



Traffic Impact Analysis

Lake June Road Development
NEC Lake June Road at Guard Drive
Dallas, TX

December 1, 2015

Kimley-Horn and Associates, Inc.
Dallas, Texas

Project #064492700
Registered Firm F-928

Kimley»»Horn

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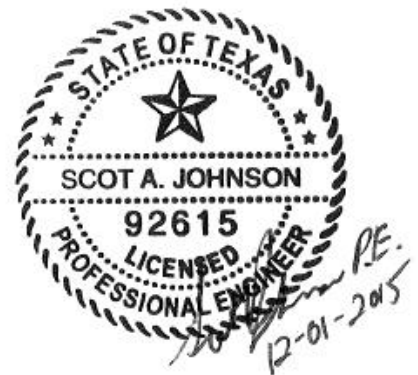


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EXECUTIVE SUMMARY

The proposed development is located at the northeast corner of Lake June Road and Guard Drive. The site is proposed with a 16-pump gas station with convenience store and 45,300 square feet of self-storage. This study is intended to identify traffic generation characteristics, identify potential traffic related impacts on the local street system, and to develop mitigation measures required for identified impacts.

The following existing intersections were selected to be part of this study:

- Lake June Road at Guard Drive

The analysis also included the following proposed driveways:

- Drive 1, a right-in/right-out driveway to Lake June Road
- Drive 2, a right-in/right-out driveway to Lake June Road
- Drive 3, a full-access driveway to Guard Drive
- Drive 4, a full-access driveway to Guard Drive

Traffic operations were analyzed at the study intersections for existing volumes, year 2016 and 2025 background traffic volumes, and year 2016 and 2025 background plus site-generated traffic volumes. The future years correspond to the projected buildout year and the regional buildout of the area. Conditions were analyzed for the weekday AM and PM peak hours.

The proposed development is expected to generate approximately 68 new weekday AM peak hour one-way trips and 107 new weekday PM peak hour one-way trips at full buildout. The distribution of the site-generated traffic volumes onto the street system was based on the surrounding roadway network, existing traffic patterns, and the project's proposed access locations.

Based on the analysis presented in this report, the proposed development can be successfully incorporated into the surrounding roadway network. The proposed site driveways provide the appropriate level of access for the development. The site-generated traffic does not significantly affect the existing traffic operations.

Intersection sight distance at the proposed driveways is acceptable, with each on relatively flat and straight segments of their respective roadways.

The proposed driveways do not meet TxDOT or City of Dallas thresholds for recommending right-turn deceleration lanes, so none are recommended for the site.

I. INTRODUCTION

A. Purpose

Kimley-Horn was retained to conduct a Traffic Impact Analysis (TIA) of future traffic conditions associated with the development of a gas station and self-storage development located at the northeast corner of Lake June Road and Guard Drive. A site vicinity map is provided as **Exhibit 1**. **Exhibit 2** shows the proposed conceptual site plan. This study is intended to identify traffic generation characteristics, identify potential traffic related impacts on the local street system, and to develop mitigation measures required for identified impacts.

B. Methodology

Traffic operations were analyzed at the study intersections for AM and PM peak hours for the following scenarios:

- 2015 existing traffic
- 2016 background traffic
- 2016 background plus site traffic
- 2025 background traffic
- 2025 background plus site traffic

For the study intersections, the capacity analyses were conducted using the *Synchro*[™] software package and its associated *Highway Capacity Manual* reports for unsignalized intersections.

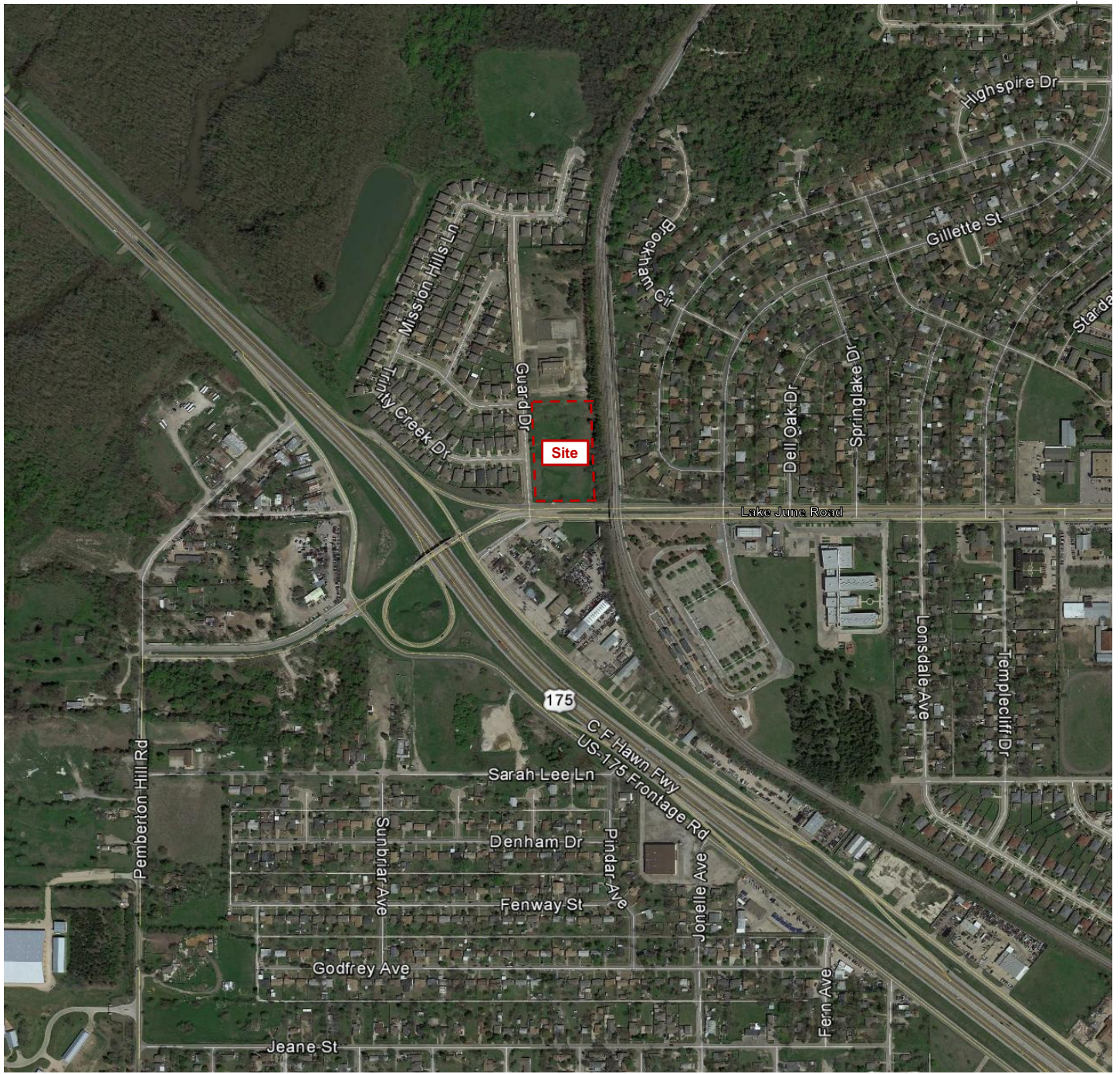


EXHIBIT 1

Vicinity Map

Lake June TIA Dallas



GUARD STREET

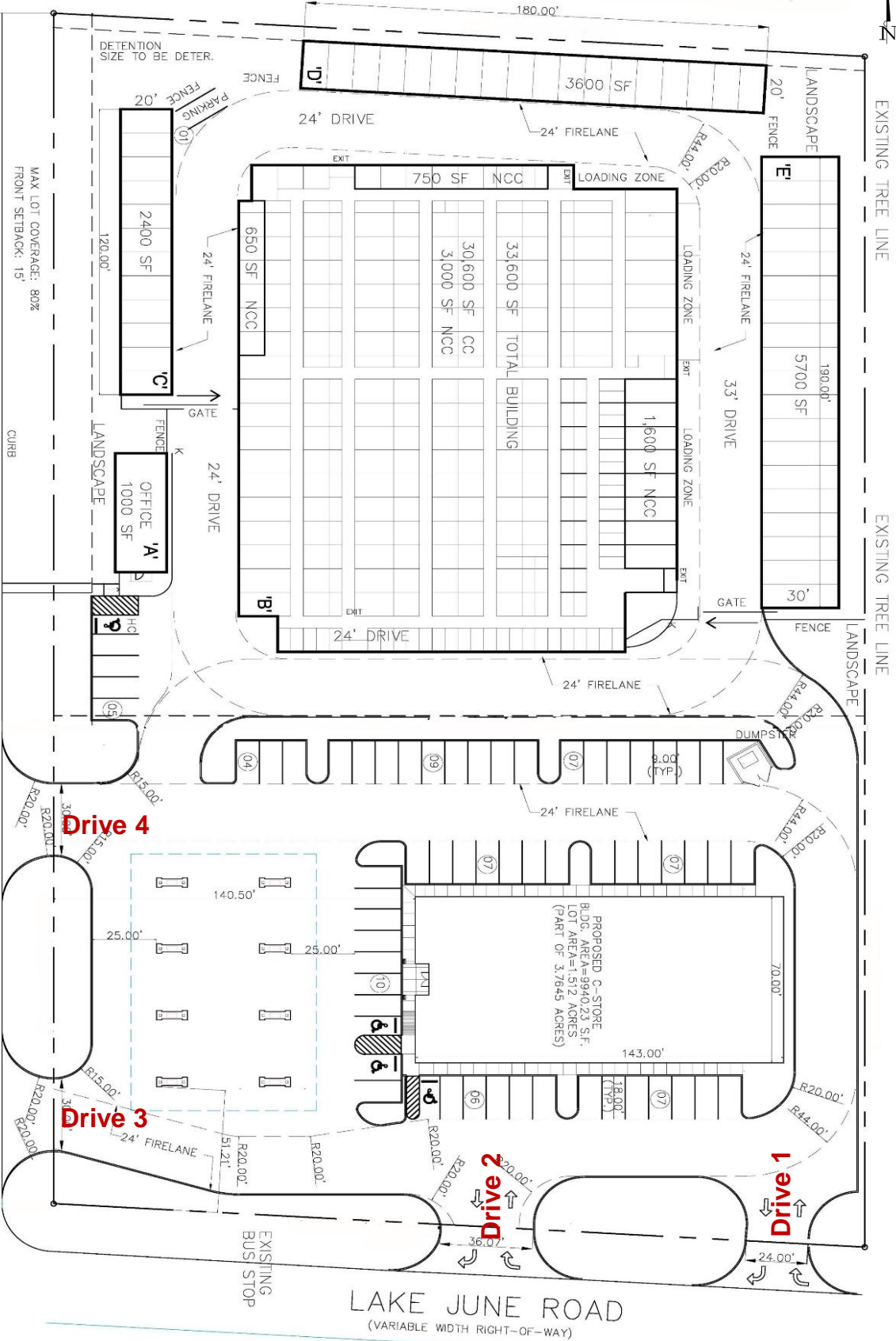


EXHIBIT 2

Conceptual Site Plan

Lake June TIA Dallas

Kimley»Horn

II. EXISTING AND FUTURE AREA CONDITIONS

A. Roadway Characteristics

The following existing intersections were selected to be part of this study:

- Lake June Road at Guard Drive

The analysis also included the following proposed driveways:

- Drive 1, a right-in/right-out driveway to Lake June Road
- Drive 2, a right-in/right-out driveway to Lake June Road
- Drive 3, a full-access driveway to Guard Drive
- Drive 4, a full-access driveway to Guard Drive

The major study area roadways are described below.

Lake June Road – is a six-lane divided roadway that runs east-west through the area. In the project vicinity, Lake June Road has a few unsignalized intersections with residential streets and commercial driveways. The speed limit adjacent to the site is 40 MPH. Lake June Road is identified as a principal arterial (M-6-D(A)) on the City's Thoroughfare Plan.

Guard Drive – is a two-lane undivided roadway that runs north a short distance from Lake June Road. In the project vicinity, Guard Drive has a few unsignalized intersections with residential streets and commercial driveways. The speed limit adjacent to the site is 30 MPH.

Exhibit 3 illustrates the intersection geometry used for the traffic analyses.

B. Existing Study Area

The project site is an undeveloped parcel located at the northeast corner of Lake June Road and Guard Drive. The parcel is currently zoned as MU-1.

The adjacent areas north, south, and east are primarily residential, with light commercial uses along the major streets. To the east is the DART Lake June rail station and Henry B. Gonzalez Elementary School. To the west across US 175 is the Trinity River watershed, so Lake June Road will not be extended farther west, and no significant development is possible.

C. Proposed Site Improvements

The site is proposed with a 16-pump gas station with convenience store and 45,300 square feet of self-storage.

The site would have access via two driveways to Lake June Road and two to Guard Drive. The driveways to be modeled in this analysis are as follows:

Drive 1 – would form an unsignalized right-in/right-out driveway to Lake June Road. Drive 1 would be at a spacing approximately 290' east of Guard Drive and 80' east of Drive 2. Drive 1 is recommended to be constructed with one lane for outbound movements.

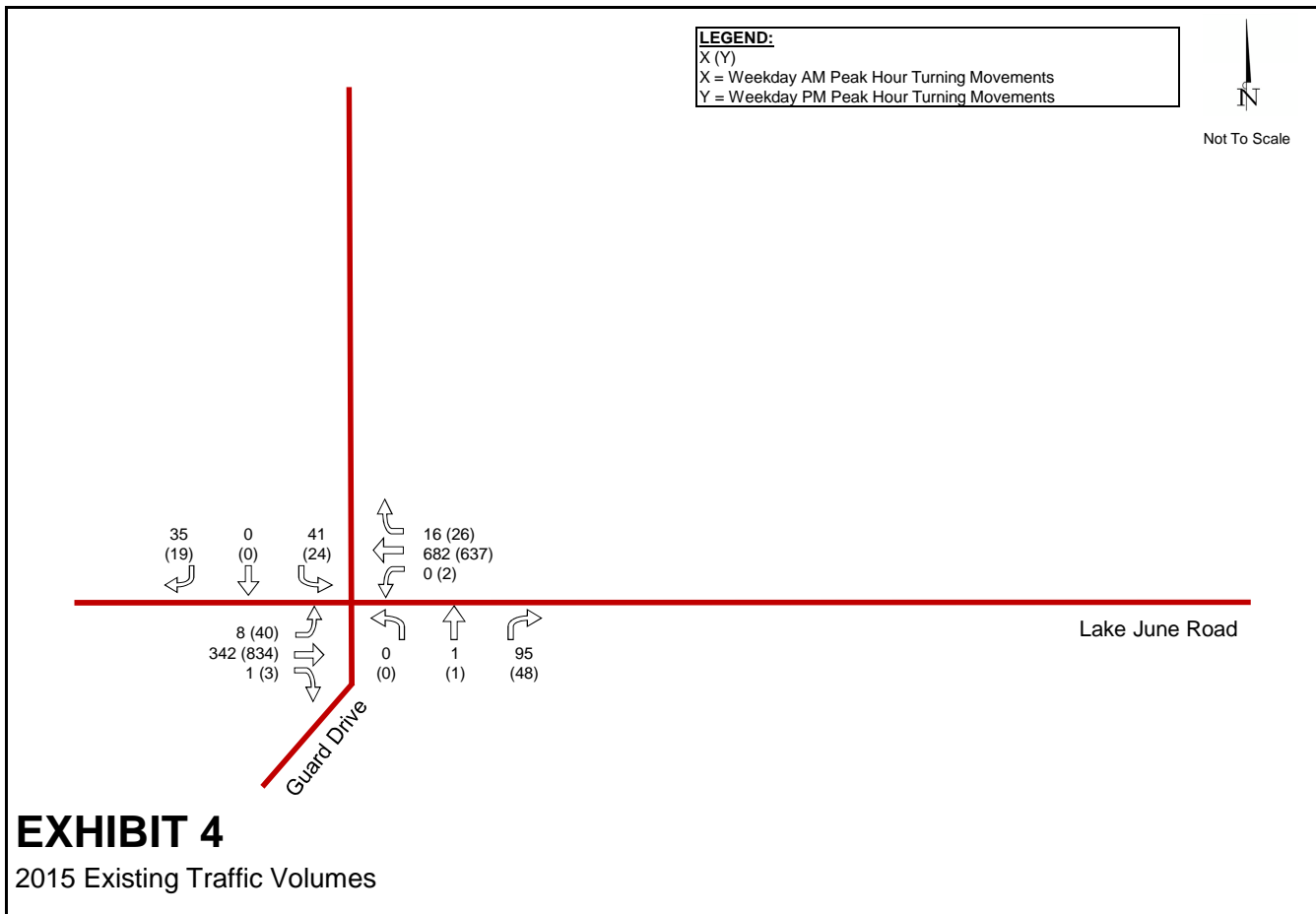
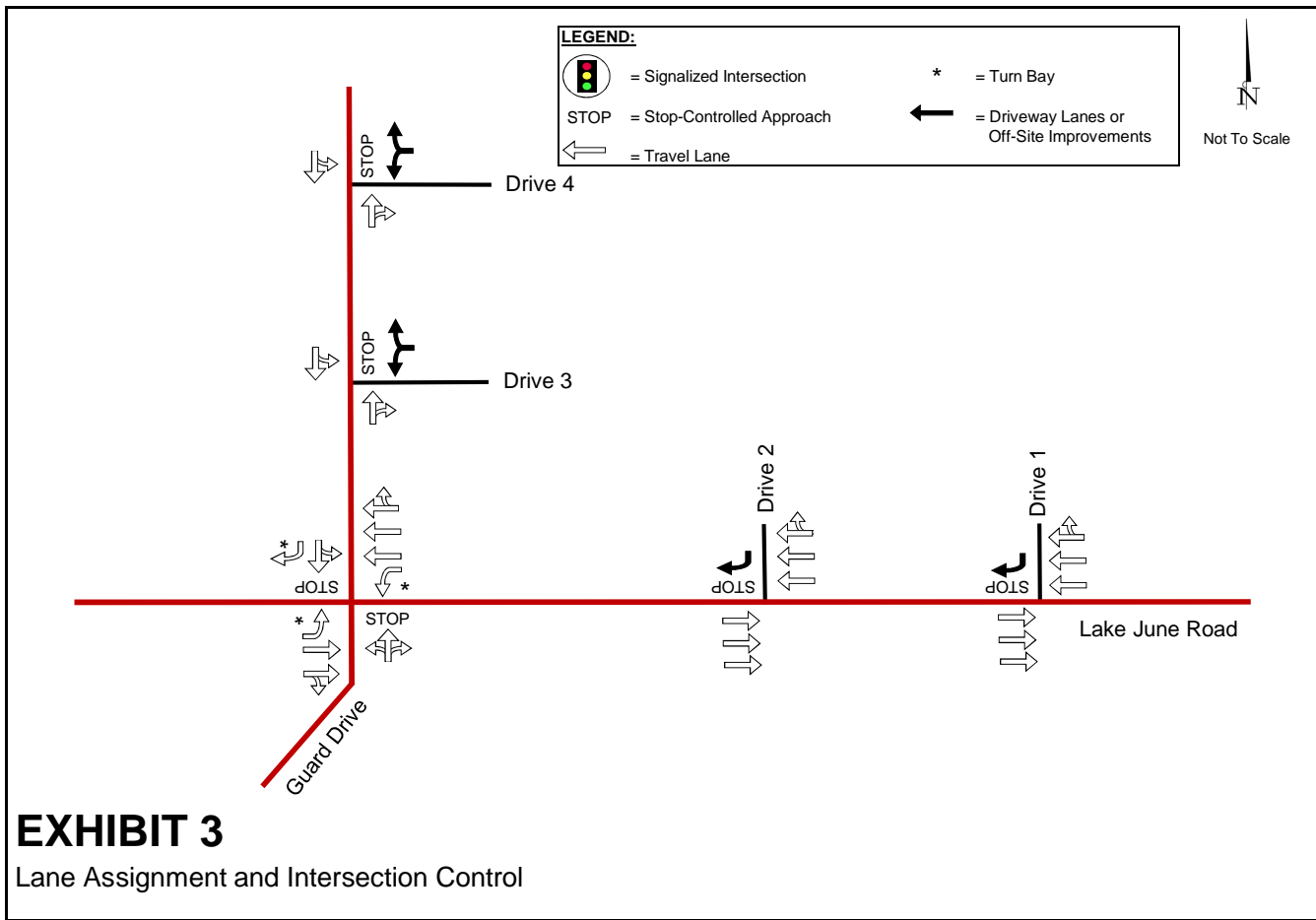
Drive 2 – would form an unsignalized right-in/right-out driveway to Lake June Road. Drive 2 would be at a spacing approximately 170' east of Guard Drive and 80' west of Drive 1. Drive 2 is recommended to be constructed with one lane for outbound movements.

Drive 3 – would form an unsignalized full-access driveway to Guard Drive. Drive 3 would be at a spacing approximately 40' north of Lake June Road. Drive 3 is recommended to be constructed with one lane for outbound movements.

Drive 4 – would form an unsignalized full-access driveway to Guard Drive. Drive 4 would be at a spacing approximately 95' north of Drive 3. Drive 4 is recommended to be constructed with one lane for outbound movements.

D. Existing Traffic Volumes

Weekday AM and PM peak hour turning movement counts were collected on November 18, 2015 at the study intersections. 24-hour machine counts were also collected adjacent to the site on Lake June Road (18,033 vehicles per day) and Guard Drive (1,231 vpd). **Exhibit 4** shows the existing weekday AM and PM peak hour traffic volumes. The raw count sheets are provided in the **Appendix**, as well as a comparison between the 24-hour volumes collected and previous 24-hour counts.



III. PROJECT TRAFFIC CHARACTERISTICS

A. Site-Generated Traffic

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the 9th edition of *Trip Generation Manual* published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. The trips indicated are actually one-way trips or *trip ends*, where one vehicle entering and exiting the site is counted as one inbound trip and one outbound trip.

Pass-by trips are existing vehicles on the adjacent roadways that choose to visit the new site, and then return to their original path. Pass-by trips do not reduce the driveway volumes projected for the site, but are deducted from the net new traffic added to the area roadways, since they are already present. Based on research in the *Trip Generation Manual*, 62% of the AM peak hour and 56% of the PM peak hour traffic at the gas station with convenience market was assumed to be pass-by traffic.

No reductions were taken for internal capture or transit use.

Table 1 shows the resulting weekday AM and PM peak hour trip generation for the proposed development's Phase 1 in 2016.

Table 1 - Trip Generation

Land Uses	Amount	Units	ITE Code	Daily One-Way Trips	AM Peak Hour One-Way Trips			PM Peak Hour One-Way Trips		
					IN	OUT	TOTAL	IN	OUT	TOTAL
Gasoline Station w/ Convenience Market	16	Fueling Pos.	945	2,604	82	81	163	108	108	216
Gasoline Station w/Conv. Mkt. Pass-By Trips (62% AM, 56% PM):				0	51	50	101	61	60	121
Mini-Warehouse	45,300	SF	151	40	3	3	6	6	6	12
Mini-Warehouse Pass-By Trips (0% AM, 0% PM):				0	0	0	0	0	0	0
Raw Trip Generation Total:				2,644	85	84	169	114	114	228
Pass-By Trips:				0	51	50	101	61	60	121
Total Net New Trips After Pass-By Reduction:				2,644	34	34	68	53	54	107

Trip Generation and Pass-By rates based on ITE's *Trip Generation Manual, 9th Edition*.

B. Trip Distribution and Assignment

The distribution of the site-generated traffic volumes into and out of the site driveways and onto the street system was based on the area street system characteristics, existing traffic patterns, relative residential density, and the locations of the proposed driveway access to/from the site. **Table 2** displays the general directional distribution percentages assumed for the site.

Table 2 - General Directional Distribution

Direction (To/From)	Percent of Site Traffic
East (via Lake June Road)	40%
West (via Lake June Road)	60%

The corresponding inbound and outbound traffic assignment, where the directional distribution in **Table 2** is applied using the most probable paths to and from the site can be found in **Exhibit 5**. **Exhibit 6** shows the resulting site-generated weekday AM and weekday PM peak hour turning movements after multiplying the new external trip generation by the respective traffic assignment percentages.

Based on an examination of the existing roadway network, reasonable assumptions for the pass-by distributions were made. **Table 3** displays the general pass-by percentages assumed for the site.

Table 3 - General Directional Pass-By Distribution

Direction	Percent of Site Traffic
Eastbound (via Lake June Road)	25%
Westbound (via Lake June Road)	75%

Exhibit 7 shows the pass-by traffic assignment, including the reductions from the existing through traffic which later return to traveling in the same direction. **Exhibit 8** shows the resulting weekday AM and weekday PM peak hour turning movement volumes after multiplying the pass-by trip generation by the respective traffic assignment percentages.

C. Development of 2016 Background Traffic

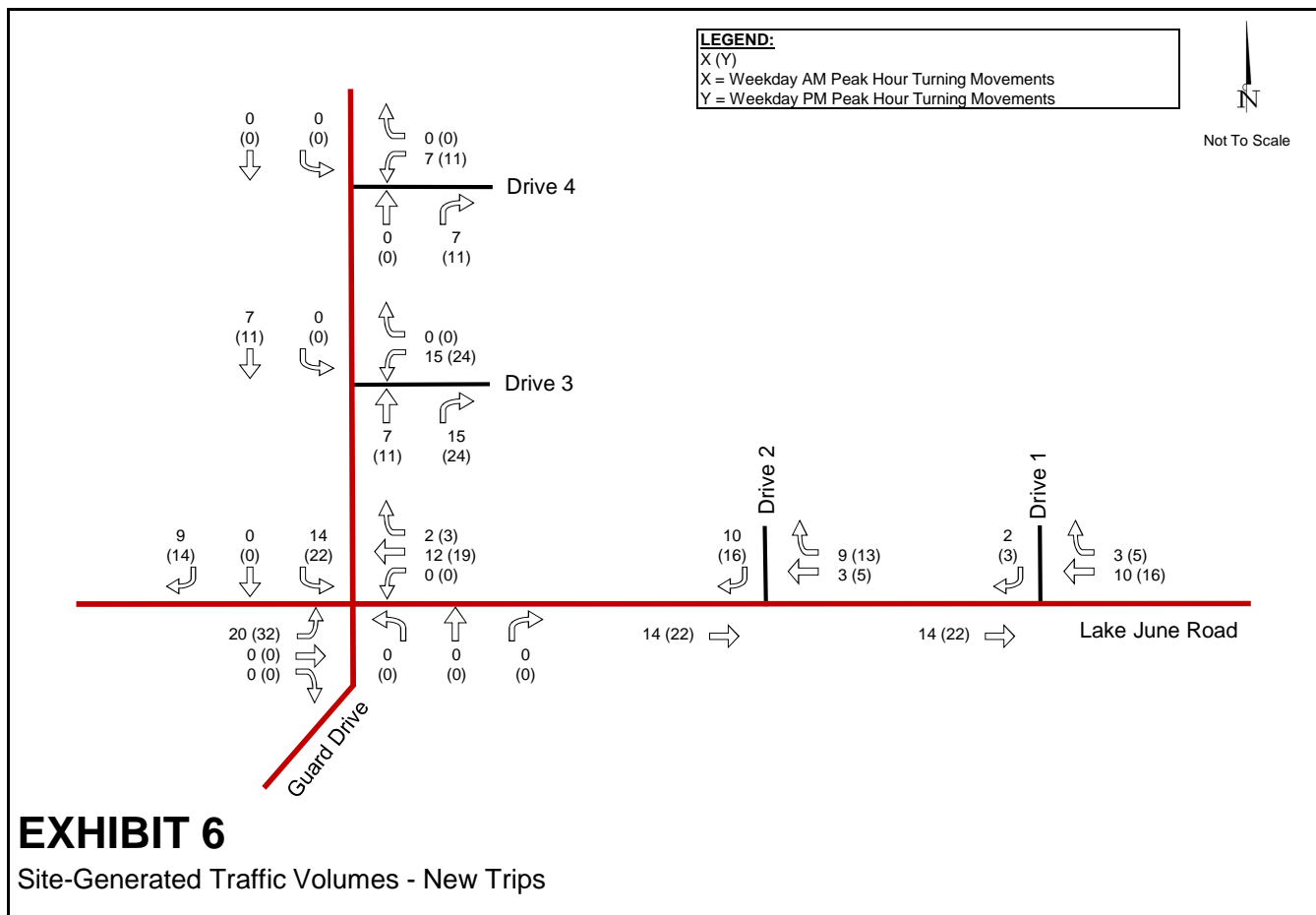
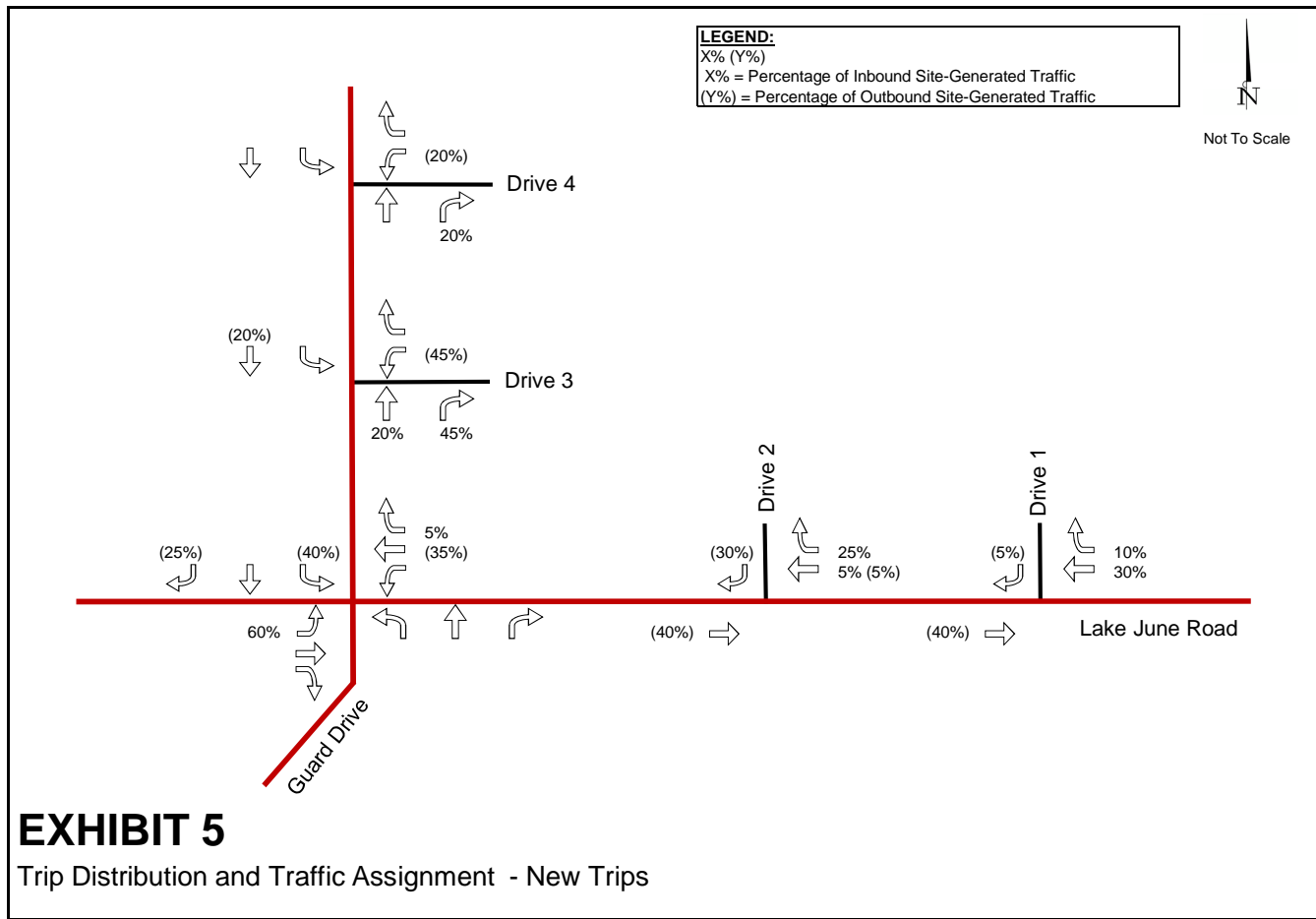
In order to obtain 2016 background traffic, the existing traffic counts and historic counts near the site were compared to find expected growth trends within the study area. Based on the recent growth in the area, an annual growth rate of 2% was assumed for the background traffic. To find the 2016 background traffic, the existing 2015 traffic counts were grown by 2% annually for one year. The resulting 2016 background weekday AM and PM peak hour traffic volumes are shown in **Exhibit 9**.

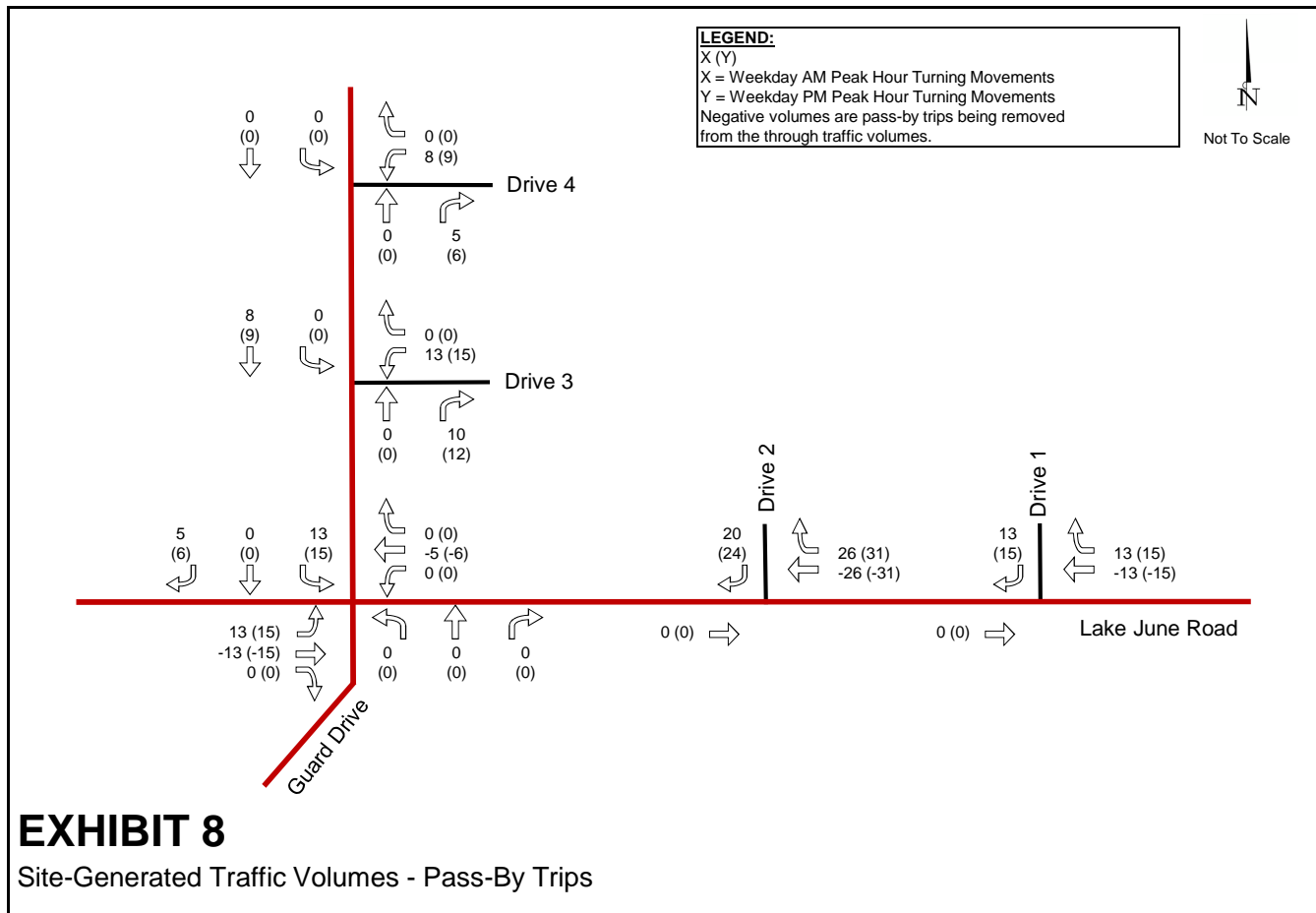
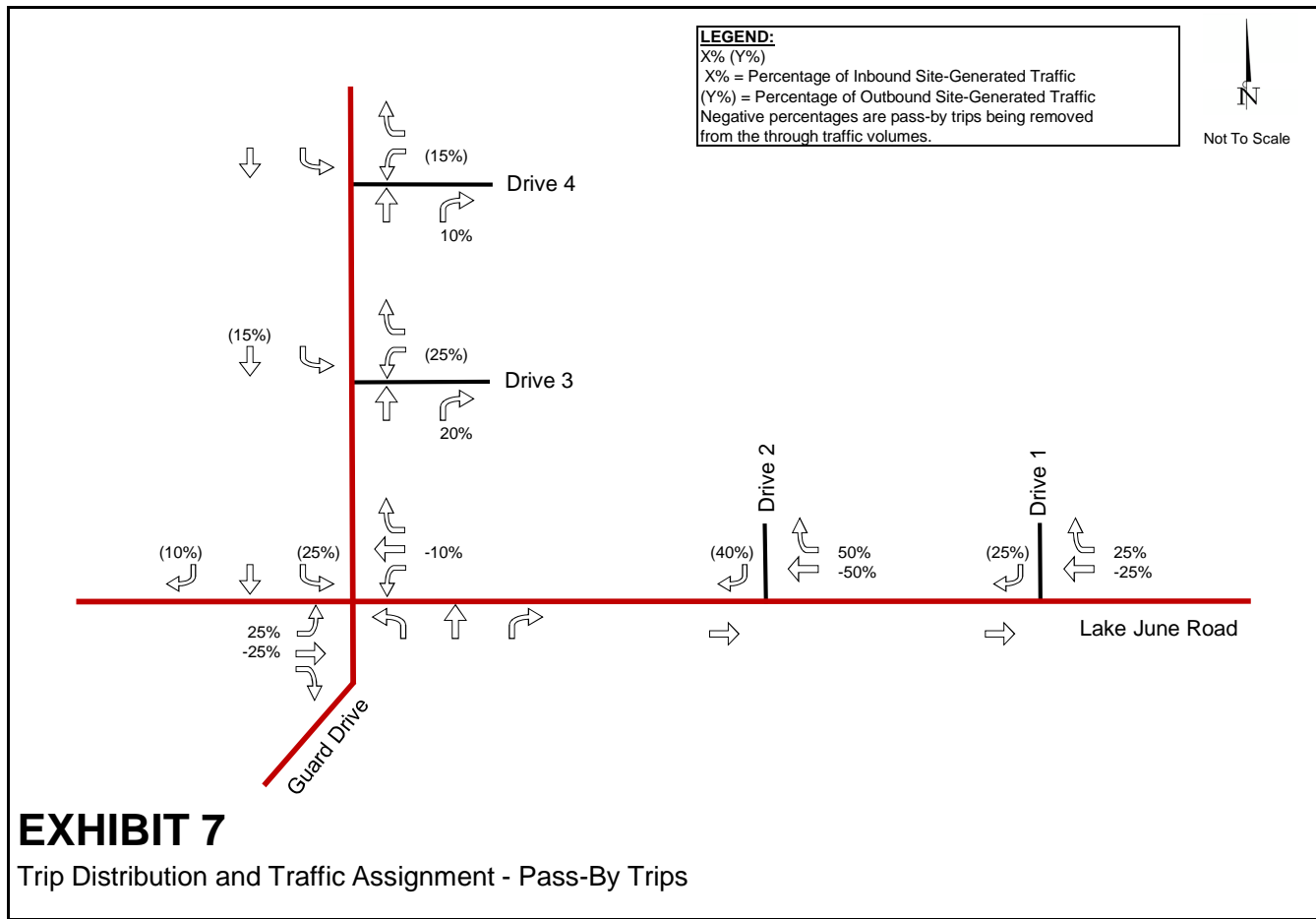
D. Development of 2016 Total Traffic

Site traffic volumes were added to the background volumes to represent the estimated total (background plus site-generated) traffic conditions for the 2016 study year after completion of the proposed development. **Exhibit 10** shows the resulting 2016 weekday AM and PM peak hour total traffic volumes.

E. Development of 2025 Background and Total Traffic

The background and total traffic volumes in the 2025 study year were calculated in the same manner as the 2016 traffic volumes, only with nine years of 1% growth over the 2016 volumes. **Exhibit 11** shows the resulting 2025 weekday AM and PM peak hour background traffic volumes, and **Exhibit 12** shows the resulting 2025 weekday AM and PM peak hour total traffic volumes after the addition of the site-generated traffic.





LEGEND:
 X (Y)
 X = Weekday AM Peak Hour Turning Movements
 Y = Weekday PM Peak Hour Turning Movements



Not To Scale

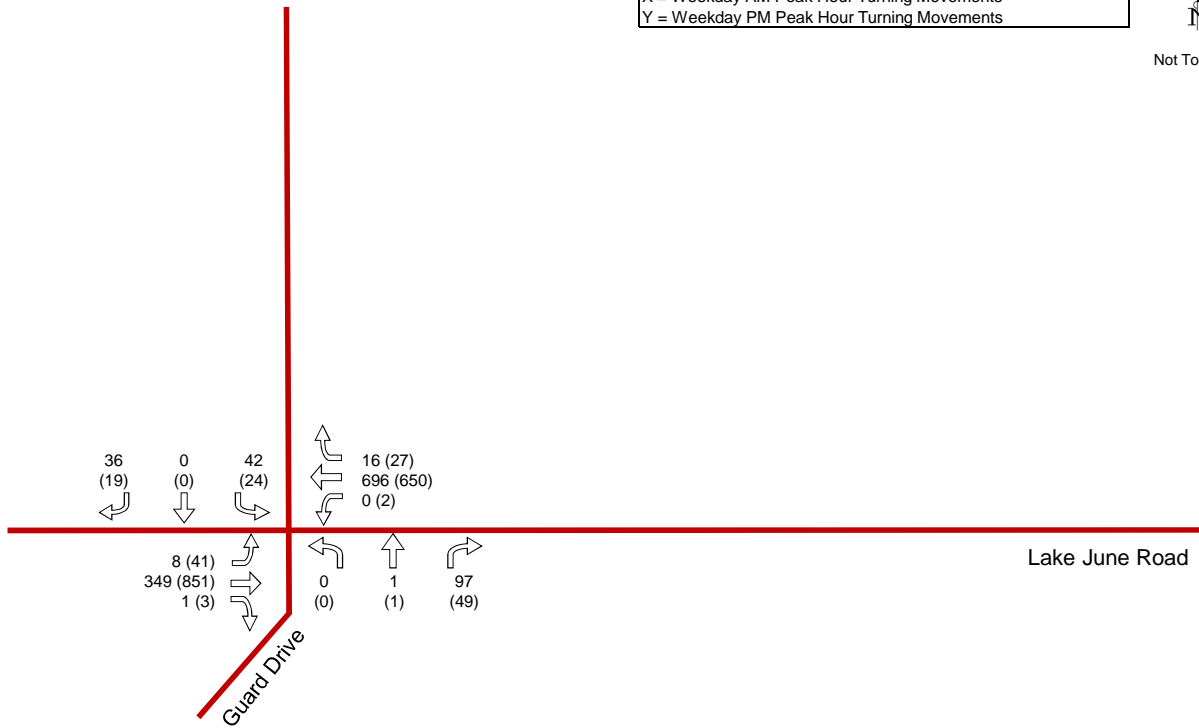


EXHIBIT 9

2016 Background Traffic Volumes

LEGEND:
 X (Y)
 X = Weekday AM Peak Hour Turning Movements
 Y = Weekday PM Peak Hour Turning Movements



Not To Scale

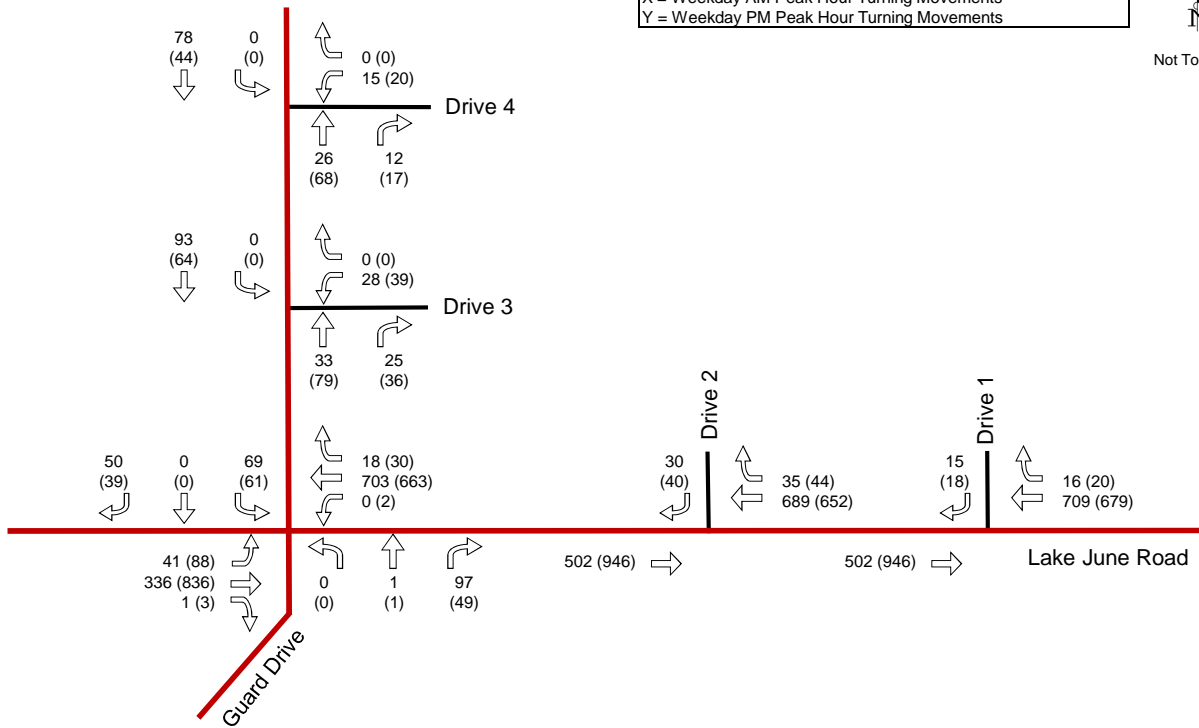


EXHIBIT 10

2016 Background Plus Site-Generated Traffic Volumes

LEGEND:
 X (Y)
 X = Weekday AM Peak Hour Turning Movements
 Y = Weekday PM Peak Hour Turning Movements



Not To Scale

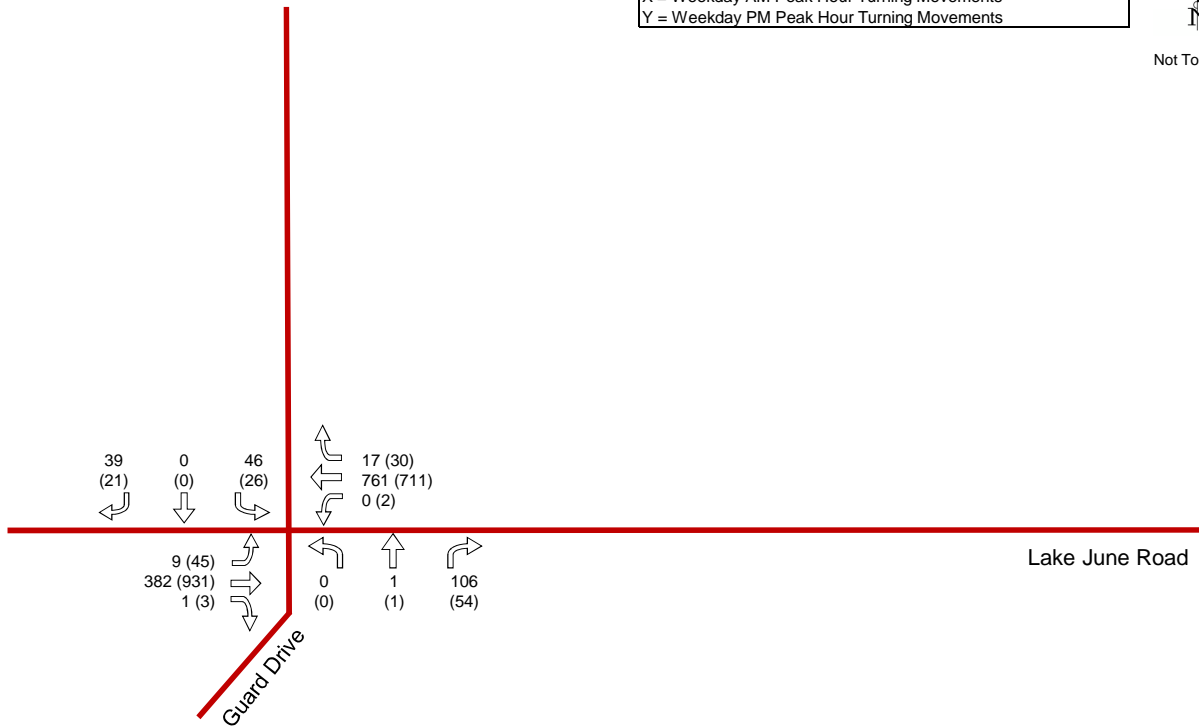


EXHIBIT 11

2025 Background Traffic Volumes

LEGEND:
 X (Y)
 X = Weekday AM Peak Hour Turning Movements
 Y = Weekday PM Peak Hour Turning Movements



Not To Scale

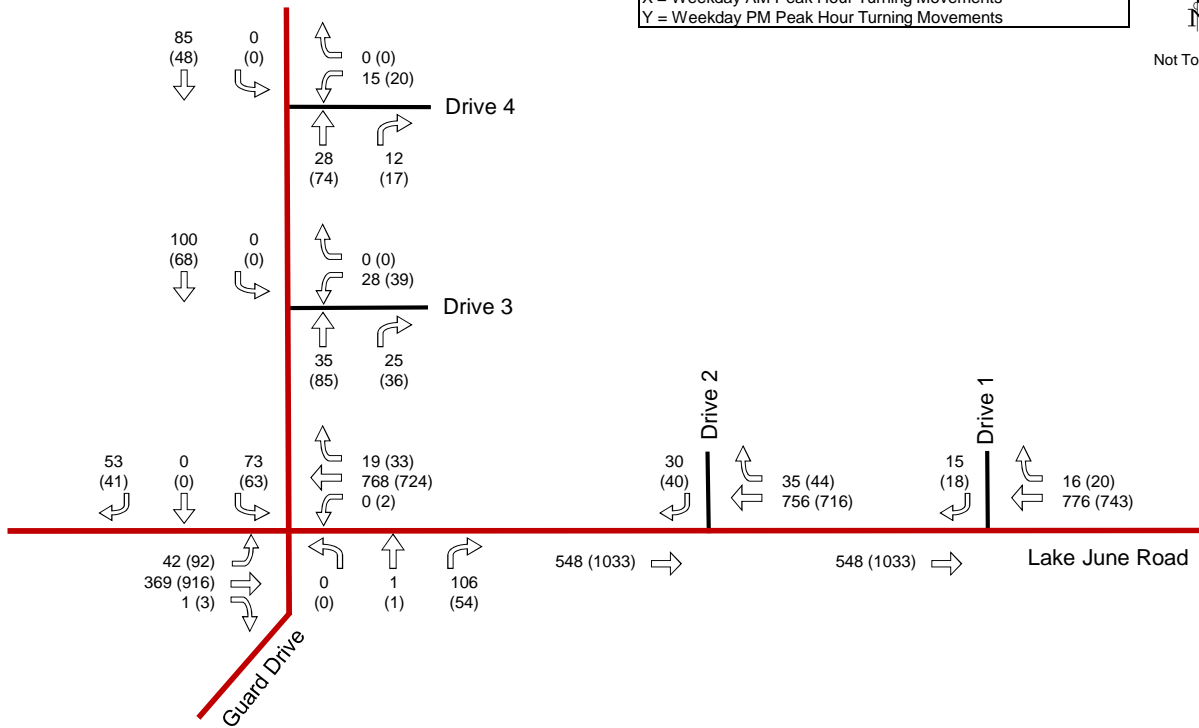


EXHIBIT 12

2025 Background Plus Site-Generated Traffic Volumes

IV. TRAFFIC OPERATIONS ANALYSIS

Kimley-Horn conducted a traffic operations analysis to determine potential capacity deficiencies in the 2015, 2016, and 2025 study years at the study intersections. The acknowledged source for determining overall capacity is the current edition of the *Highway Capacity Manual*.

A. Analysis Methodology

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). **Table 4** shows the definition of level of service for signalized and unsignalized intersections. LOS D is considered the threshold for acceptable operations for signalized intersections.

Table 4 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50

Definitions provided from the Highway Capacity Manual, Special Report 209, Transportation Research Board, 2010.

Study area intersections were analyzed based on average total delay analysis for the unsignalized intersections. For the unsignalized analysis, the level of service (LOS) for a two-way stop controlled intersection is defined for each movement. Unlike signalized intersections which define LOS for each approach and for the intersection as a whole, LOS for two-way stop-controlled intersections is not defined as a whole.

Calculations for the level of service at the key intersections identified for study are provided in the **Appendix**. The analyses assumed the lane geometry and intersection control shown in **Exhibit 3**.

B. Analysis Results

Tables 5 and **6** show the intersection operational results for the weekday AM and PM peak hours, respectively.

Table 5 – Traffic Operational Results – Weekday AM Peak Hour

INTERSECTION	APPROACH	2015 Existing Traffic		2016 Background Traffic		2016 Background Plus Site Traffic		2025 Background Traffic		2025 Background Plus Site Traffic	
		AM Peak Hour		AM Peak Hour		AM Peak Hour		AM Peak Hour		AM Peak Hour	
		DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS
Lake June Road @ Guard Drive	EBL	12.2	B	12.3	B	13.0	B	12.9	B	13.7	B
	WBL	-	-	-	-	-	-	-	-	-	-
	NB*	10.1	B	10.1	B	10.1	B	10.4	B	10.4	B
	SBL*	20.4	C	20.9	C	27.3	D	23.9	C	33.1	D
	SBR*	12.1	B	12.3	B	12.5	B	12.7	B	12.9	B
Lake June Road @ Drive 1	SBR*	-	-	-	-	12.2	B	-	-	12.6	B
Lake June Road @ Drive 2	SBR*	-	-	-	-	12.4	B	-	-	12.9	B
Guard Drive @ Drive 3	WB*	-	-	-	-	9.4	A	-	-	9.5	A
	SBL	-	-	-	-	-	-	-	-	-	-
Guard Drive @ Drive 4	WB*	-	-	-	-	9.2	A	-	-	9.2	A
	SBL	-	-	-	-	-	-	-	-	-	-

* Stop-Controlled Approach - No movements in Time Period

Table 6 – Traffic Operational Results – Weekday PM Peak Hour

INTERSECTION	APPROACH	2015 Existing Traffic		2016 Background Traffic		2016 Background Plus Site Traffic		2025 Background Traffic		2025 Background Plus Site Traffic	
		PM Peak Hour		PM Peak Hour		PM Peak Hour		PM Peak Hour		PM Peak Hour	
		DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS
Lake June Road @ Guard Drive	EBL	12.4	B	12.5	B	13.6	B	13.2	B	14.6	B
	WBL	9.9	A	9.9	A	9.9	A	10.3	B	10.2	B
	NB*	12.5	B	12.7	B	12.7	B	13.4	B	13.4	B
	SBL*	22.1	C	22.8	C	37.2	E	26.0	D	47.2	E
	SBR*	11.8	B	11.9	B	12.2	B	12.3	B	12.6	B
Lake June Road @ Drive 1	SBR*	-	-	-	-	12.1	B	-	-	12.5	B
Lake June Road @ Drive 2	SBR*	-	-	-	-	12.4	B	-	-	12.8	B
Guard Drive @ Drive 3	WB*	-	-	-	-	9.7	A	-	-	9.7	A
	SBL	-	-	-	-	-	-	-	-	-	-
Guard Drive @ Drive 4	WB*	-	-	-	-	9.3	A	-	-	9.3	A
	SBL	-	-	-	-	-	-	-	-	-	-

* Stop-Controlled Approach - No movements in Time Period

C. 2015 Existing Traffic Operations

The analysis of the 2015 existing traffic operations shows the unsignalized intersection of Lake June Road at Guard Drive operating at LOS C or better in both peak hours.

D. 2016 Background Traffic Operations

The addition of two years of background growth adds a small amount of delay to the signalized intersection with no changes in both peak hours as compared to the 2015 existing conditions.

E. 2016 Background Plus Site-Generated Traffic Operations

The addition of the site-generated traffic to the 2016 background traffic results in a small amount of additional delay at the existing unsignalized intersection with one change in each peak hour. In the AM peak hour, the stop-controlled southbound left-turn approach changes from LOS C to D. In the PM peak hour, the same approach changes from LOS C to E. As the area reaches buildout, this LOS is to be expected when attempting to make an unsignalized left-turn onto a principal arterial. The maximum 95th percentile queue length of the southbound left-turn is less than two vehicles. The site driveways operate at LOS B or better in both peak hours.

F. 2025 Background Traffic Operations

Nine additional years of background growth results in a small amount of additional delay at the existing unsignalized intersection with one change in the PM peak hour. The stop-controlled southbound left-turn approach changes from LOS C to D as compared to the 2016 background conditions.

G. 2025 Background Plus Site-Generated Traffic Operations

The addition of the site-generated traffic to the 2025 background traffic results in a small amount of additional delay at the existing unsignalized intersection with one change in each peak hour. In the AM peak hour, the stop-controlled southbound left-turn approach changes from LOS C to D. In the PM peak hour, the same approach changes from LOS D to E. Similar to the 2016 background plus site condition, this LOS is to be expected when attempting to make an unsignalized left-turn onto a principal arterial. The maximum 95th percentile queue length of the southbound left-turn is less than three vehicles. The site driveways continue to operate at LOS B or better in both peak hours.

H. Driveway and Right-Turn Lane Analysis

The proposed driveways to Lake June Road are on a relatively flat and straight roadway segment. There are a few utility poles and trees along the northern edge of Lake June Road. The trees should be maintained to provide the appropriate sight distance along Lake June Road.

The proposed driveways to Guard Drive are on a flat and straight roadway segment. There are a few utility poles along the eastern edge of Guard Drive, but adequate sight distance is provided for the proposed driveways.

Where justified, the addition of right-turn deceleration lanes can help inbound turning vehicles separate from the through traffic, avoiding conflicts and smoothing traffic flow. Both TxDOT and the City of Dallas have identified right-turning volume thresholds where right-turn lanes are believed to be justified. **Table 7** shows the driveway locations with right-turn driveway access to the site, and how it compares to the TxDOT and City standards in the scenario years. The high inbound volume occurs in the PM peak hour. The proposed driveways do not meet the thresholds for recommending a right-turn lane, so none are recommended.

Table 7 - Right-Turn Lane Analysis

Right-Turn Location	Projected Maximum Peak Hour Right-Turn Volume	TxDOT Threshold (Access Management Manual, Table 2-3)	City of Dallas Threshold (Off-Street Parking and Driveways Handbook, III.A.5)	Right-Turn Lane Recommended?
Drive 1 from WB Lake June Road (2025)	20 vph	60 vph	120 vph	No
Drive 2 from WB Lake June Road (2025)	44 vph	60 vph	120 vph	No
Drive 3 from NB Guard Drive (2025)	36 vph	60 vph	120 vph	No
Drive 4 from NB Guard Drive (2025)	17 vph	60 vph	120 vph	No

I. Link Analysis

The link capacity analysis examines the operating conditions of roadway links rather than intersections, and uses the daily traffic rather than the peak hours. The operating condition is defined by the ratio of link volume to link capacity, or V/C. The V/C of the different roadway links that would be impacted by the proposed development’s traffic was calculated for the 2016 and 2025 background and background plus site traffic scenarios. The daily link capacity for the roadways are taken from the Dallas-Fort Worth Regional Travel Model (DFWRTM). The daily background volume on each link is found by applying the growth factor to known daily link volumes, then adding the percentage of the daily site traffic that uses each link. **Table 8** summarizes daily volumes and volume-to-capacity ratios of the links for the 2016 opening year and the 2025 buildout year scenarios.

The link analyses show Lake June Road and Guard Drive operating at LOS A/B in all scenarios.

Table 8 – Link Analysis

Roadway Link		2015 Existing			2016 Background			2016 Site-Generated		2016 Background+Site		
From	To	Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	Assignment	Daily Volume	Volume	V/C Ratio	LOS
Lake June Road Guard Drive Volume Limit 6 Lanes 55,500	Gillette Street	18,033	0.32	A/B	18,394	0.33	A/B	40.0%	1,058	19,452	0.35	A/B
					2% growth for 1 year							
Guard Drive	Trinity Creek	1,231	0.12	A/B	1,256	0.12	A/B	65.0%	1,719	2,975	0.28	A/B
					2% growth for 1 year							
Roadway Link		2015 Existing			2016 Background			2016 Site-Generated		2016 Background+Site		
From	To	Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	Assignment	Daily Volume	Volume	V/C Ratio	LOS
Lake June Road Guard Drive Volume Limit 6 Lanes 55,500	Gillette Street				20,117	0.36	A/B	40.0%	1,058	21,175	0.38	A/B
					1% growth for 9 years							
Guard Drive	Trinity Creek				1,374	0.13	A/B	65.0%	1,719	3,093	0.29	A/B
					1% growth for 9 years							

Volume Limit Based on NCTCOG DFWR™ Hourly Capacity Per Lane

Volume to Service (Capacity) Ratio		LOS Rankin
Greater Than	Less Than / Equal To	
-	0.45	A or B
0.45	0.65	C
0.65	0.80	D
0.80	1.00	E
1.00	-	F

V. CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis presented in this report, the proposed development can be successfully incorporated into the surrounding roadway network. The proposed site driveways provide the appropriate level of access for the development. The site-generated traffic does not significantly affect the existing traffic operations.

Intersection sight distance at the proposed driveways is acceptable, with each on relatively flat and straight segments of their respective roadways.

The proposed driveways do not meet TxDOT or City of Dallas thresholds for recommending right-turn deceleration lanes, so none are recommended for the site.

APPENDIX

Traffic Counts and Historical Data



kh@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417

Count Name: Lake June Road at
Guard Drive
Site Code: 1
Start Date: 11/18/2015
Page No: 1

Turning Movement Data

Start Time	Guard Drive Southbound						Lake June Road Westbound						Guard Drive Northbound						Lake June Road Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:00 AM	7	0	15	0	0	22	0	176	2	0	0	178	0	0	7	0	0	7	2	71	0	0	0	73	280
7:15 AM	10	0	8	0	0	18	0	173	2	0	0	175	0	0	21	0	0	21	2	73	0	0	0	75	289
7:30 AM	13	0	4	0	0	17	0	156	2	0	0	158	0	1	38	0	0	39	3	102	0	0	0	105	319
7:45 AM	11	0	8	0	0	19	0	177	10	0	0	187	0	0	29	0	0	29	1	96	1	0	0	98	333
Hourly Total	41	0	35	0	0	76	0	682	16	0	0	698	0	1	95	0	0	96	8	342	1	0	0	351	1221
8:00 AM	6	0	6	0	0	12	1	156	9	0	0	166	0	0	18	0	0	18	3	77	1	0	0	81	277
8:15 AM	9	0	6	0	0	15	0	145	3	0	0	148	0	0	9	0	0	9	1	79	2	0	0	82	254
8:30 AM	4	0	5	0	0	9	1	135	2	0	0	138	0	0	10	0	0	10	1	58	0	0	0	59	216
8:45 AM	3	0	9	0	0	12	2	105	1	0	0	108	0	1	5	0	0	6	2	76	0	0	0	78	204
Hourly Total	22	0	26	0	0	48	4	541	15	0	0	560	0	1	42	0	0	43	7	290	3	0	0	300	951
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:30 PM	5	0	2	0	0	7	1	131	13	0	0	145	0	0	21	0	0	21	6	204	1	0	0	211	384
4:45 PM	7	0	4	0	0	11	0	156	11	0	0	167	0	0	13	0	0	13	12	188	0	0	0	200	391
Hourly Total	12	0	6	0	0	18	1	287	24	0	0	312	0	0	34	0	0	34	18	392	1	0	0	411	775
5:00 PM	3	0	5	0	0	8	0	161	5	0	0	166	0	0	10	0	0	10	10	228	0	0	0	238	422
5:15 PM	8	0	4	0	0	12	1	147	8	0	0	156	0	0	15	0	0	15	12	175	1	0	0	188	371
5:30 PM	6	0	4	0	0	10	1	173	8	1	0	183	0	1	12	0	0	13	12	204	2	0	0	218	424
5:45 PM	7	0	6	0	0	13	0	156	5	3	0	164	0	0	11	0	0	11	6	227	0	0	0	233	421
Hourly Total	24	0	19	0	0	43	2	637	26	4	0	669	0	1	48	0	0	49	40	834	3	0	0	877	1638
6:00 PM	5	0	4	0	0	9	2	137	10	1	0	150	0	1	10	0	0	11	7	198	1	0	0	206	376
6:15 PM	6	0	4	0	0	10	0	139	8	0	0	147	0	0	12	0	1	12	4	146	0	1	0	151	320
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	110	0	94	0	0	204	9	2423	99	5	0	2536	0	4	241	0	1	245	84	2202	9	1	0	2296	5281
Approach %	53.9	0.0	46.1	0.0	-	-	0.4	95.5	3.9	0.2	-	-	0.0	1.6	98.4	0.0	-	-	3.7	95.9	0.4	0.0	-	-	-
Total %	2.1	0.0	1.8	0.0	-	3.9	0.2	45.9	1.9	0.1	-	48.0	0.0	0.1	4.6	0.0	-	4.6	1.6	41.7	0.2	0.0	-	43.5	-
All Vehicles (no classification)	110	0	94	0	-	204	9	2423	99	5	-	2536	0	4	241	0	-	245	84	2202	9	1	-	2296	5281
% All Vehicles (no classification)	100.0	-	100.0	-	-	100.0	100.0	100.0	100.0	100.0	-	100.0	-	100.0	100.0	-	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-



kh@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417

Count Name: Lake June Road at
Guard Drive
Site Code: 1
Start Date: 11/18/2015
Page No: 3

Turning Movement Peak Hour Data (7:00 AM)

Start Time	Guard Drive Southbound						Lake June Road Westbound						Guard Drive Northbound						Lake June Road Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:00 AM	7	0	15	0	0	22	0	176	2	0	0	178	0	0	7	0	0	7	2	71	0	0	0	73	280
7:15 AM	10	0	8	0	0	18	0	173	2	0	0	175	0	0	21	0	0	21	2	73	0	0	0	75	289
7:30 AM	13	0	4	0	0	17	0	156	2	0	0	158	0	1	38	0	0	39	3	102	0	0	0	105	319
7:45 AM	11	0	8	0	0	19	0	177	10	0	0	187	0	0	29	0	0	29	1	96	1	0	0	98	333
Total	41	0	35	0	0	76	0	682	16	0	0	698	0	1	95	0	0	96	8	342	1	0	0	351	1221
Approach %	53.9	0.0	46.1	0.0	-	-	0.0	97.7	2.3	0.0	-	-	0.0	1.0	99.0	0.0	-	-	2.3	97.4	0.3	0.0	-	-	-
Total %	3.4	0.0	2.9	0.0	-	6.2	0.0	55.9	1.3	0.0	-	57.2	0.0	0.1	7.8	0.0	-	7.9	0.7	28.0	0.1	0.0	-	28.7	-
PHF	0.788	0.000	0.583	0.000	-	0.864	0.000	0.963	0.400	0.000	-	0.933	0.000	0.250	0.625	0.000	-	0.615	0.667	0.838	0.250	0.000	-	0.836	0.917
All Vehicles (no classification)	41	0	35	0	-	76	0	682	16	0	-	698	0	1	95	0	-	96	8	342	1	0	-	351	1221
% All Vehicles (no classification)	100.0	-	100.0	-	-	100.0	-	100.0	100.0	-	-	100.0	-	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



kh@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417

Count Name: Lake June Road at
Guard Drive
Site Code: 1
Start Date: 11/18/2015
Page No: 5

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Guard Drive Southbound						Lake June Road Westbound						Guard Drive Northbound						Lake June Road Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
5:00 PM	3	0	5	0	0	8	0	161	5	0	0	166	0	0	10	0	0	10	10	228	0	0	0	238	422
5:15 PM	8	0	4	0	0	12	1	147	8	0	0	156	0	0	15	0	0	15	12	175	1	0	0	188	371
5:30 PM	6	0	4	0	0	10	1	173	8	1	0	183	0	1	12	0	0	13	12	204	2	0	0	218	424
5:45 PM	7	0	6	0	0	13	0	156	5	3	0	164	0	0	11	0	0	11	6	227	0	0	0	233	421
Total	24	0	19	0	0	43	2	637	26	4	0	669	0	1	48	0	0	49	40	834	3	0	0	877	1638
Approach %	55.8	0.0	44.2	0.0	-	-	0.3	95.2	3.9	0.6	-	-	0.0	2.0	98.0	0.0	-	-	4.6	95.1	0.3	0.0	-	-	-
Total %	1.5	0.0	1.2	0.0	-	2.6	0.1	38.9	1.6	0.2	-	40.8	0.0	0.1	2.9	0.0	-	3.0	2.4	50.9	0.2	0.0	-	53.5	-
PHF	0.750	0.000	0.792	0.000	-	0.827	0.500	0.921	0.813	0.333	-	0.914	0.000	0.250	0.800	0.000	-	0.817	0.833	0.914	0.375	0.000	-	0.921	0.966
All Vehicles (no classification)	24	0	19	0	-	43	2	637	26	4	-	669	0	1	48	0	-	49	40	834	3	0	-	877	1638
% All Vehicles (no classification)	100.0	-	100.0	-	-	100.0	100.0	100.0	100.0	100.0	-	100.0	-	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lake June TIA Dallas

Historical Link Volumes and Growth Rates

Lake June Road (West of Gillette)						
Record	Year	Link Start	Link End	Source	24-Hour Volume	Annual Growth Rate
1	2009	Guard Road	Gillette Street	TxDOT	18,047	-
2	2015	Guard Road	Gillette Street	KH	18,033	0.0%

Lake June Road (East of Gillette)						
Record	Year	Link Start	Link End	Source	24-Hour Volume	Annual Growth Rate
1	1999	Gillette Street	Lonsdale Ave	TxDOT	17,242	-
2	2004	Gillette Street	Lonsdale Ave	TxDOT	19,838	2.8%
3	2009	Gillette Street	Lonsdale Ave	TxDOT	18,046	-1.9%

Average Growth 1999 - 2009: 0.5%

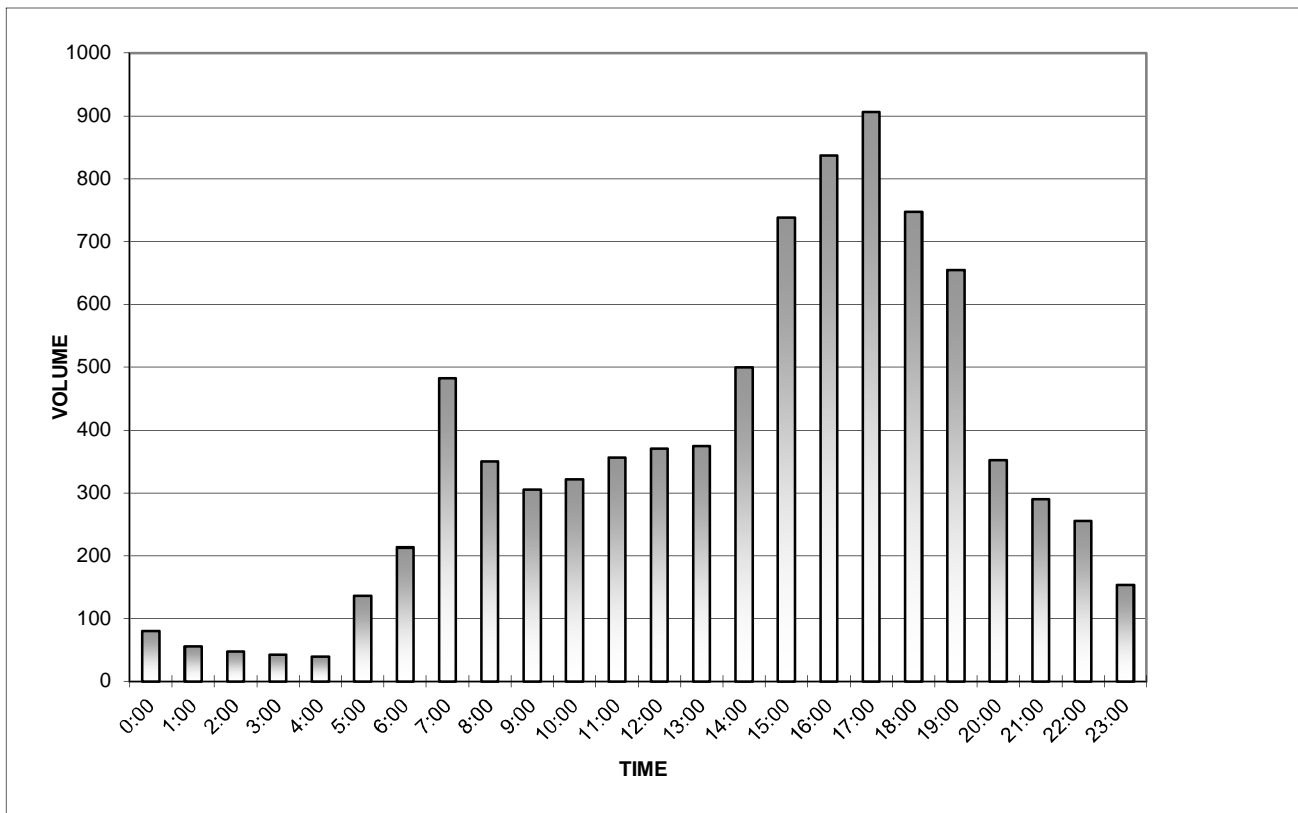
Guard Drive						
Record	Year	Link Start	Link End	Source	24-Hour Volume	Annual Growth Rate
1	2015	Lake June Road	Trinity Creek Dr	KH	1,231	-

EB Lake June Road East of Guard Drive

Date Began:
11/18/2015

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	21	20	28	11	80
1:00	21	12	14	9	56
2:00	13	16	12	6	47
3:00	10	10	14	8	42
4:00	10	11	6	12	39
5:00	24	28	36	48	136
6:00	40	39	62	72	213
7:00	86	110	150	136	482
8:00	100	92	74	84	350
9:00	76	86	65	78	305
10:00	96	73	70	82	321
11:00	82	98	94	82	356
12:00	85	110	92	83	370
13:00	96	104	90	84	374
14:00	104	130	114	152	500
15:00	208	172	168	190	738
16:00	200	212	211	214	837
17:00	238	191	227	250	906
18:00	210	162	189	186	747
19:00	189	180	156	130	655
20:00	124	76	71	81	352
21:00	82	74	62	72	290
22:00	54	77	64	60	255
23:00	36	50	33	34	153
TOTAL:					8604

The A.M. peak hour from 7:15 to 8:15 is 496
The P.M. peak hour from 17:00 to 18:00 is 906



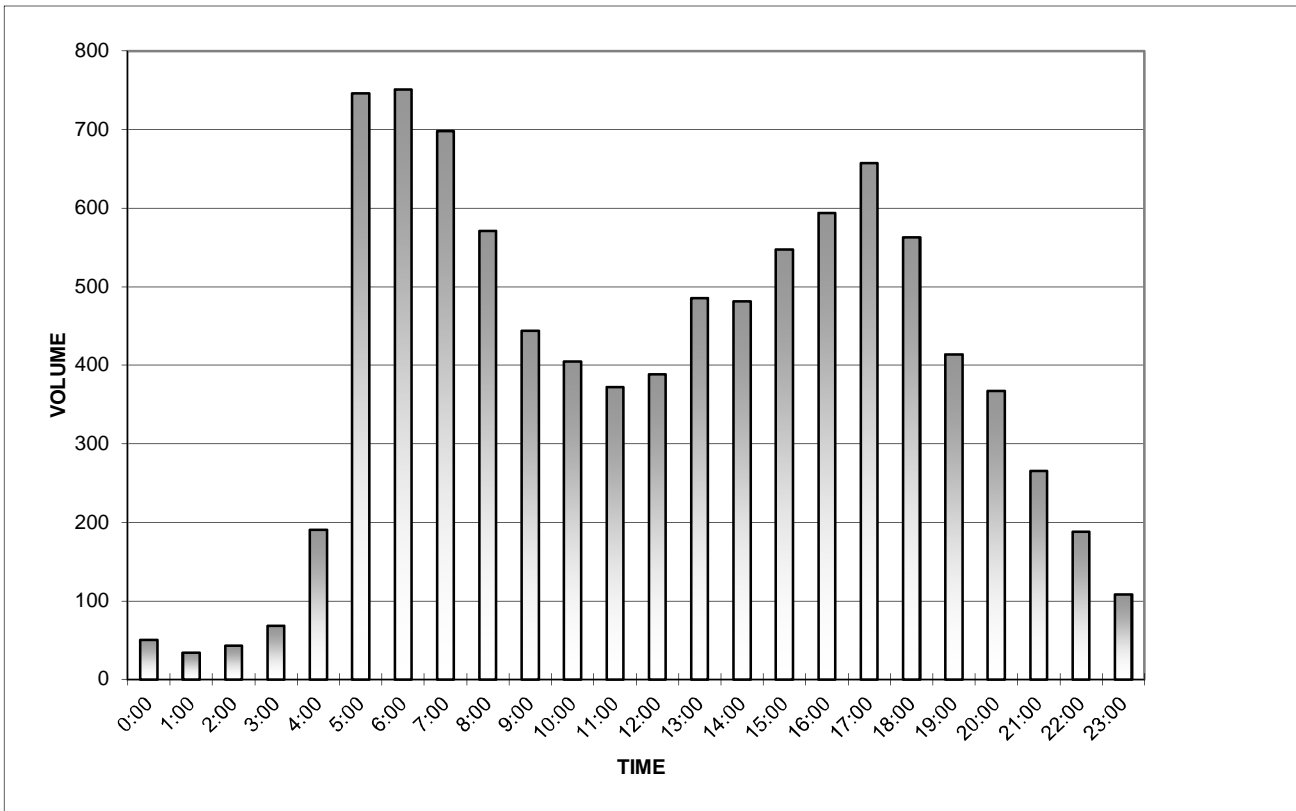
WB Lake June Road East of Guard Drive

Date Began:
11/18/2015

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	12	12	12	14	50
1:00	7	16	6	5	34
2:00	8	14	10	11	43
3:00	17	16	20	15	68
4:00	31	35	54	70	190
5:00	90	156	230	270	746
6:00	225	182	184	160	751
7:00	177	178	161	182	698
8:00	164	154	144	109	571
9:00	114	90	124	116	444
10:00	108	106	96	95	405
11:00	90	106	100	76	372
12:00	91	100	106	91	388
13:00	110	135	126	114	485
14:00	120	113	139	109	481
15:00	136	137	144	130	547
16:00	142	134	146	172	594
17:00	164	156	177	160	657
18:00	156	138	144	125	563
19:00	126	104	80	104	414
20:00	112	94	71	90	367
21:00	80	72	56	57	265
22:00	46	66	44	32	188
23:00	28	33	24	23	108

TOTAL: 9429

The A.M. peak hour from 5:30 to 6:30 is 907
The P.M. peak hour from 16:45 to 17:45 is 669

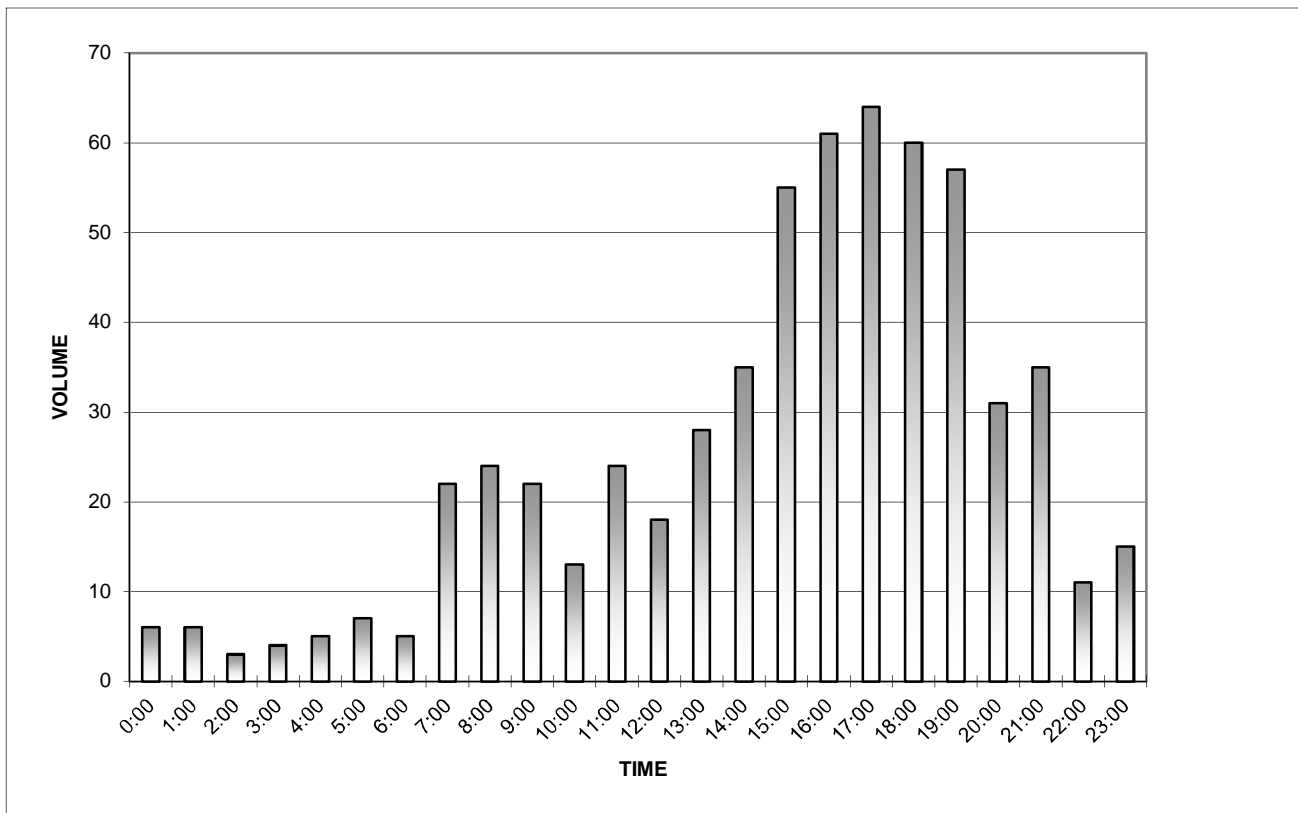


NB Guard Drive North of Lake June Road

Date Began:
11/18/2015

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	2	3	1	0	6
1:00	2	2	1	1	6
2:00	2	1	0	0	3
3:00	1	1	1	1	4
4:00	2	1	2	0	5
5:00	0	0	6	1	7
6:00	1	1	2	1	5
7:00	4	4	5	9	22
8:00	11	5	4	4	24
9:00	4	6	8	4	22
10:00	3	2	1	7	13
11:00	6	8	5	5	24
12:00	7	3	5	3	18
13:00	9	3	6	10	28
14:00	13	9	9	4	35
15:00	23	12	6	14	55
16:00	14	7	18	22	61
17:00	16	18	17	13	64
18:00	18	10	19	13	60
19:00	14	18	12	13	57
20:00	6	4	12	9	31
21:00	13	9	11	2	35
22:00	1	4	4	2	11
23:00	2	8	2	3	15
TOTAL:					611

The A.M. peak hour from 7:30 to 8:30 is 30
The P.M. peak hour from 16:30 to 17:30 is 74

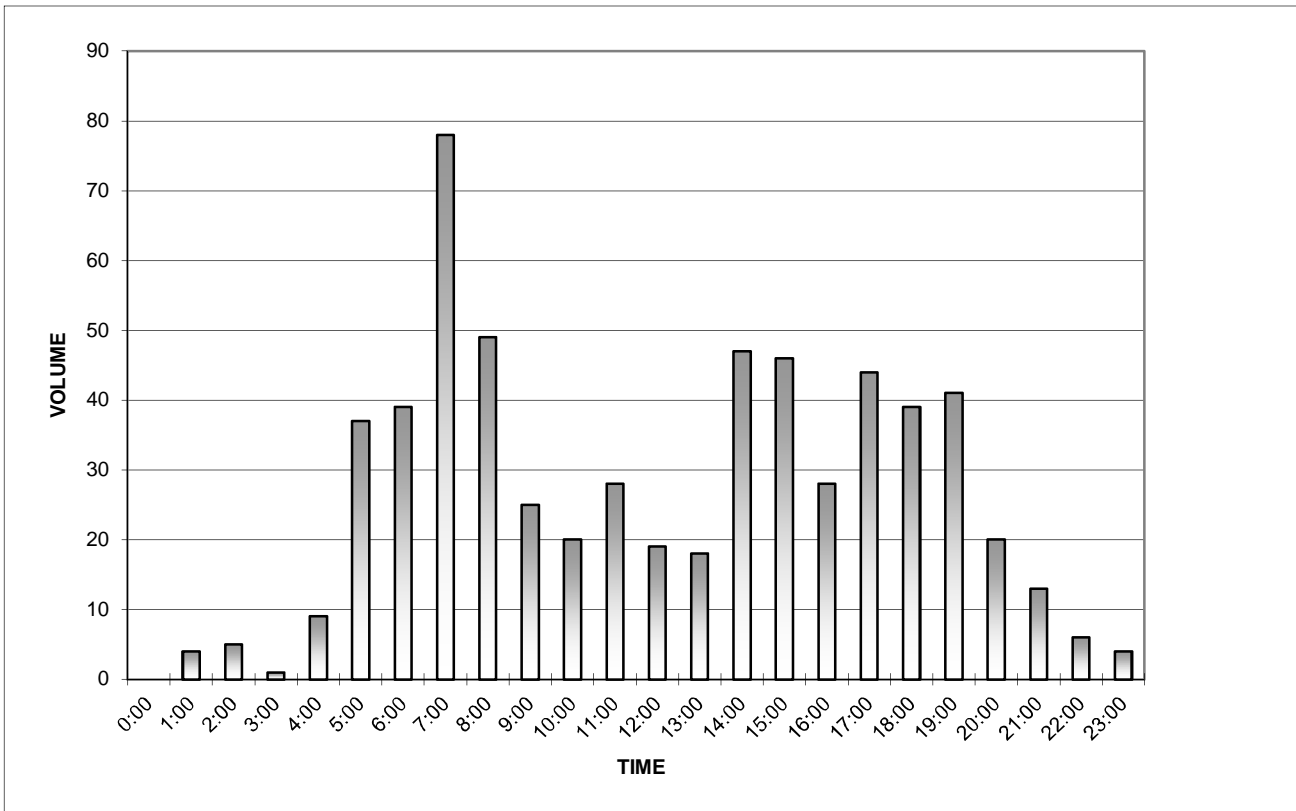


SB Guard Drive North of Lake June Road

Date Began:
11/18/2015

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	0	0	0	0	0
1:00	1	1	2	0	4
2:00	2	1	1	1	5
3:00	0	1	0	0	1
4:00	2	2	2	3	9
5:00	2	8	8	19	37
6:00	4	7	14	14	39
7:00	23	18	16	21	78
8:00	13	15	8	13	49
9:00	6	8	7	4	25
10:00	7	6	2	5	20
11:00	10	9	3	6	28
12:00	6	8	4	1	19
13:00	3	4	6	5	18
14:00	11	17	12	7	47
15:00	16	15	5	10	46
16:00	7	6	7	8	28
17:00	7	14	10	13	44
18:00	8	11	7	13	39
19:00	16	6	11	8	41
20:00	5	4	7	4	20
21:00	6	3	3	1	13
22:00	0	2	2	2	6
23:00	2	1	1	0	4
TOTAL:					620

The A.M. peak hour from 7:00 to 8:00 is 78
The P.M. peak hour from 14:15 to 15:15 is 52



Synchro™ Output - 2015 Existing Traffic

Intersection													
Intersection Delay, s/veh													
2													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SBR
Vol, veh/h	8	342	1	0	682	16	0	1	95	41	0	35	
Conflicting Peds, #/hr	0	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	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	-
Storage Length	120	-	120	-	-	-	-	-	-	-	-	50	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	372	1	0	741	17	0	1	103	45	0	38	
Major/Minor	Major1	Major2	Major1	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2
Conflicting Flow All	759	0	0	373	0	0	687	1149	186	954	1140	379	
Stage 1	-	-	-	-	-	-	390	390	-	750	-	750	-
Stage 2	-	-	-	-	-	-	297	759	-	204	-	390	-
Follow-up Headway	3.12	-	2.22	-	-	-	3.67	4.02	3.32	3.67	4.02	3.92	-
Pd Capacity-1 Maneuver	511	-	1182	-	-	-	359	197	824	241	200	529	-
Stage 1	-	-	-	-	-	-	585	606	-	304	-	417	-
Stage 2	-	-	-	-	-	-	652	413	-	750	-	606	-
Time blocked-Platoon, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Capacity-1 Maneuver	511	-	1182	-	-	-	329	194	824	207	196	529	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-	417	303	-	258	-	309	-
Stage 1	-	-	-	-	-	-	575	595	-	299	-	417	-
Stage 2	-	-	-	-	-	-	605	413	-	643	-	595	-
Approach	EB	WB	WB	EB	WB	WB	NB	NB	SB	SB	SB	SB	SB
HCM Control Delay, s	0.3	0	0	10.1	10.1	10.1	17.9	17.9	17.9	17.9	17.9	17.9	17.9
HCM LOS				B	B	B	C	C	C	C	C	C	C
Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn1	SBLn2	SBLn1	SBLn2
Capacity (veh/h)	810	511	-	-	1182	-	-	291	529	291	529	291	529
HCM Lane V/C Ratio	0.129	0.017	-	-	-	-	-	0.197	0.048	0.197	0.048	0.197	0.048
HCM Control Delay (s)	10.1	12.167	-	-	0	-	-	20.4	12.1	20.4	12.1	20.4	12.1
HCM Lane LOS	B	B	-	-	A	-	-	C	B	C	B	C	B
HCM 95th %ile Q(veh)	0.441	0.052	-	-	0	-	-	0.717	0.151	0.717	0.151	0.717	0.151
Notes	-												
- : Volume Exceeds Capacity. \$: Delay Exceeds 300 Seconds. Error : Computation Not Defined													

Intersection													
Intersection Delay, s/veh													1.2
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SBR
Vol, veh/h	40	834	3	2	637	26	0	1	48	24	0	19	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	None	Free	Free	None	Stop	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	-
Storage Length	120	-	120	-	-	-	-	-	-	-	-	50	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	907	3	2	692	28	0	1	52	26	0	21	
Major/Minor	Major1	Major2	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2	Minor1
Conflicting Flow All	721	0	0	910	0	0	1276	1720	455	1252	1708	360	
Stage 1	-	-	-	-	-	-	995	995	-	711	711	-	
Stage 2	-	-	-	-	-	-	281	725	-	541	997	-	
Follow-up Headway	3.12	-	2.22	-	3.67	4.02	3.32	3.67	4.02	3.92	4.02	3.92	
Pd Capacity-1 Maneuver	533	-	744	-	147	89	552	153	90	544	90	544	
Stage 1	-	-	-	-	256	321	-	324	434	-	-	-	
Stage 2	-	-	-	-	667	428	-	478	320	-	-	-	
Time blocked-Platoon, %	-	-	-	-	-	-	-	-	-	-	-	-	
Mov Capacity-1 Maneuver	533	-	744	-	132	82	552	129	83	544	83	544	
Mov Capacity-2 Maneuver	-	-	-	-	197	189	-	212	195	-	-	-	
Stage 1	-	-	-	-	235	295	-	298	433	-	-	-	
Stage 2	-	-	-	-	640	427	-	396	294	-	-	-	
Approach	EB	WB	WB	EB	WB	WB	NB	NB	SB	SB	SB	SB	SB
HCM Control Delay, s	0.6	-	0	-	-	-	12.5	12.5	19.1	19.1	19.1	19.1	19.1
HCM LOS	B	-	-	-	-	-	B	B	C	C	C	C	C
Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn1	SBLn2	SBLn1	SBLn2
Capacity (veh/h)	531	533	-	-	744	-	-	243	544	243	544	243	544
HCM Lane V/C Ratio	0.1	0.082	-	-	0.003	-	-	0.136	0.025	0.136	0.025	0.136	0.025
HCM Control Delay (s)	12.5	12.353	-	-	9.853	-	-	22.1	11.8	22.1	11.8	22.1	11.8
HCM Lane LOS	B	B	-	-	A	-	-	C	B	C	B	C	B
HCM 95th %ile Q(veh)	0.333	0.265	-	-	0.009	-	-	0.463	0.078	0.463	0.078	0.463	0.078
Notes	- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined												

Synchro™ Output – 2016 Background Traffic

Intersection													
Intersection Delay, s/veh													
2													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SBR
Vol, veh/h	8	349	1	0	696	16	0	1	97	42	0	36	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	None	Free	Free	None	Stop	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	-
Storage Length	120	-	120	-	-	-	-	-	-	-	-	50	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	379	1	0	757	17	0	1	105	46	0	39	
Major/Minor	Major1	Major2	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2	Minor1
Conflicting Flow All	774	0	0	380	0	0	700	1171	190	973	1163	387	
Stage 1	-	-	-	-	-	-	397	397	-	765	765	-	
Stage 2	-	-	-	-	-	-	303	774	-	208	398	-	
Follow-up Headway	3.12	-	2.22	-	-	-	3.67	4.02	3.32	3.67	4.02	3.92	
Pd Capacity-1 Maneuver	502	-	1175	-	-	-	352	191	820	234	193	522	
Stage 1	-	-	-	-	-	-	580	602	-	297	410	-	
Stage 2	-	-	-	-	-	-	647	406	-	746	601	-	
Time blocked-Platoon, %	-	-	-	-	-	-	-	-	-	-	-	-	
Mov Capacity-1 Maneuver	502	-	1175	-	-	-	321	188	820	201	190	522	
Mov Capacity-2 Maneuver	-	-	-	-	-	-	411	297	-	252	303	-	
Stage 1	-	-	-	-	-	-	570	591	-	292	410	-	
Stage 2	-	-	-	-	-	-	598	406	-	637	590	-	
Approach	EB	WB	WB	WB	EBR	EBT	NB	WB	SB	SB	SB	SB	SB
HCM Control Delay, s	0.3	-	0	-	-	-	10.1	-	-	18.3	-	-	-
HCM LOS							B			C			
Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn1	SBLn2	SBLn1	SBLn2
Capacity (veh/h)	806	502	-	-	1175	-	-	285	522	-	-	-	-
HCM Lane V/C Ratio	0.132	0.017	-	-	-	-	-	0.206	0.05	-	-	-	-
HCM Control Delay (s)	10.1	12.298	-	-	0	-	-	20.9	12.3	-	-	-	-
HCM Lane LOS	B	B	-	-	A	-	-	C	B	-	-	-	-
HCM 95th %ile Q(veh)	0.454	0.053	-	-	0	-	-	0.758	0.157	-	-	-	-
Notes	-												
- : Volume Exceeds Capacity ; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined													

Intersection													
Intersection Delay, s/veh 1.2													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SBR
Vol, veh/h	41	851	3	2	650	27	0	1	49	24	0	19	
Conflicting Peds, #/hr	0	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	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	-
Storage Length	120	-	-	120	-	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-	0
Grade, %	-	0	-	-	0	-	-	0	-	-	-	-	0
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	925	3	2	707	29	0	1	53	26	0	21	
Major/Minor	Major1	Major2	Major3	Minor1	Minor2	Minor3	Minor4	Minor5	Minor6	Minor7	Minor8	Minor9	Minor10
Conflicting Flow All	736	0	0	928	0	0	1303	1756	464	1278	1743	368	
Stage 1	-	-	-	-	-	-	1016	1016	-	726	726	-	
Stage 2	-	-	-	-	-	-	287	740	-	552	1017	-	
Follow-up Headway	3.12	-	2.22	-	3.67	4.02	3.32	3.67	4.02	3.92	4.02	3.92	
Pd Capacity-1 Maneuver	524	-	733	-	141	84	545	147	86	537	86	537	
Stage 1	-	-	-	-	-	-	249	314	-	316	428	-	
Stage 2	-	-	-	-	-	-	661	421	-	471	313	-	
Time blocked-Platoon, %	-	-	-	-	-	-	-	-	-	-	-	-	
Mov Capacity-1 Maneuver	524	-	733	-	126	77	545	123	78	537	78	537	
Mov Capacity-2 Maneuver	-	-	-	-	191	183	-	205	189	-	-	-	
Stage 1	-	-	-	-	228	287	-	289	427	-	-	-	
Stage 2	-	-	-	-	634	420	-	387	286	-	-	-	
Approach	EB	WB	WB	EB	WB	WB	NB	NB	SB	SB	SB	SB	SB
HCM Control Delay, s	0.6	-	0	-	-	-	12.7	12.7	19.6	19.6	19.6	19.6	19.6
HCM LOS	B	-	-	-	-	-	B	B	C	C	C	C	C
Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3	SBLn4	SBLn5	SBLn6
Capacity (veh/h)	524	524	-	-	733	-	-	235	537	-	-	-	-
HCM Lane V/C Ratio	0.104	0.085	-	-	0.003	-	-	0.14	0.026	-	-	-	-
HCM Control Delay (s)	12.7	12.508	-	-	9.926	-	-	22.8	11.9	-	-	-	-
HCM Lane LOS	B	B	-	-	A	-	-	C	B	-	-	-	-
HCM 95th %ile Q(veh)	0.345	0.278	-	-	0.009	-	-	0.48	0.079	-	-	-	-
Notes	- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined												



SynchroTM Output - 2016 Background Plus Site Traffic

Intersection													
Intersection Delay, s/veh													3.3
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Vol, veh/h	41	336	1	0	703	18	0	1	97	69	0	50	
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	120	-	-	120	-	-	-	-	-	-	-	50	
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	0	
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	45	365	1	0	764	20	0	1	105	75	0	54	
Major/Minor	Major1	Major2	Minor1	Minor2									
Conflicting Flow All	784	0	0	366	0	0	761	1239	183	1046	1229	392	
Stage 1	-	-	-	-	-	-	455	455	-	774	774	-	
Stage 2	-	-	-	-	-	-	306	784	-	272	455	-	
Follow-up Headway	3.12	-	-	2.22	-	-	3.67	4.02	3.32	3.67	4.02	3.92	
Pd Capacity-1 Maneuver	497	-	-	1189	-	-	322	174	828	209	177	519	
Stage 1	-	-	-	-	-	-	536	567	-	293	406	-	
Stage 2	-	-	-	-	-	-	644	402	-	685	567	-	
Time blocked-Platoon, %	-	-	-	-	-	-	-	-	-	-	-	-	
Mov Capacity-1 Maneuver	497	-	-	1189	-	-	268	158	828	169	161	519	
Mov Capacity-2 Maneuver	-	-	-	-	-	-	354	261	-	225	279	-	
Stage 1	-	-	-	-	-	-	487	516	-	266	406	-	
Stage 2	-	-	-	-	-	-	577	402	-	543	516	-	
Approach	EB	WB	WB	NR	NR	SB							
HCM Control Delay, s	1.4	0	0	10.1	10.1	23.2							
HCM LOS				B	B	C							
Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2				
Capacity (veh/h)	810	497	-	-	1189	-	-	253	519				
HCM Lane V/C Ratio	0.132	0.09	-	-	-	-	-	0.368	0.07				
HCM Control Delay (s)	10.1	12.956	-	-	0	-	-	27.3	12.5				
HCM Lane LOS	B	B	-	-	A	-	-	D	B				
HCM 95th %ile Q(veh)	0.452	0.294	-	-	0	-	-	1.616	0.224				
Notes													
- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined													

Intersection													
Intersection Delay, s/veh													0.1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR					
Vol, veh/h	0	502	0	709	16	0	15						
Conflicting Peds, #/hr	0	0	0	0	0	0	0						
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop					
RT Channelized	-	None	-	-	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	92						
Heavy Vehicles, %	2	2	2	2	2	2	2						
Mvmt Flow	0	546	0	771	17	0	16						
Major/Minor	Major1	Major2	Minor2										
Conflicting Flow All	788	0	0	977	0	977	394						
Stage 1	-	-	-	779	-	779	-						
Stage 2	-	-	-	218	-	218	-						
Follow-up Headway	3.12	-	-	3.82	-	3.82	3.92						
Pd Capacity-1 Maneuver	495	-	-	312	-	312	517						
Stage 1	-	-	-	329	-	329	-						
Stage 2	-	-	-	732	-	732	-						
Time blocked-Platoon, %	-	-	-	-	-	-	-						
Mov Capacity-1 Maneuver	495	-	-	312	-	312	517						
Mov Capacity-2 Maneuver	-	-	-	300	-	300	-						
Stage 1	-	-	-	329	-	329	-						
Stage 2	-	-	-	732	-	732	-						
Approach	EB	WB	WB	SB									
HCM Control Delay, s	0	0	0	12.2									
HCM LOS				B									
Minor Lane / Major Mvmt	EBL	EBT	WBL	WBR	SBLn1								
Capacity (veh/h)	495	-	-	-	517								
HCM Lane V/C Ratio	-	-	-	-	0.032								
HCM Control Delay (s)	0	-	-	-	12.2								
HCM Lane LOS	A	-	-	-	B								
HCM 95th %ile Q(veh)	0	-	-	-	0.098								
Notes													
- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined													

Intersection									
Intersection Delay, s/veh	0.3								
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Vol, veh/h	0	502	689	35	0	30			
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	546	749	38	0	33			
Major/Minor	Major1	Major2	Minor1	Minor2					
Conflicting Flow All	787	0	-	0	986	393			
Stage 1	-	-	-	-	768	-			
Stage 2	-	-	-	-	218	-			
Follow-up Headway	3.12	-	-	-	3.82	3.92			
Pd Capacity-1 Maneuver	495	-	-	-	316	518			
Stage 1	-	-	-	-	334	-			
Stage 2	-	-	-	-	732	-			
Time blocked-Platoon, %	-	-	-	-	-	-			
Mov Capacity-1 Maneuver	495	-	-	-	316	518			
Mov Capacity-2 Maneuver	-	-	-	-	304	-			
Stage 1	-	-	-	-	334	-			
Stage 2	-	-	-	-	732	-			
Approach	EB	WB	WB	SB					
HCM Control Delay, s	0	0	0	12.4					
HCM LOS				B					
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBRn1			
Capacity (veh/h)	495	-	-	-	518	-			
HCM Lane V/C Ratio	-	-	-	-	0.063	-			
HCM Control Delay (s)	0	-	-	-	12.4	-			
HCM Lane LOS	A	-	-	-	B	-			
HCM 95th %ile Q(veh)	0	-	-	-	0.201	-			
Notes									
- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined									

Intersection									
Intersection Delay, s/veh	1.5								
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Vol, veh/h	28	0	33	25	0	93			
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	-	-	-	-	-			
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	30	0	36	27	0	101			
Major/Minor	Minor1	Major1	Major2						
Conflicting Flow All	150	49	0	0	63	0			
Stage 1	49	-	-	-	-	-			
Stage 2	101	-	-	-	-	-			
Follow-up Headway	3.518	3.318	-	-	2.218	-			
Pd Capacity-1 Maneuver	842	1020	-	-	1540	-			
Stage 1	973	-	-	-	-	-			
Stage 2	923	-	-	-	-	-			
Time blocked-Platoon, %	-	-	-	-	-	-			
Mov Capacity-1 Maneuver	842	1020	-	-	1540	-			
Mov Capacity-2 Maneuver	842	-	-	-	-	-			
Stage 1	973	-	-	-	-	-			
Stage 2	923	-	-	-	-	-			
Approach	WB	NB	SB						
HCM Control Delay, s	9.4	0	0						
HCM LOS	A								
Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT				
Capacity (veh/h)	-	-	842	1540	-				
HCM Lane V/C Ratio	-	-	0.036	-	-				
HCM Control Delay (s)	-	-	9.4	0	-				
HCM Lane LOS	-	-	A	A	-				
HCM 95th %ile Q(veh)	-	-	0.112	0	-				
Notes									
- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined									

Intersection										
Intersection Delay, s/veh 1.1										
Movement	WBL	WBR	NBT	NBR	SBL	SBT				
Vol, veh/h	15	0	26	12	0	78				
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				
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	16	0	28	13	0	85				
Major/Minor										
	Minor1	Major1		Major2						
Conflicting Flow All	120	35	0	0	41	0				
Stage 1	35	-	-	-	-	-				
Stage 2	85	-	-	-	-	-				
Follow-up Headway	3.518	3.318	-	-	2.218	-				
Pd Capacity-1 Maneuver	876	1038	-	-	1568	-				
Stage 1	987	-	-	-	-	-				
Stage 2	938	-	-	-	-	-				
Time blocked-Platoon, %	-	-	-	-	-	-				
Mov Capacity-1 Maneuver	876	1038	-	-	1568	-				
Mov Capacity-2 Maneuver	876	-	-	-	-	-				
Stage 1	987	-	-	-	-	-				
Stage 2	938	-	-	-	-	-				
Approach										
	WB	NB		SB						
HCM Control Delay, s	9.2	0	0	0	0	0				
HCM LOS	A									
Minor Lane / Major Mvmt										
	NBT	NBR	WBLn1	SBL	SBT					
Capacity (veh/h)	-	-	876	1568	-					
HCM Lane V/C Ratio	-	-	0.019	-	-					
HCM Control Delay (s)	-	-	9.2	0	-					
HCM Lane LOS	-	-	A	A	-					
HCM 95th %ile Q(veh)	-	-	0.057	0	-					
Notes										
- : Volume Exceeds Capacity ; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined										

Intersection													
Intersection Delay, s/veh													2.8
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SBR
Vol, veh/h	88	836	3	2	663	30	0	1	49	61	0	39	18
Conflicting Peds, #/hr	0	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	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	None
Storage Length	120	-	-	120	-	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	96	909	3	2	721	33	0	1	53	66	0	42	20
Major/Minor	Major1	Major2	Minor1	Minor2									
Conflicting Flow All	753	0	0	912	0	0	1395	1860	456	1387	1844	377	380
Stage 1	-	-	-	-	-	-	1102	1102	-	741	741	-	-
Stage 2	-	-	-	-	-	-	293	758	-	646	1103	-	-
Follow-up Headway	3.12	-	-	2.22	-	-	3.67	4.02	3.32	3.67	4.02	3.92	3.92
Pd Capacity-1 Maneuver	514	-	-	743	-	-	122	72	551	124	74	530	528
Stage 1	-	-	-	-	-	-	221	286	-	308	421	-	-
Stage 2	-	-	-	-	-	-	656	413	-	414	285	-	-
Time blocked-Platoon, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Capacity-1 Maneuver	514	-	-	743	-	-	96	58	551	95	60	530	528
Mov Capacity-2 Maneuver	-	-	-	-	-	-	151	148	-	167	160	-	-
Stage 1	-	-	-	-	-	-	180	233	-	250	420	-	-
Stage 2	-	-	-	-	-	-	602	412	-	303	232	-	-
Approach	EB	WB	WB	EB	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBR	SBR
HCM Control Delay, s	1.3	0	0	12.7	-	-	12.7	-	-	30.7	-	12.1	12.1
HCM LOS	B	B	B	B	B	B	B	B	B	D	B	B	B
Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2				
Capacity (veh/h)	523	514	-	-	743	-	-	190	530				
HCM Lane V/C Ratio	0.104	0.186	-	-	0.003	-	-	0.423	0.053				
HCM Control Delay (s)	12.7	13.598	-	-	9.859	-	-	37.2	12.2				
HCM Lane LOS	B	B	-	-	A	-	-	E	B				
HCM 95th %ile Q(veh)	0.346	0.677	-	-	0.009	-	-	1.93	0.169				
Notes	- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined												

Intersection													
Intersection Delay, s/veh													0.1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SBR
Vol, veh/h	0	946	0	679	20	0	0	0	0	0	0	18	18
Conflicting Peds, #/hr	0	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	Stop
RT Channelized	-	None	-	-	None	-	-	-	None	-	-	None	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	0	-	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1028	0	738	22	0	0	0	0	0	0	20	20
Major/Minor	Major1	Major2	Minor1	Minor2									
Conflicting Flow All	760	0	0	1160	-	-	0	1160	-	749	-	380	380
Stage 1	-	-	-	-	-	-	-	-	-	749	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	411	-	-	-
Follow-up Headway	3.12	-	-	-	-	-	-	-	-	3.82	-	3.92	3.92
Pd Capacity-1 Maneuver	510	-	-	-	-	-	-	-	-	268	-	528	528
Stage 1	-	-	-	-	-	-	-	-	-	343	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	583	-	-	-
Time blocked-Platoon, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Capacity-1 Maneuver	510	-	-	-	-	-	-	-	-	258	-	528	528
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	-	-	297	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	343	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	583	-	-	-
Approach	EB	WB	WB	EB	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBR	SBR
HCM Control Delay, s	0	0	0	12.1	-	-	12.1	-	-	30.7	-	12.1	12.1
HCM LOS	B	B	B	B	B	B	B	B	B	D	B	B	B
Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2				
Capacity (veh/h)	523	514	-	-	743	-	-	190	530				
HCM Lane V/C Ratio	0.104	0.186	-	-	0.003	-	-	0.423	0.053				
HCM Control Delay (s)	12.7	13.598	-	-	9.859	-	-	37.2	12.2				
HCM Lane LOS	B	B	-	-	A	-	-	E	B				
HCM 95th %ile Q(veh)	0.346	0.677	-	-	0.009	-	-	1.93	0.169				
Notes	- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined												

Intersection									
Intersection Delay, s/veh	0.3								
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Vol, veh/h	0	946	652	44	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	0	-			
Grade, %	-	0	0	0	0	-			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	0	1028	709	48	0	43			
Major/Minor	Major1	Major2	Minor1	Minor2					
Conflicting Flow All	757	0	-	0	1144	378			
Stage 1	-	-	-	-	733	-			
Stage 2	-	-	-	-	411	-			
Follow-up Headway	3.12	-	-	-	3.82	3.92			
Pd Capacity-1 Maneuver	512	-	-	-	263	529			
Stage 1	-	-	-	-	351	-			
Stage 2	-	-	-	-	583	-			
Time blocked-Platoon, %	-	-	-	-	-	-			
Mov Capacity-1 Maneuver	512	-	-	-	263	529			
Mov Capacity-2 Maneuver	-	-	-	-	303	-			
Stage 1	-	-	-	-	351	-			
Stage 2	-	-	-	-	583	-			
Approach	EB	WB	WB	SB					
HCM Control Delay, s	0	0	0	12.4					
HCM LOS				B					
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBR			
Capacity (veh/h)	512	-	-	-	529	-			
HCM Lane V/C Ratio	-	-	-	-	0.082	-			
HCM Control Delay (s)	0	-	-	-	12.4	-			
HCM Lane LOS	A	-	-	-	B	-			
HCM 95th %ile Q(veh)	0	-	-	-	0.267	-			
Notes	- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined								

Intersection									
Intersection Delay, s/veh	1.7								
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Vol, veh/h	39	0	79	36	0	64			
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			
Veh in Median Storage, #	0	-	0	0	-	0			
Grade, %	0	-	0	0	-	0			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	42	0	86	39	0	70			
Major/Minor	Minor1	Major1	Major2						
Conflicting Flow All	175	105	0	0	125	0			
Stage 1	105	-	-	-	-	-			
Stage 2	70	-	-	-	-	-			
Follow-up Headway	3.518	3.318	-	-	2.218	-			
Pd Capacity-1 Maneuver	815	949	-	-	1462	-			
Stage 1	919	-	-	-	-	-			
Stage 2	953	-	-	-	-	-			
Time blocked-Platoon, %	-	-	-	-	-	-			
Mov Capacity-1 Maneuver	815	949	-	-	1462	-			
Mov Capacity-2 Maneuver	815	-	-	-	-	-			
Stage 1	919	-	-	-	-	-			
Stage 2	953	-	-	-	-	-			
Approach	WB	NB	SB						
HCM Control Delay, s	9.7	0	0						
HCM LOS	A								
Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT				
Capacity (veh/h)	-	-	815	1462	-				
HCM Lane V/C Ratio	-	-	0.052	-	-				
HCM Control Delay (s)	-	-	9.7	0	-				
HCM Lane LOS	-	-	A	A	-				
HCM 95th %ile Q(veh)	-	-	0.164	0	-				
Notes	- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined								

Intersection									
Intersection Delay, s/veh	1.2								
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Vol, veh/h	20	0	68	17	0	44			
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	-	-	-	-	-			
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	22	0	74	18	0	48			
Major/Minor	Minor1	Major1		Major2					
Conflicting Flow All	131	83	0	0	92	0			
Stage 1	83	-	-	-	-	-			
Stage 2	48	-	-	-	-	-			
Follow-up Headway	3.518	3.318	-	-	2.218	-			
Pd Capacity-1 Maneuver	863	976	-	-	1503	-			
Stage 1	940	-	-	-	-	-			
Stage 2	974	-	-	-	-	-			
Time blocked-Platoon, %	-	-	-	-	-	-			
Mov Capacity-1 Maneuver	863	976	-	-	1503	-			
Mov Capacity-2 Maneuver	863	-	-	-	-	-			
Stage 1	940	-	-	-	-	-			
Stage 2	974	-	-	-	-	-			
Approach	WB	NB		SB					
HCM Control Delay, s	9.3	0		0					
HCM LOS	A								
Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT				
Capacity (veh/h)	-	-	863	1503	-				
HCM Lane V/C Ratio	-	-	0.025	-	-				
HCM Control Delay (s)	-	-	9.3	0	-				
HCM Lane LOS	-	-	A	A	-				
HCM 95th %ile Q(veh)	-	-	0.077	0	-				
Notes	- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined								

Synchro™ Output – 2025 Background Traffic

Intersection													
Intersection Delay, s/veh													2.2
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SBR
Vol, veh/h	9	382	1	0	761	17	0	1	106	46	0	39	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	None	Free	Free	None	Stop	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	-
Storage Length	120	-	120	-	-	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-	0
Grade, %	-	0	-	-	0	-	-	0	-	-	-	-	0
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	415	1	0	827	18	0	1	115	50	0	42	0
Major/Minor	Major1	Major2	Major1	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2
Conflicting Flow All	846	0	0	416	0	0	766	1281	208	1064	1272	423	423
Stage 1	-	-	-	-	-	-	435	435	-	836	-	-	-
Stage 2	-	-	-	-	-	-	331	846	-	228	436	-	-
Follow-up Headway	3.12	-	2.22	-	-	-	3.67	4.02	3.32	3.67	4.02	3.92	3.92
Pd Capacity-1 Maneuver	464	-	1139	-	-	-	319	164	798	204	166	495	495
Stage 1	-	-	-	-	-	-	551	579	-	265	381	-	-
Stage 2	-	-	-	-	-	-	622	377	-	727	578	-	-
Time blocked-Platoon, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Capacity-1 Maneuver	464	-	1139	-	-	-	287	160	798	171	162	495	495
Mov Capacity-2 Maneuver	-	-	-	-	-	-	381	271	-	223	278	-	-
Stage 1	-	-	-	-	-	-	539	567	-	259	381	-	-
Stage 2	-	-	-	-	-	-	569	377	-	607	566	-	-
Approach	EB	WB	WB	NB	NB	SB	SB	SB	SB	SB	SB	SB	SB
HCM Control Delay, s	0.3	0	0	10.4	10.4	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5
HCM LOS	B	C	C	B	B	C	C	C	C	C	C	C	C
Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn1	SBLn2	SBLn1	SBLn2
Capacity (veh/h)	784	464	-	-	1139	-	-	254	495	254	495	254	495
HCM Lane V/C Ratio	0.148	0.021	-	-	-	-	-	0.252	0.057	0.252	0.057	0.252	0.057
HCM Control Delay (s)	10.4	12.926	-	-	0	-	-	23.9	12.7	23.9	12.7	23.9	12.7
HCM Lane LOS	B	B	-	-	A	-	-	C	B	C	B	C	B
HCM 95th %ile Q(veh)	0.519	0.065	-	-	0	-	-	0.973	0.181	0.973	0.181	0.973	0.181
Notes	- : Volume Exceeds Capacity ; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined												

Intersection													
Intersection Delay, s/veh													1.3
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SBR
Vol, veh/h	45	931	3	2	711	30	0	1	54	26	0	21	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	None	Stop	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	-
Storage Length	120	-	120	-	-	-	-	-	-	-	-	50	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	49	1012	3	2	773	33	0	1	59	28	0	23	
Major/Minor	Major1	Major2	Major1	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2	Minor1	Minor2
Conflicting Flow All	805	0	0	1015	0	0	1424	1921	508	1397	1906	403	
Stage 1	-	-	-	-	-	-	1111	1111	-	793	793	-	
Stage 2	-	-	-	-	-	-	313	810	-	604	1113	-	
Follow-up Headway	3.12	-	2.22	-	2.22	-	3.67	4.02	3.32	3.67	4.02	3.92	
Pd Capacity-1 Maneuver	486	-	679	-	679	-	117	66	510	122	68	510	
Stage 1	-	-	-	-	-	-	218	283	-	284	398	-	
Stage 2	-	-	-	-	-	-	638	391	-	438	282	-	
Time blocked-Platoon, %	-	-	-	-	-	-	-	-	-	-	-	-	
Mov Capacity-1 Maneuver	486	-	679	-	679	-	103	59	510	99	61	510	
Mov Capacity-2 Maneuver	-	-	-	-	-	-	165	159	-	178	167	-	
Stage 1	-	-	-	-	-	-	196	254	-	255	397	-	
Stage 2	-	-	-	-	-	-	608	390	-	347	254	-	
Approach	EB	WB	WB	EB	WB	WB	NB	NB	SB	SB	SB	SB	
HCM Control Delay, s	0.6	-	0	-	0	-	13.4	13.4	-	21.9	21.9	-	
HCM LOS							B	B		C	C		
Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn1	SBLn2	SBLn1	SBLn2
Capacity (veh/h)	490	486	-	-	679	-	-	207	510	-	-	510	-
HCM Lane V/C Ratio	0.122	0.101	-	-	0.003	-	-	0.173	0.03	-	-	0.03	-
HCM Control Delay (s)	13.4	13.235	-	-	10.319	-	-	26	12.3	-	-	12.3	-
HCM Lane LOS	B	B	-	-	B	-	-	D	B	-	-	B	-
HCM 95th %ile Q(veh)	0.414	0.334	-	-	0.01	-	-	0.611	0.092	-	-	0.092	-
Notes	-												
- : Volume Exceeds Capacity ; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined													

Synchro™ Output - 2025 Background Plus Site Traffic

Intersection													
Intersection Delay, s/veh													3.6
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SBR
Vol, veh/h	42	369	1	0	768	19	0	1	106	73	0	53	15
Conflicting Peds, #/hr	0	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	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	None
Storage Length	120	-	-	120	-	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	401	1	0	835	21	0	1	115	79	0	58	16
Major/Minor	Major1	Major2	Major3	Minor1	Minor2	Minor3							
Conflicting Flow All	855	0	0	402	0	0	827	1348	201	1137	1338	428	430
Stage 1	-	-	-	-	-	-	493	493	-	845	845	-	-
Stage 2	-	-	-	-	-	-	334	855	-	292	493	-	-
Follow-up Headway	3.12	-	-	2.22	-	-	3.67	4.02	3.32	3.67	4.02	3.92	3.92
Pd Capacity-1 Maneuver	460	-	-	1153	-	-	291	150	806	182	152	492	490
Stage 1	-	-	-	-	-	-	510	545	-	261	377	-	-
Stage 2	-	-	-	-	-	-	619	373	-	667	545	-	-
Time blocked-Platoon, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Capacity-1 Maneuver	460	-	-	1153	-	-	237	135	806	144	137	492	490
Mov Capacity-2 Maneuver	-	-	-	-	-	-	326	237	-	198	256	-	-
Stage 1	-	-	-	-	-	-	459	491	-	235	377	-	-
Stage 2	-	-	-	-	-	-	547	373	-	513	491	-	-
Approach	EB	WB	WB	NB	NB	SB							
HCM Control Delay, s	1.4	0	0	10.4	10.4	27.4							
HCM LOS	B			B	B	D							
Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2				
Capacity (veh/h)	788	460	-	-	1153	-	-	224	492				
HCM Lane V/C Ratio	0.148	0.099	-	-	-	-	-	0.44	0.078				
HCM Control Delay (s)	10.4	13.687	-	-	0	-	-	33.1	12.9				
HCM Lane LOS	B	B	-	-	A	-	-	D	B				
HCM 95th %ile Q(veh)	0.516	0.328	-	-	0	-	-	2.081	0.263				
Notes	- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined												

Intersection													
Intersection Delay, s/veh													0.1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SBR
Vol, veh/h	0	548	0	776	16	0	0	0	0	0	0	15	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	-	None	-	-	None	-	-	None	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0	0
Veh in Median Storage, #	-	0	-	0	-	0	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	596	0	843	17	0	0	0	0	0	0	16	16
Major/Minor	Major1	Major2	Major3	Minor1	Minor2	Minor3							
Conflicting Flow All	861	0	0	1090	0	0	1090	0	852	852	430	430	430
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Headway	3.12	-	-	2.38	-	-	3.82	-	3.82	-	3.82	-	3.92
Pd Capacity-1 Maneuver	457	-	-	280	-	-	280	-	280	-	280	-	490
Stage 1	-	-	-	-	-	-	297	-	297	-	715	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Time blocked-Platoon, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Capacity-1 Maneuver	457	-	-	280	-	-	280	-	280	-	490	-	490
Mov Capacity-2 Maneuver	-	-	-	-	-	-	271	-	271	-	715	-	-
Stage 1	-	-	-	-	-	-	297	-	297	-	715	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB	WB	WB	NB	NB	SB							
HCM Control Delay, s	0	0	0	12.6	12.6	12.6							
HCM LOS	B			B	B	D							
Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBR	SBLn1	SBLn2					
Capacity (veh/h)	457	-	-	-	-	-	490	-					
HCM Lane V/C Ratio	-	-	-	-	-	-	0.033	-					
HCM Control Delay (s)	0	-	-	-	-	-	12.6	-					
HCM Lane LOS	A	-	-	-	-	-	B	-					
HCM 95th %ile Q(veh)	0	-	-	-	-	-	0.103	-					
Notes	- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined												

Intersection									
Intersection Delay, s/veh	0.3								
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Vol, veh/h	0	548	756	35	0	30			
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	596	822	38	0	33			
Major/Minor	Major1		Major2		Minor2				
Conflicting Flow All	860	0	-	0	1079	430			
Stage 1	-	-	-	-	841	-			
Stage 2	-	-	-	-	238	-			
Follow-up Headway	3.12	-	-	-	3.82	3.92			
Pd Capacity-1 Maneuver	457	-	-	-	283	490			
Stage 1	-	-	-	-	302	-			
Stage 2	-	-	-	-	715	-			
Time blocked-Platoon, %	-	-	-	-	-	-			
Mov Capacity-1 Maneuver	457	-	-	-	283	490			
Mov Capacity-2 Maneuver	-	-	-	-	275	-			
Stage 1	-	-	-	-	302	-			
Stage 2	-	-	-	-	715	-			
Approach	EB	WB	WB	SB					
HCM Control Delay, s	0	0	0	12.9					
HCM LOS				B					
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBR			
Capacity (veh/h)	457	-	-	-	490	-			
HCM Lane V/C Ratio	-	-	-	-	0.067	-			
HCM Control Delay (s)	0	-	-	-	12.9	-			
HCM Lane LOS	A	-	-	-	B	-			
HCM 95th %ile Q(veh)	0	-	-	-	0.213	-			
Notes									
- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined									

Intersection									
Intersection Delay, s/veh	1.4								
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Vol, veh/h	28	0	35	25	0	100			
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	-	-	-	-	-			
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	30	0	38	27	0	109			
Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	161	52	0	0	65	0			
Stage 1	52	-	-	-	-	-			
Stage 2	109	-	-	-	-	-			
Follow-up Headway	3.518	3.318	-	-	2.218	-			
Pd Capacity-1 Maneuver	830	1016	-	-	1537	-			
Stage 1	970	-	-	-	-	-			
Stage 2	916	-	-	-	-	-			
Time blocked-Platoon, %	-	-	-	-	-	-			
Mov Capacity-1 Maneuver	830	1016	-	-	1537	-			
Mov Capacity-2 Maneuver	830	-	-	-	-	-			
Stage 1	970	-	-	-	-	-			
Stage 2	916	-	-	-	-	-			
Approach	WB	WB	NB	SB					
HCM Control Delay, s	9.5	9.5	0	0					
HCM LOS	A	A							
Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT				
Capacity (veh/h)	-	-	830	1537	-				
HCM Lane V/C Ratio	-	-	0.037	-	-				
HCM Control Delay (s)	-	-	9.5	0	-				
HCM Lane LOS	-	-	A	A	-				
HCM 95th %ile Q(veh)	-	-	0.114	0	-				
Notes									
- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined									

Intersection									
Intersection Delay, s/veh									
1									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Vol, veh/h	15	0	28	12	0	85			
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	-	-	-	-	-			
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	16	0	30	13	0	92			
Major/Minor									
Minor1	Minor1		Major1		Major2				
Conflicting Flow All	129	37	0	0	43	0			
Stage 1	37	-	-	-	-	-			
Stage 2	92	-	-	-	-	-			
Follow-up Headway	3.518	3.318	-	-	2.218	-			
Pd Capacity-1 Maneuver	865	1035	-	-	1566	-			
Stage 1	985	-	-	-	-	-			
Stage 2	932	-	-	-	-	-			
Time blocked-Platoon, %	-	-	-	-	-	-			
Mov Capacity-1 Maneuver	865	1035	-	-	1566	-			
Mov Capacity-2 Maneuver	865	-	-	-	-	-			
Stage 1	985	-	-	-	-	-			
Stage 2	932	-	-	-	-	-			
Approach									
WB	WB		NB		SB				
HCM Control Delay, s	9.2	0	0	0	0	0			
HCM LOS	A								
Minor Lane / Major Mvmt									
Capacity (veh/h)	NBT	NBR	WBLn1	SBL	SBT				
HCM Lane V/C Ratio	-	-	865	1566	-				
HCM Control Delay (s)	-	-	0.019	-	-				
HCM Lane LOS	-	-	A	A	-				
HCM 95th %ile Q(veh)	-	-	0.058	0	-				
Notes									
- : Volume Exceeds Capacity ; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined									

Intersection													
Intersection Delay, s/veh													3.1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SBR
Vol, veh/h	92	916	3	2	724	33	0	1	54	63	0	41	18
Conflicting Peds, #/hr	0	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	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	None
Storage Length	120	-	-	120	-	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	-	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	100	9%	3	2	787	36	0	1	59	68	0	45	20
Major/Minor	Major1	Major2	Minor1	Minor2									
Conflicting Flow All	823	0	0	999	0	0	1516	2024	499	1507	2008	411	415
Stage 1	-	-	-	-	-	-	1197	1197	-	809	809	-	-
Stage 2	-	-	-	-	-	-	319	827	-	698	1199	-	-
Follow-up Headway	3.12	-	-	2.22	-	-	3.67	4.02	3.32	3.67	4.02	3.92	3.92
Pd Capacity-1 Maneuver	476	-	-	689	-	-	101	57	517	103	59	504	501
Stage 1	-	-	-	-	-	-	193	257	-	277	392	-	-
Stage 2	-	-	-	-	-	-	632	384	-	386	257	-	-
Time blocked-Platoon, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Capacity-1 Maneuver	476	-	-	689	-	-	77	45	517	76	46	504	501
Mov Capacity-2 Maneuver	-	-	-	-	-	-	128	128	-	144	140	-	-
Stage 1	-	-	-	-	-	-	152	203	-	219	391	-	-
Stage 2	-	-	-	-	-	-	574	383	-	269	203	-	-
Approach	EB	WB	EB	WB	EB	WB	NB	NB	SB	SB			
HCM Control Delay, s	1.3	0	0	0	13.4	13.4	13.4	13.4	38.1	38.1			
HCM LOS	B	B	B	B	B	B	B	B	E	E			
Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn1	SBLn2		
Capacity (veh/h)	490	476	-	-	689	-	-	165	504	165	504		
HCM Lane V/C Ratio	0.122	0.21	-	-	0.003	-	-	0.505	0.059	0.505	0.059		
HCM Control Delay (s)	13.4	14.563	-	-	10.242	-	-	47.2	12.6	47.2	12.6		
HCM Lane LOS	B	B	-	-	B	-	-	E	B	E	B		
HCM 95th %ile Q(veh)	0.414	0.785	-	-	0.009	-	-	2.466	0.187	2.466	0.187		
Notes	- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined												

Intersection													
Intersection Delay, s/veh													0.1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SBR
Vol, veh/h	0	1033	0	743	20	0	0	0	0	0	0	18	18
Conflicting Peds, #/hr	0	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	Stop
RT Channelized	-	None	-	-	None	-	-	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	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1123	0	808	22	0	0	20	20	0	0	20	20
Major/Minor	Major1	Major2	Minor1	Minor2									
Conflicting Flow All	829	0	0	1267	-	-	818	-	-	449	-	-	415
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Headway	3.12	-	-	-	-	-	-	-	-	-	-	-	3.92
Pd Capacity-1 Maneuver	473	-	-	-	-	-	-	-	-	-	-	-	501
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Time blocked-Platoon, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Capacity-1 Maneuver	473	-	-	-	-	-	-	-	-	-	-	-	501
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB	WB	EB	WB	WB	SB	SB						
HCM Control Delay, s	0	0	0	0	12.5	12.5	12.5						
HCM LOS	B	B	B	B	B	B	B						
Minor Lane / Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2					
Capacity (veh/h)	473	-	-	-	-	-	-	501					
HCM Lane V/C Ratio	-	-	-	-	-	-	-	0.039					
HCM Control Delay (s)	0	-	-	-	-	-	-	12.5					
HCM Lane LOS	A	-	-	-	-	-	-	B					
HCM 95th %ile Q(veh)	0	-	-	-	-	-	-	0.122					
Notes	- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined												

Intersection									
Intersection Delay, s/veh 0.3									
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Vol, veh/h	0	1033	716	44	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	0	-			
Grade, %	-	0	0	0	0	-			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	0	1123	778	48	0	43			
Major/Minor	Major1	Major2	Minor1	Minor2					
Conflicting Flow All	826	0	0	1251	413				
Stage 1	-	-	-	802	-				
Stage 2	-	-	-	449	-				
Follow-up Headway	3.12	-	-	3.82	-	3.92			
Pd Capacity-1 Maneuver	475	-	-	232	-	503			
Stage 1	-	-	-	319	-	-			
Stage 2	-	-	-	558	-	-			
Time blocked-Platoon, %	-	-	-	-	-	-			
Mov Capacity-1 Maneuver	475	-	-	232	-	503			
Mov Capacity-2 Maneuver	-	-	-	274	-	-			
Stage 1	-	-	-	319	-	-			
Stage 2	-	-	-	558	-	-			
Approach	EB	WB	WB	SB					
HCM Control Delay, s	0	0	0	12.8					
HCM LOS				B					
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1				
Capacity (veh/h)	475	-	-	-	503				
HCM Lane V/C Ratio	-	-	-	-	0.086				
HCM Control Delay (s)	0	-	-	-	12.8				
HCM Lane LOS	A	-	-	-	B				
HCM 95th %ile Q(veh)	0	-	-	-	0.282				
Notes	- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined								

Intersection									
Intersection Delay, s/veh 1.7									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Vol, veh/h	39	0	85	36	0	68			
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	-	-	-	-	-			
Veh in Median Storage, #	0	-	0	0	-	0			
Grade, %	0	-	0	0	-	0			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	42	0	92	39	0	74			
Major/Minor	Minor1	Major1	Major2						
Conflicting Flow All	186	112	0	0	132	0			
Stage 1	112	-	-	-	-	-			
Stage 2	74	-	-	-	-	-			
Follow-up Headway	3.518	3.318	-	-	2.218	-			
Pd Capacity-1 Maneuver	803	941	-	-	1453	-			
Stage 1	913	-	-	-	-	-			
Stage 2	949	-	-	-	-	-			
Time blocked-Platoon, %	-	-	-	-	-	-			
Mov Capacity-1 Maneuver	803	941	-	-	1453	-			
Mov Capacity-2 Maneuver	803	-	-	-	-	-			
Stage 1	913	-	-	-	-	-			
Stage 2	949	-	-	-	-	-			
Approach	WB	NB	SB						
HCM Control Delay, s	9.7	0	0						
HCM LOS	A								
Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT				
Capacity (veh/h)	-	-	803	1453	-				
HCM Lane V/C Ratio	-	-	0.053	-	-				
HCM Control Delay (s)	-	-	9.7	0	-				
HCM Lane LOS	-	-	A	A	-				
HCM 95th %ile Q(veh)	-	-	0.167	0	-				
Notes	- : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined								

Intersection									
Intersection Delay, s/veh	1.2								
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Vol, veh/h	20	0	74	17	0	48			
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	-	-	-	-	-			
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	22	0	80	18	0	52			
Major/Minor									
Minor1	Minor1		Major1		Major2				
Conflicting Flow All	142	90	0	0	99	0			
Stage 1	90	-	-	-	-	-			
Stage 2	52	-	-	-	-	-			
Follow-up Headway	3.518	3.318	-	-	2.218	-			
Pd Capacity-1 Maneuver	851	968	-	-	1494	-			
Stage 1	934	-	-	-	-	-			
Stage 2	970	-	-	-	-	-			
Time blocked-Platoon, %	-	-	-	-	-	-			
Mov Capacity-1 Maneuver	851	968	-	-	1494	-			
Mov Capacity-2 Maneuver	851	-	-	-	-	-			
Stage 1	934	-	-	-	-	-			
Stage 2	970	-	-	-	-	-			
Approach									
WB	WB		NB		SB				
HCM Control Delay, s	9.3	-	0	-	0	-			
HCM LOS	A	-	-	-	-	-			
Minor Lane / Major Mvmt									
NBT	NBR	WBLn1	SBL	SBT					
-	-	851	1494	-					
Capacity (veh/h)	-	-	0.026	-					
HCM Lane V/C Ratio	-	-	9.3	0					
HCM Control Delay (s)	-	-	A	A					
HCM Lane LOS	-	-	0.079	0					
HCM 95th %ile Q(veh)	-	-	-	-					
Notes									
- : Volume Exceeds Capacity ; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined									