

Traffic Impact Study

South Windsor High School South Windsor, Connecticut

Prepared for: South Windsor Public Schools



Prepared by:
KWH Enterprise, LLC
February 2024

Traffic Impact Study South Windsor High School South Windsor, Connecticut

This study examines the traffic impact of connecting two driveways on Ayers Road to the South Windsor High School in South Windsor, Connecticut. Levels of Service (LOS) for traffic flows under 2020 existing and 2025 no-build and build traffic conditions were analyzed to identify any deficiencies in the existing and future traffic operations at area intersections. For the purpose of this traffic study, 2025 was assumed to be the year during which the construction is completed.

I. Summary

- The two new high school driveways on Ayers Road will improve access to the school during the peak school hours.
- Delays and queuing will remain for the eastbound approach of Ayers Road at the Nevers Road intersection during the weekday morning and afternoon peak hours and for traffic exiting the existing high school driveway on Ayers Road during the weekday morning peak hour.
- One potential option to address the delays and queuing for the exiting traffic at the
 existing school driveway on Ayers Road is restricting the exiting traffic to making
 right-turn exits only at this existing school driveway during the morning peak hour.

II. Project Description

The proposed improvements will include connecting two driveways on Ayers Road to the existing South Windsor High School to improve access and traffic circulation.

III. Existing Traffic Conditions

For the evaluation of the quality of traffic operation in the vicinity of the development, the following unsignalized intersections were analyzed for the study:

- Nevers Road and Collins Crossing;
- Nevers Road and Ayers Road;
- Nevers Road, the existing high school exit driveway, and the senior center driveway;
- The existing high school driveway and Ayers Road;
- New high school driveway (west), Sunset Terrace, and Ayers Road; and
- New high school driveway (east) and Ayers Road.

The 2020 traffic volumes used for the analyses (Figures 1 and 2 of the Appendices) were from a memorandum prepared by Milone & MacBroom (SLR Consulting) and dated March 10, 2020. All intersection approach volumes including those for the school

driveways were increased by 0.6 percent per year, or 3.0 percent over five years, to generate the 2025 traffic volumes. The 0.6 percent annual traffic growth for South Windsor was recommended by CTDOT.

Capacity Analysis

To assess the quality of traffic flow, intersection capacity analysis was conducted for the existing, future no-build, and future build traffic conditions. Capacity analysis provides an indication of how well roadway facilities serve the traffic demands placed upon them. Synchro 12, a software package that includes the evaluation criteria of the *Highway Capacity Manual, 7th Edition*, was used to analyze the intersections.

Level of service (LOS) is the term used to describe the different operating conditions that occur on a given roadway segment or intersection under various traffic conditions. It is a qualitative measure of the effects of a number of factors including roadway geometry, speed, travel delay, freedom to maneuver, and safety. Six levels of service can be defined for each type of facility. Each level of service (LOS) is given a letter designation from A to F, with LOS A representing the best operating conditions and LOS F representing the worst.

Table 1 that follows shows the capacity analysis and queue results for the analyzed intersections under the 2020 existing traffic conditions. The traffic approaches with delays and queuing issues during the two peak hours are as follows:

- Eastbound Ayers Road at the Nevers Road intersection;
- Eastbound right lane of the existing high school exit driveway on Nevers Road:
- Northbound lane of the existing high school driveway on Ayers Road; and
- Westbound Ayers Road left-turn movement into the existing high school driveway.

These are the traffic approaches with LOS E or F, moderate queues (95th-percentile queues of more than five and fewer than ten vehicles), or long queues (95th-percentile queues of ten vehicles or more). Please note that the traffic analyses are approximations of the traffic operation; the delays and queuing conditions may not exactly match the field conditions.

The delays and queuing under the existing conditions can be attributed to the limited number of driveways for the high school during the peak hours, an issue that this project attempts to address by adding two additional driveways to provide improved access to the school.

Table 1 Capacity Analyses for Existing Conditions

Table I Capacity Allalyses for Lx	ioting Contaitions	
	2020 Existing	g Conditions
Intersection	Weekday Morning Peak Hour of School	Weekday Afternoon Peak Hour of School
	LOS and Queue	LOS and Queue
Nevers Road and Collins Crossing		
NB Nevers Road Left Turn	Α	Α
NB Nevers Road Through	Α	Α
EB Collins Crossing	С	В
Nevers Road and Ayers Road		
NB Nevers Road Left Turn	В	Α
WB Nevers Road Through	Α	Α
EB Ayers Road	F, Moderate Queues	E, Moderate Queues
Nevers Road, High School Exit Driveway, and Senior Center Driveway		
EB High School Exit Driveway Left Lane	D	С
EB High School Exit Driveway Right Lane	C, Moderate Queues	В
WB Senior Center Driveway	Е	С
SB Nevers Road Left Turn	А	А
SB Nevers Road Through	А	А
High School Driveway and Ayers Road		
NB High School Driveway	A	F, Long Queues
WB Ayers Road Left Turn	F, Long Queues	А
WB Ayers Road Through	А	А

EB Eastbound
WB Westbound
NB Northbound
SB Southbound
LOS Level of Service

IV. Future Traffic Conditions

For the purpose of this traffic impact study, it was assumed that the construction will be completed in 2025.

As a comparison for demonstrating the traffic impact of the project, a 2025 no-build scenario is included in the study. Figures 3 and 4 of the Appendices show the 2025 no-build traffic volumes, which were generated by using an annual traffic growth rate of 0.6 percent between 2020 and 2025.

Table 2 details the capacity analysis results for the 2025 no-build traffic conditions. There will be some increases in average delays and queuing during the two peak hours. The only change in LOS is for the eastbound Ayers Road approach at the Nevers Road intersection, which will drop to a LOS F from the existing LOS E.

Table 2 Capacity Analyses for No-Build Conditions

lable 2 Capacity Analyses for No	-Bulla Conditions	5
	2025 No-Buil	d Conditions
Intersection	Weekday Morning Peak Hour of School	Weekday Afternoon Peak Hour of School
	LOS and Queue	LOS and Queue
Nevers Road and Collins Crossing		
NB Nevers Road Left Turn	Α	Α
NB Nevers Road Through	А	Α
EB Collins Crossing	С	В
Nevers Road and Ayers Road		
NB Nevers Road Left Turn	В	Α
WB Nevers Road Through	А	Α
EB Ayers Road	F, Moderate Queues	F, Moderate Queues
Nevers Road, High School Exit Driveway, and		
Senior Center Driveway		
EB High School Exit Driveway Left Lane	Е	С
EB High School Exit Driveway Right Lane	C, Moderate Queues	В
WB Senior Center Driveway	Е	С
SB Nevers Road Left Turn	А	A
SB Nevers Road Through	Α	А
High School Driveway and Ayers Road		
NB High School Driveway	Α	F, Long Queues
WB Ayers Road Left Turn	F, Long Queues	Α
WB Ayers Road Through	Α	А

EB Eastbound
WB Westbound
NB Northbound
SB Southbound
LOS Level of Service

Traffic Diversions

With the addition of the two new driveways on Ayers Road, existing peak-hour entry and exit traffic volumes were redistributed among the four driveways. The estimated traffic diversions are shown in Figure 5.

Capacity Analysis

Table 3 shows the capacity analysis and queuing results for the 2025 build traffic conditions when the new high school driveways are in place. The project will result in the following changes when compared with the 2025 no-build conditions:

- The eastbound Ayers Road approach at the Nevers Road intersection will experience longer delays and queuing during both peak hours because of the increased high school traffic using Ayers Road;
- The queues for the school driveway on Nevers Road will become shorter. The left lane of the school driveway will drop to a LOS E from a LOS D, a result of increased southbound Nevers Road traffic north of the driveway intersection;
- The westbound queues on Ayers Road will become shorter as a result of the three driveways for the entry traffic on Ayers Road instead of the one driveway under the existing and no-build conditions;
- Traffic exiting the existing high school driveway on Ayers Road will continue to experience delays and queuing during the morning peak hour. One potential option to address this is that staff directing traffic at the existing school driveway on Ayers Road can restrict the exiting traffic to right-turns only during the morning peak hour.

Table 3 Capacity Analyses for Build Conditions

Table 3 Capacity Analyses for Bu	ila Collaitions	
	2025 Build	Conditions
Intersection	Weekday Morning Peak Hour of School	Weekday Afternoon Peak Hour of School
	LOS and Queue	LOS and Queue
Nevers Road and Collins Crossing		
NB Nevers Road Left Turn	Α	Α
NB Nevers Road Through	Α	Α
EB Collins Crossing	С	В
Nevers Road and Ayers Road		
NB Nevers Road Left Turn	В	Α
WB Nevers Road Through	Α	Α
EB Ayers Road	F, Long Queues	F, Moderate Queues
Nevers Road, High School Exit Driveway, and Senior Center Driveway		
EB High School Exit Driveway Left Lane	Е	С
EB High School Exit Driveway Right Lane	С	В
WB Senior Center Driveway	Е	С
SB Nevers Road Left Turn	A	Α
SB Nevers Road Through	А	Α
High School Driveway and Ayers Road		
NB High School Driveway	F, Long Queues	С
WB Ayers Road Left Turn	В	Α
WB Ayers Road Through	A	Α
New High School Driveway (West), Sunset Terrace, and Ayers		
EB Ayers Road Left Turn	А	А
EB Ayers Road Through and Right Turn	А	А
WB Ayers Road Left Turn	С	А
WB Ayers Road Through and Right Turn	А	А
SB Sunset Terrace	F	С
New High School Driveway (East) and Ayers Road		
NB New High School Driveway (East)	D	В
WB Ayers Road Left Turn	Α	Α
WB Ayers Road Through	А	А

EB Eastbound
WB Westbound
NB Northbound
SB Southbound
LOS Level of Service

V. Conclusions

Area traffic operation was analyzed for the addition of two driveways on Ayers Road for the South Windsor High School. Overall, the project will improve access to the school during the peak hours. Delays and queuing will remain for the eastbound approach of Ayers Road at the Nevers Road intersection during both peak hours and for traffic exiting the existing high school driveway on Ayers Road during the weekday morning peak hour.

Kermit Hua, PE, PTOE

Principal

KWH Enterprise, LLC

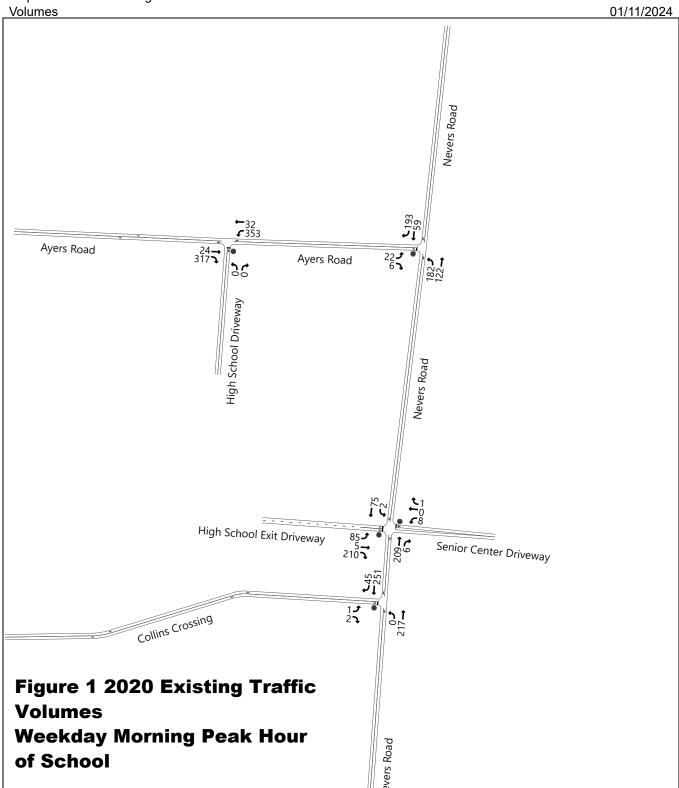
(203) 606-3525

Kermit Hua

kermit.hua@kwhenterprise.com

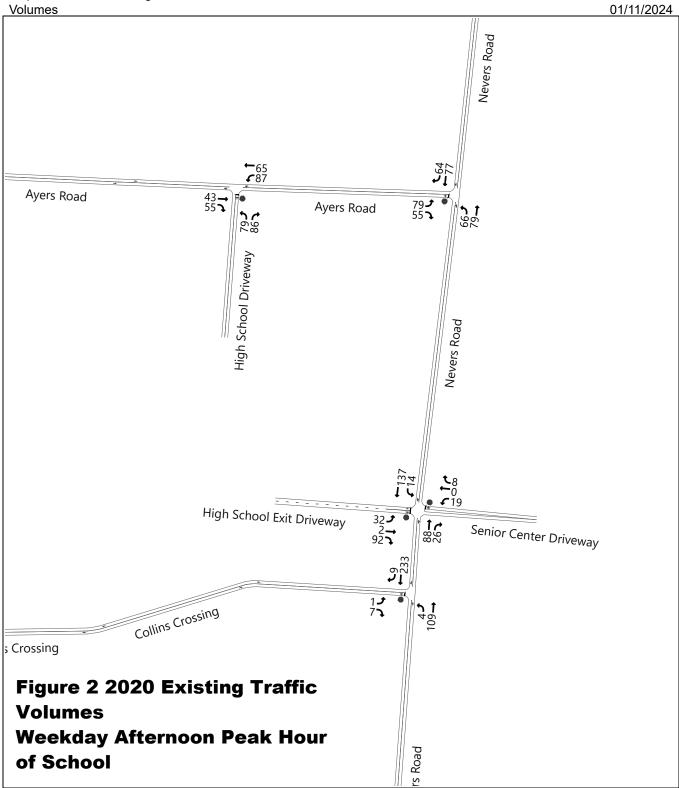
Technical Appendices

Map - South Windsor High School



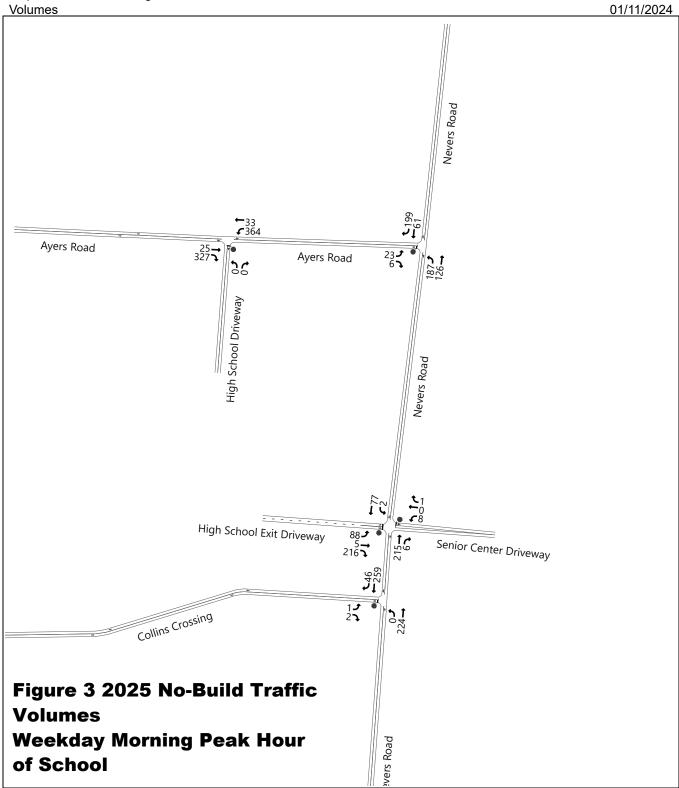
South Windsor High School, Weekday Morning Peak Hour of School, 2020 Existing Conditions KWH Enterprise, LLC

Map - South Windsor High School



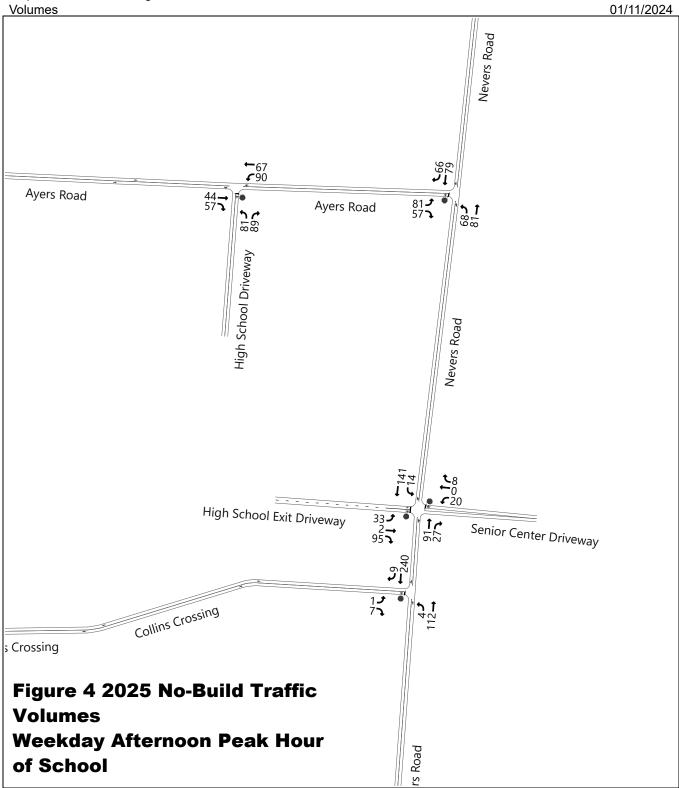
South Windsor High School, Weekday Afternoon Peak Hour of School, 2020 Existing Conditions KWH Enterprise, LLC

Map - South Windsor High School



South Windsor High School, Weekday Morning Peak Hour of School, 2025 No-Build Conditions KWH Enterprise, LLC

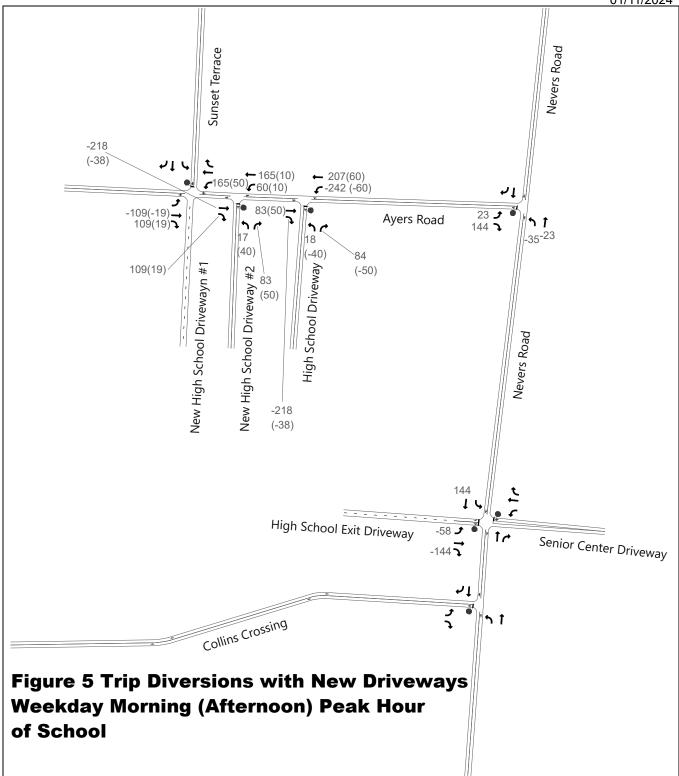
Map - South Windsor High School



South Windsor High School, Weekday Afternoon Peak Hour of School, 2025 No-Build Conditions KWH Enterprise, LLC

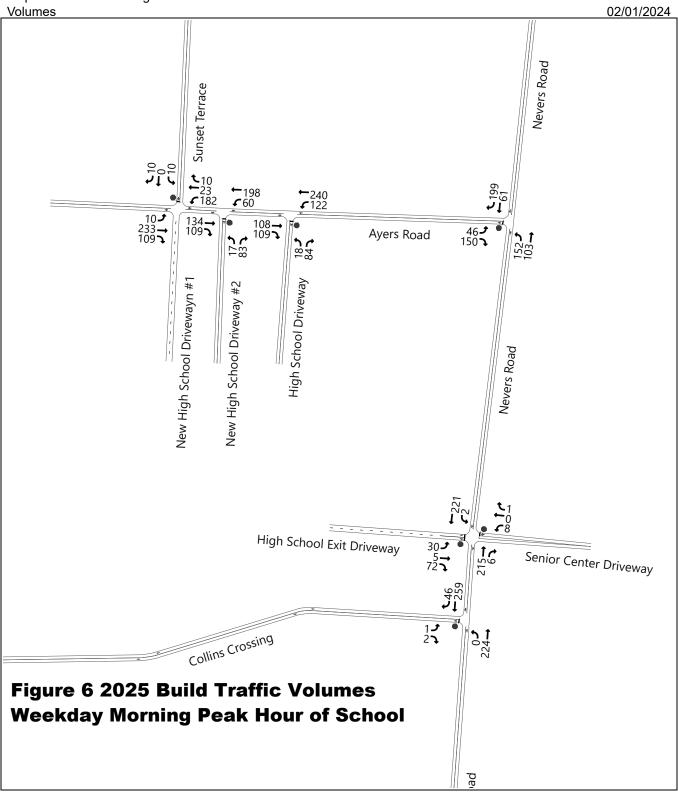
Map - South Windsor High School





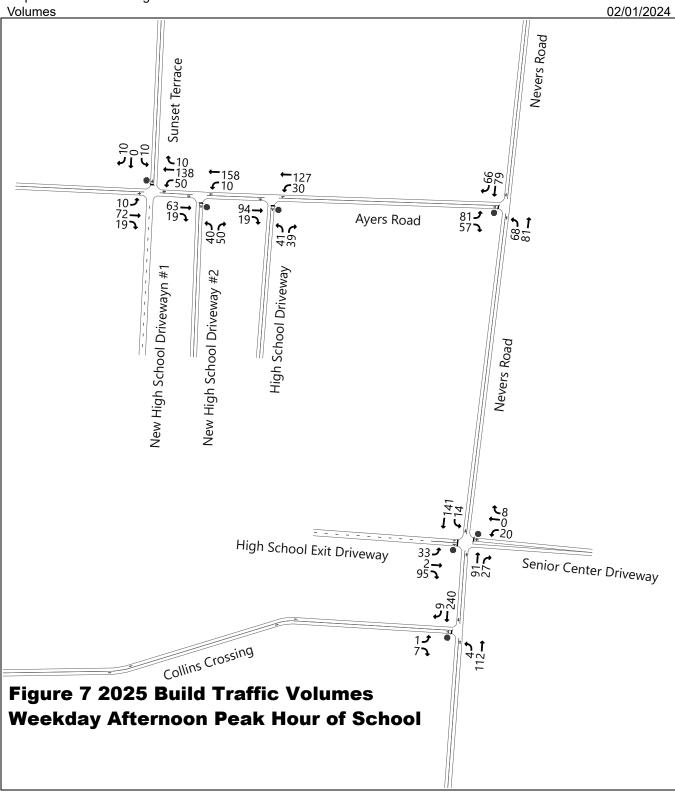
South Windsor High School, Trip Diversions KWH Enterprise, LLC

Map - South Windsor High School



South Windsor High School, Weekday Morning Peak Hour of School, 2025 Build Conditions KWH Enterprise, LLC

Map - South Windsor High School



South Windsor High School, Weekday Afternoon Peak Hour of School, 2025 Build Conditions KWH Enterprise, LLC

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			र्स	1	
Traffic Vol, veh/h	1	2	0	217	251	45
Future Vol, veh/h	1	2	0	217	251	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage	, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	0	0	0	4	2	0
Mvmt Flow	3	5	0	543	628	113
				0.0	0_0	
	Minor2		//ajor1		Major2	
Conflicting Flow All	1226	684	740	0	-	0
Stage 1	684	-	-	-	-	-
Stage 2	543	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	199	452	876	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	199	452	876	-	_	-
Mov Cap-2 Maneuver	199	-102	-	-	_	-
Stage 1	505		-	_	_	_
Stage 2	587	-	-	-	-	
Glage 2	301	_	_	_		_
Approach	EB		NB		SB	
HCM Control Delay, s/v	v16.61		0		0	
HCM LOS	С					
Minor Long/Major Mys	.4	NDI	NDT	CDI 51	CDT	CDD
Minor Lane/Major Mvm	IL	NBL	וומוו	EBLn1	SBT	SBR
Capacity (veh/h)		876	-	318	-	-
HCM Lane V/C Ratio		-	-	0.024	-	-
HCM Control Delay (s/	veh)	0	-	16.6	-	-
HCM Lane LOS		A	-	С	-	-
HCM 95th %tile Q(veh))	0	-	0.1	-	-

Intersection								
Int Delay, s/veh	18.6							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	A			सी	1			
Traffic Vol, veh/h	22	6	182	122	59	193		
Future Vol, veh/h	22	6	182	122	59	193		
Conflicting Peds, #/h	r 0	0	0	0	0	1		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-		-	None	-	None		
Storage Length	-	-	-	-	-	-		
eh in Median Storag	ge,# 0	-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
eak Hour Factor	40	40	40	40	40	40		
Heavy Vehicles, %	9	0	5	6	0	2		
/lvmt Flow	55	15	455	305	148	483		
Acier/Miner	Misse		Mais 1		/oicr0			
Major/Minor	Minor2		Major1		Major2	^		
Conflicting Flow All	1605	390	631	0	-	0		
Stage 1	390	-	-	-	-	-		
Stage 2	1215	-	- 4.45	-	-	-		
ritical Hdwy	6.49	6.2	4.15	-	-	-		
ritical Hdwy Stg 1	5.49	-	-	-	-	-		
ritical Hdwy Stg 2	5.49	-	-	-	-	-		
ollow-up Hdwy	3.581		2.245	-	-	-		
ot Cap-1 Maneuver		663	937	-	-	-		
Stage 1	669	-	-	-	-	-		
Stage 2	272	-	-	-	-	-		
Platoon blocked, %				-	-	-		
Nov Cap-1 Maneuve		662	936	-	-	-		
Nov Cap-2 Maneuve		-	-	-	-	-		
Stage 1	277	-	-	-	-	-		
Stage 2	271	-	-	-	-	-		
Approach	EB		NB		SB			
HCM Control Delay,			7.44		0			
ICM LOS	F. F.							
						05.5		
linor Lane/Major Mv	mt	NBL	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)		778	-		-	-		
CM Lane V/C Ratio		0.486		1.214	-	-		
ICM Control Delay (s/veh)	12.4		306.3	-	-		
CM Lane LOS		В	Α	F	-	-		
ICM 95th %tile Q(ve	h)	2.7	-	6	-	-		
lotes								
: Volume exceeds c	anacity	\$· Da	alay eye	eeds 30	ηης	+. Com	putation Not Defined	*: All major volume in platoon
. volume exceeds c	apacity	ψ. Dt	siay ext	eeus 30	103	·. Colli	patation Not Delined	. Ali major volume in piatoon

Intersection												
Int Delay, s/veh	11.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	1			4			1>			ની	
Traffic Vol, veh/h	85	5	210	8	0	1	0	209	6	2	75	0
Future Vol, veh/h	85	5	210	8	0	1	0	209	6	2	75	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	40	40	40	40	40	40	40	40	40	40	40	40
Heavy Vehicles, %	8	2	10	25	2	100	2	3	17	0	5	2
Mvmt Flow	213	13	525	20	0	3	0	523	15	5	188	0
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	720	735	188	734	728	530	- viajoi i	0	0	538	0	0
Stage 1	198	198	-	530	530	-	_	-	-	-	-	-
Stage 2	523	538	_	204	198	_	_	-	_	<u>-</u>	_	<u>-</u>
Critical Hdwy	7.18	6.52	6.3	7.35	6.52	7.2	-	_	-	4.1	-	_
Critical Hdwy Stg 1	6.18	5.52	-	6.35	5.52	- 1.2	-	-	-	- -	-	-
Critical Hdwy Stg 2	6.18	5.52	-	6.35	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.572	4.018	3.39	3.725	4.018	4.2	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	335	347	834	308	350	398	0	-	-	1041	-	0
Stage 1	791	737	-	493	527	-	0	-	-	-	-	0
Stage 2	527	523	-	748	737	-	0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	332	345	834	110	348	398	-	-	-	1041	-	-
Mov Cap-2 Maneuver	332	345	-	110	348	-	-	-	-	-	-	-
Stage 1	786	734	-	493	527	-	-	-	-	-	-	-
Stage 2	523	523	-	271	734	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s				42.09			0			0.22		
HCM LOS	C			42.03 E			0			U.ZZ		
TOW LOO												
N. 61		NST	NES	EDL (EDL 6	A/DL /	051	057				
Minor Lane/Major Mvr	nt	NBT		EBLn1			SBL	SBT				
Capacity (veh/h)		-	-	00_	808	119	47	-				
HCM Lane V/C Ratio		-	-			0.189		-				
HCM Control Delay (s.	/veh)	-	-	33.3	17.9	42.1	8.5	0				
HCM Lane LOS		-	-	D	С	E	Α	Α				
HCM 95th %tile Q(veh	1)	-	-	4.2	5.2	0.7	0	-				

Description Configurations Configu	Intersection									
### Configurations 1	Int Delay, s/veh	65.5								
affic Vol., veh/h 24 317 353 32 0 0 thure Vol., veh/h 24 317 353 32 0 0 millicting Peds, #hr 0 46 46 0 46 0 gn Control Free Free Free Free Free Stop Stop Channelized - None - None - None orage Length 0 0	Movement	EBT	EBR	WBL	WBT	NBL	NBR			
affic Vol, veh/h 24 317 353 32 0 0 thure Vol, veh/h 24 317 353 32 0 0 millicting Peds, #hr 0 46 46 0 46 0 gn Control Free Free Free Free Free Stop Stop Channelized - None - None - None orage Length 0 0 th in Median Storage, # 0 0 0 0 - ade, % 0 0 0 0 - ade, % 0 0 0 0 0 - ade, % 0 0 0 0 0 - ade, % 0 0 0 0 0 - ade, % 8 6 3 1 2 2 mt Flow 60 793 883 80 0 0 sport/Minor Major1 Major2 Minor1 millicting Flow All 0 899 0 2393 502 Stage 1 502 - Stage 2 1891 - itical Hdwy Stg 1 502 - stitical Hdwy Stg 1 542 - itical Hdwy Stg 2 542 - itical Hdwy Stg 2 542 - itical Hdwy Stg 2 542 - itical Hdwy C - 2,227 3,518 3,318 tt Cap-1 Maneuver - 752 3 7 569 Stage 1 5542 - itical Hdwy 2,227 3,518 3,318 tt Cap-1 Maneuver 7752 3 7 569 Stage 1 581 - Stage 2 1300 - stage 1 581 - Stage 2 1300 - stage 1 581 - Stage 1 581 - Stage 2 581 - Stage 2 581 - Stage 1 581 - Stage 2 581 - Stage 2 581 - Stage 1 581 - Stage 2 581 - Stage 2 581 - Stage 1 581 - Stage 2 581 - Stage 2 581 - Stage 1 581 - Stage 2 581 - Stage 2 581 - Stage 1 581 - Stage 2 581 - Stage 1 581 - Stage 2 Stage 1 Stage 1 Stage 1 Stage 1 Stage 1	Lane Configurations	1			र्स	**				
Inflicting Peds, #/hr	Traffic Vol, veh/h		317	353			0			
Channelized	Future Vol, veh/h	24	317	353	32	0	0			
Channelized	Conflicting Peds, #/hr	0	46	46	0	46	0			
Channelized None None None Drage Length - <	Sign Control	Free	Free	Free	Free	Stop	Stop			
th in Median Storage, # 0 0 0 - ade, % 0 40 40 40 40 40 40 avay Vehicles, % 8 6 3 1 2 2 2 ymt Flow 60 793 883 80 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	RT Channelized	-	None	-	None		None			
ade, % 0 0 0 0 0	Storage Length	_	-		_		-			
ask Hour Factor 40 40 40 40 40 40 about Pack 40 about Pack 40 40 40 40 40 40 about Pack	Veh in Median Storage,	# 0	-	-	0	0	-			
Party Vehicles, % 8 6 3 1 2 2 2 2 2 2 2 2 2 2 2 2 2 3 3 502 3 3 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Grade, %			-		-				
### Flow 60 793 883 80 0 0 0 ### Sigor/Minor Major1 Major2 Minor1 ### Major4 Major3 Minor1 ### Major4 Major5 Minor1 ### Major5 Minor1 ### Major6 Major6 Major6 Minor1 ### Major6 Major7 Major7 Minor1 ### Major7 Major8 Major8 Minor1 ### Major8 Major8 Major8 Major8 Major8 ### Major8 Major8 Major8 Major8 Major8 ### Major8 Major8 Major8 Major8 Major8 ### Major8 Majo	Peak Hour Factor				40		40			
Sigor/Minor Major1 Major2 Minor1 Minor Min	Heavy Vehicles, %					2				
Stage 1 502 - 1891 - 161	Mvmt Flow	60	793	883	80	0	0			
Stage 1 502 - 1891 - 161										
Stage 1 502 - 1891 - 161	Major/Minor M	ajor1	1	Major2		Minor1				
Stage 1	Conflicting Flow All						502			
Stage 2										
itical Hdwy Stg 1 4.13 - 6.42 6.22 itical Hdwy Stg 1 5.42 itical Hdwy Stg 2 5.42 illow-up Hdwy 2.227 - 3.518 3.318 it Cap-1 Maneuver ~752 - 37 569 Stage 1 608 - Stage 2 130 atoon blocked, % by Cap-1 Maneuver ~719 - 0 544 by Cap-2 Maneuver ~719 - 0 544 by Cap-2 Maneuver 581 - Stage 2 0 Stage 1 581 - Stage 2 0 Stage 1 667	•	-	-	_	_		_			
itical Hdwy Stg 1 5.42 - itical Hdwy Stg 2 5.42 - illow-up Hdwy - 2.227 - 3.518 3.318 it Cap-1 Maneuver ~752 - 37 569 Stage 1 608 - Stage 2 130 - atoon blocked, % ov Cap-1 Maneuver - ~719 - 0 544 ov Cap-2 Maneuver ~719 - 0 544 ov Cap-2 Maneuver 581 - Stage 2 0 - Stage 1 581 - Stage 2 0 - Stage 2 10 - Stage 1 687 - OM Control Delay, s/v 0 123.52 0 CM LOS A Nor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT Apacity (veh/h) ~687 - CM Lane V/C Ratio - 1.228 - CM Control Delay (s/veh) 0 - 134.7 0 CM Lane LOS A - F A CM 95th %tile Q(veh) 31.1 - otes	Critical Hdwy	-	-	4.13	-		6.22			
itical Hdwy Stg 2 5.42 5.42 5.42	Critical Hdwy Stg 1	-	-		-					
Stage 1	Critical Hdwy Stg 2	-	-	-	-		-			
Stage 1 752 - 37 569 Stage 2 130	Follow-up Hdwy	-	-	2.227	-		3.318			
Stage 1 - - - 608 - Stage 2 - - - 130 - atoon blocked, % - - - - ov Cap-1 Maneuver - - 0 - ov Cap-2 Maneuver - - 0 - Stage 1 - - - 581 - Stage 2 - - - 0 - A Common Early, s/v 0 123.52 0 0 CM Control Delay, s/v 0 123.52 0 0 CM Lane/Major Mvmt NBLn1 EBR WBL WBT Apacity (veh/h) - - - 687 - CM Lane V/C Ratio - - - 1.228 - CM Control Delay (s/veh) 0 - 134.7 0 CM Lane LOS A - - F A CM 95th %tile Q(veh) - - 31.1 -	Pot Cap-1 Maneuver	-								
Stage 2 - - - 130 - atoon blocked, % - - - - ov Cap-1 Maneuver - - 719 - 0 544 ov Cap-2 Maneuver - - - 0 - Stage 1 - - - 581 - Stage 2 - - - 0 - approach EB WB NB NB CM Control Delay, s/v 0 123.52 0 0 CM Los A - <t< td=""><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td><td></td><td></td><td></td></t<>		-	-	-	-					
ation blocked, %		-	-	-	-	130	-			
Stage 1	Platoon blocked, %	-	-		-					
Stage 1	Mov Cap-1 Maneuver	-	-	~ 719	-	0	544			
Stage 1 - - - 581 - Stage 2 - - - 0 - OPPROACH EB WB NB CM Control Delay, s/v 0 123.52 0 CM LOS A A In Control Delay, s/v 0 123.52 0 A - - - - - A -	Mov Cap-2 Maneuver	-	-	-	-	0	-			
Stage 2 0 - proach EB WB NB CM Control Delay, s/v 0 123.52 0 CM LOS A nor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT apacity (veh/h) 687 - CM Lane V/C Ratio 1.228 - CM Control Delay (s/veh) 0 - 134.7 0 CM Lane LOS A - F A CM 95th %tile Q(veh) 31.1 - otes	Stage 1	-	-	-	-	581	-			
CM Control Delay, s/v 0 123.52 0 CM LOS A nor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT apacity (veh/h) ~ 687 - CM Lane V/C Ratio 1.228 - CM Control Delay (s/veh) 0 - 134.7 0 CM Lane LOS A - F A CM 95th %tile Q(veh) 31.1 -		-	-	-	-	0	-			
CM Control Delay, s/v 0 123.52 0 CM LOS A nor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT apacity (veh/h) ~ 687 - CM Lane V/C Ratio 1.228 - CM Control Delay (s/veh) 0 - 134.7 0 CM Lane LOS A - F A CM 95th %tile Q(veh) 31.1 -										
CM Control Delay, s/v 0 123.52 0 CM LOS A nor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT apacity (veh/h) ~ 687 - CM Lane V/C Ratio 1.228 - CM Control Delay (s/veh) 0 - 134.7 0 CM Lane LOS A - F A CM 95th %tile Q(veh) 31.1 -	Approach	FB		WR		NR				
A nor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT Apacity (veh/h) 687 - CM Lane V/C Ratio 1.228 - CM Control Delay (s/veh) 0 134.7 0 CM Lane LOS A - F A CM 95th %tile Q(veh) 31.1 - otes			,							
nor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT apacity (veh/h) ~ 687 - CM Lane V/C Ratio 1.228 - CM Control Delay (s/veh) 0 134.7 0 CM Lane LOS A - F A CM 95th %tile Q(veh) 31.1 - otes	HCM LOS	- 0		120.02						
Apacity (veh/h) ~ 687 CM Lane V/C Ratio 1.228 - CM Control Delay (s/veh) 0 134.7 0 CM Lane LOS A - F A CM 95th %tile Q(veh) 31.1 - Ottes						,,				
Apacity (veh/h) ~ 687 687	Minor Lang/Major Mymt		NDI 51	EDT	EDD	\\/DI	\\/DT			
CM Lane V/C Ratio - - 1.228 - CM Control Delay (s/veh) 0 - - 134.7 0 CM Lane LOS A - - F A CM 95th %tile Q(veh) - - 31.1 - otes										
CM Control Delay (s/veh) 0 134.7 0 CM Lane LOS A F A CM 95th %tile Q(veh) 31.1 -										
CM Lane LOS A - - F A CM 95th %tile Q(veh) - - - 31.1 - otes - - - 31.1 -		- l-\								
CM 95th %tile Q(veh) 31.1 - otes		en)	-							
otes										
	HCIVI 95th %tile Q(veh)		-	-	-	31.1	-			
Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon	Notes									
Totallo excessed dapatity 4. Botay excessed ecos 1. Compatation Not Bottlean 17 th major voiding in plateon	~: Volume exceeds capa	acity	\$: De	elay exc	eeds 3	00s	+: Com	putation Not Defined	*: All major volume in	platoon

Intersection						
Int Delay, s/veh	0.4					
					05-	055
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	1			ન	7>	
Traffic Vol, veh/h	1	7	4	109	233	9
Future Vol, veh/h	1	7	4	109	233	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage	, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	18	10	273	583	23
	Minor2		Major1		Major2	
Conflicting Flow All	886	594	605	0	-	0
Stage 1	594	-	-	-	-	-
Stage 2	293	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	315	505	973	-	-	-
Stage 1	552	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Platoon blocked, %				_	_	-
Mov Cap-1 Maneuver	311	505	973	_	_	_
Mov Cap-1 Maneuver	311	505	913	_	_	_
	545			-	-	-
Stage 1		-	-			-
Stage 2	757	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s/			0.31		0	
HCM LOS	В		0.01			
Minor Lane/Major Mvm	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		64	-	469	-	-
HCM Lane V/C Ratio		0.01	-	0.043	-	-
HCM Control Delay (s/	veh)	8.7	0	13	-	-
HCM Lane LOS		Α	Α	В	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-
7000 00	,			J. 1		

Intersection						
Int Delay, s/veh	16.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	î,	
Traffic Vol, veh/h	79	55	66	79	77	64
Future Vol, veh/h	79	55	66	79	77	64
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage	e, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	1	4	14	9	4	0
Mvmt Flow	198	138	165	198	193	160
Major/Minor	Minor		Major1	N.	laier?	
	Minor2		Major1		/lajor2	^
Conflicting Flow All	801	274	354	0	-	0
Stage 1	274	-	-	-	-	-
Stage 2	528	-	-	-	-	-
Critical Hdwy	6.41	6.24	4.24	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.336		-	-	-
Pot Cap-1 Maneuver	355	760	1142	-	-	-
Stage 1	775	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	297	760	1141	-	_	_
Mov Cap-2 Maneuver						
	297	-	-	-	-	-
Stage 1	648	-	-	-	-	-
Stage 1 Stage 2				- -		-
	648	-	-	-	-	-
Stage 2	648 593	-	-	-	-	-
Stage 2 Approach	648 593 EB	-	- - NB	-	- SB	-
Stage 2 Approach HCM Control Delay, s/	648 593 EB	-	-	-	-	-
Stage 2 Approach	648 593 EB	-	- - NB	-	- SB	-
Stage 2 Approach HCM Control Delay, s/HCM LOS	648 593 EB v 47.8 E	-	NB 3.96	-	- - SB 0	-
Stage 2 Approach HCM Control Delay, s/ HCM LOS Minor Lane/Major Mvm	648 593 EB v 47.8 E	- - NBL	NB 3.96	- - EBLn1	- SB	-
Stage 2 Approach HCM Control Delay, s/HCM LOS Minor Lane/Major Mvm Capacity (veh/h)	648 593 EB v 47.8 E	- - NBL 819	NB 3.96	EBLn1 396	- - SB 0	-
Stage 2 Approach HCM Control Delay, s/HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio	648 593 EB V 47.8 E	NBL 819 0.145	- - NB 3.96	EBLn1 396 0.846	SB 0	SBR
Stage 2 Approach HCM Control Delay, s/HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s/	648 593 EB V 47.8 E	NBL 819 0.145 8.7	NB 3.96	EBLn1 396 0.846 47.8	SB 0	SBR
Stage 2 Approach HCM Control Delay, s/HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio	648 593 EB v 47.8 E	NBL 819 0.145	- - NB 3.96	EBLn1 396 0.846	SB 0	SBR

La La constanti di												
Intersection	^ ^											
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	1			4			1>			ની	
Traffic Vol, veh/h	32	2	92	19	0	8	0	88	26	14	137	0
Future Vol, veh/h	32	2	92	19	0	8	0	88	26	14	137	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storag	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	40	40	40	40	40	40	40	40	40	40	40	40
Heavy Vehicles, %	38	0	22	0	0	0	0	0	0	0	0	0
Mvmt Flow	80	5	230	48	0	20	0	220	65	35	343	0
Major/Minor	Minor2		ı	Minor1			Major1		N	Major2		
Conflicting Flow All	633	698	343	668	665	253	• • • • • • • • • • • • • • • • • • •	0	0	285	0	0
Stage 1	413	413	-	253	253	-	-	-	-	-	-	-
Stage 2	220	285	-	415	413	-	_	-	<u>-</u>	<u>-</u>	_	<u>-</u>
Critical Hdwy	7.48	6.5	6.42	7.1	6.5	6.2	-	_	-	4.1	-	_
Critical Hdwy Stg 1	6.48	5.5	-	6.1	5.5	- 3.2	_	_	_		-	_
Critical Hdwy Stg 2	6.48	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.842	4	3.498	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	346	367	657	375	383	791	0	-	-	1289	-	0
Stage 1	551	597	-	756	702	-	0	-	-	-	-	0
Stage 2	708	679	-	619	597	-	0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	326	355	657	232	370	791	-	-	-	1289	-	-
Mov Cap-2 Maneuver		355	-	232	370	-	-	-	-	-	-	-
Stage 1	533	577	-	756	702	-	-	-	-	-	-	-
Stage 2	690	679	-	385	577	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s				20.88			0			0.73		
HCM LOS	C			Z0.00			0			0.10		
TOW LOO				U								
N.C. 1 (2.1. 1.1.		NET	NDD.	-DI (-DI 61	VDL 4	0.51	057				
Minor Lane/Major Mvr	mt	NBT	NBR I		EBLn2V		SBL	SBT				
Capacity (veh/h)		-	-	326	645	294	167	-				
HCM Lane V/C Ratio		-	-	0.245			0.027	-				
HCM Control Delay (s	/veh)	-	-	19.6	13.7	20.9	7.9	0				
HCM Lane LOS		-	-	С	В	С	Α	Α				
HCM 95th %tile Q(veh	1)	-	-	0.9	1.7	0.9	0.1	-				

Intersection						
Int Delay, s/veh	46					
		ED.0	\A/D.	MOT	ND	NDD
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	7>			ની	Y	
Traffic Vol, veh/h	43	55	87	65	79	86
Future Vol, veh/h	43	55	87	65	79	86
Conflicting Peds, #/hr	0	46	46	0	46	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	7	31	6	11	1	0
Mvmt Flow	108	138	218	163	198	215
N 4 - 1 - 1 N 41	1.1.4		4.1.0		A'	
	lajor1		Major2		Minor1	
Conflicting Flow All	0	0	291	0	866	222
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	644	-
Critical Hdwy	-	-	4.16	-	6.41	6.2
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.254	-	3.509	3.3
Pot Cap-1 Maneuver	-	-	1248	-	325	822
Stage 1	-	-	-	-	817	-
Stage 2	-	-	-	-	525	-
Platoon blocked, %	-	_		-		
Mov Cap-1 Maneuver	_	-	1193	-	238	786
Mov Cap-1 Maneuver	<u>-</u>	_	-	_	238	- 100
Stage 1					781	-
	_	_			402	-
Stage 2	_	-	-	-	402	-
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		4.97		111.15	
HCM LOS					F	
Minor Lane/Major Mvmt	1	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		374	-	-	1030	-
HCM Lane V/C Ratio		1.104	-	-	0.182	-
HCM Control Delay (s/ve	eh)	111.1	-	-	8.7	0
HCM Lane LOS		F	-	-	Α	Α
HCM 95th %tile Q(veh)		15.1	-	-	0.7	-

Intersection						
Int Delay, s/veh	24.4					
Movement	EBL	EBR	NBL	NDT	SBT	SBR
	EBL	EBK	NBL	NBT		SBK
Lane Configurations	1,11	c	107	4	1	100
Traffic Vol, veh/h	23	6		126	61	199
Future Vol, veh/h	23	6		126	61	199
Conflicting Peds, #/hr	0	0		0	0	_ 1
Sign Control	Stop	Stop		Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage	e, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	9	0	5	6	0	2
Mvmt Flow	58	15		315	153	498
	- 00	10	100	- 010	- 100	- 100
Major/Minor	Minor2	N	Major1	N	Major2	
Conflicting Flow All	1652	402	651	0	-	0
Stage 1	402	-		-	-	-
Stage 2	1250	-		-	-	-
Critical Hdwy	6.49	6.2	4.15	-	-	-
Critical Hdwy Stg 1	5.49	-		_	-	_
Critical Hdwy Stg 2	5.49	-		-	-	-
Follow-up Hdwy	3.581			_	_	_
Pot Cap-1 Maneuver	104	652			-	
Stage 1	661	- 002		_		_
	261					
Stage 2	201	-	-	-	-	-
Platoon blocked, %	40	050		-	-	-
Mov Cap-1 Maneuver	~ 40	652		-	-	-
Mov Cap-2 Maneuver	~ 40	-	-	-	-	-
Stage 1	254	-	-	-	-	-
Stage 2	261	-	-	-	-	-
Annragah	ED		ND		CD	
Approach	EB		NB		SB	
HCM Control Delay, \$/			7.69		0	
HCM LOS	F					
Minor Long/Major My	-1	NIDI	NDT	EDL1	CDT	CDD
Minor Lane/Major Mvn	IL	NBL		EBLn1	SBT	SBR
Capacity (veh/h)		759		50	-	-
HCM Lane V/C Ratio		0.508		1.462	-	-
HCM Control Delay (s/	veh)	12.9		423.7	-	-
HCM Lane LOS		В		F	-	-
HCM 95th %tile Q(veh		2.9	-	6.8	-	-
Notes						
		Φ -			00.	
~: Volume exceeds ca	pacity	\$: De	elay exc	ceeds 30	UUS	+: Com

Intersection	40-											
Int Delay, s/veh	12.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	1→			4			1>			ની	
Traffic Vol, veh/h	88	5	216	8	0	1	0	215	6	2	77	0
Future Vol, veh/h	88	5	216	8	0	1	0	215	6	2	77	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	40	40	40	40	40	40	40	40	40	40	40	40
Heavy Vehicles, %	8	2	10	25	2	100	2	3	17	0	5	2
Mvmt Flow	220	13	540	20	0	3	0	538	15	5	193	0
Major/Minor	Minor2	-		Minor1	-		Major1	-		Major2	-	-
Conflicting Flow All	740	755	193	754	748	545	- viajoi i	0	0	553	0	0
Stage 1	203	203	193	545	545	343	-	-	U	555	-	-
Stage 2	538	553	-	209	203		-	-	-	-		_
Critical Hdwy	7.18	6.52	6.3	7.35	6.52	7.2	-	-	-	4.1	-	
Critical Hdwy Stg 1	6.18	5.52	0.5	6.35	5.52	1.2	-	-	_	4.1	_	-
Critical Hdwy Stg 2	6.18	5.52	-	6.35	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.572		3.39	3.725	4.018	4.2	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	325	338	829	299	341	389	0	_	_	1028	-	0
Stage 1	786	734	023	483	519	303	0	-	_	1020	-	0
Stage 2	517	515	-	744	734	-	0	-	-	-	-	0
Platoon blocked, %	317	313		144	134		U	-	_		_	U
Mov Cap-1 Maneuver	321	336	829	100	339	389	-	_	-	1028	-	-
Mov Cap-1 Maneuver	321	336	029	100	339	309	-	-	_	1020	-	_
Stage 1	782	730	-	483	519	-	-	-	-	-	-	-
Stage 2	514	515	-	253	730	-	_	_	_	-	_	_
Olayt 2	314	313	_	200	1 30	_	_	_	_	_	_	-
Approach	EB			WB			NB			SB		
HCM Control Delay, sa				46.55			0			0.22		
HCM LOS	С			E								
Minor Lane/Major Mvn	nt	NBT	NBR	EBLn1	EBLn2V	VBLn1	SBL	SBT				
Capacity (veh/h)			-		802	109	46	_				
HCM Lane V/C Ratio		_			0.689			_				
HCM Control Delay (s	/veh)	_	-	^- 4	18.8	46.6	8.5	0				
HCM Lane LOS		-	_	E	C	E	A	Ā				
HCM 95th %tile Q(veh	1)	-	-	4.7	5.6	0.7	0	-				
	7				5.5	•						

Intersection								
Int Delay, s/veh	79.3							
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	Þ			ની	A.			
Traffic Vol, veh/h	25	327	364	33	0	0		
Future Vol, veh/h	25	327	364	33	0	0		
Conflicting Peds, #/hr	0	46	46	0	46	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	-	-	-	-	-	-		
Veh in Median Storage		-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	40	40	40	40	40	40		
Heavy Vehicles, %	8	6	3	1	2	2		
Mvmt Flow	63	818	910	83	0	0		
Major/Minor	Major1		Major2	I	Minor1			
Conflicting Flow All	0	0	926		2466	517		
Stage 1	-	-	-	-	517	-		
Stage 2	-	-	-	-	1949	-		
Critical Hdwy	-	-	4.13	-	6.42	6.22		
Critical Hdwy Stg 1	-	-	-	-	5.42	-		
Critical Hdwy Stg 2	-	-	-	-	5.42	-		
Follow-up Hdwy	-	-	2.227	-		3.318		
Pot Cap-1 Maneuver	-	-	~ 734	-	33	558		
Stage 1	-	-	-	-	598	-		
Stage 2	-	-	-	-	122	-		
Platoon blocked, %	-	-		-				
Mov Cap-1 Maneuver	-	-	~ 702	-	0	534		
Mov Cap-2 Maneuver	-	-	-	-	0	-		
Stage 1	-	-	-	-	572	-		
Stage 2	-	-	-	-	0	-		
Approach	EB		WB		NB			
			149.6		0			
HCM Control Delay, S	IV U		149.0					
HCM LOS					Α			
Minor Lane/Major Mvn	nt I	NBLn1	EBT	EBR	WBL	WBT		
Capacity (veh/h)		-	-	-	~ 670	-		
HCM Lane V/C Ratio		-	-		1.297	-		
HCM Control Delay (s.	/veh)	0	-	-	163.2	0		
HCM Lane LOS		Α	-	-	F	Α		
HCM 95th %tile Q(veh	1)	-	-	-	35.6	-		
Notes								
~: Volume exceeds ca	nacity	\$· De	play eye	eeds 30	00s	+. Com	putation Not Defined	*: All major volume in platoon
. Volume exceeds ca	pacity	ψ. De	nay ext	CCU5 31	005	·. Colli	pulation Not Delined	. All major volume in piatoon

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y	EDI	NDL	.ef		SDN
	T 1	7	1		240	0
Traffic Vol, veh/h	•	7	4	112	240	9
Future Vol, veh/h	1	7	4	112	240	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	# O	-	-	-	_	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	- 10	- 10	0	0	40
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	18	10	280	600	23
Major/Minor I	Minor2	ı	Major1	N	Major2	
Conflicting Flow All	911	611	623	0	-	0
Stage 1	611	-	-	-	-	-
Stage 2	300	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	_	-	-
Pot Cap-1 Maneuver	304	494	958	-	-	-
Stage 1	542	-	-	_	_	-
Stage 2	752	_	_	-	-	_
Platoon blocked, %	. 02			-	_	-
Mov Cap-1 Maneuver	301	494	958			_
Mov Cap-1 Maneuver	301	- 434	330		_	
Stage 1	535	-	-	_	_	_
Stage 2	752					
Slaye 2	132	_	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s/v	/13.24		0.3		0	
HCM LOS	В					
Minor Long/Major May		NDI	NDT	CDL4	CDT	CDD
Minor Lane/Major Mvm	l	NBL		EBLn1	SBT	SBR
Capacity (veh/h)		62	-		-	-
HCM Lane V/C Ratio		0.01		0.044	-	-
HCM Control Delay (s/	ven)	8.8	0	13.2	-	-
HCM Lane LOS HCM 95th %tile Q(veh)		A 0	A	0.1	-	-
			-		-	

Intersection						
Int Delay, s/veh	19.7					
		ED5	NE	NET	057	000
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			ન	7>	
Traffic Vol, veh/h	81	57	68	81	79	66
Future Vol, veh/h	81	57	68	81	79	66
Conflicting Peds, #/hr	0	0	_ 0	_ 0	_ 0	_ 1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	1	4	14	9	4	0
Mvmt Flow	203	143	170	203	198	165
Major/Minor	Minor2		Major1	N	Major2	
Conflicting Flow All	824	281	364	0	viajuiz -	0
Stage 1	281	201	304		-	-
•	543	-	-	-	-	-
Stage 2			1 24	-		-
Critical Hdwy	6.41	6.24	4.24	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	- 220	0.000	-	-	-
Follow-up Hdwy	3.509	3.336	2.326	_	-	-
Pot Cap-1 Maneuver	344	753	1132	-	-	-
Stage 1	769	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	285	752	1131	-	-	-
Mov Cap-2 Maneuver	285	-	-	-	-	-
Stage 1	638	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s/			3.99		0	
HCM LOS	F					
Minor Lane/Major Mvn	nt	NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		821	-		-	-
HCM Lane V/C Ratio		0.15	_	0.899	-	-
HCM Control Delay (s/	veh)	8.7	0	57.3	-	-
HCM Lane LOS	<i></i>	A	A	F	-	-
HCM 95th %tile Q(veh)	0.5	-	9.2	-	-
	1	3.0		J.L		

Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
) j		EDR	VVDL		WDK	INDL	1ND 1	INDIX	SDL	<u>अज्ञा</u>	SDR
Lane Configurations Traffic Vol, veh/h	33	1 → 2	95	20	4	8	0	91	27	14	141	0
Future Vol, veh/h	33	2	95	20	0	8	0	91	27	14	141	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	Stop -	Stop -	None	Stop -	- -	None	-	-	None	-	-	None
Storage Length	_	_	INOITE		_	INOING	_		-	_		INOIIC
Veh in Median Storage	e.# -	0	-		0	_	-	0	_	_	0	-
Grade, %	-	0	_	_	0	_	_	0	_	_	0	_
Peak Hour Factor	40	40	40	40	40	40	40	40	40	40	40	40
Heavy Vehicles, %	38	0	22	0	0	0	0	0	0	0	0	0
Mymt Flow	83	5	238	50	0	20	0	228	68	35	353	0
						20		LLU			- 500	
NA - ' /NA'	N						NA . 1			4.1.		
	Minor2	=		Minor1			Major1			Major2		
Conflicting Flow All	650	718	353	686	684	261	-	0	0	295	0	0
Stage 1	423	423	-	261	261	-	-	-	-	-	-	-
Stage 2	228	295	- 0.40	425	423	-	-	-	-	-	-	-
Critical Hdwy	7.48	6.5	6.42	7.1	6.5	6.2	-	-	-	4.1	-	-
Critical Hdwy Stg 1	6.48	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.48	5.5	- 400	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.842		3.498	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	337	358	648	364	374	782	0	-	-	1278	-	0
Stage 1	544	591	-	748	696	-	0	-	-	-	-	0
Stage 2	701	673	-	611	591	-	0	-	-	-	-	0
Platoon blocked, %	047	245	040	000	204	700		-	-	4070	-	
Mov Cap-1 Maneuver	317	345	648	220	361	782	-	-	-	1278	-	-
Mov Cap-2 Maneuver	317	345	-	220	361	-	-	-	-	-	-	-
Stage 1	526	571	-	748	696	-	-	-	-	-	-	-
Stage 2	683	673	-	371	571	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	/v15.67			22.37			0			0.71		
HCM LOS	С			С								
Minor Lane/Major Mvn	nt	NBT	NBR F	-Bl.n1	EBLn2\	VBI n1	SBL	SBT				
Capacity (veh/h)		-	ואופאו	317	637	277	163	- CD 1				
HCM Lane V/C Ratio		_	_		0.381			-				
HCM Control Delay (s.	(veh)	_	_	20.3	14.1	22.4	7.9	0				
HCM Lane LOS	ven)	_	-	20.3 C	14.1 B	22.4 C	7.9 A	A				
HCM 95th %tile Q(veh	1)	_	-	1	1.8	1	0.1	- -				
	'/	-	_		1.0	1	0.1					

Intersection						
	56.4					
		EBR	\//DI	\\/DT	NDL	NIDD
	EBT	EBK	WBL	WBT	NBL	NBR
Lane Configurations	14	F 7	00	ન	Y	00
Traffic Vol, veh/h	44	57	90	67	81	89
Future Vol, veh/h	44	57	90	67	81	89
Conflicting Peds, #/hr	0	46	46	0	46	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	7	31	6	11	1	0
Mvmt Flow	110	143	225	168	203	223
Major/Minor Ma	ajor1	N	Major2		Minor1	
Conflicting Flow All	0	0	299	0	891	227
Stage 1	-	-	-	-	227	
Stage 2	_	_	-	-	664	_
Critical Hdwy	-	-	4.16	-	6.41	6.2
Critical Hdwy Stg 1	_	_	-	_	5.41	- 0.2
Critical Hdwy Stg 2	_	_	-	_	5.41	_
Follow-up Hdwy	_	_	2.254	_	3.509	3.3
Pot Cap-1 Maneuver	_		1240		314	817
Stage 1	-		1240	_	813	- 017
Stage 2	_	_	-	-	514	-
Platoon blocked, %	-	-		-	314	
Mov Cap-1 Maneuver	_	-	1186	-	227	781
Mov Cap-1 Maneuver	-	-	1100	-	227	701
	-	-	-	-	777	
Stage 1	-	-	-	-		-
Stage 2	-	-	-	-	389	-
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		5.01		137.26	
HCM LOS					F	
N. C		UDL 4	COT	E55	MA	MOT
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		361	-		1032	-
HCM Lane V/C Ratio		1.176	-	-	0.19	-
HCM Control Delay (s/ve	h)	137.3	-	-	8.7	0
					Λ.	٨
HCM Lane LOS HCM 95th %tile Q(veh)		F 17.2	-	-	0.7	A -

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y	EDK	INDL			SDR
Traffic Vol, veh/h	_:т: 1	2	٥	લે 224	1 > 259	46
	•	2	0			
Future Vol, veh/h	1	2	0	224	259	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	<u>-</u>	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	0	0	0	4	2	0
Mvmt Flow	3	5	0	560	648	115
Major/Minor	Minor2	N	/lajor1	N	Major2	
Conflicting Flow All		705	763	0		0
	1265				-	
Stage 1	705	-	-	-	-	-
Stage 2	560	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	189	440	859	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	576	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	189	440	859	-	-	-
Mov Cap-2 Maneuver	189	-	-	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	576	_	_	_	_	_
2.0.30 2	3, 3					
Approach	EB		NB		SB	
HCM Control Delay, s/	v17.12		0		0	
HCM LOS	С					
Minor Long /Maior M		NDI	NDT	CDL 4	CDT	CDD
Minor Lane/Major Mvm	I	NBL		EBLn1	SBT	SBR
Capacity (veh/h)		859	-		-	-
HCM Lane V/C Ratio		-	-	0.025	-	-
HCM Control Delay (s/	veh)	0	-		-	-
HCM Lane LOS		Α	-	С	-	-
HCM 95th %tile Q(veh))	0	-	0.1	-	-
	,					

Intersection								
Int Delay, s/veh	150.5							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	Y			ની	1			
Traffic Vol, veh/h	46	150	152	103	61	199		
Future Vol, veh/h	46	150	152	103	61	199		
Conflicting Peds, #/hr	. 0	0	0	0	0	1		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-	None	-	None	-	None		
Storage Length	-	-	-	-	-	-		
eh in Median Storag	ge, # 0	-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	40	40	40	40	40	40		
Heavy Vehicles, %	5	5	5	5	5	5		
Mvmt Flow	115	375	380	258	153	498		
Major/Mina-	Minaro		Mais=1		/oicr0			
Major/Minor	Minor2		Major1		Major2			
Conflicting Flow All	1420	402	651	0	-	0		
Stage 1	402	-	-	-	-	-		
Stage 2	1018	-	-	-	-	-		
ritical Hdwy	6.45	6.25	4.15	-	-	-		
ritical Hdwy Stg 1	5.45	-	-	-	-	-		
ritical Hdwy Stg 2	5.45	-		-	-	-		
ollow-up Hdwy				-	-	-		
ot Cap-1 Maneuver		642	921	-	-	-		
Stage 1	669	-	-	-	-	-		
Stage 2	345	-	-	-	-	-		
Platoon blocked, %				-	-	-		
Mov Cap-1 Maneuve		641	920	-	-	-		
Nov Cap-2 Maneuve		-	-	-	-	-		
Stage 1	346	-	-	-	-	-		
Stage 2	344	-	-	-	-	-		
Approach	EB		NB		SB			
HCM Control Delay,			6.94		0.0			
HCM LOS	F		0.04		0			
TOWN LOO	1							
Minor Lane/Major Mv	mt	NBL	NBT I	EBLn1	SBT	SBR		
Capacity (veh/h)		789	-	235	-	-		
HCM Lane V/C Ratio		0.413		2.086	-	-		
HCM Control Delay (s/veh)	11.6	0\$	536.8	-	-		
ICM Lane LOS		В	Α	F	-	-		
HCM 95th %tile Q(ve	h)	2	-		-	-		
Notes								
		ф. D	aless es	O	20-	0	autation Nat Define	*. All marian values in all 1
: Volume exceeds c	apacity	\$: De	elay exc	eeds 30	JUS	+: Com	putation Not Defined	*: All major volume in platoon

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	1>			4			ĵ.			4	
Traffic Vol, veh/h	30	5	72	8	0	1	0	215	6	2	221	0
Future Vol, veh/h	30	5	72	8	0	1	0	215	6	2	221	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	_	_	-	-	_	-	-	_	-	_	_	-
Veh in Median Storage	e.# -	0	-	-	0	-	-	0	-	_	0	-
Grade, %	-	0	_	_	0	_	_	0	-	_	0	-
Peak Hour Factor	40	40	40	40	40	40	40	40	40	40	40	40
Heavy Vehicles, %	8	2	10	25	2	100	2	3	17	0	5	2
Mymt Flow	75	13	180	20	0	3	0	538	15	5	553	0
IIIC I IOW	10	- 10	- 100	20				- 500	10		- 500	
	Minor2			Minor1			Major1			/lajor2		
Conflicting Flow All	1100	1115	553	1114	1108	545	-	0	0	553	0	0
Stage 1	563	563	-	545	545	-	-	-	-	-	-	-
Stage 2	538	553	-	569	563	-	-	-	-	-	-	-
Critical Hdwy	7.18	6.52	6.3	7.35	6.52	7.2	-	-	-	4.1	-	-
Critical Hdwy Stg 1	6.18	5.52	-	6.35	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.18	5.52	-	6.35	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.572	4.018	3.39	3.725	4.018	4.2	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	185	208	518	168	210	389	0	-	-	1028	-	0
Stage 1	501	509	-	483	519	-	0	-	-	-	-	0
Stage 2	517	515	-	469	509	-	0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	182	206	518	102	209	389	-	-	-	1028	-	-
Mov Cap-2 Maneuver	182	206	-	102	209	-	-	-	-	-	-	-
Stage 1	497	506	-	483	519	-	-	-	-	-	-	-
Stage 2	514	515	-	296	506	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/				45.44			0			0.08		
HCM LOS	vz3.44 C			45.44 E			U			0.00		
I IOIVI LUS	U											
Minor Lane/Major Mvn	nt	NBT	NBR		EBLn2V		SBL	SBT				
Capacity (veh/h)		-	-	182	472	111	16	-				
HCM Lane V/C Ratio		-	-		0.408			-				
HCM Control Delay (s/	/veh)	-	-	37.9	17.8	45.4	8.5	0				
HCM Lane LOS		-		Е	С	Е	Α	Α				
HCM 95th %tile Q(veh)	-	-	1.8	2	0.7	0	-				

Intersection						
	37.4					
		EDD	WDL	WDT	NDL	NDD
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	100	100	100	€ 1	\	0.4
Traffic Vol, veh/h	108	109	122	240	18	84
Future Vol, veh/h	108	109	122	240	18	84
Conflicting Peds, #/hr	0	46	46	0	46	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	270	273	305	600	45	210
Major/Minor M	ajor1		Major?		Minor1	
			Major2			450
Conflicting Flow All	0	0	589	0	1708	452
Stage 1	-	-	-	-	452	-
Stage 2	-	-	-	-	1256	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	972	-	98	601
Stage 1	-	-	-	-	635	-
Stage 2	-	-	-	-	264	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	930	-	46	575
Mov Cap-2 Maneuver	-	-	-	-	46	-
Stage 1	-	-	-	-	607	-
Stage 2	-	-	-	-	128	-
A			14/0		NE	
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		3.62	2	236.58	
HCM LOS					F	
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
		189	LUI		607	1101
Capacity (veh/h) HCM Lane V/C Ratio				-		
	٠ ৯ \	1.351	-		0.328	-
HCM Control Delay (s/ve	(11)	236.6	-	-		0
HCM Lane LOS		F	-	-	В	Α
HCM 95th %tile Q(veh)		14.8	-	-	1.4	-

Intersection												
Int Delay, s/veh	8.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4						4	
Traffic Vol, veh/h	10	233	109	182	23	10	0	0	0	10	0	10
Future Vol, veh/h	10	233	109	182	23	10	0	0	0	10	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	40	40	40	40	40	40	40	40	40	40	40	40
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	25	583	273	455	58	25	0	0	0	25	0	25
Major/Minor	Major1		N	Major2					N	Minor2		
Conflicting Flow All	83	0	0	855	0	0				1613	1885	70
Stage 1	-	-	-	-	-	-				980	980	-
Stage 2	-	-	-	_	-	-				633	905	-
Critical Hdwy	4.15	-	-	4.15	-	-				6.45	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-				5.45	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	_				5.45	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-				3.545	4.045	3.345
Pot Cap-1 Maneuver	1496	-	-	772	-	-				113	69	984
Stage 1	-	-	-	-	-	-				359	324	-
Stage 2	-	-	-	-	-	-				524	351	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1496	-	-	772	-	-				41	0	984
Mov Cap-2 Maneuver	-	-	-	-	-	-				41	0	-
Stage 1	-	-	-	-	-	-				347	0	-
Stage 2	-	-	-	-	-	-				199	0	-
Approach	EB			WB						SB		
HCM Control Delay, s/				13.65						107.29		
HCM LOS	V V.Z1			10.00						F		
I TOWN EOO												
Mineral and /Mineral	-4	EDI	CDT	EDD	MDI	MPT	MDD	2DL 4				
Minor Lane/Major Mvn	nt	EBL	EBT	EBR	WBL	WBT	WBR S					
Capacity (veh/h)		48	-	-	735	-	-	80				
HCM Lane V/C Ratio		0.017	-		0.589	-		0.628				
HCM Control Delay (sa	(veh)	7.4	0	-	16.1	0	-	107.3				
HCM Lane LOS	,	A	Α	-	С	Α	-	F				
HCM 95th %tile Q(veh	1)	0.1	-	-	3.9	-	-	2.9				

Intersection						
Int Delay, s/veh	5.9					
		E55	14/5	MOT	ND	NES
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	₽			ન	Y	
Traffic Vol, veh/h	134	109	60	198	17	83
Future Vol, veh/h	134	109	60	198	17	83
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	335	273	150	495	43	208
Major/Minor Major/Minor	ajor1	. 1	Major2		Minor1	
						171
Conflicting Flow All	0	0	608	0	1266	471
Stage 1	-	-	-	-	471	-
Stage 2	-	-	-	-	795	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-		2.245	-	0.0.0	3.345
Pot Cap-1 Maneuver	-	-	956	-	184	586
Stage 1	-	-	-	-	622	-
Stage 2	-	-	-	-	439	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	956	-	144	586
Mov Cap-2 Maneuver	-	-	-	-	144	-
Stage 1	-	-	-	-	622	-
Stage 2	-	-	-	-	344	-
A	ED		\A/D		NID	
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		2.2		30.05	
HCM LOS					D	
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
		385		LDIN		
Capacity (veh/h) HCM Lane V/C Ratio		0.649	-		0.157	-
HCM Control Delay (s/ve	h)	30.1	-	-	9.5	0
HCM Lane LOS	5(I)		-			
		D	-	-	A	Α
HCM 95th %tile Q(veh)		4.4	-	-	0.6	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
	Y.	EDK	INDL			SDR
Lane Configurations		7	1	ન	7→	0
Traffic Vol, veh/h	1	7	4	112	240	9
Future Vol, veh/h	1	7	4	112	240	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	0	0	0	4	2	0
Mvmt Flow	3	18	10	280	600	23
Major/Minor	Minor2		Jaior1		Asiar?	
			Major1		//ajor2	^
Conflicting Flow All	911	611	623	0	-	0
Stage 1	611	-	-	-	-	-
Stage 2	300	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	307	497	968	-	-	-
Stage 1	545	-	-	-	-	-
Stage 2	756	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	303	497	968	-	-	-
Mov Cap-2 Maneuver	303	-	-	-	-	-
Stage 1	539	-	-	-	-	-
Stage 2	756	_	_	_	_	_
Approach	EB		NB		SB	
HCM Control Delay, s/	v13.17		0.3		0	
HCM LOS	В					
Minant and Markett		NDI	NET	EDL 4	ODT	ODD
Minor Lane/Major Mvm	IT	NBL	NRI	EBLn1	SBT	SBR
Capacity (veh/h)		62	-		-	-
HCM Lane V/C Ratio		0.01		0.043	-	-
HCM Control Delay (s/	veh)	8.8	0	13.2	-	-
HCM Lane LOS		Α	Α	В	-	-
HCM 95th %tile Q(veh))	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	20.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	**			4	ĵ.	
Traffic Vol., veh/h	81	57	68	81	79	66
Future Vol, veh/h	81	57	68	81	79	66
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	_	-	-	-	_	-
Veh in Median Storage	e,# 0	-	-	0	0	-
Grade, %	0	-	_	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	5	5	5	5	5	5
Mymt Flow	203	143	170	203	198	165
IVIVIIIL I IOVV	200	140	170	200	130	100
Major/Minor	Minor2		Major1	N	/lajor2	
Conflicting Flow All	824	281	364	0	-	0
Stage 1	281	-	-	-	-	-
Stage 2	543	-	-	-	-	-
Critical Hdwy	6.45	6.25	4.15	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	_	-	-
Follow-up Hdwy		3.345		-	_	-
Pot Cap-1 Maneuver	339	751	1179	-	-	-
Stage 1	760			-	_	_
Stage 2	577	_	_	-	_	-
Platoon blocked, %	011			_	_	_
Mov Cap-1 Maneuver	283	750	1178	-	-	-
Mov Cap-1 Maneuver	283	750				-
	636		-	-	-	-
Stage 1		-	-	-	-	-
Stage 2	576	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s/			3.91		0	
HCM LOS	F		0.01			
TIOWI LOO	1					
Minor Lane/Major Mvm	nt	NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		821	-	381	-	-
HCM Lane V/C Ratio		0.144	-	0.905	-	-
HCM Control Delay (s/	veh)	8.6	0	58.6	-	-
HCM Lane LOS		Α	Α	F	-	-
HCM 95th %tile Q(veh)	0.5	-	9.3	-	-
	,					

Intersection												
Int Delay, s/veh	6.3											
		ГОТ	EDD	WDI	WDT	WDD	NDI	NDT	NDD	CDI	SBT	CDD
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL		SBR
Lane Configurations	7	f	0E	20	4	0	٥	♣	27	11	4	٥
Traffic Vol, veh/h Future Vol, veh/h	33	2	95 95	20 20	0	8	0	91 91	27 27	14 14	141 141	0
	0	0	95	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr Sign Control		Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	Stop	Slop -	None	Stop -	Slop -	None	-		None	riee -	riee -	None
Storage Length	-	-	NOHE	-	-	NOHE	-	-	NOHE	-	-	None
Veh in Median Storage	e.# -	0		-	0	-	-	0	-	-	0	-
Grade, %	=, # -	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	40	40	40	40	40	40	40	40	40	40	40	40
Heavy Vehicles, %	8	2	10	25	2	100	2	3	17	0	5	2
Mvmt Flow	83	5	238	50	0	20	0	228	68	35	353	0
IVIVIIIL I IOW	03	J	230	50	U	20	U	220	00	JJ	333	U
Major/Minor	Minor2			Minor1			Major1		N	Major2		
Conflicting Flow All	650	718	353	686	684	261	-	0	0	295	0	0
Stage 1	423	423	-	261	261	-	-	-	-	-	-	-
Stage 2	228	295	-	425	423	-	-	-	-	-	-	-
Critical Hdwy	7.18	6.52	6.3	7.35	6.52	7.2	-	-	-	4.1	-	-
Critical Hdwy Stg 1	6.18	5.52	-	6.35	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.18	5.52	-	6.35	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.572	4.018	3.39	3.725	4.018	4.2	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	374	355	673	333	371	590	0	-	-	1278	-	0
Stage 1	597	588	-	696	692	-	0	-	-	-	-	0
Stage 2	762	669	-	564	588	-	0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	349	343	673	205	359	590	-	-	-	1278	-	-
Mov Cap-2 Maneuver	349	343	-	205	359	-	-	-	-	-	-	-
Stage 1	577	568	-	696	692	-	-	-	-	-	-	-
Stage 2	736	669	-	350	568	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/	/v14.82			24.7			0			0.71		
HCM LOS	В			C								
Minor Lane/Major Mvn	nt	NBT	NBR	EBLn1	EBLn2\	VBLn1	SBL	SBT				
Capacity (veh/h)		-	_	349	660	252	163	_				
HCM Lane V/C Ratio		_	_	0.236				_				
HCM Control Delay (s	/veh)	-	_	18.5	13.6	24.7	7.9	0				
HCM Lane LOS		-	_	C	В	C C	Α	A				
HCM 95th %tile Q(veh	1)	-	-	0.9	1.7	1.1	0.1	-				
. 13111 33th 70th Q(VOI	'/			0.0	1.1	1.1	0.1					

Intersection						
Int Delay, s/veh	5.8					
		EDD	\A/DI	WOT	NDI	NDD
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1>	40		्र ी	Y	
Traffic Vol, veh/h	94	19	30	127	41	39
Future Vol, veh/h	94	19	30	127	41	39
Conflicting Peds, #/hr	_ 0	_ 46	_ 46	_ 0	46	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	235	48	75	318	103	98
Major/Minor	laia-1		Maiara		Minera	
	lajor1		Major2		Minor1	005
Conflicting Flow All	0	0	329	0	818	305
Stage 1	-	-	-	-	305	-
Stage 2	-	-	-	-	514	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-		-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-		
Pot Cap-1 Maneuver	-	-	1214	-	341	728
Stage 1	-	-	-	-	741	-
Stage 2	-	-	-	-	595	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1161	-	288	696
Mov Cap-2 Maneuver	-	_	-	-	288	-
Stage 1	-	-	-	-	709	-
Stage 2	_	_	_	_	524	_
Olugo Z					J27	
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		1.59		22.42	
HCM LOS					С	
Minantana (Maria Ar		UDL 4	EDT	EDD	MDI	MOT
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		403	-	-	344	-
HCM Lane V/C Ratio		0.496	-	-	0.065	-
HCM Control Delay (s/v	eh)	22.4	-	-	8.3	0
HCM Lane LOS		С	-	-	Α	Α
HCM 95th %tile Q(veh)		2.7	-	-	0.2	-

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR SBT Canconfigurations Capta Capta	Intersection												
Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR		2.5											
Lane Configurations		EDI	CDT	EDD	WDI	WDT	WDD	NDI	NDT	NDD	CDI	CDT	CDD
Traffic Vol, veh/h		EBL		EBK	WBL		WBK	NBL	INRT	INBK	SBL		SBR
Future Vol, veh/h Conflicting Peds, #/hr O O O O O O O O O O O O O		40		40	50		40	^	^	•	40		40
Conflicting Peds, #/hr	•												
Sign Control Free Free Free Free Free Free Free Free None Stop Stop	·												
RT Channelized									-				
Storage Length													
Veh in Median Storage, # - 0		-	-	None	-		None	-	-		-	-	None
Grade, % - 0 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 0 - 0 0 0 - 0 0 0 - 0 0 0 0 - 0			-	-	-				-		-		-
Peak Hour Factor		# -		-			-	-		-	-		
Heavy Vehicles, % 5 5 5 5 5 5 5 5 5													
Mymt Flow 25 180 48 125 345 25 0 0 25 0 25 Major/Minor Major1 Major2 Minor2 Minor2 Conflicting Flow All 370 0 0 228 0 0 838 885 358 Stage 1 - - - - - - 608 608 - Stage 2 - - - - - 230 278 - Critical Hdwy Stg 1 - - - - 5.45 5.55 - 5.65 6.25 C.25 C.25 Critical Hdwy Stg 2 - - - 5.45 5.55 - C.55 C.54 5.55 C.5 C.54 5.55 C.5													
Major/Minor Major1													
Conflicting Flow All 370 0 0 228 0 0 838 885 358	Mvmt Flow	25	180	48	125	345	25	0	0	0	25	0	25
Conflicting Flow All 370 0 0 228 0 0 838 885 358													
Conflicting Flow All 370 0 0 228 0 0 838 885 358	Major/Minor M	aior1			Maior2						Minor2		
Stage 1			0			0	0					QQE	358
Stage 2 -				U									330
Critical Hdwy 4.15 - 4.15 - - 6.45 6.55 6.25 Critical Hdwy Stg 1 - - - - - 5.45 5.55 - Critical Hdwy Stg 2 - - - - - 5.45 5.55 - Follow-up Hdwy 2.245 - - 2.245 - - 3.545 4.045 3.345 Pot Cap-1 Maneuver 1172 - 1323 - - 801 675 - Stage 1 - - - - - 801 675 - Platoon blocked, % - <td></td> <td>•</td>													•
Critical Hdwy Stg 1 - - - - - 5.45 5.55 - Critical Hdwy Stg 2 - - - - - 5.45 5.55 - Follow-up Hdwy 2.245 - - 2.245 - - 3.545 4.045 3.345 Pot Cap-1 Maneuver 1172 - - - - - 538 481 - Stage 2 -			-	-			-						
Critical Hdwy Stg 2 - - - - - - 5.45 5.55 - Follow-up Hdwy 2.245 - - 2.245 - - 3.545 4.045 3.345 Pot Cap-1 Maneuver 1172 - 1323 - - 538 481 - Stage 2 - - - - - - 801 675 - Platoon blocked, % -	_		-										
Follow-up Hdwy 2.245 2.245 3.545 4.045 3.345 Pot Cap-1 Maneuver 1172 1323 333 281 680 Stage 1 538 481 - 538 481 - 538 481 - 538 538 481 - 538 680 675 - 538 680 675 - 680 675 679 Platoon blocked, % 1323 286 0 680 680 680 680 680 680 680 680 680			-	-	-	-	-						-
Pot Cap-1 Maneuver 1172			-	-	2 245	-	-						2 245
Stage 1 - - - - - - - 801 675 - Platoon blocked, % -			-	-		-	-						
Stage 2			-	-	1323	-	-						
Platoon blocked, % -			-	-	-	-	-						
Mov Cap-1 Maneuver 1172 - 1323 - - 286 0 680 Mov Cap-2 Maneuver - - - - - - - 286 0 - Stage 1 - - - - - - - 525 0 - Stage 2 - - - - - - 706 0 - Approach EB WB WB SB HCM Control Delay, s/v 0.81 2.02 15.21 HCM Lane/Major Mvmt EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 171 - - 448 - - 402 HCM Lane V/C Ratio 0.021 - - 0.094 - - 0.124 HCM Control Delay (s/veh) 8.1 0 - 8 0 - 15.2 HCM Lane LOS A A		-	-	-	-	-	-				801	0/5	-
Mov Cap-2 Maneuver -		1170	-	-	1202	-	-				000	^	000
Stage 1	•		-	-		-	-						
Stage 2 - </td <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		-	-	-	-	-	-						
Approach EB WB SB HCM Control Delay, s/v 0.81 2.02 15.21 HCM LOS C Minor Lane/Major Mvmt EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 171 - 448 - 402 HCM Lane V/C Ratio 0.021 - 0.094 - 0.124 HCM Control Delay (s/veh) 8.1 0 - 8 0 - 15.2 HCM Lane LOS A A - A A - C	•	-	-	-	-	-	-						
HCM Control Delay, s/v 0.81 HCM LOS C Minor Lane/Major Mvmt EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 171 448 402 HCM Lane V/C Ratio 0.021 0.094 0.124 HCM Control Delay (s/veh) 8.1 0 - 8 0 - 15.2 HCM Lane LOS A A - A A - C	Stage 2	-	-	-	-	-	-				706	0	-
HCM Control Delay, s/v 0.81 HCM LOS C Minor Lane/Major Mvmt EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 171 448 402 HCM Lane V/C Ratio 0.021 0.094 0.124 HCM Control Delay (s/veh) 8.1 0 - 8 0 - 15.2 HCM Lane LOS A A - A A - C													
HCM Control Delay, s/v 0.81 HCM LOS C Minor Lane/Major Mvmt EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 171 448 402 HCM Lane V/C Ratio 0.021 0.094 0.124 HCM Control Delay (s/veh) 8.1 0 - 8 0 - 15.2 HCM Lane LOS A A - A A - C	Approach	EB			WB						SB		
Minor Lane/Major Mvmt EBL EBT EBR WBL WBT WBR SBLn1													
Minor Lane/Major Mvmt EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 171 - - 448 - - 402 HCM Lane V/C Ratio 0.021 - - 0.094 - - 0.124 HCM Control Delay (s/veh) 8.1 0 - 8 0 - 15.2 HCM Lane LOS A A - A A - C		0.01											
Capacity (veh/h) 171 448 402 HCM Lane V/C Ratio 0.021 0.094 0.124 HCM Control Delay (s/veh) 8.1 0 - 8 0 - 15.2 HCM Lane LOS A A - A A - C													
Capacity (veh/h) 171 448 402 HCM Lane V/C Ratio 0.021 0.094 0.124 HCM Control Delay (s/veh) 8.1 0 - 8 0 - 15.2 HCM Lane LOS A A - A A - C	N. 1 (0.1) 1		E5.	E5.T	ED5	14/51	MOT	14/00) DI (
HCM Lane V/C Ratio 0.021 0.094 0.124 HCM Control Delay (s/veh) 8.1 0 - 8 0 - 15.2 HCM Lane LOS A A - A A - C				EBI	EBR		WBT	WBR S					
HCM Control Delay (s/veh) 8.1 0 - 8 0 - 15.2 HCM Lane LOS A A - A A - C				-			-						
HCM Lane LOS A A - A A - C					-	0.094	-	-					
		eh)	8.1	0	-	8	0	-					
HCM 95th %tile Q(veh) 0.1 0.3 0.4				Α	-		Α	-					
	HCM 95th %tile Q(veh)		0.1	-	-	0.3	-	-	0.4				

Intersection						
Int Delay, s/veh	4.1					
			14/5	14/5-		
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1			4	A	
Traffic Vol, veh/h	63	19	10	158	40	50
Future Vol, veh/h	63	19	10	158	40	50
Conflicting Peds, #/hr	0	0	0	0	0	0
	ree	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	£ 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	40	40	40	40	40	40
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	158	48	25	395	100	125
Major/Minor	ior1	N	Majora		Minor1	
	ijor1		Major2		Minor1	404
Conflicting Flow All	0	0	205	0	626	181
Stage 1	-	-	-	-	181	-
Stage 2	-	-	-	-	445	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1349	-	443	854
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	639	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1349	-	433	854
Mov Cap-2 Maneuver	_	_	-	-	433	-
Stage 1	_	_	_	-	843	-
Stage 2	_	_	_	_	624	_
Olago Z					J27	
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		0.46		14.66	
HCM LOS					В	
Minard and Maria Maria		UDL 4	CDT	EDD	MDI	MOT
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		596	-	-	107	-
HCM Lane V/C Ratio		0.378	-	-	0.019	-
HCM Control Delay (s/vel	h)	14.7	-	-		0
HCM Lane LOS		В	-	-	Α	Α
HCM 95th %tile Q(veh)		1.8	-	-	0.1	-