			43.7			50.3			46.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	25.4	15.0	25.0	15.0	25.0	20.6	19.4
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	8.5	20.5	9.5	19.5	9.5	19.5	11.5	17.5
Max Q Clear Time (g_c+I1), s	9.7	19.2	11.0	20.2	11.5	19.9	7.9	12.0
Green Ext Time (p_c), s	0.0	0.7	0.0	0.0	0.0	0.0	0.3	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	44.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	847	118	40	491	97	113	164	26	42	199	99
Future Volume (veh/h)	159	847	118	40	491	97	113	164	26	42	199	99
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	175	931	130	44	540	107	124	180	29	46	219	109
Adj No. of Lanes	1	2	1	1	2	1	2	1	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	1066	883	62	684	694	882	225	36	435	307	148
Arrive On Green	0.29	0.60	0.60	0.04	0.19	0.19	0.26	0.14	0.14	0.25	0.13	0.13
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	1566	252	1774	2321	1114
Grp Volume(v), veh/h	175	931	130	44	540	107	124	0	209	46	165	163
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	0	1818	1774	1770	1666
Q Serve(g_s), s	7.0	17.7	0.0	2.0	11.6	0.0	2.2	0.0	8.9	1.6	7.1	7.5
Cycle Q Clear(g_c), s	7.0	17.7	0.0	2.0	11.6	0.0	2.2	0.0	8.9	1.6	7.1	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.67
Lane Grp Cap(c), veh/h	254	1066	883	62	684	694	882	0	261	435	234	221
V/C Ratio(X)	0.69	0.87	0.15	0.71	0.79	0.15	0.14	0.00	0.80	0.11	0.70	0.74
Avail Cap(c_a), veh/h	322	1305	990	100	863	774	882	0	420	435	387	364
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.41	0.41	0.41	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.0	14.6	4.7	38.2	30.7	13.5	22.9	0.0	33.2	23.4	33.2	33.4
Incr Delay (d2), s/veh	1.8	2.5	0.0	13.6	3.9	0.1	0.1	0.0	22.2	0.1	16.3	19.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	8.6	0.7	1.2	6.1	1.4	1.1	0.0	6.1	0.8	4.5	4.7
LnGrp Delay(d),s/veh	28.8	17.2	4.7	51.8	34.7	13.6	23.0	0.0	55.4	23.5	49.5	53.1
LnGrp LOS	C	B	A	D	C	B	C		E	C	D	D
Approach Vol, veh/h		1236			691			333			374	
Approach Delay, s/veh		17.5			32.5			43.3			47.9	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.1	17.0	8.3	29.6	26.0	16.1	16.9	21.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	5.5	18.5	4.5	29.5	6.5	17.5	14.5	19.5
Max Q Clear Time (g_c+I1), s	3.6	10.9	4.0	19.7	4.2	9.5	9.0	13.6
Green Ext Time (p_c), s	0.0	0.6	0.0	4.4	0.1	1.1	0.2	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	29.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	474	258	99	380	36	203	342	119	101	415	33
Future Volume (veh/h)	202	474	258	99	380	36	203	342	119	101	415	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	224	527	287	110	422	40	226	380	132	112	461	37
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	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	266	631	507	133	491	595	351	441	493	266	626	50
Arrive On Green	0.15	0.34	0.32	0.08	0.26	0.24	0.40	0.47	0.47	0.05	0.06	0.06
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	3320	266
Grp Volume(v), veh/h	224	527	287	110	422	40	226	380	132	112	245	253
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	1770	1816
Q Serve(g_s), s	9.8	20.9	6.4	4.9	17.3	0.0	8.3	14.5	2.0	4.9	10.9	11.0
Cycle Q Clear(g_c), s	9.8	20.9	6.4	4.9	17.3	0.0	8.3	14.5	2.0	4.9	10.9	11.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	266	631	507	133	491	595	351	441	493	266	334	342
V/C Ratio(X)	0.84	0.84	0.57	0.83	0.86	0.07	0.64	0.86	0.27	0.42	0.73	0.74
Avail Cap(c_a), veh/h	266	661	532	133	522	621	351	526	566	266	389	399
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.1	24.4	6.5	36.5	28.0	16.0	21.9	19.9	5.0	34.7	35.5	35.6
Incr Delay (d2), s/veh	20.9	8.8	1.3	27.8	10.7	0.0	4.0	19.5	1.3	1.1	13.4	13.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	12.2	4.4	3.4	10.3	0.6	4.4	9.6	1.2	2.5	6.6	6.8
LnGrp Delay(d),s/veh	54.0	33.2	7.7	64.2	38.8	16.0	25.9	39.4	6.3	35.7	49.0	49.0
LnGrp LOS	D	C	A	E	D	B	C	D	A	D	D	D
Approach Vol, veh/h		1038			572			738			610	
Approach Delay, s/veh		30.7			42.1			29.3			46.5	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	22.9	10.0	31.1	19.8	19.1	16.0	25.1
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	5.5	21.1	4.5	26.9	10.5	16.1	10.5	20.9
Max Q Clear Time (g_c+I1), s	6.9	16.5	6.9	22.9	10.3	13.0	11.8	19.3
Green Ext Time (p_c), s	0.0	0.9	0.0	1.4	0.0	0.6	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	35.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	353	72	24	279	76	83	631	72	98	758	98
Future Volume (veh/h)	131	353	72	24	279	76	83	631	72	98	758	98
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	134	360	73	24	285	78	85	644	73	100	773	100
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	478	406	44	354	301	108	904	102	128	1037	464
Arrive On Green	0.09	0.26	0.26	0.02	0.19	0.19	0.06	0.28	0.28	0.07	0.29	0.29
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3205	363	1774	3539	1583
Grp Volume(v), veh/h	134	360	73	24	285	78	85	355	362	100	773	100
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1799	1774	1770	1583
Q Serve(g_s), s	4.5	10.7	2.2	0.8	8.8	2.5	2.8	10.9	10.9	3.3	11.9	2.9
Cycle Q Clear(g_c), s	4.5	10.7	2.2	0.8	8.8	2.5	2.8	10.9	10.9	3.3	11.9	2.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	162	478	406	44	354	301	108	499	507	128	1037	464
V/C Ratio(X)	0.83	0.75	0.18	0.55	0.81	0.26	0.78	0.71	0.71	0.78	0.75	0.22
Avail Cap(c_a), veh/h	162	525	446	132	494	420	132	499	507	132	1037	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	20.7	17.5	29.1	23.4	20.8	27.9	19.4	19.5	27.5	19.3	16.1
Incr Delay (d2), s/veh	28.6	5.6	0.2	10.2	6.6	0.5	21.7	8.4	8.3	24.9	4.9	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	6.2	1.0	0.5	5.2	1.1	2.0	6.4	6.5	2.5	6.5	1.4
LnGrp Delay(d),s/veh	55.5	26.2	17.7	39.3	29.9	21.3	49.6	27.8	27.8	52.5	24.2	17.2
LnGrp LOS	E	C	B	D	C	C	D	C	C	D	C	B
Approach Vol, veh/h		567			387			802			973	
Approach Delay, s/veh		32.0			28.8			30.1			26.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	22.5	7.0	21.0	9.2	23.2	11.0	17.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	17.0	4.5	17.0	4.5	17.0	5.5	16.0
Max Q Clear Time (g_c+I1), s	5.3	12.9	2.8	12.7	4.8	13.9	6.5	10.8
Green Ext Time (p_c), s	0.0	1.2	0.0	0.7	0.0	1.3	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	29.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	163	84	39	136	11	55	299	42	14	289	31
Future Volume (veh/h)	21	163	84	39	136	11	55	299	42	14	289	31
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	22	172	88	41	143	12	58	315	44	15	304	33
Adj No. of Lanes	1	1	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	205	105	60	622	52	563	799	112	28	368	313
Arrive On Green	0.02	0.18	0.18	0.03	0.19	0.19	0.32	0.50	0.50	0.02	0.20	0.20
Sat Flow, veh/h	1774	1163	595	1774	3309	275	1774	1600	223	1774	1863	1583
Grp Volume(v), veh/h	22	0	260	41	76	79	58	0	359	15	304	33
Grp Sat Flow(s),veh/h/ln	1774	0	1758	1774	1770	1814	1774	0	1823	1774	1863	1583
Q Serve(g_s), s	1.0	0.0	11.4	1.8	2.9	3.0	1.8	0.0	9.8	0.7	12.5	1.1
Cycle Q Clear(g_c), s	1.0	0.0	11.4	1.8	2.9	3.0	1.8	0.0	9.8	0.7	12.5	1.1
Prop In Lane	1.00		0.34	1.00		0.15	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	39	0	310	60	333	341	563	0	910	28	368	313
V/C Ratio(X)	0.57	0.00	0.84	0.69	0.23	0.23	0.10	0.00	0.39	0.53	0.83	0.11
Avail Cap(c_a), veh/h	100	0	428	122	453	465	563	0	910	100	617	524
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	0.0	31.9	38.2	27.6	27.6	19.3	0.0	12.5	39.1	30.8	16.9
Incr Delay (d2), s/veh	12.6	0.0	10.2	13.1	0.3	0.3	0.1	0.0	1.3	14.5	18.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	6.4	1.1	1.4	1.5	0.9	0.0	5.2	0.4	8.3	0.6
LnGrp Delay(d),s/veh	51.3	0.0	42.1	51.3	27.9	27.9	19.3	0.0	13.8	53.6	49.5	17.6
LnGrp LOS	D		D	D	C	C	B		B	D	D	B
Approach Vol, veh/h		282			196			417			352	
Approach Delay, s/veh		42.8			32.8			14.5			46.7	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	45.4	8.2	19.6	30.9	21.3	7.2	20.5
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	4.5	28.5	5.5	19.5	6.5	26.5	4.5	20.5
Max Q Clear Time (g_c+I1), s	2.7	11.8	3.8	13.4	3.8	14.5	3.0	5.0
Green Ext Time (p_c), s	0.0	1.7	0.0	0.7	0.0	1.3	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	32.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	22	15	28	22	29	15	379	32	22	390	8
Future Volume (veh/h)	7	22	15	28	22	29	15	379	32	22	390	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	8	24	16	30	24	31	16	408	34	24	419	9
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	73	43	96	42	44	30	492	41	764	2492	53
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.10	0.10	0.43	0.70	0.70
Sat Flow, veh/h	172	994	583	472	571	599	1774	1696	141	1774	3543	76
Grp Volume(v), veh/h	48	0	0	85	0	0	16	0	442	24	209	219
Grp Sat Flow(s),veh/h/ln	1749	0	0	1642	0	0	1774	0	1838	1774	1770	1849
Q Serve(g_s), s	0.0	0.0	0.0	1.9	0.0	0.0	0.7	0.0	18.9	0.6	3.2	3.2
Cycle Q Clear(g_c), s	2.1	0.0	0.0	3.9	0.0	0.0	0.7	0.0	18.9	0.6	3.2	3.2
Prop In Lane	0.17		0.33	0.35		0.36	1.00		0.08	1.00		0.04
Lane Grp Cap(c), veh/h	181	0	0	182	0	0	30	0	533	764	1245	1301
V/C Ratio(X)	0.27	0.00	0.00	0.47	0.00	0.00	0.54	0.00	0.83	0.03	0.17	0.17
Avail Cap(c_a), veh/h	443	0	0	428	0	0	100	0	884	764	1245	1301
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	0.0	0.0	36.1	0.0	0.0	39.5	0.0	34.2	13.2	4.0	4.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	1.9	0.0	0.0	14.1	0.0	13.9	0.0	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	1.9	0.0	0.0	0.5	0.0	11.7	0.3	1.6	1.7
LnGrp Delay(d),s/veh	36.1	0.0	0.0	38.0	0.0	0.0	53.6	0.0	48.2	13.2	4.3	4.3
LnGrp LOS	D			D			D		D	B	A	A
Approach Vol, veh/h		48			85			458			452	
Approach Delay, s/veh		36.1			38.0			48.4			4.7	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	39.9	28.7		11.4	6.8	61.8		11.4
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5
Max Green Setting (Gmax), s	6.5	38.5		18.5	4.5	40.5		18.5
Max Q Clear Time (g_c+I1), s	2.6	20.9		4.1	2.7	5.2		5.9
Green Ext Time (p_c), s	0.0	2.3		0.1	0.0	2.4		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	28.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	15	6	621	670	23
Future Vol, veh/h	25	15	6	621	670	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	17	7	698	753	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1129	390	779	0	-	0
Stage 1	766	-	-	-	-	-
Stage 2	363	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	198	609	834	-	-	-
Stage 1	419	-	-	-	-	-
Stage 2	674	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	196	609	834	-	-	-
Mov Cap-2 Maneuver	196	-	-	-	-	-
Stage 1	416	-	-	-	-	-
Stage 2	674	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.5	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	834	-	263	-	-
HCM Lane V/C Ratio	0.008	-	0.171	-	-
HCM Control Delay (s)	9.4	-	21.5	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	412	168	184	350	59	91	480	155	64	558	39
Future Volume (veh/h)	48	412	168	184	350	59	91	480	155	64	558	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	50	429	175	192	365	61	95	500	0	67	581	41
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	544	220	261	1103	493	388	1296	580	116	716	50
Arrive On Green	0.06	0.22	0.20	0.15	0.31	0.31	0.22	0.37	0.00	0.13	0.43	0.39
Sat Flow, veh/h	1774	2462	995	1774	3539	1583	1774	3539	1583	1774	3354	236
Grp Volume(v), veh/h	50	307	297	192	365	61	95	500	0	67	306	316
Grp Sat Flow(s),veh/h/ln	1774	1770	1687	1774	1770	1583	1774	1770	1583	1774	1770	1821
Q Serve(g_s), s	2.2	13.1	13.4	8.3	6.3	2.2	3.5	8.3	0.0	2.8	12.1	12.2
Cycle Q Clear(g_c), s	2.2	13.1	13.4	8.3	6.3	2.2	3.5	8.3	0.0	2.8	12.1	12.2
Prop In Lane	1.00		0.59	1.00		1.00	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	100	391	373	261	1103	493	388	1296	580	116	378	388
V/C Ratio(X)	0.50	0.79	0.80	0.74	0.33	0.12	0.25	0.39	0.00	0.58	0.81	0.81
Avail Cap(c_a), veh/h	133	442	422	310	1239	554	388	1296	580	155	487	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	29.4	29.9	32.6	21.1	19.7	25.8	18.7	0.0	33.7	21.5	21.7
Incr Delay (d2), s/veh	3.8	8.1	9.2	7.3	0.2	0.1	0.3	0.9	0.0	4.4	17.0	16.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	7.3	7.2	4.6	3.1	1.0	1.8	4.2	0.0	1.5	7.6	7.8
LnGrp Delay(d),s/veh	40.4	37.5	39.1	39.9	21.3	19.8	26.1	19.6	0.0	38.1	38.5	38.5
LnGrp LOS	D	D	D	D	C	B	C	B		D	D	D
Approach Vol, veh/h		654			618			595			689	
Approach Delay, s/veh		38.4			26.9			20.6			38.5	
Approach LOS		D			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	33.3	15.8	21.7	21.5	21.1	8.5	28.9
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	5.5	21.5	12.5	18.5	6.5	20.5	4.5	26.5
Max Q Clear Time (g_c+I1), s	4.8	10.3	10.3	15.4	5.5	14.2	4.2	8.3
Green Ext Time (p_c), s	0.0	1.7	0.1	0.8	0.0	1.4	0.0	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	31.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑↑			↱
Traffic Vol, veh/h	0	811	516	20	0	38
Future Vol, veh/h	0	811	516	20	0	38
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	882	561	22	0	41

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	292
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	-	0	705
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	705
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	705
HCM Lane V/C Ratio	-	-	-	0.059
HCM Control Delay (s)	-	-	-	10.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑↑			↱
Traffic Vol, veh/h	0	811	516	162	0	76
Future Vol, veh/h	0	811	516	162	0	76
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	882	561	176	0	83

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	369
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	-	0	629
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	629
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	629
HCM Lane V/C Ratio	-	-	-	0.131
HCM Control Delay (s)	-	-	-	11.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.5

Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	114	152	101	396	397	121
Future Vol, veh/h	114	152	101	396	397	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	80	-	-	-
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	124	165	110	430	432	132

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1148	282	564	0	-	0
Stage 1	498	-	-	-	-	-
Stage 2	650	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	205	716	1006	-	-	-
Stage 1	577	-	-	-	-	-
Stage 2	519	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	183	716	1006	-	-	-
Mov Cap-2 Maneuver	183	-	-	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	519	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	31.5	1.8	0
HCM LOS	D		

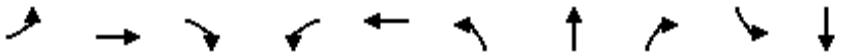
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1006	-	183	716	-	-
HCM Lane V/C Ratio	0.109	-	0.677	0.231	-	-
HCM Control Delay (s)	9	-	58.2	11.5	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.4	-	4.1	0.9	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	474	258	99	380	36	203	342	119	101	415	33
Future Volume (veh/h)	202	474	258	99	380	36	203	342	119	101	415	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	224	527	287	110	422	40	226	380	132	112	461	37
Adj No. of Lanes	1	1	1	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	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	390	607	486	133	591	56	374	441	493	288	626	50
Arrive On Green	0.22	0.33	0.31	0.08	0.18	0.16	0.42	0.47	0.47	0.05	0.06	0.06
Sat Flow, veh/h	1774	1863	1583	1774	3269	309	1774	1863	1583	1774	3320	266
Grp Volume(v), veh/h	224	527	287	110	228	234	226	380	132	112	245	253
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1770	1808	1774	1863	1583	1774	1770	1816
Q Serve(g_s), s	9.0	21.3	6.4	4.9	9.7	9.8	7.9	14.5	2.0	4.9	10.9	11.0
Cycle Q Clear(g_c), s	9.0	21.3	6.4	4.9	9.7	9.8	7.9	14.5	2.0	4.9	10.9	11.0
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	390	607	486	133	320	327	374	441	493	288	334	342
V/C Ratio(X)	0.57	0.87	0.59	0.83	0.71	0.72	0.60	0.86	0.27	0.39	0.73	0.74
Avail Cap(c_a), veh/h	390	661	532	133	495	506	374	526	566	288	389	399
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	25.4	6.5	36.5	30.8	31.0	20.6	19.9	4.9	34.0	35.5	35.6
Incr Delay (d2), s/veh	2.0	11.2	1.5	27.8	2.4	2.4	2.8	19.5	1.3	0.9	13.4	13.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	12.7	4.5	3.4	5.0	5.1	4.0	9.6	1.1	2.5	6.6	6.8
LnGrp Delay(d),s/veh	29.9	36.6	7.9	64.3	33.2	33.4	23.3	39.4	6.2	34.9	49.0	49.0
LnGrp LOS	C	D	A	E	C	C	C	D	A	C	D	D
Approach Vol, veh/h		1038			572			738			610	
Approach Delay, s/veh		27.2			39.2			28.5			46.4	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	22.9	10.0	30.1	20.9	19.1	21.6	18.5
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	5.5	21.1	4.5	26.9	10.5	16.1	10.5	20.9
Max Q Clear Time (g_c+I1), s	6.9	16.5	6.9	23.3	9.9	13.0	11.0	11.8
Green Ext Time (p_c), s	0.0	0.9	0.0	1.3	0.0	0.6	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	33.8
HCM 2010 LOS	C

APPENDIX E
QUEUE ANALYSIS



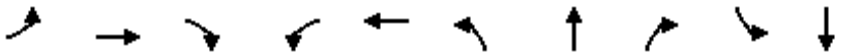
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	184	260	187	155	758	349	533	167	133	507
v/c Ratio	0.80	0.67	0.34	0.41	0.74	1.02	0.91	0.17	0.88	0.69
Control Delay	65.3	27.7	2.1	35.9	32.7	86.9	37.6	0.4	91.9	31.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.3	27.7	2.1	35.9	32.7	86.9	37.6	0.4	91.9	31.5
Queue Length 50th (ft)	108	98	0	77	200	~227	288	0	80	133
Queue Length 95th (ft)	#260	151	1	136	231	#396	#435	m0	#180	188
Internal Link Dist (ft)		380			5194		1189			251
Turn Bay Length (ft)	180		60	160		200		120	150	
Base Capacity (vph)	230	476	604	379	1213	341	600	978	151	824
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.55	0.31	0.41	0.62	1.02	0.89	0.17	0.88	0.62

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	224	527	287	110	462	226	380	132	112	498
v/c Ratio	0.62	0.85	0.46	0.75	0.62	0.82	0.73	0.19	0.61	0.62
Control Delay	20.7	19.1	2.4	69.5	31.1	48.9	22.9	0.7	50.9	26.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.7	19.1	2.4	69.5	31.1	48.9	22.9	0.7	50.9	26.8
Queue Length 50th (ft)	70	46	0	55	107	114	54	0	57	125
Queue Length 95th (ft)	m#182	#374	m0	#144	145	#238	#281	0	#140	127
Internal Link Dist (ft)		380			5194		1189			251
Turn Bay Length (ft)	180		60	160		200		120	150	
Base Capacity (vph)	362	661	654	146	986	276	526	690	183	802
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.80	0.44	0.75	0.47	0.82	0.72	0.19	0.61	0.62

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX F
PEAK-HOUR SIGNAL WARRANT

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

DIST	CO	RTE	PM

COUNT DATE 8/23/18
CALC jc DATE 9/25/18
CHK kh DATE 9/25/18

Major St: Lasselle St — Critical Approach Speed 45 mph
Minor St: Brodiaea Ave — Critical Approach Speed 25 mph

Speed limit or critical speed on major street traffic > 40 mph..... [X]
or
In built up area of isolated community of < 10,000 population..... [ ] **RURAL (R)**

[ ] **URBAN (U)**

INTERSECTION #7

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 3 - Peak Hour **SATISFIED YES ☐ NO ☒**
(Part A or Part B must be satisfied)

PART A **SATISFIED YES ☐ NO ☒**
(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes ☐ No ☒
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes ☐ No ☒
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☐ No ☒

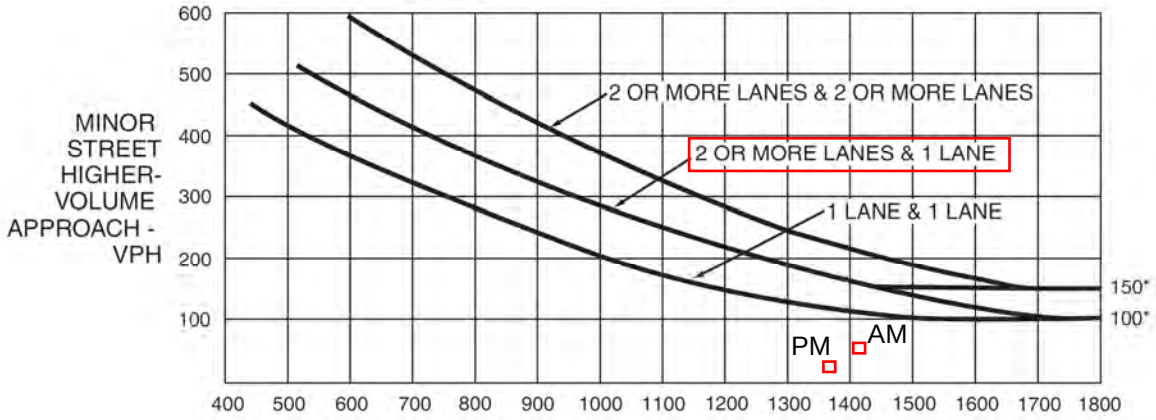
PART B **SATISFIED YES ☐ NO ☒**

APPROACH LANES	AM One	AM 2 or More	PM Hour
Both Approaches - Major Street		1476	1359
Higher Approach - Minor Street	74		40

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐ No ☐
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☐ No ☒

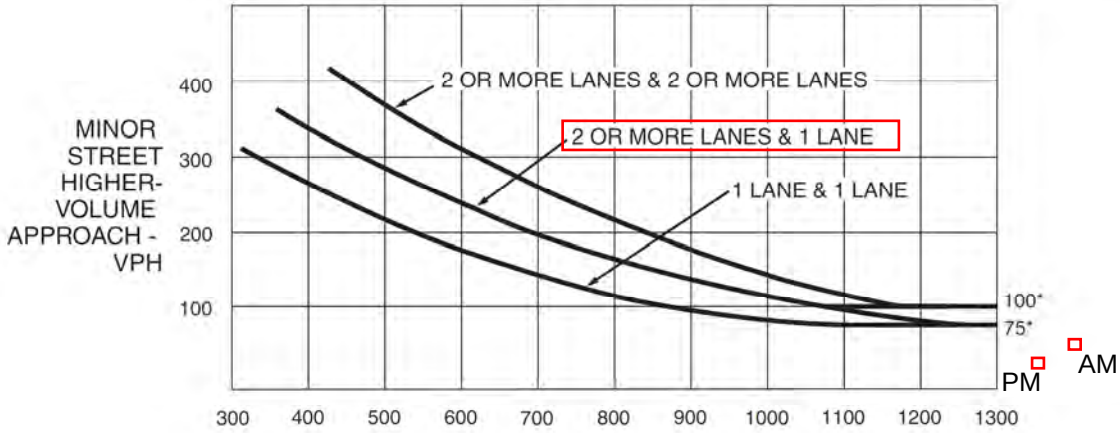
The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

INTERSECTION #7
MAJOR ST: Lasselle St
MINOR ST: Brodiaea Ave

Warrant 3: Peak Hour- NOT SATISFIED
Warrant 3: Peak Hour (70%)- NOT SATISFIED