

# TRAFFIC IMPACT STUDY

For

**Camelot II at Sayreville  
Borough of Sayreville  
Middlesex County, New Jersey**

*Prepared For:*

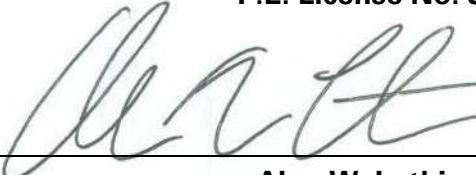
**Kaplan Companies  
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**LANGAN**

**19 September 2019  
130101101**

## Table of Contents

<b>EXECUTIVE SUMMARY.....</b>	<b>i</b>
<b>INTRODUCTION .....</b>	<b>1</b>
Project Description.....	1
Study Area .....	1
Scope of Study.....	2
<b>DESCRIPTION OF EXISTING CONDITIONS .....</b>	<b>3</b>
Roads.....	3
Main Street (CR 670) .....	3
Main Street Extension .....	3
Stegiel Place.....	3
Intersections .....	3
Main Street (CR 670) and Main Street Extension .....	3
Main Street (CR 670) and Stegiel Place .....	3
Traffic Volumes.....	4
<b>ESTIMATE OF FUTURE CONDITIONS.....</b>	<b>5</b>
Background Traffic Growth .....	5
Site-Generated Trips .....	5
Trip Distribution.....	5
Build Traffic Volumes .....	6
<b>ANALYSIS OF TRAFFIC OPERATIONS.....</b>	<b>7</b>
Level of Service Criteria .....	7
Capacity Analysis .....	8
Main Street (CR 670) and Main Street Extension .....	8
Main Street (CR 670) and Stegiel Place/Site Driveway .....	8
<b>CONCLUSIONS .....</b>	<b>10</b>

## **List of Figures**

- Figure 1 - Site Location Map
- Figure 2 - 2019 Existing Traffic Volumes
- Figure 3 - 2021 No-Build Traffic Volumes
- Figure 4 - Arrival and Departure Distributions
- Figure 5 - Total Site Generated Trips
- Figure 6 - 2021 Build Traffic Volumes

## **List of Tables**

- Table 1 - Trip Generation Estimates
- Table 2 - Trip Distribution
- Table 3 - Intersection Capacity Analysis Summary

## **Appendices**

- Appendix A Figures
- Appendix B Traffic Counts
- Appendix C Capacity Printouts

## **EXECUTIVE SUMMARY**

Kaplan Companies, has retained Langan Engineering and Environmental Services to prepare a traffic impact study for a proposed development consisting of 142 multi-family residential units. The project is located in the Borough of Sayreville, Middlesex County, New Jersey.

The site is located along Main Street (CR 670) northbound. It is bordered on the east and south by the Raritan River Railroad and on the west by existing commercial uses. Access to the site will be provided via one access driveway proposed to intersect Main Street directly across from Stegiel Place to form a full-movement unsignalized intersection.

Langan has estimated the number of new trips the proposed development would generate based on data compiled for Land Use 220 (Multi-Family (Low-Rise)) by the Institute of Transportation Engineers (ITE) as contained in the Trip Generation, 10<sup>th</sup> edition. Langan estimates that the development will generate approximately 67 trips (15 enter, 52 exit) during the weekday morning peak hour and 81 trips (51 enter, 30 exit) during the weekday evening peak hour.

We determined the directional distribution of the site-generated trips based on an examination of census data, demographic data, a Journey-to-Work model, and existing travel patterns in the study area. We conducted capacity analyses at the following intersections:

- Main Street (CR 670) and Main Street Extension
- Main Street (CR 670) and Stegiel Place/Site Driveway

Based upon the results of our analyses, we do not expect the proposed development to significantly impact the existing intersections during peak traffic hours. The site's access point is expected to operate safely and efficiently during peak traffic hours. Moreover, the site's access points are expected to maintain any queues experienced within the site without altering flow along Main Street (CR 670).

## **INTRODUCTION**

Kaplan Companies, has retained Langan Engineering and Environmental Services to prepare a traffic impact study for a proposed development consisting of 142 multi-family residential units. The project is located in the Borough of Sayreville, Middlesex County, New Jersey.

### **Project Description**

The proposed development consists of 142 multi-family residential units. The site is designated as Block 347.01, Lot 3.01 and Block 366.01 Lot 1 according to Borough of Sayreville tax maps. The site location is shown on Figure 1.

Access to the site will be provided via one access driveway proposed to intersect Main Street directly across from Stegiel Place to form a full-movement unsignalized intersection.

### **Study Area**

We conducted capacity analyses at the following intersections:

- Main Street (CR 670) and Main Street Extension
- Main Street (CR 670) and Stegiel Place/Site Driveway

An inventory of the physical road conditions is presented in the section “Description of Existing Conditions.”

## **Scope of Study**

Langan undertook the following steps to prepare this study in accordance with standard traffic engineering methodologies:

1. Conducted a field examination of the site and surrounding road network to inventory physical and regulatory conditions including the number of lanes, lane assignments, channelization, traffic-control devices, lateral clearances and other factors that limit traffic capacity.
2. Conducted a series of turning movement traffic counts at the study intersections. Manual turning movement counts were conducted on a typical weekday from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM. The existing weekday morning and evening peak hour traffic volumes were identified based on the manual traffic count data.
3. Established 2021 No-Build traffic volumes by applying the New Jersey Department of Transportation (NJDOT) Middlesex County growth factor of 1.0 percent per year to the existing traffic volumes.
4. Prepared peak hour trip generation estimates for the proposed residential development based on trip generation data published by the Institute of Transportation Engineers (ITE).
5. Developed trip distribution based on an examination of census data, demographic data, a Journey-to-Work model, and existing travel patterns in the study area.
6. Assigned site-generated trips to the site access roads and surrounding road network based on the likely travel routes motorists will use to travel to and from the site.
7. Established future “2021 Build” traffic volumes by adding site-generated trips to the “2021 No-Build” traffic volumes.
8. Performed intersection capacity analyses for the weekday morning and evening peak hours using Synchro Software.

## **DESCRIPTION OF EXISTING CONDITIONS**

This section describes the roads, intersections and traffic volumes in the area of the proposed redevelopment located in the Borough of Sayerville, Middlesex County, New Jersey.

### **Roads**

#### Main Street (CR 670)

Main Street (CR 670) is classified as an urban minor arterial road and is under county (Middlesex County) jurisdiction. The roadway has a general north-south directional orientation and generally provides one travel lane in each direction. The posted speed limit in the immediate study area is 45 mph.

#### Main Street Extension

Main Street Extension is classified as an urban minor arterial road and is under municipal (Borough of Sayreville) jurisdiction. The roadway has a general north-south directional orientation and generally provides two travel lanes in each direction. The posted speed limit in the immediate study area is 45 mph.

#### Stegiel Place

Stegiel Place is classified as a local road. The roadway has a general east-west directional orientation and generally provides one travel lane in each direction. There is no posted speed limit in the immediate study area.

### **Intersections**

#### Main Street (CR 670) and Main Street Extension

Main Street (CR 670) and Main Street Extension intersect to form a T-shaped intersection under signal control. The westbound Main Street approach provides a left-turn lane and a channelized right-turn lane. The northbound Main Street approach provides two through lanes and a right-turn lane. The southbound Main Street Extension approach provides two through lanes and a left-turn lane.

#### Main Street (CR 670) and Stegiel Place

Main Street (CR 670) and Stegiel Place intersect to form a T-shaped intersection under "stop"-control. The eastbound Main Street approach provides a shared left-turn/through lane. The westbound Main Street approach provides a shared through/right-turn lane. The southbound Stegiel place approach provides a shared left-turn/right-turn lane and is "stop"-controlled.

## **Traffic Volumes**

To examine traffic conditions near the site, turning movement traffic counts were conducted during the morning and evening peak hours during a typical weekday at the study intersections. Specifically, manual turning movement counts were conducted on Tuesday, March 9, 2019, from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM. Additionally, Automatic Traffic Recorder (ATR) counts were conducted on both sides of Main Street (CR 670)

The manual traffic counts identify distinct times during the weekday morning and evening hours when traffic experienced its highest levels. According to the manual traffic count data collected, the weekday morning peak hour occurs from 7:15 AM to 8:15 AM; and the weekday evening peak hour occurs from 4:45 PM to 5:45 PM.

We also reviewed prior traffic volume data Langan collected in November 2016 and October 2018. This data was utilized to confirm the 2019 collected data as representative of existing traffic conditions.

Figure 2 illustrates the existing weekday morning and evening peak hour traffic volumes. Summaries of the manual traffic counts are contained in Appendix B.

## **ESTIMATE OF FUTURE CONDITIONS**

This section of the report covers background traffic growth, adjacent developments, site-generated trips, trip distribution, and future traffic volumes. We anticipate the project will be completed by the end of 2021. Accordingly, we projected traffic volumes to include existing traffic, new traffic created by background growth to derive the 2021 No-Build traffic volumes. The site generated trips were added to the 2021 No-Build traffic volumes to derive the 2021 Build traffic volumes.

### **Background Traffic Growth**

The existing counted traffic volumes were increased by a compounded annual growth rate of 1.0 percent, established by the NJDOT for Middlesex County for short term growth projections, to derive the 2021 No-Build traffic volumes. Figure 3 illustrates the 2021 No-Build traffic volumes.

### **Site-Generated Trips**

We prepared trip generation estimates for the proposed development using data compiled for Land Use 220 (Multi-Family (Low-Rise)) by the Institute of Transportation Engineers (ITE) as contained in the publication Trip Generation, 10<sup>th</sup> edition. Table 1 summarizes the trip generation estimates for the project for the weekday morning and evening peak hours.

**Table 1 - Trip Generation Estimates**

Use	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
	In	Out	Total	In	Out	Total
142 Multi-Family Units	15	52	67	51	30	81

### **Trip Distribution**

We determined the directional distribution of the site-generated trips the service components based on an examination of census data, demographic data, a Journey-to-Work model, and existing travel patterns in the study area. The directional distribution of site traffic is shown in Table 2.

**Table 2 - Trip Distribution**

Direction (To/From)	Arrival & Departure Distributions
Main Street Extension (North)	54%
Main Street – CR 670 (East)	18%
Main Street – CR 670 (West)	28%
<b>Total</b>	<b>100%</b>

Figure 4 shows the arrival and departure distributions for the project. The site generated traffic was then applied to the adjacent roadway system as per the above distributions. Figure 5 shows the total site generated trips assigned to the roadway network for the development.

### **Build Traffic Volumes**

The 2021 Build traffic volumes were derived by adding the total site-generated trips to the 2021 No-Build traffic volumes. Figure 6 illustrates the 2021 Build weekday morning and evening peak hour traffic volumes.

## **ANALYSIS OF TRAFFIC OPERATIONS**

This section describes the capacity analysis we conducted to assess traffic operations for the No-Build and Build conditions. Capacity analysis provides an indication of the adequacy of road facilities to serve traffic demand.

### **Level of Service Criteria**

Level of Service (LOS) is the term used to denote different operating conditions that occur on a given road segment under various traffic volume demands. LOS is a qualitative measure that considers a number of factors including road geometry, speed, travel delay and freedom to maneuver. LOS designations range from A to F and provide an index of operational qualities of a road segment or an intersection. LOS A represents the best operating conditions; LOS F represents the worst.

LOS designations are reported differently for signalized and unsignalized intersections. For signalized intersections, the analysis considers the operation of all traffic entering the intersection. For unsignalized intersections, the analysis considers the operation of all movements that conflict with other movements, such as main-line left turns and traffic exiting a side street. The evaluation criteria used to analyze the study area intersections are based on the 2010 Highway Capacity Manual (HCM), published by the Transportation Research Board and the latest version of the Highway Capacity Software (HCS).

The HCM defines LOS for signalized intersections as follows:

<b><u>LOS</u></b>	<b><u>Control Delay per Vehicle</u></b>
A	≤10 sec
B	>10 and ≤20 sec
C	>20 and ≤35 sec
D	>35 and ≤55 sec
E	>55 and ≤80 sec
F	>80 sec

The HCM defines LOS for unsignalized intersections as follows:

<b><u>LOS</u></b>	<b><u>Delay Range (sec/veh)</u></b>
A	0 - 10 sec
B	>10 sec - 15 sec
C	>15 sec - 25 sec
D	>25 sec - 35 sec
E	>35 sec - 50 sec
F	>50 sec

## Capacity Analysis

We conducted capacity analyses for the intersections in the study area and found that the proposed development will not significantly impact operations in the study area during peak hours. Table 3 summarizes the 2021 No-Build and 2021 Build levels of service at each relevant study intersection during the weekday morning and evening peak hours. Following are discussions pertaining to each of the intersections analyzed for the project. Note that all capacity analyses worksheets are contained in Appendix C.

**Table 3 – Intersection Capacity Analysis Summary**

Location	Movement	2015 No-Build Condition		2018 Build Condition		
		AM	PM	AM	PM	
<b>Signalized Intersections</b>						
Main Street (CR 670) and Main Street Extension	WB	L	C (23.7)	C (29.8)	C (24.8)	
		R	A (0.0)	A (0.0)	A (0.0)	
	NB	T	B (16.4)	C (25.2)	B (16.3)	
		R	A (1.6)	A (6.2)	A (1.6)	
	SB	L	C (31.2)	C (34.0)	C (32.2)	
		T	B (10.0)	B (13.3)	B (13.9)	
<b>Overall</b>		<b>B (10.5)</b>	<b>B (17.6)</b>	<b>B(10.6)</b>	<b>B (18.1)</b>	
<b>Unsignalized Intersections</b>						
Main Street (CR 670) and Stegeli Place/Site Driveway	EB	L,R	F (55.7)	F (57.4)	-	
		L,T,R	-	-	F (105.1)	
	WB	L,T	-	-	F (115.4)	
		R	-	-	D (27.3)	
	NB	L,T	A (8.8)	B (11.8)	-	
		L,T,R	-	-	A (8.8)	
SB		L,T,R	-	-	B (11.9)	
A (9.3)						

Based on HCS Software

\*Level of Service (Average vehicle delay [seconds per vehicle])

### Main Street (CR 670) and Main Street Extension

This signalized intersection is expected to operate at an overall LOS B during both the weekday morning and evening peak hours under the No-Build condition. Under the Build condition, the intersection is expected to continue to operate at an overall LOS B during both the weekday morning and evening peak hours.

### Main Street (CR 670) and Stegeli Place/Site Driveway

#### *Geometry*

The site driveway is proposed to intersect Main Street (CR 670) directly across from Stegeli Place to form a four-leg intersection that will continue to operate under “stop”-control. The eastbound Stegeli Place approach will provide a shared left-turn/through/right-turn lane and will

be “stop”-controlled. The westbound site driveway approach will provide a shared left-turn/through lane, a right-turn lane, and will be “stop”-controlled. The northbound CR 670 approach will provide a shared left-turn/through lane/right-turn lane. The southbound CR 670 approach will provide a shared left-turn/through/right-turn lane.

#### *Analysis*

All movements at this “stop”-controlled intersection are expected to operate LOS B or better during both the weekday morning and evening peak hours with the exception of the eastbound Stegiel Place left-turn/right-turn movement, which is expected to operate at LOS F during both peak hours, under the No-Build condition. Under the Build condition, all movements at this “stop”-controlled intersection are expected to operate at LOS D or better during both the weekday morning and evening peak hours with the exception of the eastbound Stegiel Place left-turn/through/right-turn movement, which is expected to continue to operate at LOS F during both peak hours and the westbound site driveway left-turn/through movement, which is expected to operate at LOS F during both peak hours. It is noted that the queues experienced on both the eastbound and westbound approaches will be no longer than one vehicle during both peak hours and will be maintained along each approach. The majority of the traffic exiting the site driveway will travel to the north along Main Street (CR 670) via a separate right-turn lane. This will allow the majority of the exiting traffic to leave the site without experiencing significant delays. Additionally, the volume to capacity (v/c) ratios experienced on both the eastbound and westbound approaches will be below 1.0 during both peak hours.

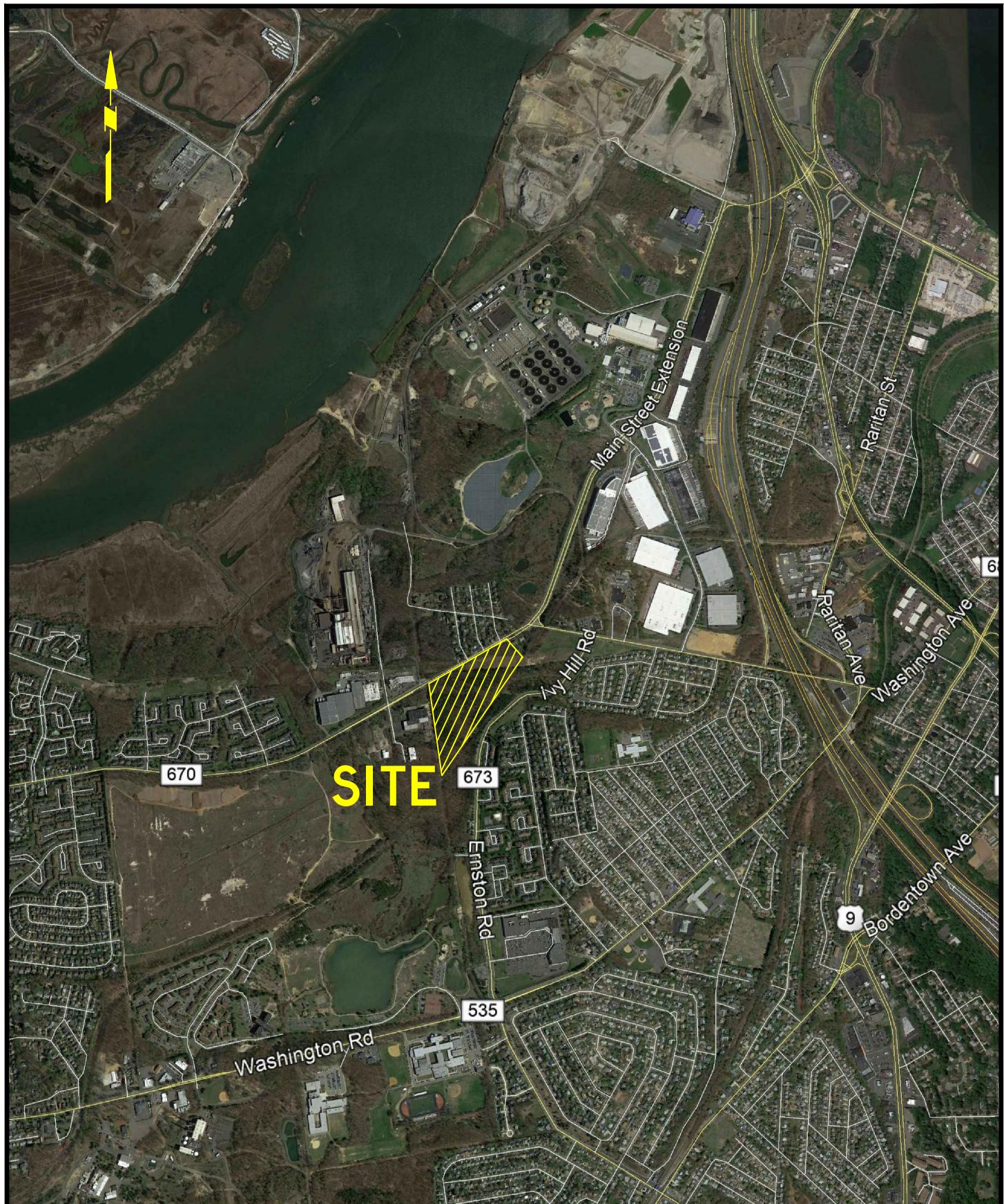
## **CONCLUSIONS**

Based upon the traffic projections and analyses as documented herein, Langan finds that the proposed development is not expected to significantly impact the existing intersections during peak traffic hours. The site's access point is expected to operate safely and efficiently during peak traffic hours. Moreover, the site's access points are expected to maintain any queues experienced within the site without altering flow along Main Street (CR 670).

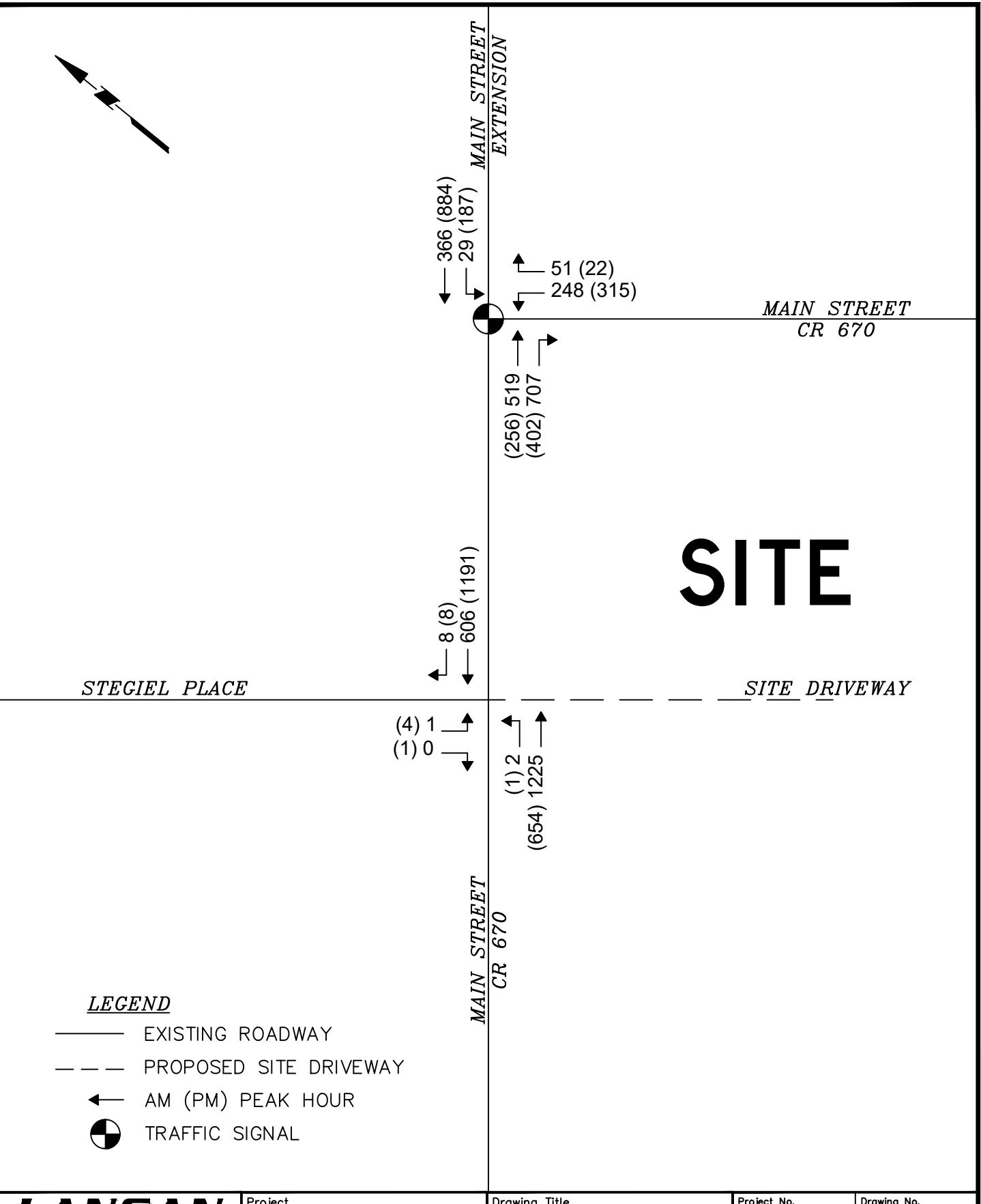
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## **APPENDIX A**

### **FIGURES**



<b>LANGAN</b> Langan Engineering and Environmental Services, Inc. 989 Lenox Drive, Suite 124 Lawrenceville, NJ 08648 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ Certificate of Authorization No. 24GA27996400		Project <b>CAMELOT II AT SAYREVILLE</b> BLOCK No. 347.01, LOT No. 3.01 BLOCK No. 366.01, LOT No. 1 BOROUGH OF SAYREVILLE MIDDLESEX COUNTY NEW JERSEY	Drawing Title <b>SITE LOCATION MAP</b>	Project No. 130101101	Drawing No. <b>FIGURE 1</b>
				Date 04/25/2019	Drawn By EJV
				Checked By KAP	Sheet 1 of 6



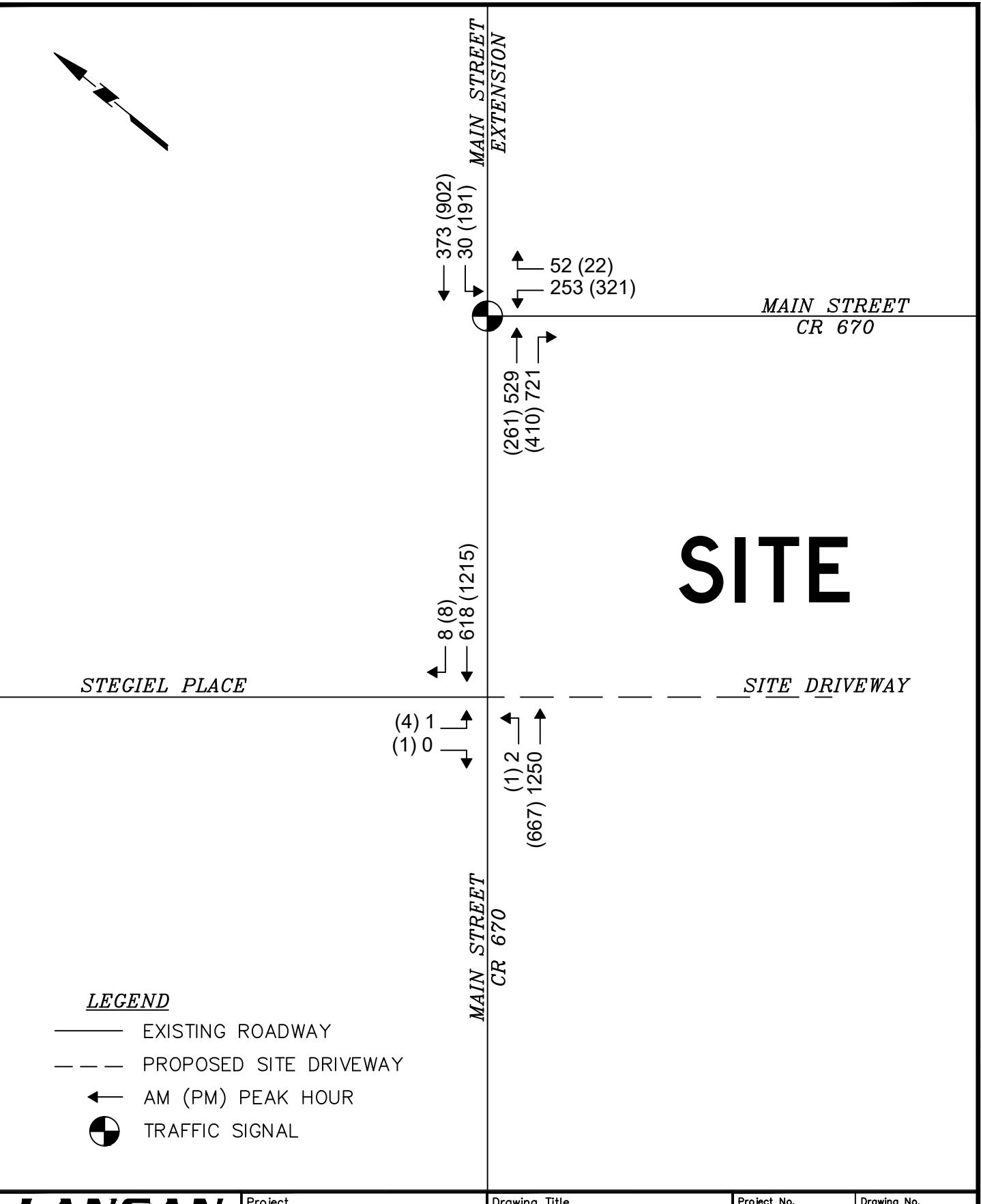
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Project  
**CAMELOT II AT SAYREVILLE**  
 BLOCK No. 347.01, LOT No. 3.01  
 BLOCK No. 366.01, LOT No. 1  
 BOROUGH OF SAYREVILLE  
 MIDDLESEX COUNTY NEW JERSEY

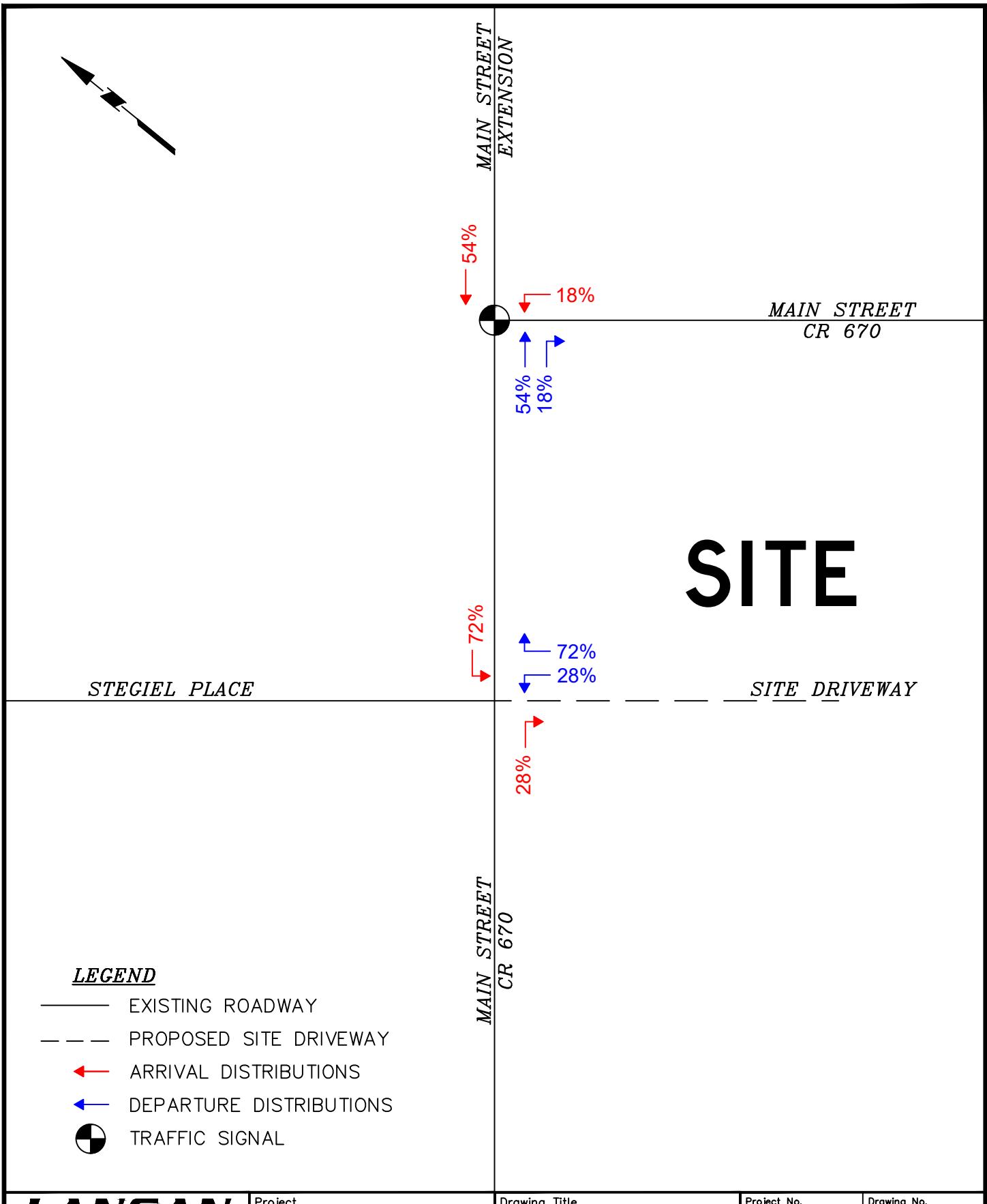
Drawing Title  
**2019 EXISTING TRAFFIC VOLUMES**

Project No.  
 130101101  
 Date  
 04/25/2019  
 Drawn By  
 EJV  
 Checked By  
 KAP

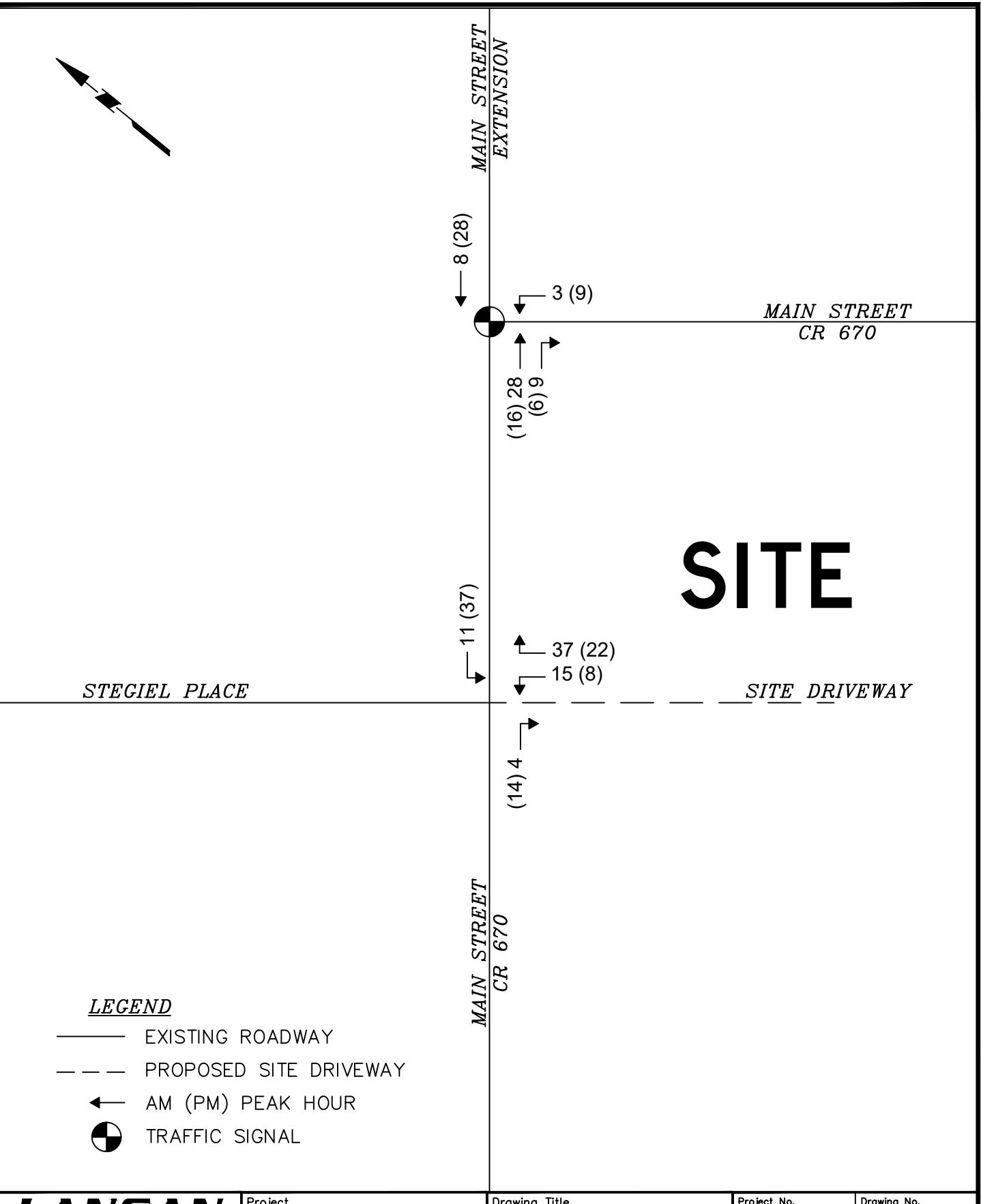
Drawing No.  
**FIGURE 2**  
 Sheet 2 of 6



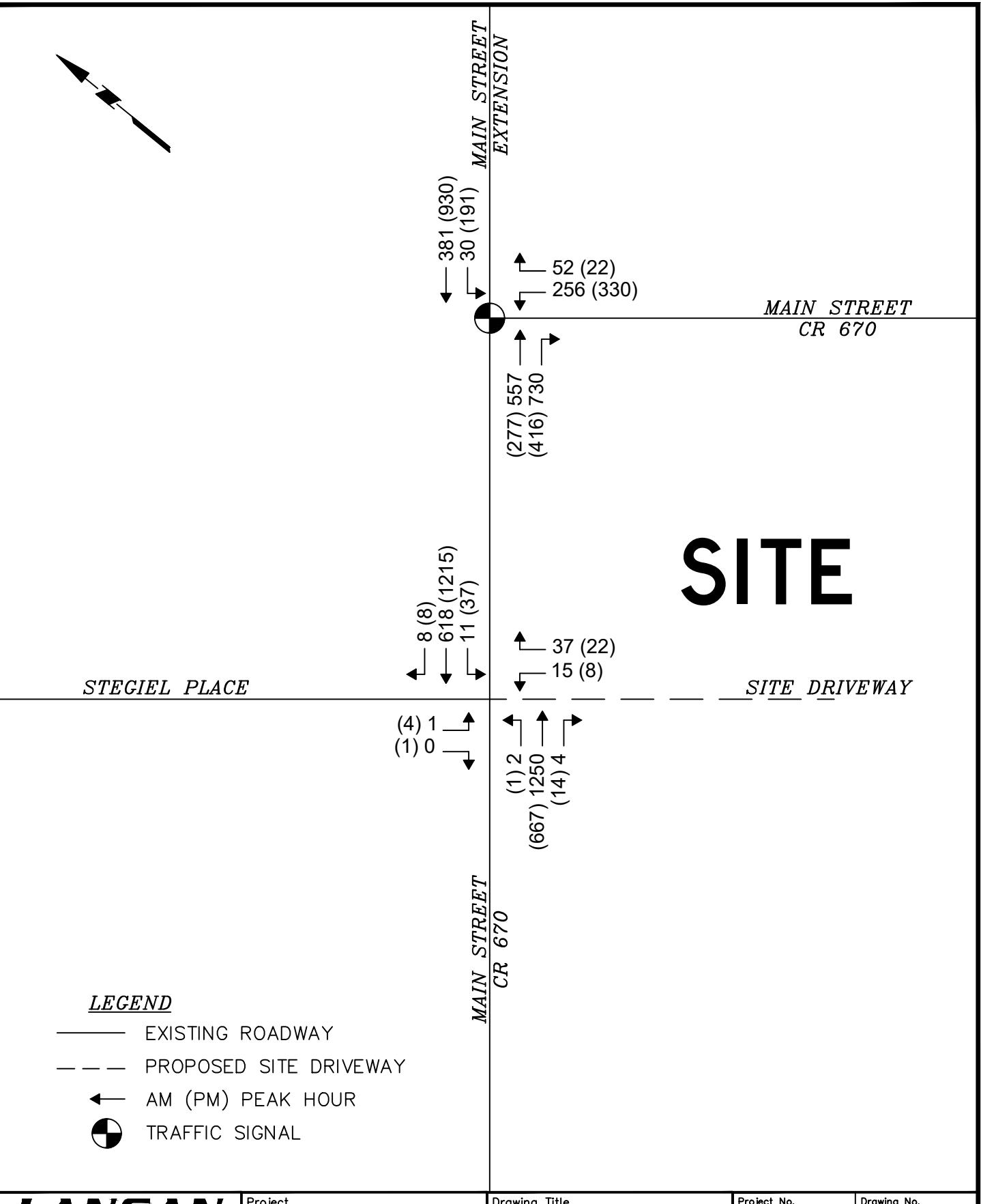
<b>LANGAN</b> Langan Engineering and Environmental Services, Inc. 989 Lenox Drive, Suite 124 Lawrenceville, NJ 08648 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ Certificate of Authorization No.24GA27996400	Project <b>CAMELOT II AT SAYREVILLE</b> BLOCK No. 347.01, LOT No. 3.01 BLOCK No. 366.01, LOT No. 1 BOROUGH OF SAYREVILLE MIDDLESEX COUNTY NEW JERSEY	Drawing Title <b>2021 NO-BUILD TRAFFIC VOLUMES</b>	Project No. 130101101	Drawing No. <b>FIGURE</b> <b>3</b>
			Date 04/25/2019	
			Drawn By EJV	



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			Date 04/25/2019	5



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			Date 04/25/2019	6
			Drawn By EJV	
			Checked By KAP	Sheet 6 of 6

**APPENDIX B**  
**TRAFFIC COUNTS**

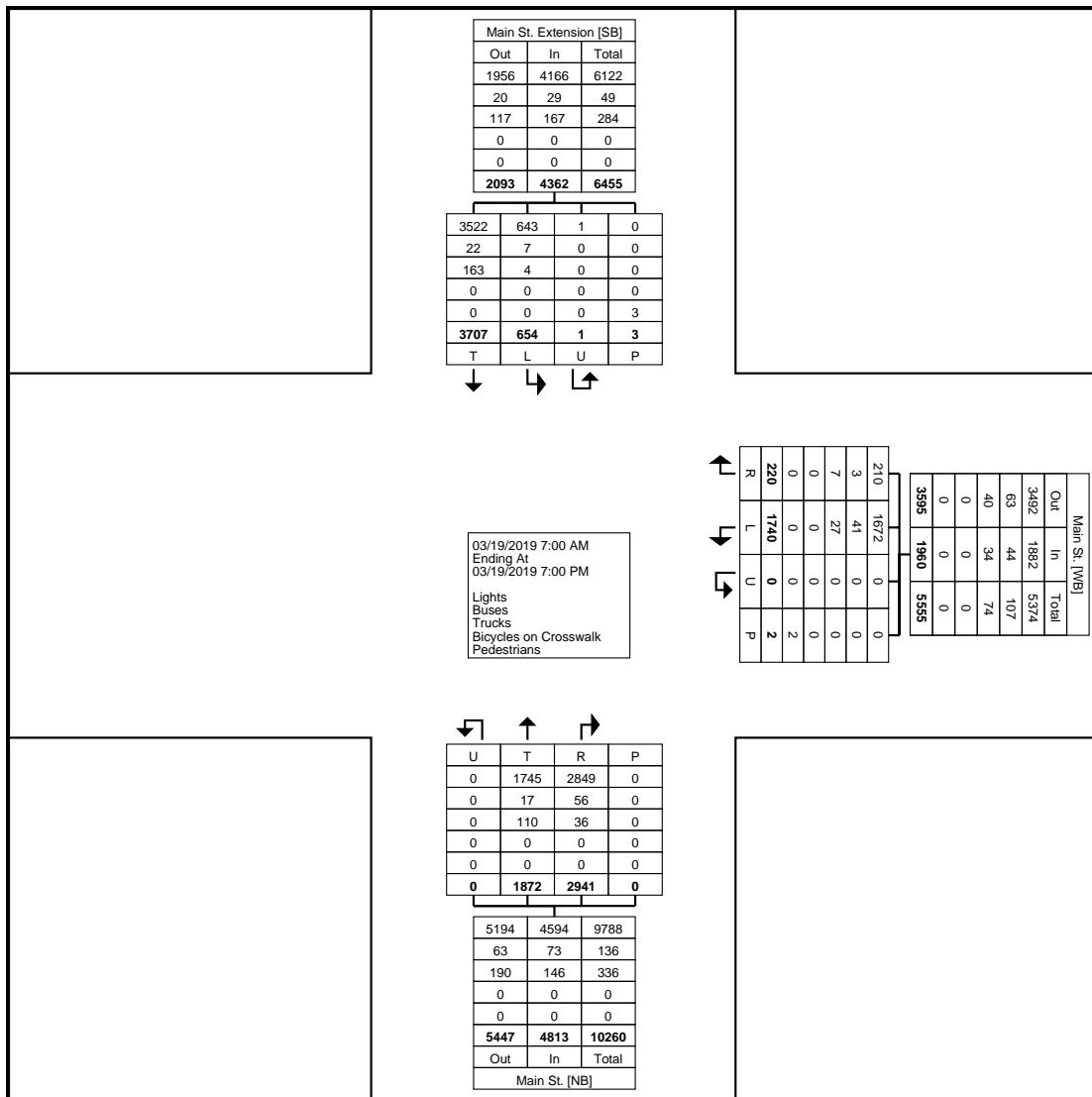
### Turning Movement Data

Start Time	Main St. Westbound						Main St. Northbound						Main St. Extension Southbound						Int. Total
	Left	Right	Right on Red	U-Turn	Peds	App. Total	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total		
7:00 AM	54	7	4	0	0	65	135	101	81	0	0	317	5	53	0	0	58	440	
7:15 AM	68	5	8	0	0	81	120	79	116	0	0	315	7	75	0	0	82	478	
7:30 AM	59	2	7	0	0	68	127	91	92	0	0	310	8	92	0	0	100	478	
7:45 AM	62	9	9	0	0	80	147	68	100	0	0	315	10	89	0	0	99	494	
Hourly Total	243	23	28	0	0	294	529	339	389	0	0	1257	30	309	0	0	339	1890	
8:00 AM	59	5	6	0	0	70	125	99	62	0	0	286	4	110	0	0	114	470	
8:15 AM	60	6	9	0	0	75	125	92	61	0	0	278	7	91	0	0	98	451	
8:30 AM	46	6	9	0	0	61	94	134	42	0	0	270	13	87	0	0	100	431	
8:45 AM	63	1	10	0	0	74	66	92	62	0	0	220	10	75	0	0	85	379	
Hourly Total	228	18	34	0	0	280	410	417	227	0	0	1054	34	363	0	0	397	1731	
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3:00 PM	90	5	4	0	0	99	65	70	43	0	0	178	13	124	0	0	137	414	
3:15 PM	84	1	8	0	0	93	63	72	38	0	0	173	23	155	0	0	178	444	
3:30 PM	66	2	2	0	0	70	52	61	34	0	0	147	32	161	0	0	193	410	
3:45 PM	67	2	4	0	0	73	65	68	34	0	0	167	43	171	0	0	214	454	
Hourly Total	307	10	18	0	0	335	245	271	149	0	0	665	111	611	0	0	722	1722	
4:00 PM	70	6	6	0	0	82	66	57	62	0	0	185	38	207	0	0	245	512	
4:15 PM	76	3	7	0	0	86	52	73	42	0	0	167	33	204	0	0	237	490	
4:30 PM	90	3	2	0	0	95	55	62	28	0	0	145	45	212	0	0	257	497	
4:45 PM	73	2	3	0	0	78	62	65	35	0	0	162	56	214	0	0	270	510	
Hourly Total	309	14	18	0	0	341	235	257	167	0	0	659	172	837	0	0	1009	2009	
5:00 PM	83	6	0	0	0	89	55	75	25	0	0	155	35	214	0	0	249	493	
5:15 PM	79	0	5	0	1	84	72	80	40	0	0	192	54	226	0	2	280	556	
5:30 PM	80	1	5	0	0	86	67	53	29	0	0	149	42	230	0	0	272	507	
5:45 PM	93	1	5	0	1	99	47	52	36	0	0	135	56	183	0	1	239	473	
Hourly Total	335	8	15	0	2	358	241	260	130	0	0	631	187	853	0	3	1040	2029	
6:00 PM	68	3	9	0	0	80	59	54	31	0	0	144	38	214	0	0	252	476	
6:15 PM	93	2	2	0	0	97	61	41	49	0	0	151	30	185	0	0	215	463	
6:30 PM	87	2	7	0	0	96	50	32	44	0	0	126	27	195	0	0	222	444	
6:45 PM	70	4	5	0	0	79	42	36	48	0	0	126	25	140	1	0	166	371	
Hourly Total	318	11	23	0	0	352	212	163	172	0	0	547	120	734	1	0	855	1754	
Grand Total	1740	84	136	0	2	1960	1872	1707	1234	0	0	4813	654	3707	1	3	4362	11135	
Approach %	88.8	4.3	6.9	0.0	-	-	38.9	35.5	25.6	0.0	-	-	15.0	85.0	0.0	-	-	-	
Total %	15.6	0.8	1.2	0.0	-	17.6	16.8	15.3	11.1	0.0	-	43.2	5.9	33.3	0.0	-	39.2	-	
Lights	1672	78	132	0	-	1882	1745	1654	1195	0	-	4594	643	3522	1	-	4166	10642	
% Lights	96.1	92.9	97.1	-	-	96.0	93.2	96.9	96.8	-	-	95.4	98.3	95.0	100.0	-	95.5	95.6	
Buses	41	2	1	0	-	44	17	34	22	0	-	73	7	22	0	-	29	146	
% Buses	2.4	2.4	0.7	-	-	2.2	0.9	2.0	1.8	-	-	1.5	1.1	0.6	0.0	-	0.7	1.3	
Trucks	27	4	3	0	-	34	110	19	17	0	-	146	4	163	0	-	167	347	
% Trucks	1.6	4.8	2.2	-	-	1.7	5.9	1.1	1.4	-	-	3.0	0.6	4.4	0.0	-	3.8	3.1	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	0	-	-	
% Bicycles on Crosswalk	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	0.0	-	-	
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	3	-	-	
% Pedestrians	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-	

Sayreville, NJ  
Main St & Main St Ext  
Tuesday, March 19, 2019  
Location: 40.478385, -  
74.312237

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Ext.  
Site Code:  
Start Date: 03/19/2019  
Page No: 2



Turning Movement Data Plot



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Tuesday, March 19, 2019  
Location: 40.478385, -74.312237

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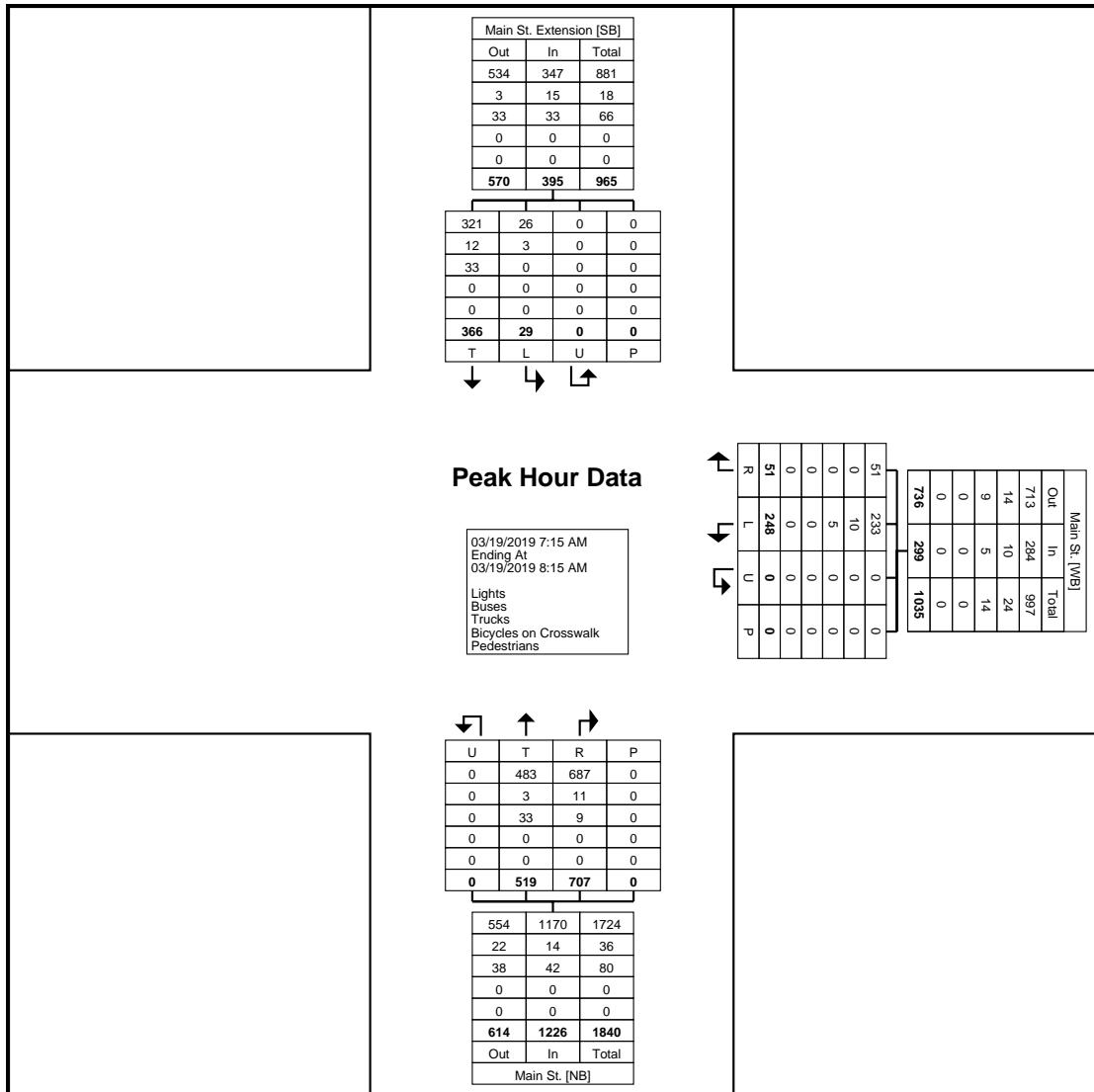
Count Name: Main St./Main St.  
Ext.  
Site Code:  
Start Date: 03/19/2019  
Page No: 3

## Turning Movement Peak Hour Data (7:15 AM)

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Main St & Main St Ext  
Tuesday, March 19, 2019  
Location: 40.478385, -  
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Page No: 4



Turning Movement Peak Hour Data Plot (7:15 AM)



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Main St & Main St Ext  
Tuesday, March 19, 2019  
Location: 40.478385, -74.312237

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Site Code:  
Start Date: 03/19/2019  
Page No: 5

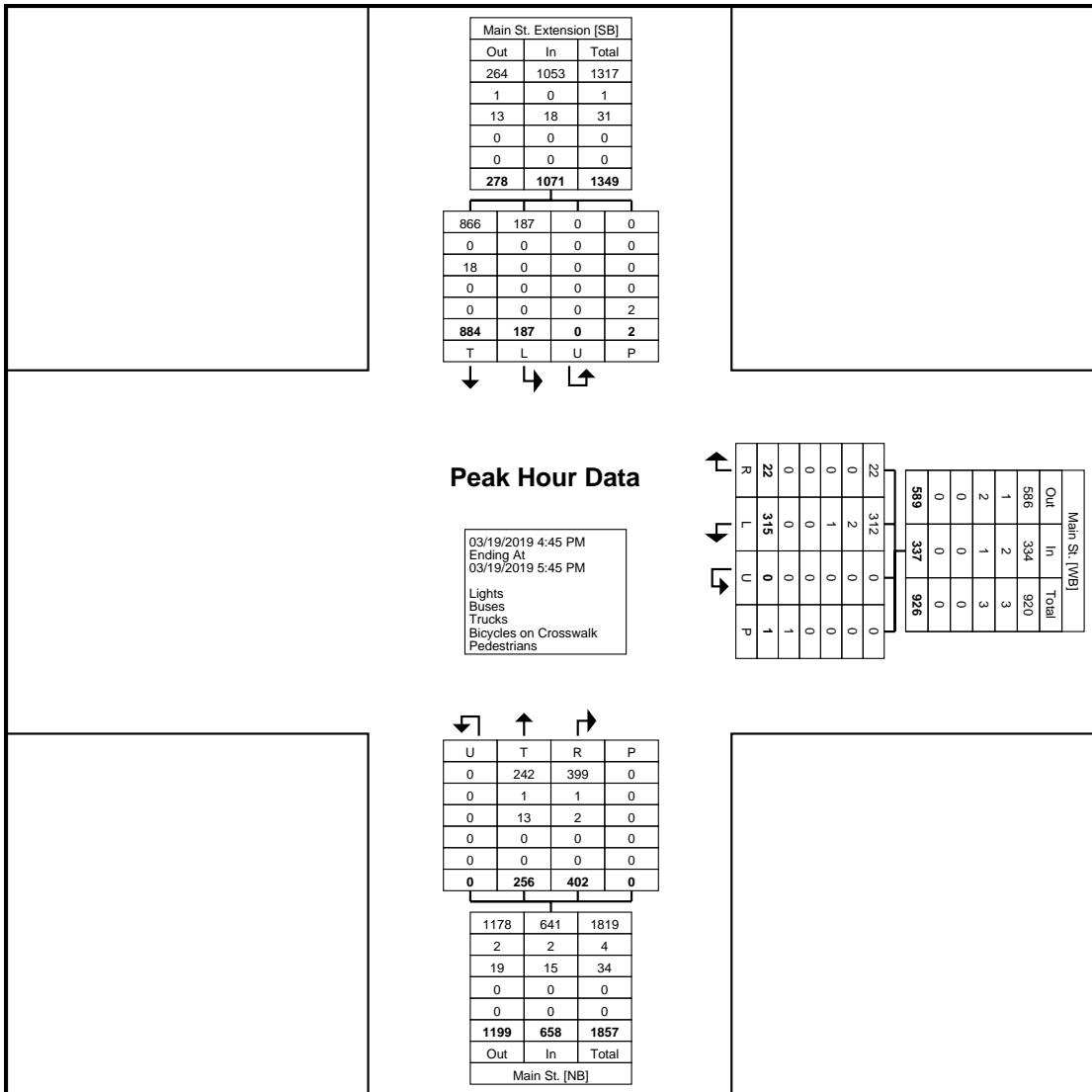
### Turning Movement Peak Hour Data (4:45 PM)

Start Time	Main St. Westbound						Main St. Northbound						Main St. Extension Southbound						Int. Total
	Left	Right	Right on Red	U-Turn	Peds	App. Total	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total		
4:45 PM	73	2	3	0	0	78	62	65	35	0	0	162	56	214	0	0	270	510	
5:00 PM	83	6	0	0	0	89	55	75	25	0	0	155	35	214	0	0	249	493	
5:15 PM	79	0	5	0	1	84	72	80	40	0	0	192	54	226	0	2	280	556	
5:30 PM	80	1	5	0	0	86	67	53	29	0	0	149	42	230	0	0	272	507	
Total	315	9	13	0	1	337	256	273	129	0	0	658	187	884	0	2	1071	2066	
Approach %	93.5	2.7	3.9	0.0	-	-	38.9	41.5	19.6	0.0	-	-	17.5	82.5	0.0	-	-	-	
Total %	15.2	0.4	0.6	0.0	-	16.3	12.4	13.2	6.2	0.0	-	31.8	9.1	42.8	0.0	-	51.8	-	
PHF	0.949	0.375	0.650	0.000	-	0.947	0.889	0.853	0.806	0.000	-	0.857	0.835	0.961	0.000	-	0.956	0.929	
Lights	312	9	13	0	-	334	242	272	127	0	-	641	187	866	0	-	1053	2028	
% Lights	99.0	100.0	100.0	-	-	99.1	94.5	99.6	98.4	-	-	97.4	100.0	98.0	-	-	98.3	98.2	
Buses	2	0	0	0	-	2	1	0	1	0	-	2	0	0	0	-	0	4	
% Buses	0.6	0.0	0.0	-	-	0.6	0.4	0.0	0.8	-	-	0.3	0.0	0.0	-	-	0.0	0.2	
Trucks	1	0	0	0	-	1	13	1	1	0	-	15	0	18	0	-	18	34	
% Trucks	0.3	0.0	0.0	-	-	0.3	5.1	0.4	0.8	-	-	2.3	0.0	2.0	-	-	1.7	1.6	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	
% Bicycles on Crosswalk	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	0.0	-	
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	2	-	
% Pedestrians	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-	

Sayreville, NJ  
Main St & Main St Ext  
Tuesday, March 19, 2019  
Location: 40.478385, -  
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Ext.  
Site Code:  
Start Date: 03/19/2019  
Page No: 6



Turning Movement Peak Hour Data Plot (4:45 PM)



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Main St & Main St Ext  
Turning Movement Traffic Count  
Weekday AM & PM Peak Hours  
Thursday, 11 October 2018

File Name : Main St & Main St Ext AMPM  
Site Code : 00000000  
Start Date : 10/11/2018  
Page No : 1

**Groups Printed- Lights - Trucks - Buses**

MAIN STREET EXTENSION										MAIN STREET (COUNTY ROAD 670)									
Southbound					Westbound					Northbound					Northbound				
Start Time	Left	Thru	U-Turn	App. Total	Left	Right	U-Turn	App. Total	Thru	Right	U-Turn	RTOR	App. Total	Thru	Right	U-Turn	RTOR	App. Total	Int. Total
06:00 AM	5	65	0	70	20	0	0	0	20	53	49	0	44	146	236				
06:15 AM	2	97	0	99	31	6	0	6	43	98	33	0	81	212	354				
06:30 AM	4	91	0	95	33	4	0	3	40	98	25	0	77	200	335				
06:45 AM	5	93	0	98	49	10	0	4	63	97	38	0	106	241	402				
Total	16	346	0	362	133	20	0	13	166	346	145	0	308	799	1327				
07:00 AM	5	57	0	62	44	7	0	5	56	120	105	0	80	305	423				
07:15 AM	9	113	0	122	57	5	0	4	66	131	123	0	63	317	505				
07:30 AM	12	74	0	86	54	6	0	16	76	157	90	0	68	315	477				
07:45 AM	9	101	0	110	64	9	0	12	85	143	96	0	64	303	498				
Total	35	345	0	380	219	27	0	37	283	551	414	0	275	1240	1903				
08:00 AM	7	94	0	101	78	5	0	7	90	133	76	0	53	262	453				
08:15 AM	11	85	0	96	60	4	0	6	70	138	75	0	60	273	439				
08:30 AM	14	88	0	102	44	14	0	8	66	111	104	0	50	265	433				
08:45 AM	11	87	0	98	38	8	0	5	51	83	71	0	75	229	378				
Total	43	354	0	397	220	31	0	26	277	465	326	0	238	1029	1703				
<b>*** BREAK ***</b>																			
03:00 PM	18	138	0	156	84	3	0	7	94	60	51	0	40	151	401				
03:15 PM	30	161	0	191	69	3	0	4	76	62	90	0	22	174	441				
03:30 PM	30	124	0	154	83	6	0	4	93	73	71	0	23	167	429				
03:45 PM	26	155	0	181	82	2	0	8	92	56	76	0	18	150	414				
Total	104	578	0	682	318	14	0	23	355	251	288	0	103	642	1679				
04:00 PM	33	172	1	206	63	5	0	6	74	69	66	0	33	168	448				
04:15 PM	33	182	1	216	69	4	0	5	78	52	61	0	44	157	451				
04:30 PM	35	164	0	199	84	0	0	4	88	51	61	0	30	142	429				
04:45 PM	29	206	0	235	68	4	0	1	73	71	90	0	16	177	414				
Total	130	724	2	856	284	13	0	16	313	243	278	0	123	644	1813				
05:00 PM	33	189	1	223	86	1	0	11	98	73	79	0	28	180	501				
05:15 PM	49	225	0	274	73	3	0	9	85	73	65	0	25	163	522				
05:30 PM	29	180	0	209	91	1	0	7	99	58	76	0	13	147	455				
05:45 PM	39	192	0	231	82	1	0	6	89	66	92	0	6	164	484				
Total	150	786	1	937	332	6	0	33	371	270	312	0	72	654	1962				



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Main St & Main St Ext  
Turning Movement Traffic Count  
Weekday AM & PM Peak Hours  
Thursday, 11 October 2018

Main St & Main St Ext  
Turning Movement Traffic Count  
Weekday AM & PM Peak Hours  
Thursday, 11 October 2018

File Name : Main St & Main St Ext AMPM  
Site Code : 00000000  
Start Date : 10/11/2018  
Page No : 2

#### Groups Printed- Lights - Trucks - Buses

	MAIN STREET EXTENSION Southbound						MAIN STREET (COUNTY ROAD 670) Westbound						MAIN STREET (COUNTY ROAD 670) Northbound					
	Left	Thru	Right	U-Turn	App. Total	Left	Right	U-Turn	RTOR	App. Total	Thru	Right	U-Turn	RTOR	App. Total	Int. Total		
Grand Total	478	3133	3	3614	1506	111	0	148	1765	2126	1763	0	1119	5008	10387			
Apprich %	13.2	86.7	0.1	85.3	85.3	6.3	0	8.4	42.5	35.2	0	22.3						
Total %	4.6	30.2	0	34.8	14.5	1.1	0	1.4	17	20.5	17	0	10.8	48.2				
Lights	468	2968	3	3439	1438	104	0	139	1681	1993	1713	0	1084	4790	9910			
% Lights	97.9	94.7	100	95.2	95.5	93.7	0	93.9	95.2	93.7	97.2	0	96.9	95.6	95.4			
Trucks	7	140	0	147	23	3	0	7	33	110	13	0	20	143	323			
% Trucks	1.5	4.5	0	4.1	1.5	2.7	0	4.7	1.9	5.2	0.7	0	1.8	2.9	3.1			
Buses	3	25	0	28	45	4	0	2	51	23	37	0	15	75				
% Buses	0.6	0.8	0	0.8	3	3.6	0	1.4	2.9	1.1	2.1	0	1.3	1.5	1.5			



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Main St & Main St Ext  
Turning Movement Traffic Count  
Weekday AM & PM Peak Hours  
Thursday, 11 October 2018

		MAIN STREET EXTENSION				MAIN STREET (COUNTY ROAD 670)				MAIN STREET (COUNTY ROAD 670)					
		Southbound				Westbound				Northbound					
Start Time	Left	Thru	U-Turn	App. Total	Left	Right	U-Turn	RTOR	App. Total	Thru	Right	U-Turn	RTOR	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1															
07:15 AM	9	113	0	122	57	5	0	4	66	131	123	0	63	317	505
07:30 AM	12	74	0	86	54	6	0	16	76	157	90	0	68	315	477
07:45 AM	9	101	0	110	64	9	0	12	85	143	96	0	64	303	498
08:00 AM	7	94	0	101	78	5	0	7	90	133	76	0	53	262	453
Total Volume	37	382	0	419	253	25	0	39	317	564	385	0	248	1197	1933
% App. Total	8.8	91.2	0		79.8	7.9	0	12.3	47.1	322.2	0		20.7		
PHF	.771	.845	.000	.859	.811	.694	.000	.609	.881	.898	.783	.000	.912	.944	.957
Lights	36	337	0	373	238	23	0	36	297	545	374	0	245	1164	1834
% Lights	97.3	88.2	0	89.0	94.1	92.0	0	92.3	93.7	96.6	97.1	0	98.8	97.2	94.9
Trucks	0	36	0	36	3	1	0	2	6	18	1	0	2	21	63
% Trucks	0	9.4	0	8.6	1.2	4.0	0	5.1	1.9	3.2	0.3	0	0.8	1.8	3.3
Buses	1	0	9	0	10	12	1	0	1	14	1	10	1	12	36
% Buses	2.7	2.4	0	2.4	4.7	4.0	0	2.6	4.4	0.2	2.6	0	0.4	1.0	1.9
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1															
04:45 PM	29	206	0	235	68	4	0	1	73	71	90	0	16	177	485
05:00 PM	33	189	1	223	86	1	0	11	98	73	79	0	28	180	501
05:15 PM	49	225	0	274	73	3	0	9	85	73	65	0	25	163	522
05:30 PM	29	180	0	209	91	1	0	7	99	58	76	0	13	147	455
Total Volume	140	800	1	941	318	9	0	28	355	275	310	0	82	667	1963
% App. Total	14.9	85	0.1	89.6	2.5	0	7.9	41.2	46.5	0	12.3				
PHF	.714	.889	.250	.859	.874	.563	.000	.636	.896	.942	.861	.000	.732	.940	
Lights	139	786	1	926	313	9	0	27	349	253	305	0	80	638	1913
% Lights	99.3	98.3	100	98.4	100	100	0	96.4	98.3	92.0	98.4	0	97.6	95.7	97.5
Trucks	1	13	0	14	4	0	0	1	5	19	4	0	2	25	44
% Trucks	0.7	1.6	0	1.5	1.6	1.5	0	3.6	1.4	6.9	1.3	0	2.4	3.7	2.2
Buses	0	0	1	1	1.3	1.3	0	0	1	3	1	0	0	4	6
% Buses	0	0.1	0	0.1	0.3	0.3	0	0	0.3	1.1	0.3	0	0	0.6	0.3



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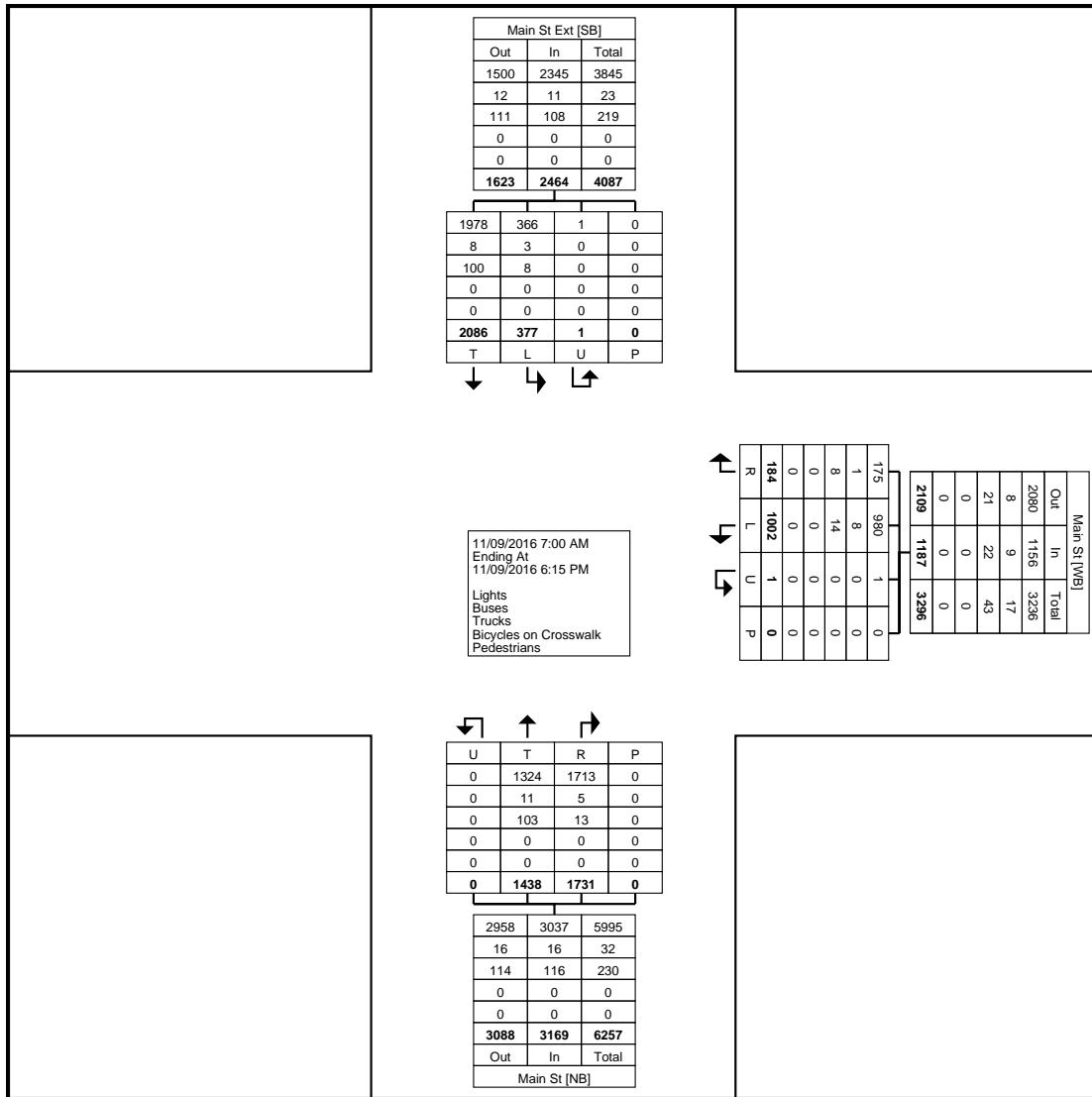
Count Name: Main St-Main St  
Ext  
Site Code:  
Start Date: 11/09/2016  
Page No: 1

# Turning Movement Data

Sayreville, NJ  
Main St/Main St Extension  
Wednesday, November 9, 2016  
Location: 40.478385, -  
74.312237

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Count Name: Main St-Main St Ext  
Site Code:  
Start Date: 11/09/2016  
Page No: 2



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Main St/Main St Extension  
Wednesday, November 9, 2016  
Location: 40.478385, -  
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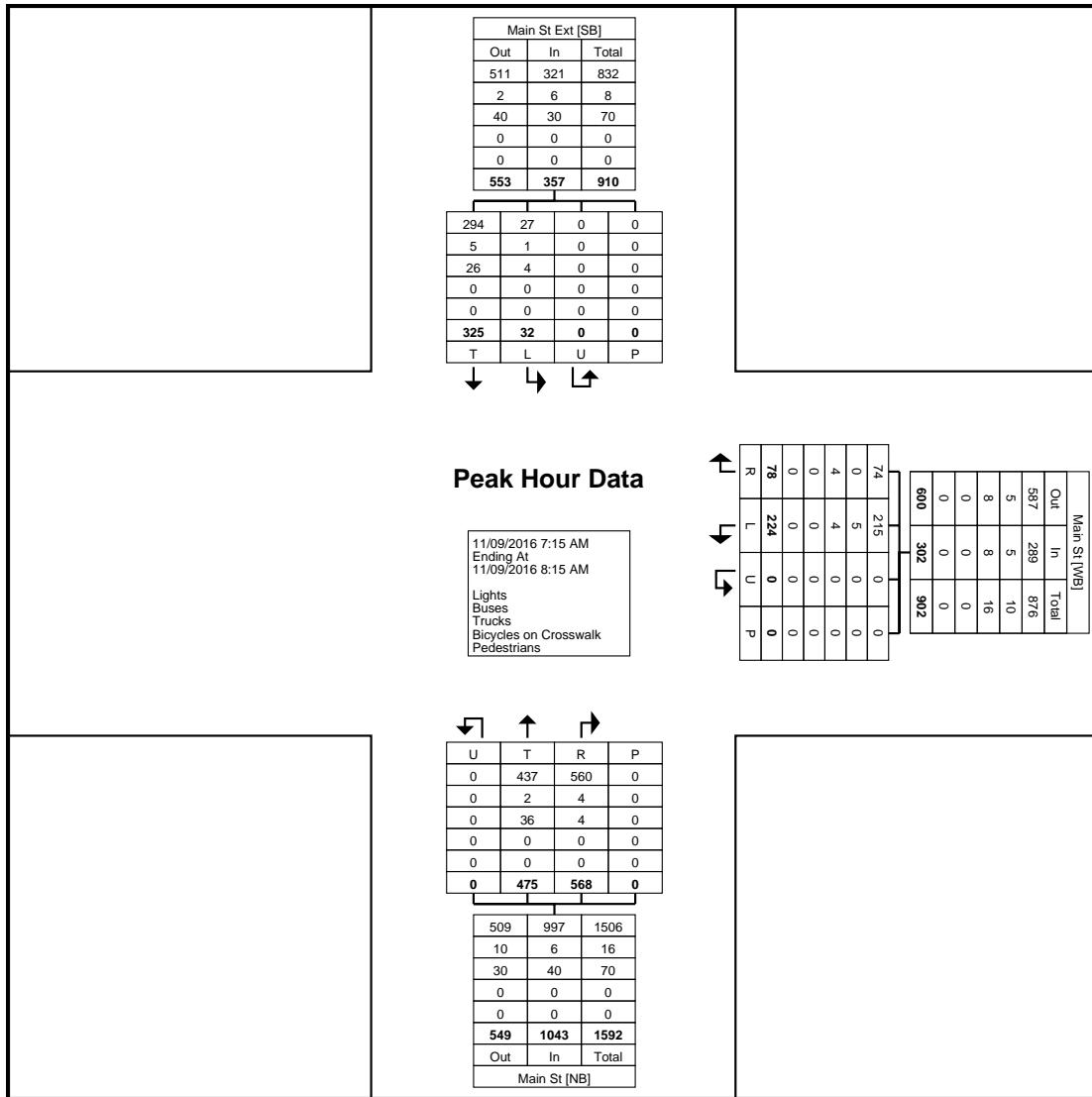
Count Name: Main St-Main St  
Ext  
Site Code:  
Start Date: 11/09/2016  
Page No: 3

## Turning Movement Peak Hour Data (7:15 AM)

Sayreville, NJ  
Main St/Main St Extension  
Wednesday, November 9, 2016  
Location: 40.478385, -  
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Start Date: 11/09/2016  
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Turning Movement Peak Hour Data Plot (7:15 AM)



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Main St/Main St Extension  
Wednesday, November 9, 2016  
Location: 40.478385, -  
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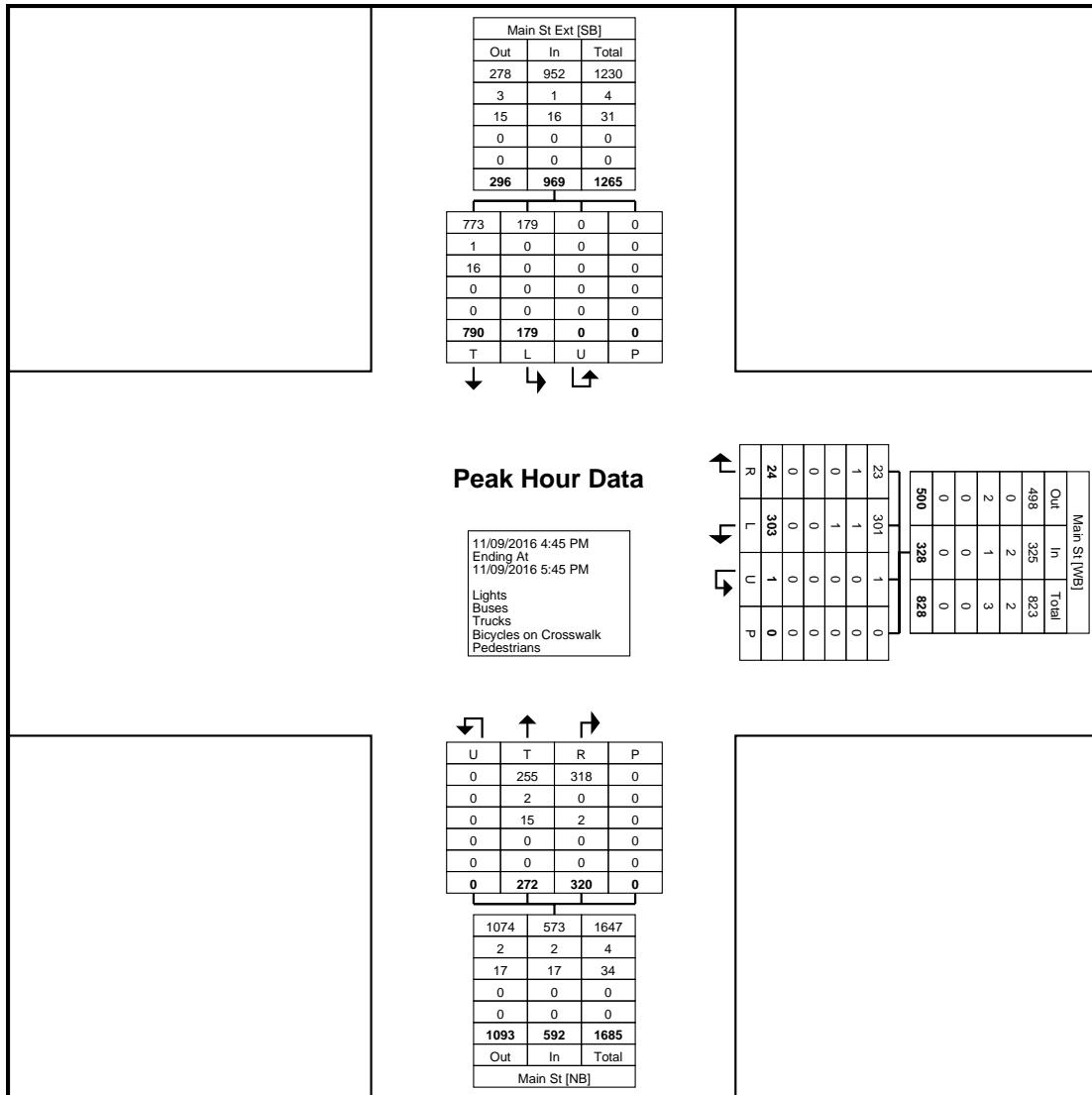
Count Name: Main St-Main St  
Ext  
Site Code:  
Start Date: 11/09/2016  
Page No: 5

## Turning Movement Peak Hour Data (4:45 PM)

Sayreville, NJ  
Main St/Main St Extension  
Wednesday, November 9, 2016  
Location: 40.478385, -  
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Site Code:  
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Wednesday, November 9, 2016  
Location: 40.478385, -  
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Count Name: Main St-Main St Ext  
Site Code:  
Start Date: 11/09/2016  
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Sayreville, NJ  
Main St/Steigiel Rd  
Wednesday, November 9, 2016  
Location: 40.477425, -  
74.314512

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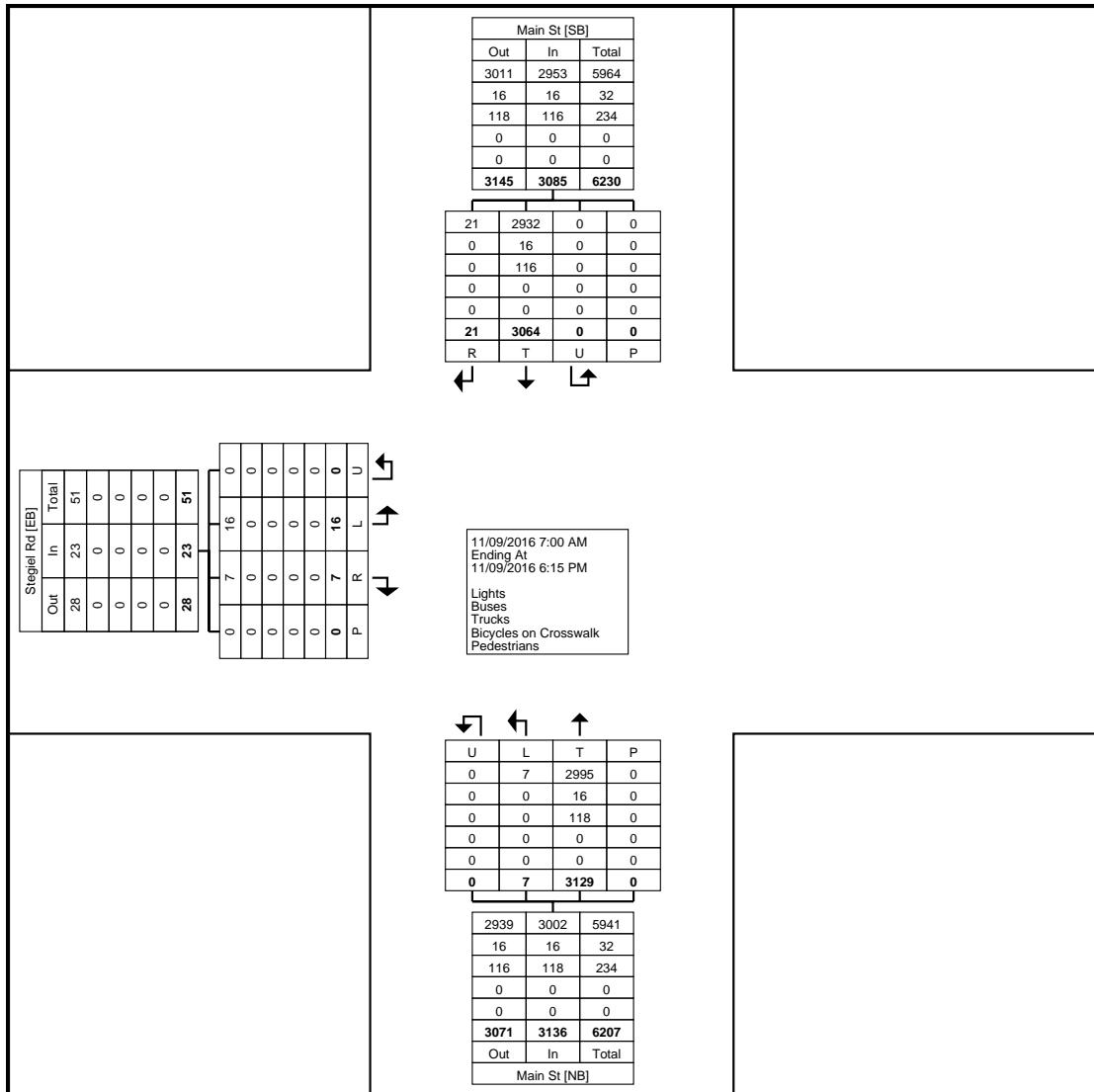
Count Name: Main St -Stegiel  
Site Code:  
Start Date: 11/09/2016  
Page No: 1

# Turning Movement Data

Sayreville, NJ  
Main St/Stegiel Rd  
Wednesday, November 9, 2016  
Location: 40.477425, -  
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Count Name: Main St -Stegiel  
Site Code:  
Start Date: 11/09/2016  
Page No: 2



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Wednesday, November 9, 2016  
Location: 40.477425, -  
74.314512

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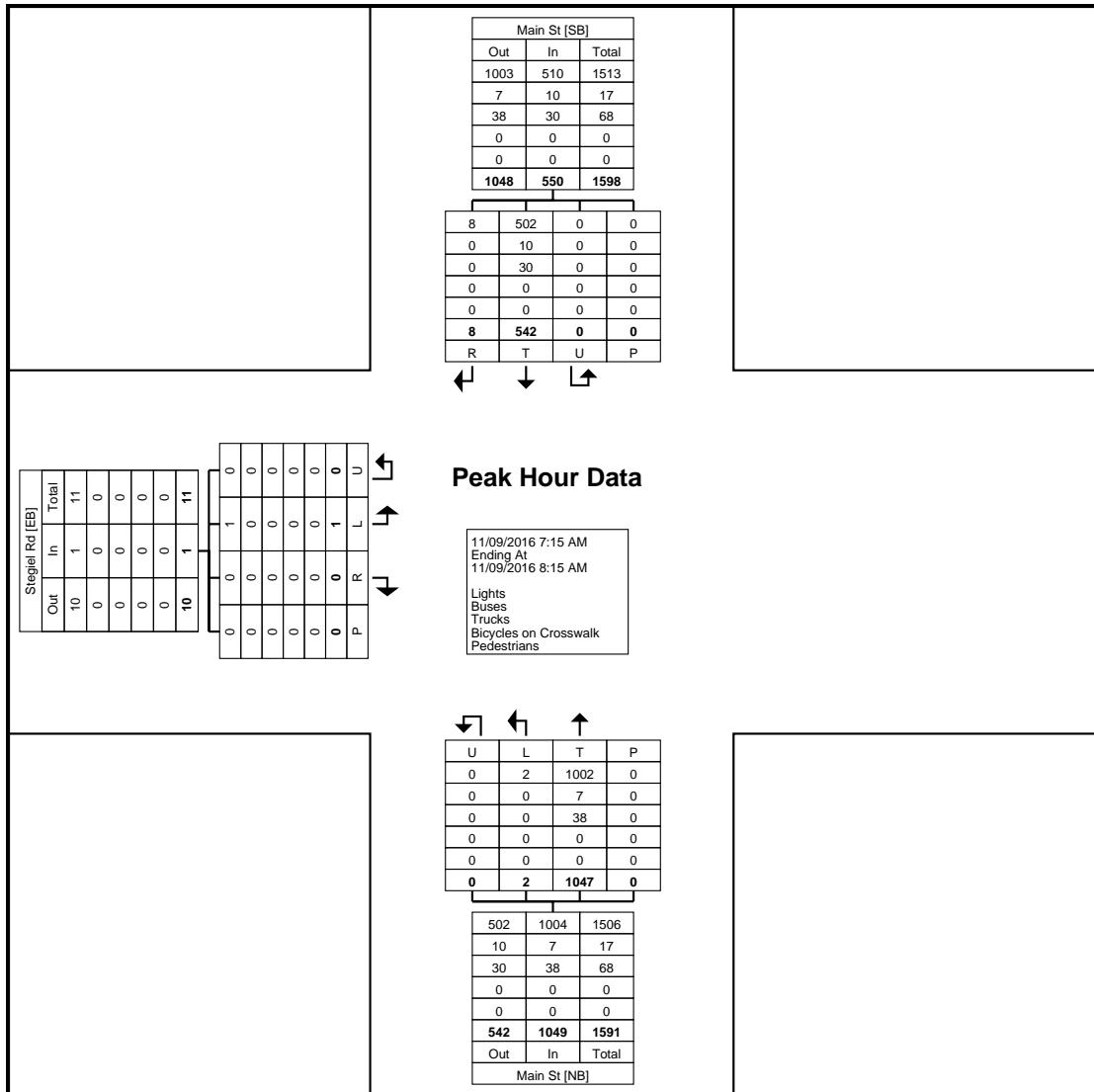
Count Name: Main St -Stegiel  
Site Code:  
Start Date: 11/09/2016  
Page No: 3

## Turning Movement Peak Hour Data (7:15 AM)

Sayreville, NJ  
Main St/Steigiel Rd  
Wednesday, November 9, 2016  
Location: 40.477425, -  
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Count Name: Main St -Stegiel  
Site Code:  
Start Date: 11/09/2016  
Page No: 4



Turning Movement Peak Hour Data Plot (7:15 AM)



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Wednesday, November 9, 2016  
Location: 40.477425, -  
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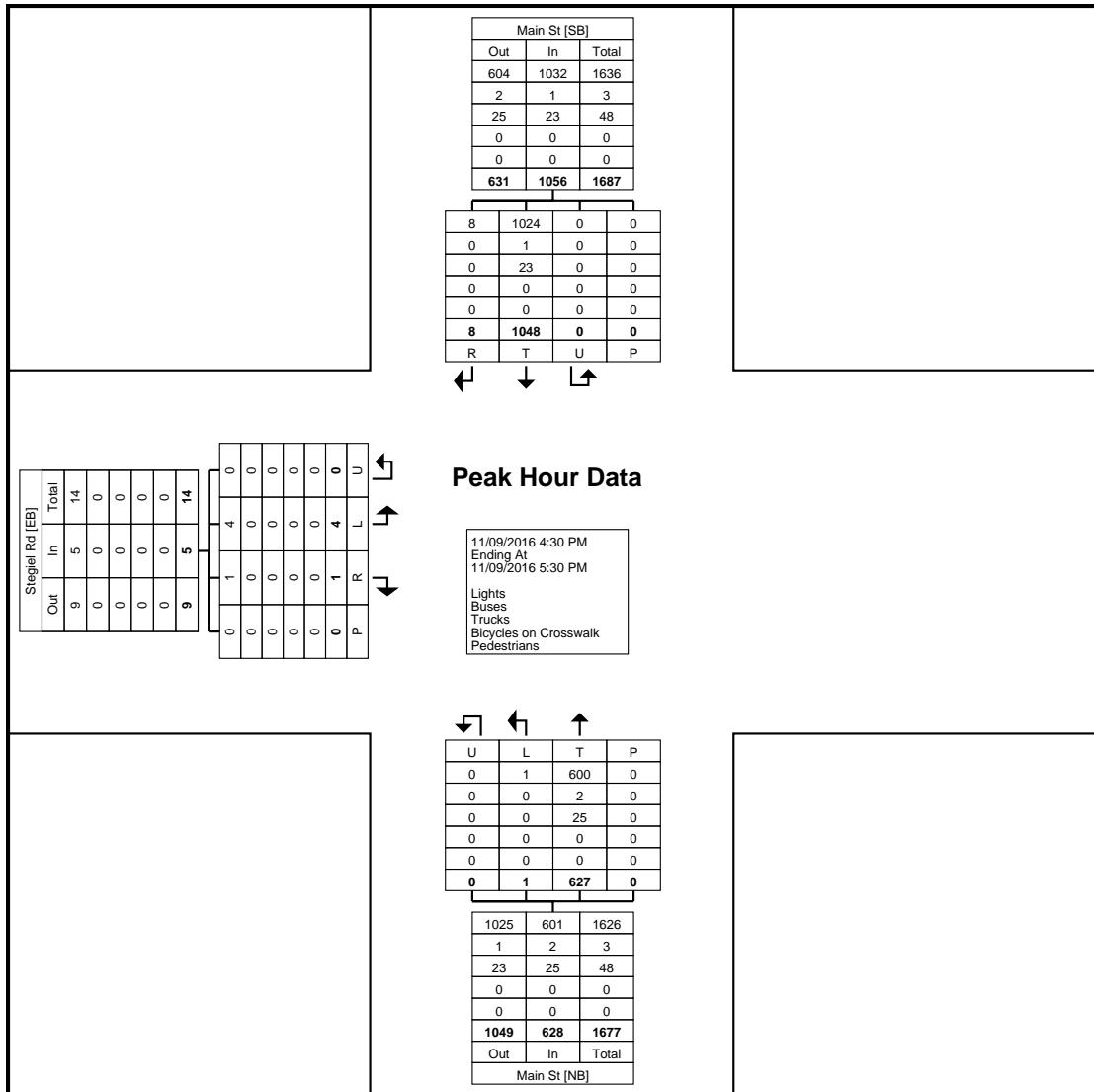
Count Name: Main St -Stegiel  
Site Code:  
Start Date: 11/09/2016  
Page No: 5

## Turning Movement Peak Hour Data (4:30 PM)

Sayreville, NJ  
Main St/Stegiel Rd  
Wednesday, November 9, 2016  
Location: 40.477425, -  
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Count Name: Main St -Stegiel  
Site Code:  
Start Date: 11/09/2016  
Page No: 6



Turning Movement Peak Hour Data Plot (4:30 PM)



www.TSTDData.com  
184 Baker Rd

Coatesville, Pennsylvania, United States 19320  
610-466-1469  
Serving Transportation Professionals Since 1995

Sayreville, NJ  
Main St/Stegiel Rd  
Wednesday, November 9, 2016  
Location: 40.477425, -  
74.314512

Count Name: Main St -Stegiel  
Site Code:  
Start Date: 11/09/2016  
Page No: 7

Start Time	3/18/2019		3/19/2019		3/20/2019		3/21/2019		3/22/2019		3/23/2019		3/24/2019		Week Average WB	
	EB	WB														
12:00 AM	*	*	45	86	51	102	54	102	60	105	99	183	105	189	69	128
01:00	*	*	31	49	26	75	35	48	62	44	113	56	130	40	80	80
02:00	*	*	18	40	28	34	26	39	40	32	62	49	76	30	48	48
03:00	*	*	50	55	53	59	55	59	63	39	49	30	46	47	54	54
04:00	*	*	118	90	124	98	126	88	132	42	75	36	50	96	86	86
05:00	*	*	415	211	414	210	380	208	378	162	133	85	75	60	299	156
06:00	*	*	709	445	750	443	689	433	586	343	219	151	148	101	517	319
07:00	*	*	1103	491	1141	521	1083	438	838	376	339	188	206	131	785	358
08:00	*	*	973	558	970	484	752	433	644	437	472	335	297	176	685	404
09:00	*	*	586	408	584	402	511	381	526	357	570	356	446	274	537	363
10:00	*	*	461	383	456	353	439	366	414	345	503	456	499	345	462	375
11:00	*	*	430	458	448	404	349	373	422	413	501	504	511	405	444	426
12:00 PM	285	339	396	408	448	393	417	395	404	470	502	463	494	407	435	435
01:00	248	343	380	439	386	446	436	456	389	445	480	580	387	511	387	460
02:00	261	467	346	474	410	545	411	523	365	516	454	584	369	476	374	512
03:00	384	508	385	526	431	540	467	636	429	624	483	583	410	600	427	574
04:00	389	693	384	669	348	610	456	801	419	672	475	592	381	520	407	651
05:00	367	813	427	892	435	748	436	845	384	627	468	527	366	460	412	702
06:00	389	784	401	788	515	950	370	727	435	726	438	559	339	385	412	703
07:00	368	654	371	679	446	712	343	637	425	524	452	504	321	433	389	592
08:00	225	468	267	564	288	567	240	498	303	531	358	505	256	385	277	503
09:00	175	378	224	400	226	416	191	398	260	409	263	321	183	293	217	374
10:00	132	231	137	297	158	279	155	282	237	315	195	313	140	211	165	275
11:00	66	159	76	163	65	184	122	154	173	211	167	275	61	98	104	178
Total Day	3289	5837	8733	9573	9201	9660	8516	9338	8349	8819	7696	8402	6134	6849	7989	8756
AM Peak Vol.	-	-	07:00	08:00	07:00	07:00	07:00	07:00	07:00	07:00	09:00	09:00	11:00	11:00	07:00	11:00
PM Peak Vol.	16:00	17:00	17:00	17:00	18:00	18:00	15:00	17:00	18:00	15:00	16:00	12:00	15:00	15:00	15:00	18:00

**Tri-State Traffic Data, Inc.**  
**610-466-1469**  
**TSTData.com**

Road: Main St  
 Location: 475 ft W of Modzelewski Terrace  
 Counter: 24995

Page 2

Site Code: 1  
 Station ID:  
 A to B EB

Latitude: 40.47641.0000 North

Start Time	3/25/2019		3/26/2019		3/27/2019		3/28/2019		3/29/2019		3/30/2019		3/31/2019	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	45	65	48	89	*	*	*	*	*	*	*	*	*	*
01:00	16	33	25	53	*	*	*	*	*	*	*	*	*	*
02:00	17	36	25	30	*	*	*	*	*	*	*	*	*	*
03:00	52	59	58	63	*	*	*	*	*	*	*	*	*	*
04:00	120	90	122	100	*	*	*	*	*	*	*	*	*	*
05:00	391	185	358	216	*	*	*	*	*	*	*	*	*	*
06:00	605	350	559	341	*	*	*	*	*	*	*	*	*	*
07:00	<b>1049</b>	<b>495</b>	<b>909</b>	<b>372</b>	*	*	*	*	*	*	*	*	<b>979</b>	<b>434</b>
08:00	835	400	*	*	*	*	*	*	*	*	*	*	*	835
09:00	528	400	*	*	*	*	*	*	*	*	*	*	*	528
10:00	422	295	*	*	*	*	*	*	*	*	*	*	*	422
11:00	360	373	*	*	*	*	*	*	*	*	*	*	*	360
12:00 PM	411	391	*	*	*	*	*	*	*	*	*	*	*	411
01:00	367	371	*	*	*	*	*	*	*	*	*	*	*	367
02:00	428	507	*	*	*	*	*	*	*	*	*	*	*	428
03:00	<b>473</b>	666	*	*	*	*	*	*	*	*	*	*	<b>473</b>	666
04:00	382	686	*	*	*	*	*	*	*	*	*	*	*	382
05:00	375	<b>708</b>	*	*	*	*	*	*	*	*	*	*	*	375
06:00	360	634	*	*	*	*	*	*	*	*	*	*	*	360
07:00	345	567	*	*	*	*	*	*	*	*	*	*	*	345
08:00	233	412	*	*	*	*	*	*	*	*	*	*	*	233
09:00	163	321	*	*	*	*	*	*	*	*	*	*	*	163
10:00	122	240	*	*	*	*	*	*	*	*	*	*	*	122
11:00	86	145	*	*	*	*	*	*	*	*	*	*	*	86
Total Day	8185	8429	2104	1264	0	0	0	0	0	0	0	0	0	8405
AM Peak Vol.	1049	495	909	372	-	-	-	-	-	-	-	-	-	16493
PM Peak Vol.	473	708	-	-	-	-	-	-	-	-	-	-	-	434

Comb. Total ADT 25740 ADT 16,755 AADT 16,755  
 ADT 21674 18861 17854 17168 16098 12983  
 33238

**APPENDIX C**  
**CAPACITY PRINTOUTS**

Lanes, Volumes, Timings  
1: Main Street (CR 670) & Main Street Ext.

2021 No-Build  
AM Peak Hour

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	253	52	529	721	30	373
Future Volume (vph)	253	52	529	721	30	373
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	600		200	200	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				75	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1615	3406	1568	1805	3312
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1615	3406	1568	1805	3312
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		54		743		
Link Speed (mph)	45		45			45
Link Distance (ft)	1041		511			1399
Travel Time (s)	15.8		7.7			21.2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	0%	6%	3%	0%	9%
Adj. Flow (vph)	261	54	545	743	31	385
Shared Lane Traffic (%)						
Lane Group Flow (vph)	261	54	545	743	31	385
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			20
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	40		70			50
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94		94	
Detector 2 Size(ft)			6		6	
Detector 2 Type			Cl+Ex		Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0		0.0	
Turn Type	Prot	Free	NA	pt+ov	Prot	NA
Protected Phases	8		2	2 8	1	6

Lanes, Volumes, Timings  
1: Main Street (CR 670) & Main Street Ext.

2021 No-Build  
AM Peak Hour



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	Free					
Detector Phase	8		2	28	1	6
Switch Phase						
Minimum Initial (s)	10.0		8.0		6.0	8.0
Minimum Split (s)	17.0		15.0		12.0	25.0
Total Split (s)	32.0		48.0		18.0	66.0
Total Split (%)	32.7%		49.0%		18.4%	67.3%
Maximum Green (s)	25.0		41.0		12.0	59.0
Yellow Time (s)	5.0		5.0		4.0	5.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	7.0		7.0		6.0	7.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		None	Min
Walk Time (s)						7.0
Flash Dont Walk (s)						11.0
Pedestrian Calls (#/hr)						0
Act Effect Green (s)	16.1	56.6	20.9	50.4	7.4	25.0
Actuated g/C Ratio	0.28	1.00	0.37	0.89	0.13	0.44
v/c Ratio	0.52	0.03	0.43	0.50	0.13	0.26
Control Delay	23.7	0.0	16.4	1.6	31.2	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.7	0.0	16.4	1.6	31.2	10.0
LOS	C	A	B	A	C	B
Approach Delay	19.7		7.8		11.6	
Approach LOS	B		A		B	
90th %ile Green (s)	25.0		30.8		8.8	45.6
90th %ile Term Code	Max		Gap		Gap	Hold
70th %ile Green (s)	19.5		24.4		7.5	37.9
70th %ile Term Code	Gap		Gap		Gap	Hold
50th %ile Green (s)	15.3		19.8		0.0	19.8
50th %ile Term Code	Gap		Gap		Skip	Hold
30th %ile Green (s)	11.2		14.8		0.0	14.8
30th %ile Term Code	Gap		Gap		Skip	Hold
10th %ile Green (s)	10.0		13.9		0.0	13.9
10th %ile Term Code	Min		Dwell		Skip	Dwell
Queue Length 50th (ft)	59	0	55	0	8	37
Queue Length 95th (ft)	187	0	158	24	42	77
Internal Link Dist (ft)	961		431		1319	
Turn Bay Length (ft)	600		200	200		
Base Capacity (vph)	863	1615	2652	1491	422	2996
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.03	0.21	0.50	0.07	0.13

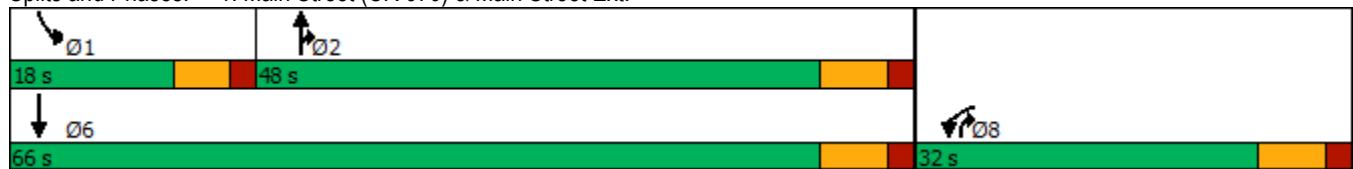
Intersection Summary

Lanes, Volumes, Timings  
1: Main Street (CR 670) & Main Street Ext.

2021 No-Build  
AM Peak Hour

Area Type:	Other
Cycle Length:	98
Actuated Cycle Length:	56.6
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.52
Intersection Signal Delay:	10.5
Intersection LOS:	B
Intersection Capacity Utilization	60.5%
ICU Level of Service	B
Analysis Period (min)	15
90th %ile Actuated Cycle:	84.6
70th %ile Actuated Cycle:	71.4
50th %ile Actuated Cycle:	49.1
30th %ile Actuated Cycle:	40
10th %ile Actuated Cycle:	37.9

Splits and Phases: 1: Main Street (CR 670) & Main Street Ext.



Lanes, Volumes, Timings  
1: Main Street (CR 670) & Main Street Ext.

2021 Build  
AM Peak Hour

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	256	52	557	730	30	381
Future Volume (vph)	256	52	557	730	30	381
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	600		200	200	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				75	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1615	3406	1568	1805	3312
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1615	3406	1568	1805	3312
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		54		753		
Link Speed (mph)	45		45			45
Link Distance (ft)	1041		511			1399
Travel Time (s)	15.8		7.7			21.2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	0%	6%	3%	0%	9%
Adj. Flow (vph)	264	54	574	753	31	393
Shared Lane Traffic (%)						
Lane Group Flow (vph)	264	54	574	753	31	393
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			20
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	40		70			50
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94		94	
Detector 2 Size(ft)			6		6	
Detector 2 Type			Cl+Ex		Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0		0.0	
Turn Type	Prot	Free	NA	pt+ov	Prot	NA
Protected Phases	8		2	2 8	1	6

Lanes, Volumes, Timings  
1: Main Street (CR 670) & Main Street Ext.

2021 Build  
AM Peak Hour



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	Free					
Detector Phase	8		2	28	1	6
Switch Phase						
Minimum Initial (s)	10.0		8.0		6.0	8.0
Minimum Split (s)	17.0		15.0		12.0	25.0
Total Split (s)	32.0		48.0		18.0	66.0
Total Split (%)	32.7%		49.0%		18.4%	67.3%
Maximum Green (s)	25.0		41.0		12.0	59.0
Yellow Time (s)	5.0		5.0		4.0	5.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	7.0		7.0		6.0	7.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		None	Min
Walk Time (s)						7.0
Flash Dont Walk (s)						11.0
Pedestrian Calls (#/hr)						0
Act Effect Green (s)	16.4	58.2	22.2	52.0	7.4	26.3
Actuated g/C Ratio	0.28	1.00	0.38	0.89	0.13	0.45
v/c Ratio	0.53	0.03	0.44	0.51	0.14	0.26
Control Delay	24.8	0.0	16.3	1.6	32.2	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.8	0.0	16.3	1.6	32.2	9.9
LOS	C	A	B	A	C	A
Approach Delay	20.6		7.9		11.6	
Approach LOS	C		A		B	
90th %ile Green (s)	25.0		32.7		8.9	47.6
90th %ile Term Code	Max		Gap		Gap	Hold
70th %ile Green (s)	20.0		26.3		7.5	39.8
70th %ile Term Code	Gap		Gap		Gap	Hold
50th %ile Green (s)	15.7		21.4		0.0	21.4
50th %ile Term Code	Gap		Gap		Skip	Hold
30th %ile Green (s)	11.4		15.1		0.0	15.1
30th %ile Term Code	Gap		Gap		Skip	Hold
10th %ile Green (s)	10.0		14.8		0.0	14.8
10th %ile Term Code	Min		Dwell		Skip	Dwell
Queue Length 50th (ft)	64	0	60	0	8	38
Queue Length 95th (ft)	195	0	166	24	42	78
Internal Link Dist (ft)	961		431		1319	
Turn Bay Length (ft)	600		200		200	
Base Capacity (vph)	841	1615	2610	1492	412	2968
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.03	0.22	0.50	0.08	0.13

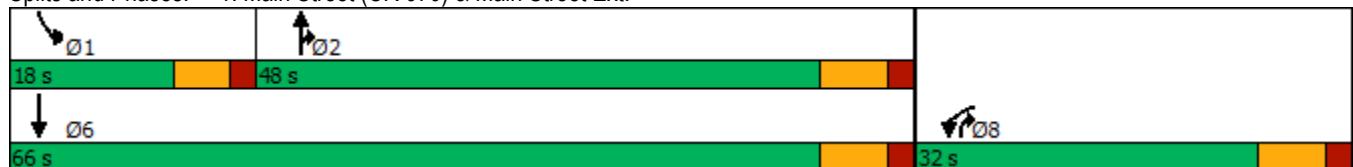
Intersection Summary

Lanes, Volumes, Timings  
1: Main Street (CR 670) & Main Street Ext.

2021 Build  
AM Peak Hour

Area Type:	Other
Cycle Length:	98
Actuated Cycle Length:	58.2
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.53
Intersection Signal Delay:	10.6
Intersection LOS:	B
Intersection Capacity Utilization	61.0%
ICU Level of Service	B
Analysis Period (min)	15
90th %ile Actuated Cycle:	86.6
70th %ile Actuated Cycle:	73.8
50th %ile Actuated Cycle:	51.1
30th %ile Actuated Cycle:	40.5
10th %ile Actuated Cycle:	38.8

Splits and Phases: 1: Main Street (CR 670) & Main Street Ext.



Lanes, Volumes, Timings  
1: Main Street (CR 670) & Main Street Ext.

2021 No-Build  
PM Peak Hour

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	321	22	261	410	191	902
Future Volume (vph)	321	22	261	410	191	902
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	600		200	200	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				75	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1805	1615	3438	1599	1805	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1805	1615	3438	1599	1805	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		24		122		
Link Speed (mph)	45		45			45
Link Distance (ft)	1041		511			1399
Travel Time (s)	15.8		7.7			21.2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	5%	1%	0%	2%
Adj. Flow (vph)	345	24	281	441	205	970
Shared Lane Traffic (%)						
Lane Group Flow (vph)	345	24	281	441	205	970
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			20
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	40		70			50
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex		Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Free	NA	pt+ov	Prot	NA
Protected Phases	8		2	2 8	1	6

Lanes, Volumes, Timings  
1: Main Street (CR 670) & Main Street Ext.

2021 No-Build  
PM Peak Hour



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	Free					
Detector Phase	8		2	2 8	1	6
Switch Phase						
Minimum Initial (s)	10.0		8.0		6.0	20.0
Minimum Split (s)	17.0		15.0		12.0	27.0
Total Split (s)	56.0		37.0		20.0	57.0
Total Split (%)	49.6%		32.7%		17.7%	50.4%
Maximum Green (s)	49.0		30.0		14.0	50.0
Yellow Time (s)	5.0		5.0		4.0	5.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	7.0		7.0		6.0	7.0
Lead/Lag			Lag	Lead		
Lead-Lag Optimize?			Yes	Yes		
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		None	Min
Walk Time (s)						7.0
Flash Dont Walk (s)						11.0
Pedestrian Calls (#/hr)						0
Act Effect Green (s)	18.6	67.0	14.2	40.0	13.7	34.0
Actuated g/C Ratio	0.28	1.00	0.21	0.60	0.20	0.51
v/c Ratio	0.69	0.01	0.39	0.44	0.56	0.54
Control Delay	29.8	0.0	25.2	6.2	34.0	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.8	0.0	25.2	6.2	34.0	13.3
LOS	C	A	C	A	C	B
Approach Delay	27.9		13.6		16.9	
Approach LOS	C		B		B	
90th %ile Green (s)	29.2		21.1		14.0	41.1
90th %ile Term Code	Gap		Gap		Max	Hold
70th %ile Green (s)	21.6		16.8		14.0	36.8
70th %ile Term Code	Gap		Gap		Max	Hold
50th %ile Green (s)	18.4		13.9		14.0	33.9
50th %ile Term Code	Gap		Gap		Max	Hold
30th %ile Green (s)	14.8		12.1		13.9	32.0
30th %ile Term Code	Gap		Gap		Gap	Hold
10th %ile Green (s)	11.6		8.5		11.3	25.8
10th %ile Term Code	Gap		Gap		Gap	Hold
Queue Length 50th (ft)	124	0	52	58	74	128
Queue Length 95th (ft)	230	0	98	104	#193	239
Internal Link Dist (ft)	961		431		1319	
Turn Bay Length (ft)	600		200	200		
Base Capacity (vph)	1356	1615	1581	1574	387	2713
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.01	0.18	0.28	0.53	0.36
Intersection Summary						

Lanes, Volumes, Timings  
1: Main Street (CR 670) & Main Street Ext.

2021 No-Build  
PM Peak Hour

Area Type: Other

Cycle Length: 113

Actuated Cycle Length: 67

Natural Cycle: 55

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 17.6

Intersection LOS: B

Intersection Capacity Utilization 54.4%

ICU Level of Service A

Analysis Period (min) 15

90th %ile Actuated Cycle: 84.3

70th %ile Actuated Cycle: 72.4

50th %ile Actuated Cycle: 66.3

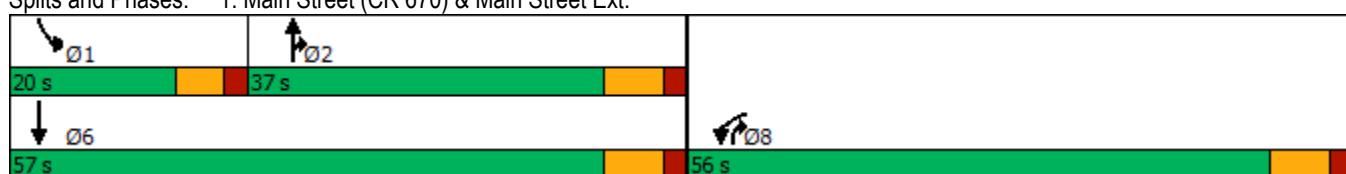
30th %ile Actuated Cycle: 60.8

10th %ile Actuated Cycle: 51.4

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Main Street (CR 670) & Main Street Ext.



Lanes, Volumes, Timings  
1: Main Street (CR 670) & Main Street Ext.

2021 Build  
PM Peak Hour

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	330	22	277	416	191	930
Future Volume (vph)	330	22	277	416	191	930
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	600		200	200	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				75	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1805	1615	3438	1599	1805	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1805	1615	3438	1599	1805	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		24		122		
Link Speed (mph)	45		45			45
Link Distance (ft)	1041		511			1399
Travel Time (s)	15.8		7.7			21.2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	5%	1%	0%	2%
Adj. Flow (vph)	355	24	298	447	205	1000
Shared Lane Traffic (%)						
Lane Group Flow (vph)	355	24	298	447	205	1000
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			20
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	40		70			50
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex		Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Free	NA	pt+ov	Prot	NA
Protected Phases	8		2	2 8	1	6

Lanes, Volumes, Timings  
1: Main Street (CR 670) & Main Street Ext.

2021 Build  
PM Peak Hour



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	Free					
Detector Phase	8		2	2 8	1	6
Switch Phase						
Minimum Initial (s)	10.0		8.0		6.0	20.0
Minimum Split (s)	17.0		15.0		12.0	27.0
Total Split (s)	56.0		37.0		20.0	57.0
Total Split (%)	49.6%		32.7%		17.7%	50.4%
Maximum Green (s)	49.0		30.0		14.0	50.0
Yellow Time (s)	5.0		5.0		4.0	5.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	7.0		7.0		6.0	7.0
Lead/Lag			Lag	Lead		
Lead-Lag Optimize?			Yes	Yes		
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		None	Min
Walk Time (s)						7.0
Flash Dont Walk (s)						11.0
Pedestrian Calls (#/hr)						0
Act Effect Green (s)	19.4	68.1	14.4	41.0	13.7	34.3
Actuated g/C Ratio	0.28	1.00	0.21	0.60	0.20	0.50
v/c Ratio	0.69	0.01	0.41	0.44	0.56	0.56
Control Delay	29.8	0.0	25.8	6.2	35.0	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.8	0.0	25.8	6.2	35.0	13.9
LOS	C	A	C	A	C	B
Approach Delay	27.9		14.1		17.5	
Approach LOS	C		B		B	
90th %ile Green (s)	30.5		21.4		14.0	41.4
90th %ile Term Code	Gap		Gap		Max	Hold
70th %ile Green (s)	22.8		17.1		14.0	37.1
70th %ile Term Code	Gap		Gap		Max	Hold
50th %ile Green (s)	19.0		14.1		14.0	34.1
50th %ile Term Code	Gap		Gap		Max	Hold
30th %ile Green (s)	15.3		12.3		14.0	32.3
30th %ile Term Code	Gap		Gap		Max	Hold
10th %ile Green (s)	11.9		8.7		11.3	26.0
10th %ile Term Code	Gap		Gap		Gap	Hold
Queue Length 50th (ft)	129	0	55	60	76	137
Queue Length 95th (ft)	237	0	106	106	#198	256
Internal Link Dist (ft)	961		431		1319	
Turn Bay Length (ft)	600		200		200	
Base Capacity (vph)	1336	1615	1559	1566	381	2674
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.01	0.19	0.29	0.54	0.37
Intersection Summary						

Lanes, Volumes, Timings  
1: Main Street (CR 670) & Main Street Ext.

2021 Build  
PM Peak Hour

Area Type:	Other
Cycle Length:	113
Actuated Cycle Length:	68.1
Natural Cycle:	55
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.69
Intersection Signal Delay:	18.1
Intersection Capacity Utilization	55.7%
Analysis Period (min)	15
90th %ile Actuated Cycle:	85.9
70th %ile Actuated Cycle:	73.9
50th %ile Actuated Cycle:	67.1
30th %ile Actuated Cycle:	61.6
10th %ile Actuated Cycle:	51.9
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Splits and Phases: 1: Main Street (CR 670) & Main Street Ext.



Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		A	B		
Traffic Vol, veh/h	1	0	2	1250	618	8
Future Vol, veh/h	1	0	2	1250	618	8
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	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	7	9	0
Mvmt Flow	1	0	2	1289	637	8
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1934	641	645	0	-	0
Stage 1	641	-	-	-	-	-
Stage 2	1293	-	-	-	-	-
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	73	478	950	-	-	-
Stage 1	528	-	-	-	-	-
Stage 2	260	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	72	478	950	-	-	-
Mov Cap-2 Maneuver	72	-	-	-	-	-
Stage 1	524	-	-	-	-	-
Stage 2	260	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	55.7	0		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	950	-	72	-	-	
HCM Lane V/C Ratio	0.002	-	0.014	-	-	
HCM Control Delay (s)	8.8	0	55.7	-	-	
HCM Lane LOS	A	A	F	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection

Int Delay, s/veh 1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔			↔	↑	↗	↔			↔		
Traffic Vol, veh/h	1	0	0	15	0	37	2	1250	4	11	618	8
Future Vol, veh/h	1	0	0	15	0	37	2	1250	4	11	618	8
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									
Storage Length	-	-	-	-	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	2	0	2	2	2	0	7	2	2	9	0
Mvmt Flow	1	0	0	15	0	38	2	1289	4	11	637	8

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	1977	1960	641	1958	1962	1291	645	0	0	1293	0	0
Stage 1	663	663	-	1295	1295	-	-	-	-	-	-	-
Stage 2	1314	1297	-	663	667	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.52	6.2	7.12	6.52	6.22	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.018	3.3	3.518	4.018	3.318	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	47	63	478	48	63	199	950	-	-	536	-	-
Stage 1	454	459	-	200	233	-	-	-	-	-	-	-
Stage 2	197	232	-	450	457	-	-	-	-	-	-	-
Platoon blocked, %							-	-	-	-	-	-
Mov Cap-1 Maneuver	37	61	478	47	61	199	950	-	-	536	-	-
Mov Cap-2 Maneuver	37	61	-	47	61	-	-	-	-	-	-	-
Stage 1	451	444	-	199	231	-	-	-	-	-	-	-
Stage 2	158	230	-	436	442	-	-	-	-	-	-	-

Approach	EB	WB			NB			SB			
HCM Control Delay, s	105.1	52.7			0			0.2			
HCM LOS	F	F									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	950	-	-	37	47	199	536	-	-		
HCM Lane V/C Ratio	0.002	-	-	0.028	0.329	0.192	0.021	-	-		
HCM Control Delay (s)	8.8	0	-	105.1	115.4	27.3	11.9	0	-		
HCM Lane LOS	A	A	-	F	F	D	B	A	-		
HCM 95th %tile Q(veh)	0	-	-	0.1	1.1	0.7	0.1	-	-		

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
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Lane Configurations						
Traffic Vol, veh/h	4	1	1	667	1215	8
Future Vol, veh/h	4	1	1	667	1215	8
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	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	5	2	0
Mvmt Flow	4	1	1	717	1306	9

Major/Minor	Minor2	Major1	Major2
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Conflicting Flow All	2030	1311	1315	0	-	0
Stage 1	1311	-	-	-	-	-
Stage 2	719	-	-	-	-	-
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	64	196	533	-	-	-
Stage 1	255	-	-	-	-	-
Stage 2	486	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	64	196	533	-	-	-
Mov Cap-2 Maneuver	64	-	-	-	-	-
Stage 1	254	-	-	-	-	-
Stage 2	486	-	-	-	-	-

Approach	EB	NB	SB
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HCM Control Delay, s	57.4	0	0
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HCM LOS	F
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Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	533	-	74	-	-
HCM Lane V/C Ratio	0.002	-	0.073	-	-
HCM Control Delay (s)	11.8	0	57.4	-	-
HCM Lane LOS	B	A	F	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔			↔	↑	↗	↔	↔		↔	↔	
Traffic Vol, veh/h	4	0	1	8	0	22	1	667	14	37	1215	8
Future Vol, veh/h	4	0	1	8	0	22	1	667	14	37	1215	8
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	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	0	2	0
Mvmt Flow	4	0	1	9	0	24	1	717	15	40	1306	9
Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	2130	2125	1311	2118	2122	725	1315	0	0	732	0	0
Stage 1	1391	1391	-	727	727	-	-	-	-	-	-	-
Stage 2	739	734	-	1391	1395	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	37	51	196	37	51	428	533	-	-	882	-	-
Stage 1	178	211	-	419	432	-	-	-	-	-	-	-
Stage 2	412	429	-	178	210	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	30	42	196	32	42	428	533	-	-	882	-	-
Mov Cap-2 Maneuver	30	42	-	32	42	-	-	-	-	-	-	-
Stage 1	177	175	-	418	431	-	-	-	-	-	-	-
Stage 2	388	428	-	147	175	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	121.8			51.4			0			0.3		
HCM LOS	F			F			B			A		
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR			
Capacity (veh/h)	533	-	-	36	32	428	882	-	-			
HCM Lane V/C Ratio	0.002	-	-	0.149	0.269	0.055	0.045	-	-			
HCM Control Delay (s)	11.8	0	-	121.8	154.7	13.9	9.3	0	-			
HCM Lane LOS	B	A	-	F	F	B	A	A	-			
HCM 95th %tile Q(veh)	0	-	-	0.5	0.9	0.2	0.1	-	-			