Shropshire Associates LLC

SBE Certified

Traffic Engineering, Transportation Planning & Design

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April 25, 2024

Mr. Michael Pagnotta (via e-mail: mpagnotta731@gmail.com)
Fortuna Park, LLC & Sole Member Nautilus
Custom Construction, LLC
342 West 9th Street
Ship Bottom, New Jersey 08008

Re: **Traffic Engineering Assessment**
Fortuna Park
Borough of Ship Bottom, Ocean County, NJ
SA Project No. 24033

Dear Michael:

At your request, Shropshire Associates, LLC has prepared a Traffic Engineering Assessment report to evaluate the impact of the traffic to be generated by the proposed 27 single-family home subdivision on the existing LBI Grade School property along eastbound 19th Street, in the Borough of Ship Bottom, Ocean County, New Jersey. The existing LBI Grade School will be razed to accommodate the proposed residential development.

The proposal is for the construction of 27 new single-family homes along eastbound 19th Street, northbound E. Bay Terrace, and westbound 20th Street. Access to each home will be provided by individual driveways and curb cuts along these streets.

Existing Conditions

A description of the roadways and intersection that comprise the study area for this report is provided below.

East of the site, **Central Avenue (CR 89)** is a two-lane undivided roadway that is classified as an Urban Local and under the jurisdiction of Ocean County. Central Avenue has a posted speed limit of 35 MPH and an approximate cartway width of 46', consisting of two 13' travel lanes and 10' shoulders. For the purpose of this study, Central Avenue is assumed to extend in a general north-south direction.

Along the site's frontage, **19th Street** is a two-lane undivided local roadway that is under the jurisdiction of the Borough of Ship Bottom. 19th Street has a posted speed limit of 25 MPH and an approximate cartway width of 32'. For the purpose of this study, 19th Street is assumed to extend in a general east-west direction.

Along the site's frontage, **20th Street** is a two-lane undivided local roadway that is under the jurisdiction of the Borough of Ship Bottom. 20th Street has a posted speed limit of 25 MPH and an approximate cartway width of 42'. For the purpose of this study, 20th Street is assumed to extend in a general east-west direction.

Along the site's frontage, **E. Bay Terrace** is a two-lane undivided local roadway that is under the jurisdiction of the Borough of Ship Bottom. E. Bay Terrace has an assumed speed limit of 25 MPH and an approximate cartway width of 24'. For the purpose of this study, E. Bay Terrace is assumed to extend in a general north-south direction.

West of the site, **Barnegat Avenue** is a two-lane undivided local roadway that is under the jurisdiction of the Borough of Ship Bottom. Barnegat Avenue has a posted speed limit of 25 MPH and an approximate cartway width of 58', consisting of two 12' travel lanes, 6' bike lanes, and 11' shoulders. For the purpose of this study, Barnegat Avenue is assumed to extend in a general north-south direction.

The four-legged **Central Avenue (CR 89)/19th Street** intersection is stop-controlled along the eastbound and westbound 19th Street approaches. All approaches consist of a single shared lane providing for all permitted movements.

The four-legged **Central Avenue (CR 89)/20th Street** intersection is stop-controlled along the eastbound and westbound 20th Street approaches. All approaches consist of a single shared lane providing for all permitted movements.

The T-shaped **19th Street/E. Bay Terrace** intersection is stop-controlled along the northbound E. Bay Terrace approach. All approaches consist of a single shared lane providing for all permitted movements.

The T-shaped **E. Bay Terrace/20th Street** intersection is stop-controlled along the westbound 20th Street approach. All approaches consist of a single shared lane providing for all permitted movements.

The four-legged **Barnegat Avenue/19th Street** intersection is stop-controlled along all approaches. All approaches consist of a single shared lane providing for all permitted movements.

Traffic Count Data

In February 2024, manual turning movement counts (MTMC) were conducted at the above-referenced study locations. This data was analyzed to determine the peak hour volumes along the adjacent roadway network that coincide with the peak times of the proposed residential development and the existing roadway network. These peak times typically occur during the weekday AM (7:00 to 9:00 AM) and weekday PM (3:00 to 6:00 PM) peak periods. The existing AM and PM peak hour volumes are illustrated on the attached Figure 1.

It is worth noting that these turning movement counts occurred while the existing school was in session. Therefore, the existing volumes shown in Figure 1 are conservative, as the traffic associated with the school was not removed in the future scenarios, where the school will no longer exist.

Future Conditions

As indicated above, the proposal is for the construction of 27 single-family homes along eastbound 19th Street, northbound E. Bay Terrace, and westbound 20th Street. The traffic resulting from the proposed development will not affect the adjacent roadway network until 2026, when the development is expected to be fully built-out and occupied. It can be expected

that the traffic volumes along the adjacent roadway network will increase because of other developments around the site and general area traffic growth.

A 1.00% annual traffic growth is projected along the adjacent roadway network in the vicinity of the site based on the *Annual Background Growth Table* prepared by the New Jersey Department of Transportation. By applying the applicable annual growth rates to the existing roadway volumes, the 2026 No-Build volumes were estimated and are indicated on Figure 2.

Trip Generation

In order to determine the amount of traffic to be generated by the proposed residential development, trip generation rates provided by the Institute of Transportation Engineers (ITE) in the *Trip Generation, 11th Edition* were utilized. Based on the ITE trip generation rates, the development is most similar to ITE Land Use 210: Single-Family Detached Housing. Based upon the data provided by the ITE, Table 1 indicates the total trips to be generated by the proposed residential development. The trip generation worksheets are attached for your review.

Table 1
ITE Trip Generation

Development	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Single-Family Detached Housing (27 Homes)	6	17	23	18	11	29

The traffic to be generated by the proposed residential homes must then be distributed to the adjacent roadway network in a manner in which we can reasonably expect the residents to travel. The site traffic was assigned to the roadway network based on the existing flow of traffic along the adjacent roadway (Figure 3). The site traffic is shown in Figure 4. The site traffic (Figure 4) was then added to the No-Build volumes to project the Build volumes, which are illustrated on the attached Figure 5.

Operational Analysis

In order to measure the quality of the traffic flow for the adjacent roadways and intersections, capacity analyses for the study intersections have been completed based upon the methods outlined in the *Highway Capacity Manual*. Capacity analysis is a procedure used to estimate the ability of the roadway network to carry traffic. Capacity analyses are performed based on a Level of Service methodology. Level of Service (LOS) is a qualitative measure that characterizes the operational conditions of a roadway or intersection based on the perceptions by motorists and passengers. Levels of Service are defined for each type of facility (i.e. freeways, highways, signalized intersections, unsignalized intersections). These Levels of Service range from LOS A to LOS F, with a LOS A representing the best operating conditions and a LOS F representing the worst operating conditions.

The determination for the Level of Service for an unsignalized intersection is based upon the average control delay associated with each minor movement (i.e. yielding left-turn movements from the major roads and stop-controlled movements from the minor approaches). The Level of Service criteria for unsignalized intersections is summarized below in Table 2.

Table 2 Level of Service Criteria	
Level of Service	Unsignalized Delay (sec)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

The existing and future operating conditions at the study intersections were evaluated using the above-described methodology and the latest Synchro computer simulation modeling software. The existing and future levels of service are illustrated on Figures 6, 7 and 8; with the detailed printouts and capacity analyses worksheets attached for your review. A detailed description of the intersections' operating conditions is provided below.

Central Avenue (CR 89) and 19th Street Intersection

Under existing conditions, both the eastbound and westbound 19th Street stop-controlled approaches operate at a LOS A during both the AM and PM peak hours. Both the northbound and southbound Central Avenue conflicting left-turn movements operate at a LOS A during both the AM and PM peak hours.

Under the future No-Build conditions, all individual movements at the Central Avenue and 19th Street stop-controlled intersection will continue to operate at existing levels of service during both the AM and PM peak hours.

Under the future Build conditions, all individual movements at the Central Avenue and 19th Street stop-controlled intersection will continue to operate at No-Build levels of service during both the AM and PM peak hours, with the exception of the eastbound 19th Street stop-controlled approach, which will operate at a LOS B during the PM peak hour.

Central Avenue (CR 89) and 20th Street Intersection

Under existing conditions, both the eastbound and westbound 20th Street stop-controlled approaches operate at a LOS A during both the AM and PM peak hours. Both the northbound and southbound Central Avenue conflicting left-turn movements operate at a LOS A during both the AM and PM peak hours.

Under both the future No-Build and Build conditions, all individual movements at the Central Avenue and 20th Street stop-controlled intersection will continue to operate at existing levels of service during both the AM and PM peak hours.

19th Street and E. Bay Terrace Intersection

Under existing conditions, the northbound E. Bay Terrace stop-controlled approach operates at a LOS A during both the AM and PM peak hours. The westbound 19th Street conflicting left-turn movements operate at a LOS A during both the AM and PM peak hours.

Under both the future No-Build and Build conditions, all individual movements at the 19th Street and E. Bay Terrace stop-controlled intersection will continue to operate at existing levels of service during both the AM and PM peak hours.

E. Bay Terrace and 20th Street Intersection

Under existing conditions, the westbound E. Bay Terrace stop-controlled approach operates at a LOS A during both the AM and PM peak hours. The southbound E. Bay Terrace conflicting left-turn movements operate at a LOS A during both the AM and PM peak hours.

Under both the future No-Build and Build conditions, all individual movements at the E. Bay Terrace and 20th Street stop-controlled intersection will continue to operate at existing levels of service during both the AM and PM peak hours.

It is also worth noting that there is a requirement associated with the widening of East Bay Terrace by 20 feet. In our opinion, there is no traffic-related benefit to this widening and will reduce the proposed open space associated with the proposed development. Therefore, in our opinion, the required widening is not necessary.

Barnegat Avenue and 19th Street Intersection

Under existing conditions, all four stop-controlled approaches operate at a LOS A during both the AM and PM peak hours.

Under both the future No-Build and Build conditions, all individual movements at the Barnegat Avenue and 19th Street stop-controlled intersection will continue to operate at existing levels of service during both the AM and PM peak hours.

19th Street and Site Driveway Intersection

As indicated above, the proposal is for the construction of 27 single-family homes along eastbound 19th Street, northbound E. Bay Terrace, and westbound 20th Street. To be conservative, the driveways were consolidated into a single driveway along eastbound 19th Street for our analysis.

Based on this configuration, the outbound driveway approach will operate at a LOS A during both the AM and PM peak hours. The westbound 19th Street Avenue conflicting left-turn movements will operate at a LOS A during both the AM and PM peak hours.

Air Quality Report

NJDEP Protocol

The New Jersey Department of Environmental Protection (NJDEP) outlines an air quality evaluation protocol in *Air Quality Analysis for Intersections*. NJDEP requires dispersion modeling to demonstrate that the National Ambient Air Quality Standards (NAAQS) for carbon monoxide will not be exceeded due to the additional traffic to be generated by a proposed development. As per N.J.A.C. 7:27-13.5, carbon monoxide concentrations shall not exceed 35 ppm for one-hour average concentrations and 9 ppm for eight-hour average concentrations.

Levels of service (LOS) results are the basis for determining whether or not an intersection requires dispersion modeling. Generally, a LOS A, B or C indicates that vehicle delays at an intersection are not significant enough to generate excessive CO concentrations. At signalized intersections, any movement that functions at a LOS D, E or F requires CO dispersion modeling. For unsignalized intersections, a LOS E or F on the stop-controlled approaches, and a LOS D, E or F for the major street left-turn movement indicates the need for CO dispersion modeling.

Data Analysis

The intersections to be analyzed for air quality violations are dependent on the levels of service at each intersection. Based on the levels of service presented in this Traffic Engineering and Air Quality Assessment report and the NJDEP protocol, dispersion modeling is not required for any of the study locations. Therefore, no further improvements are required at the study locations due to air quality conditions.

Conclusion

The traffic generated by the proposed residential development will have a minimal impact on the adjacent roadway network based upon the following conclusions.

- Based on the ITE trip generation rates, the proposed residential development will generate approximately 23 trips during the AM peak hour and 29 trips during the PM peak hour.

- Access to the 27 residential homes will be provided via individual curb cuts along 19th Street, E. Bay Terrace, and 20th Street.

- Under the future Build conditions, the traffic resulting from the proposed residential development will cause minimal changes in the future levels of service at the Central Avenue and 19th Street stop-controlled intersection. All individual movements will continue to operate at a LOS B or better during both the AM and PM peak hours.

- Under the future Build conditions, the traffic resulting from the proposed residential development will cause no changes in the future levels of service at the Central Avenue and 20th Street stop-controlled intersection. All individual movements will continue to operate at existing levels of service during both the AM and PM peak hours.

- Under the future Build conditions, the traffic resulting from the proposed residential development will cause no changes in the future levels of service at the 19th Street and E. Bay Terrace stop-controlled intersection. All individual movements will continue to operate at existing levels of service during both the AM and PM peak hours.

- Under the future Build conditions, the traffic resulting from the proposed residential development will cause no changes in the future levels of service at the E. Bay Terrace and 20th Street stop-controlled intersection. All individual movements will continue to operate at existing levels of service during both the AM and PM peak hours.

- Under the future Build conditions, the traffic resulting from the proposed residential development will cause no changes in the future levels of service at the Barnegat Avenue and 19th Street stop-controlled intersection. All individual movements will continue to operate at existing levels of service during both the AM and PM peak hours.

- As indicated above, the proposal is for the construction of 27 single-family homes along eastbound 19th Street, northbound E. Bay Terrace, and westbound 20th Street. To be conservative, the driveways were consolidated into a single driveway along eastbound 19th Street for our analysis.

  Based on this configuration, the outbound driveway approach will operate at a LOS A during both the AM and PM peak hours. The westbound 19th Street Avenue conflicting left-turn movements will operate at a LOS A during both the AM and PM peak hours.

- Based on the levels of service presented in this Traffic Engineering and Air Quality Assessment report and the NJDEP protocol, dispersion modeling is not required for any of the study locations. Therefore, no further improvements are required at the study locations due to air quality conditions.

Should you have any questions or require additional information, please feel free to contact us.

Sincerely,
Shropshire Associates LLC

David R. Shropshire, P.E., P.P.
Professional Engineer
N.J. License No. #33943
DRS/jab
Attachments

cc:
Kara Schultz	(via email: karaschultzlegal@yahoo.com)
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Benjamin P. Ojserkis	(via email: BOJSERKIS@cooperlevenson.com)
Laura M. Newton	(via email: LNEWTON@cooperlevenson.com)
Kristin Wildman	(via email: kwildman@denviro.com)

Shropshire Associates LLC
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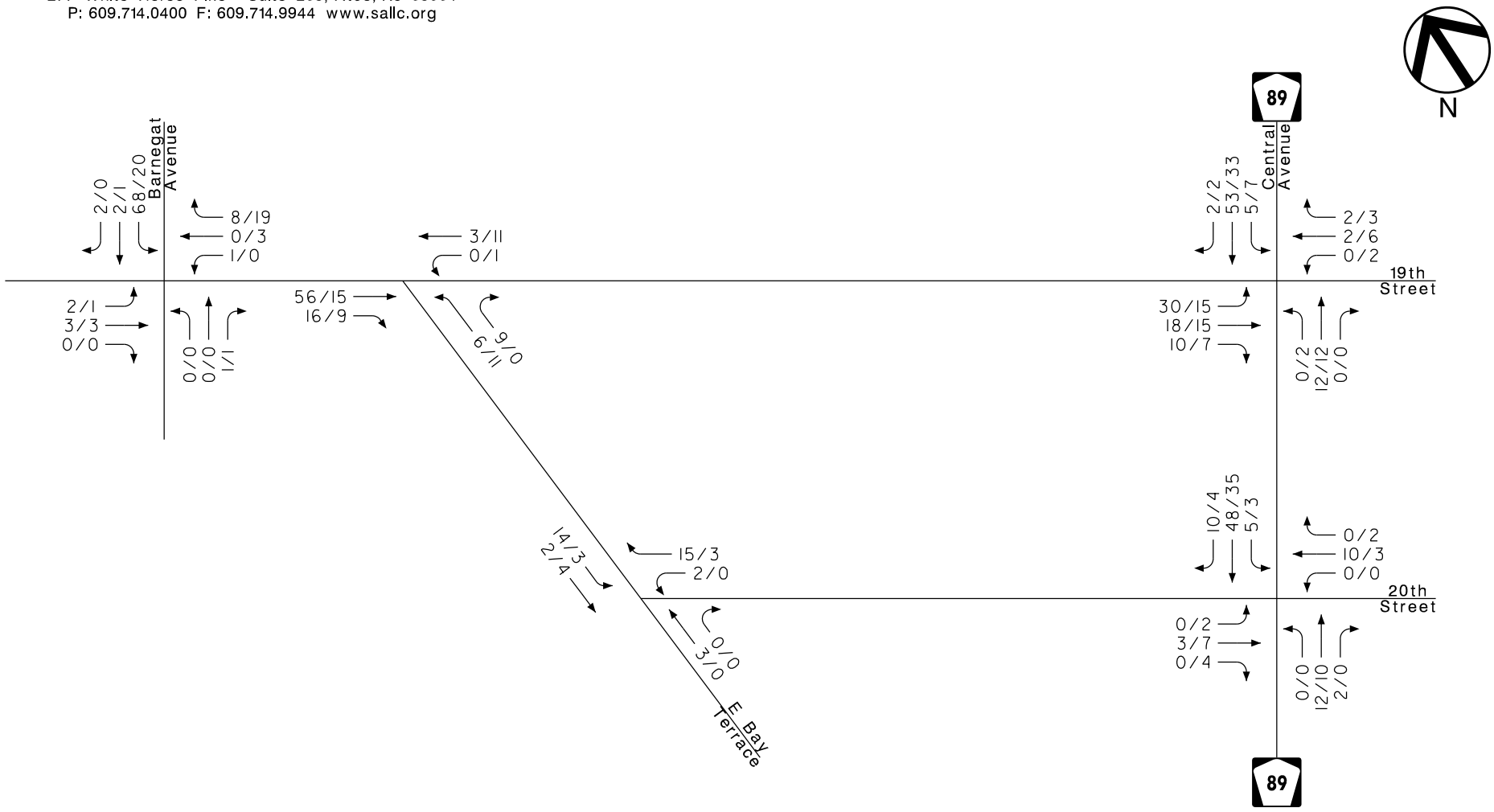
FIGURE 1
EXISTING VOLUMES



Fortuna Park, LLC

Borough of Ship Bottom, Ocean County, NJ
April 2024

AM/PM PEAK HOUR

SA Project No. 24033

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FIGURE 2
NO-BUILD VOLUMES

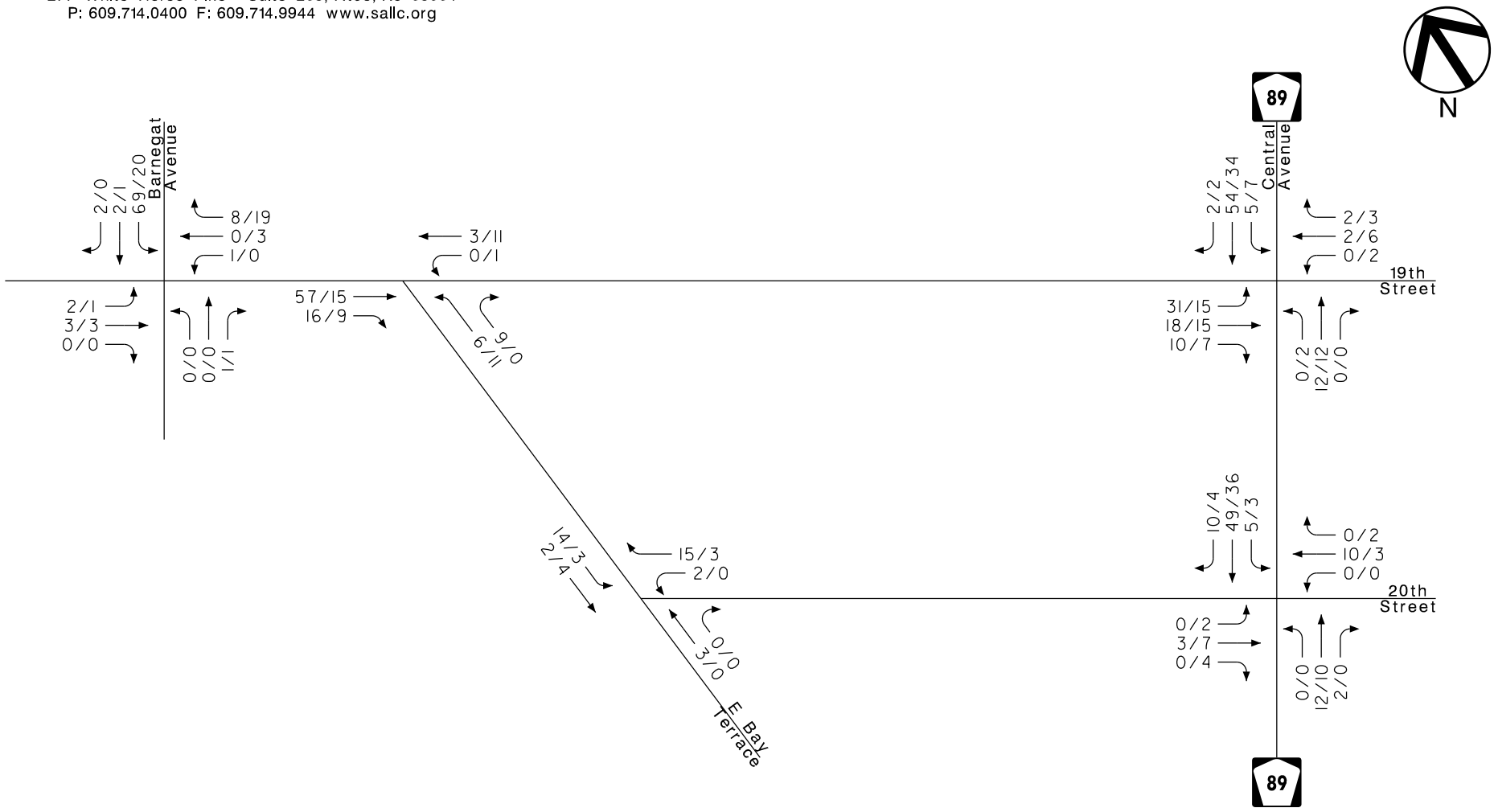

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FIGURE 3
TRIP DISTRIBUTION

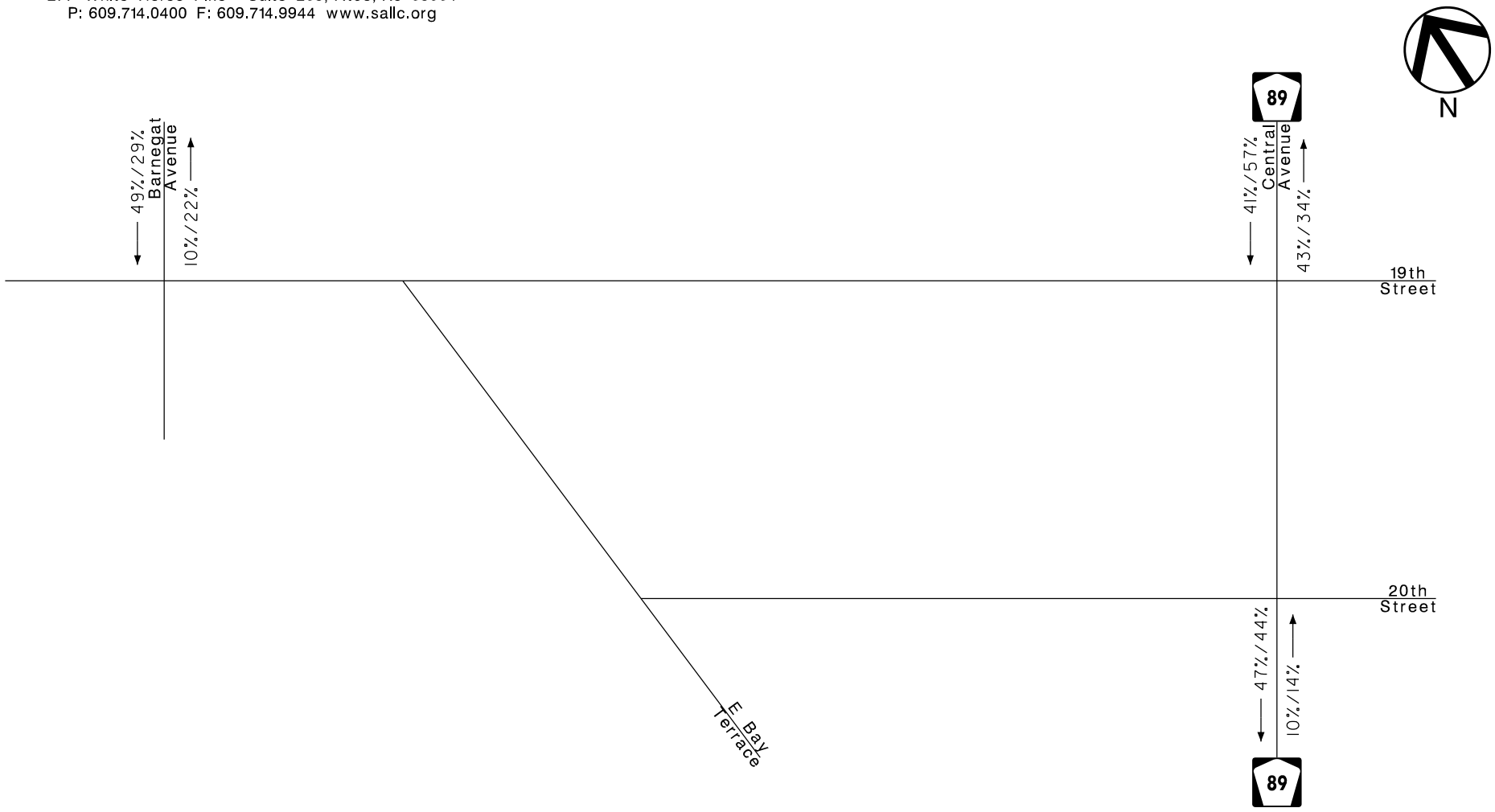

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FIGURE 4
SITE TRAFFIC

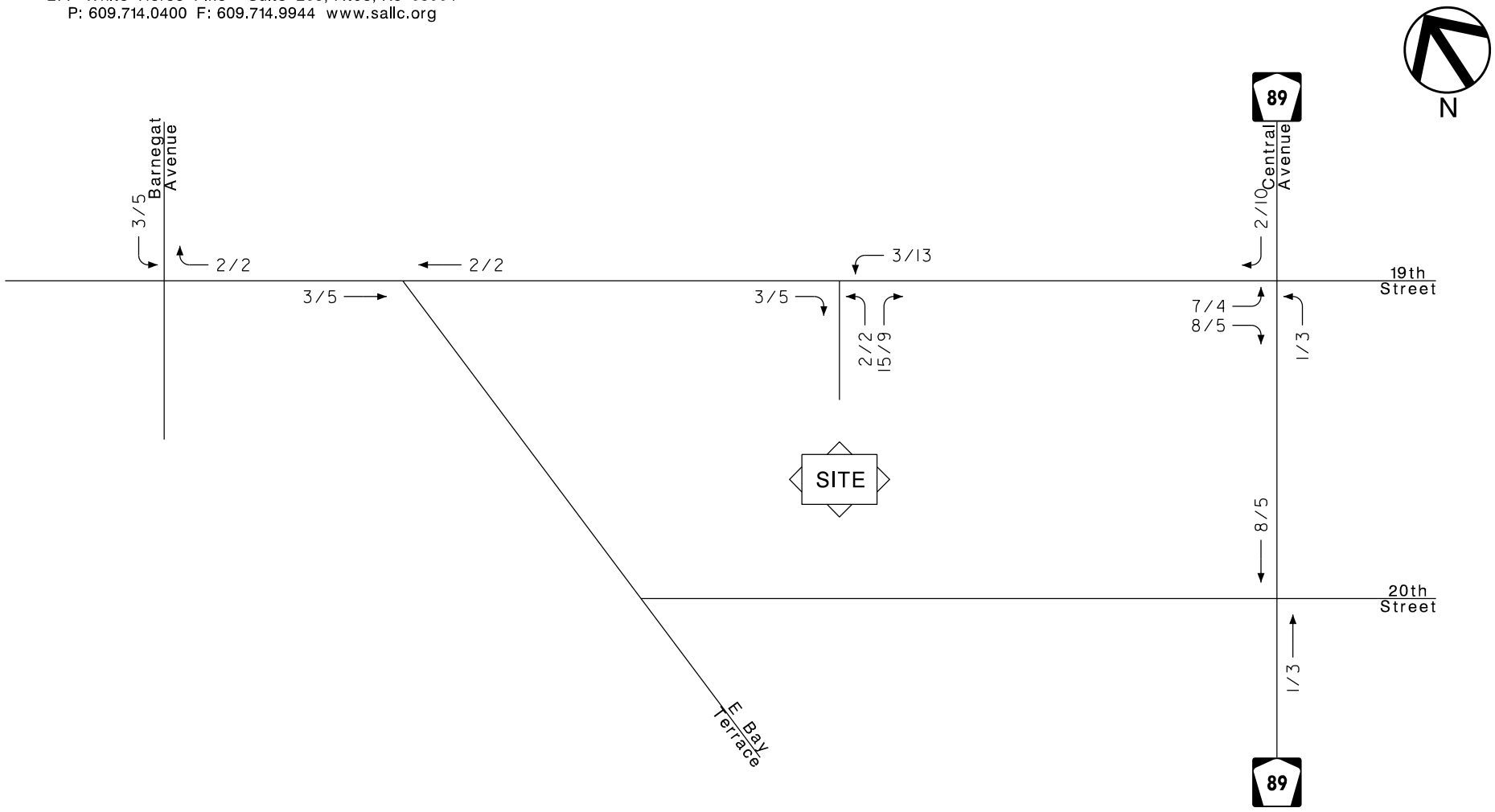

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FIGURE 5
BUILD VOLUMES

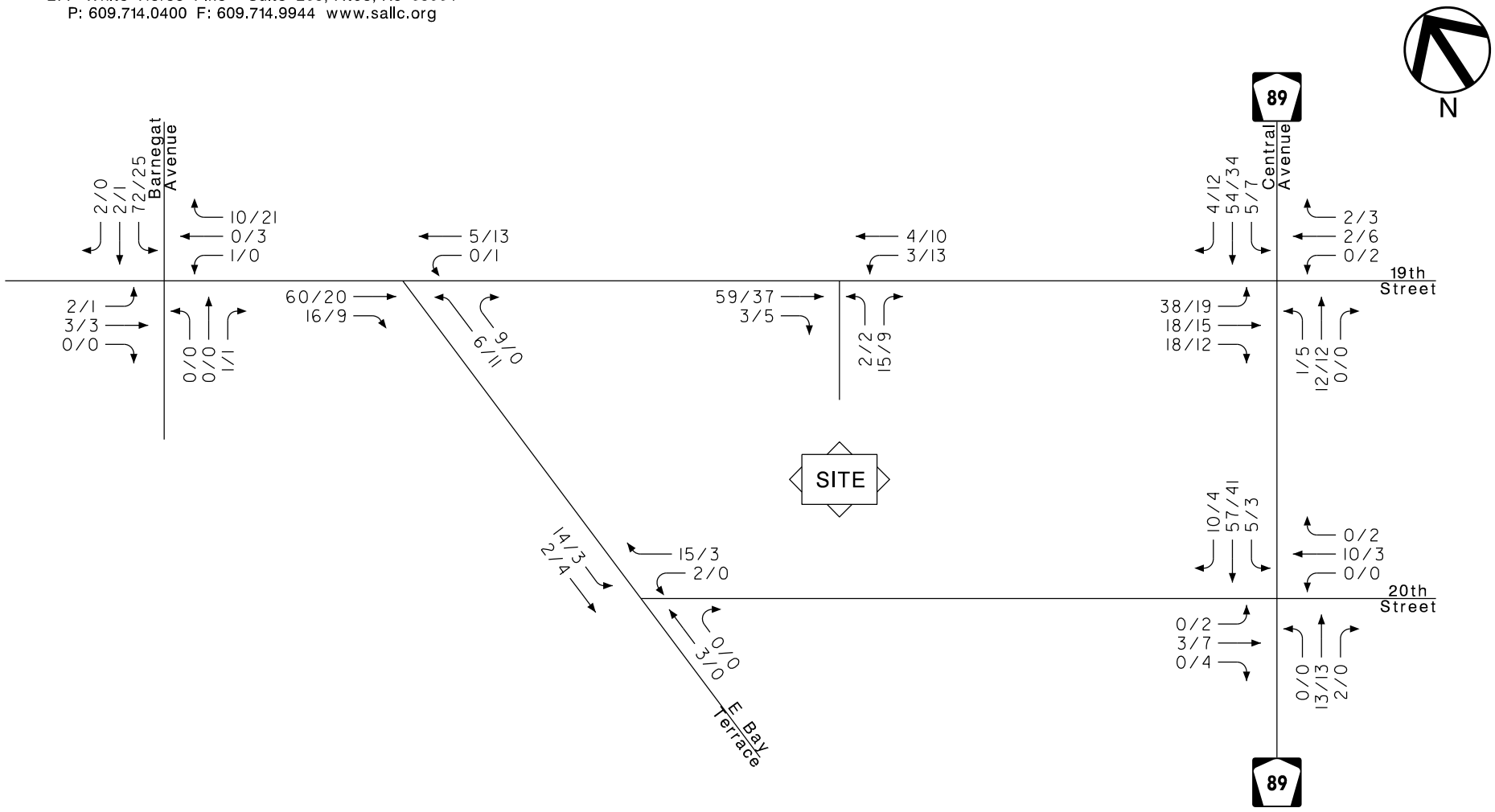

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FIGURE 6
EXISTING LEVELS OF SERVICE

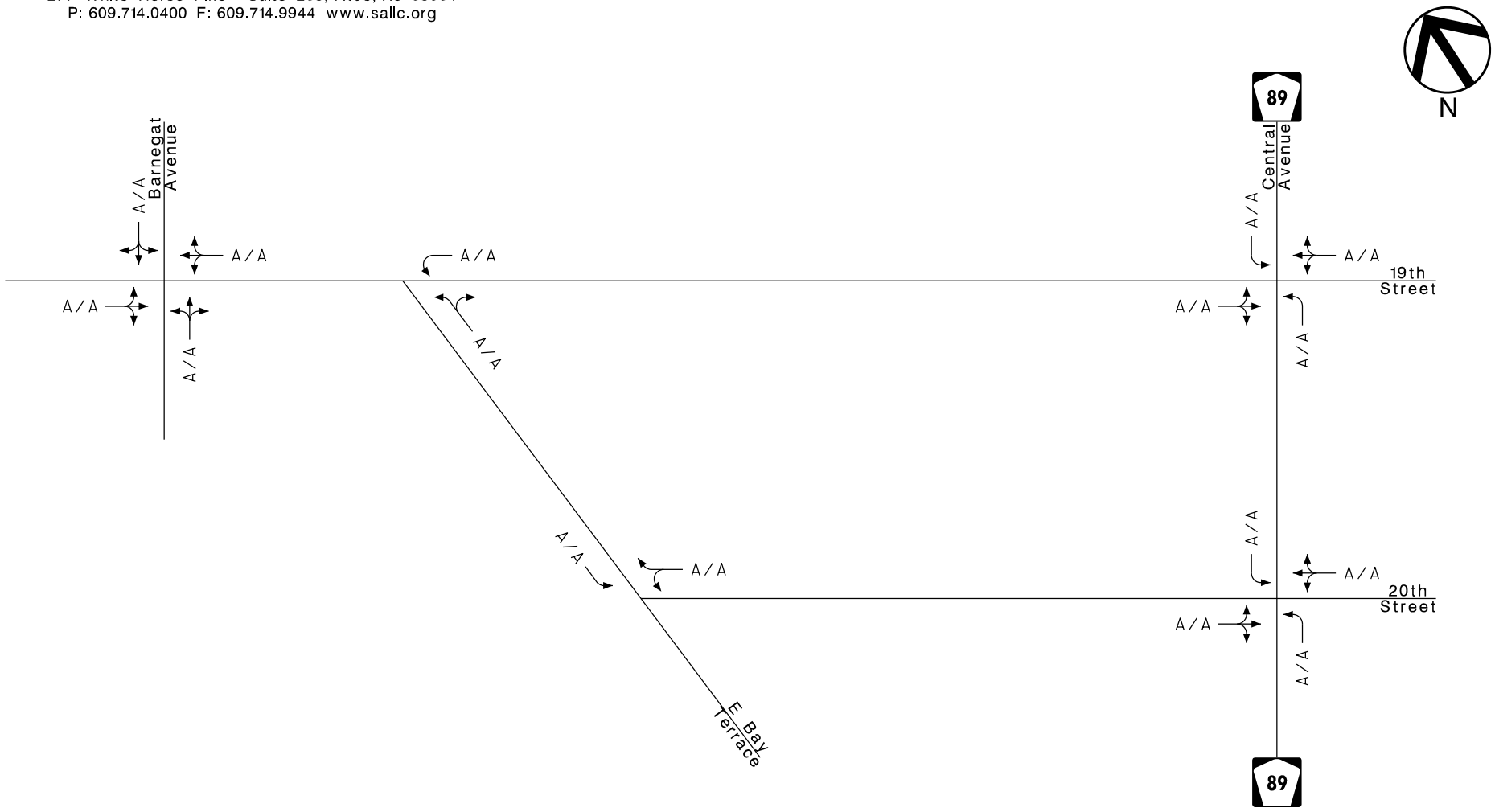

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FIGURE 7
NO-BUILD LEVELS OF SERVICE

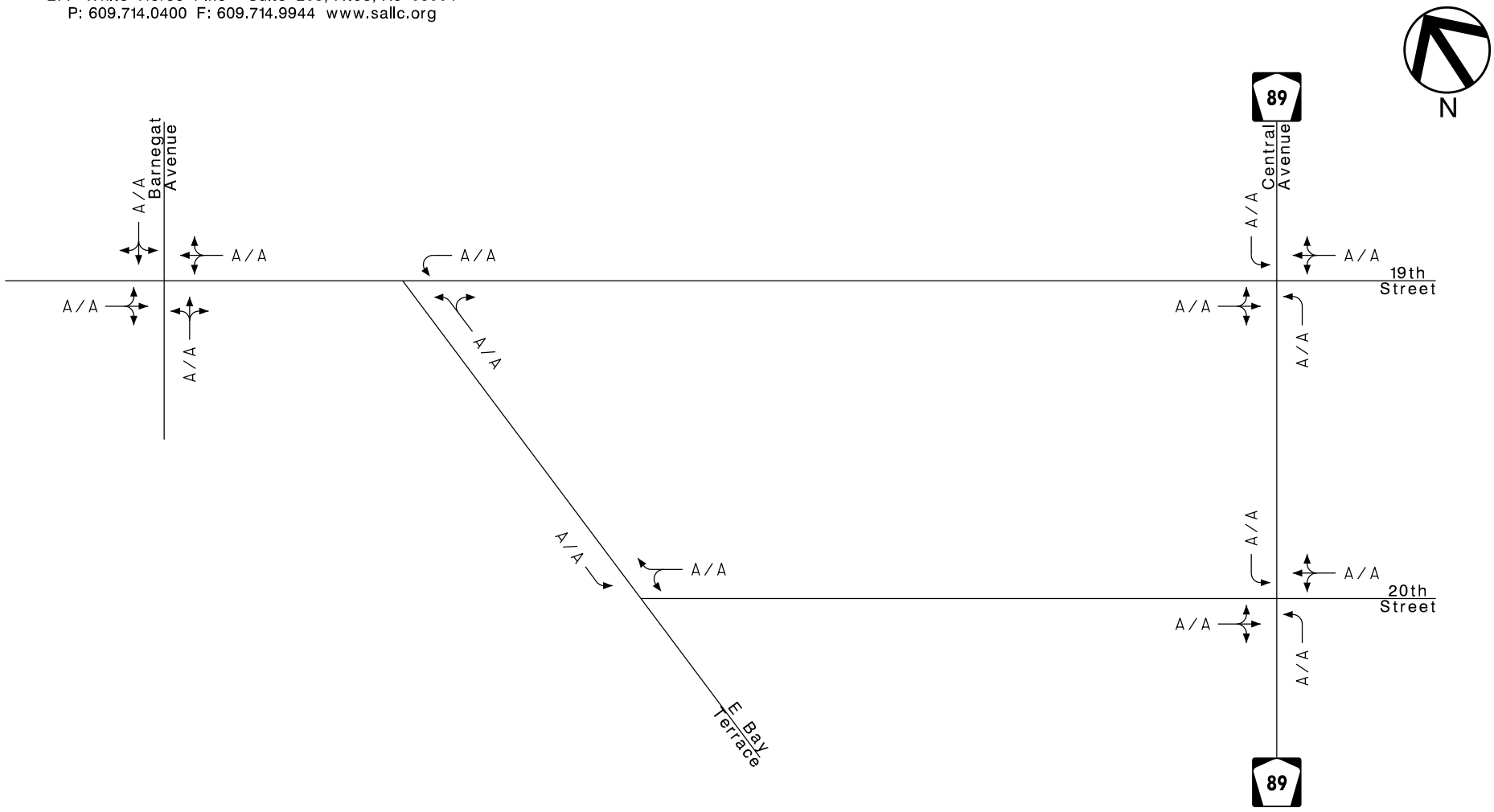

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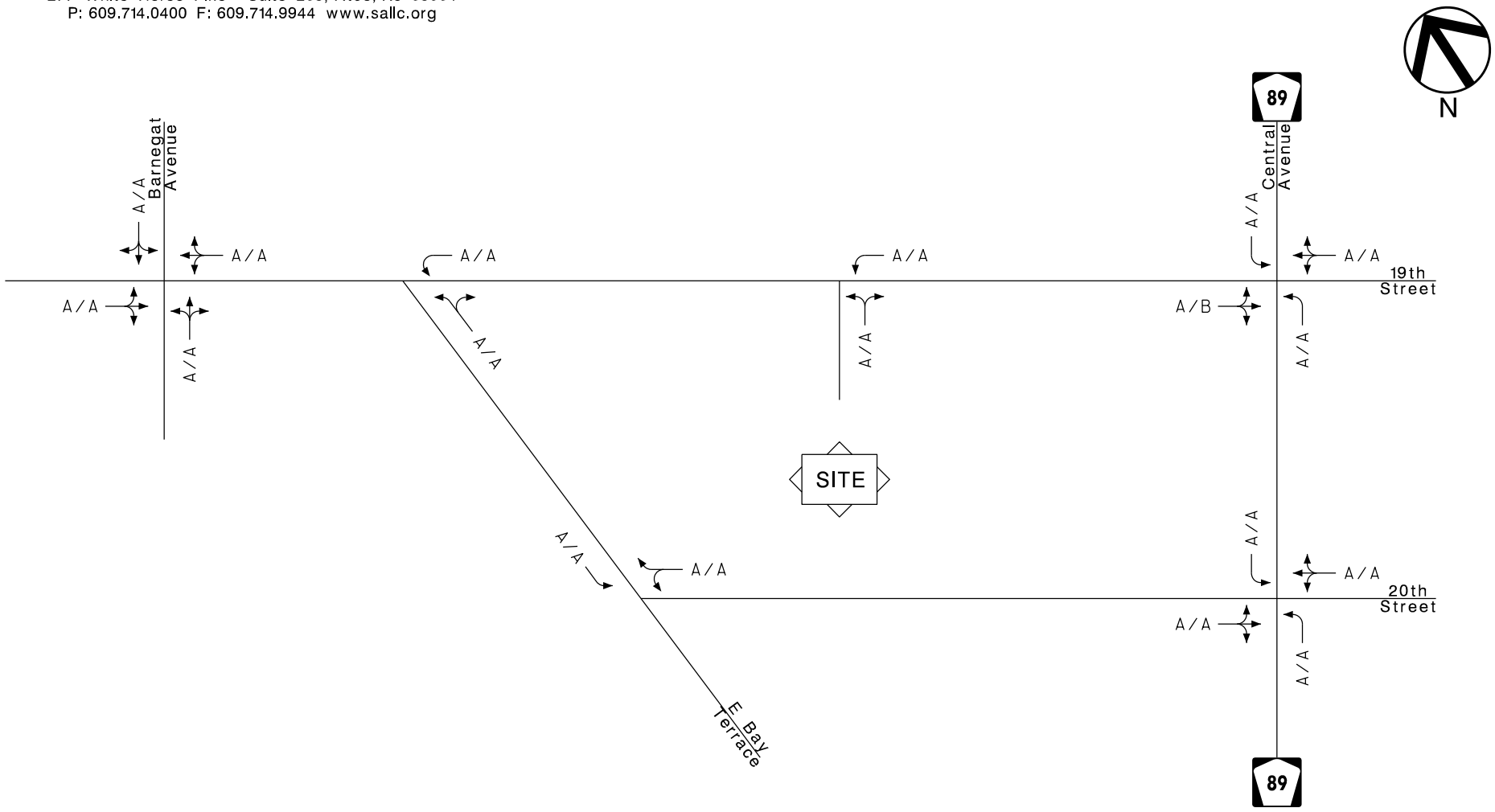
FIGURE 8
BUILD LEVELS OF SERVICE



Fortuna Park, LLC

Borough of Ship Bottom, Ocean County, NJ
April 2024

AM/PM PEAK HOUR

SA Project No. 24033

Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: Central Ave.
E/W Route: W. 19th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/LW/D4-2584

File Name : 24033001
Site Code : 24033001
Start Date : 2/13/2024
Page No : 1

Groups Printed- Unshifted - School Busses

	Central Ave. Southbound				W. 19th St. Westbound				Central Ave. Northbound				W. 19th St. Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	6	0	7	0	1	0	1	0	1	0	1	0	0	1	1	10
07:15 AM	0	2	1	3	0	0	0	0	0	0	1	1	1	1	0	2	6
07:30 AM	0	7	0	7	0	0	0	0	0	0	0	0	0	1	0	1	8
07:45 AM	0	6	0	6	1	0	0	1	0	1	0	1	5	2	0	7	15
Total	1	21	1	23	1	1	0	2	0	2	1	3	6	4	1	11	39
08:00 AM	2	14	3	19	1	1	0	2	0	0	0	0	2	8	22	32	53
08:15 AM	0	7	1	8	1	1	0	2	0	4	0	4	4	8	8	20	34
08:30 AM	0	18	0	18	0	0	0	0	0	2	0	2	2	2	0	4	24
08:45 AM	0	14	1	15	0	0	0	0	0	6	0	6	2	0	0	2	23
Total	2	53	5	60	2	2	0	4	0	12	0	12	10	18	30	58	134
*** BREAK ***																	
03:00 PM	0	6	2	8	0	4	1	5	0	6	0	6	5	11	15	31	50
03:15 PM	0	9	3	12	2	0	1	3	0	3	0	3	1	0	0	1	19
03:30 PM	2	11	1	14	1	1	0	2	0	1	1	2	1	4	0	5	23
03:45 PM	0	7	1	8	0	1	0	1	0	2	1	3	0	0	0	0	12
Total	2	33	7	42	3	6	2	11	0	12	2	14	7	15	15	37	104
04:00 PM	1	14	0	15	1	1	1	3	0	3	1	4	3	3	0	6	28
04:15 PM	0	7	0	7	0	0	0	0	1	8	2	11	3	1	0	4	22
04:30 PM	0	9	1	10	0	2	0	2	0	2	1	3	0	1	0	1	16
04:45 PM	0	7	0	7	0	0	0	0	0	3	0	3	0	2	0	2	12
Total	1	37	1	39	1	3	1	5	1	16	4	21	6	7	0	13	78
05:00 PM	0	4	0	4	1	1	0	2	0	3	2	5	1	0	0	1	12
05:15 PM	0	5	2	7	0	0	0	0	0	4	0	4	3	2	0	5	16
05:30 PM	0	6	0	6	1	0	0	1	0	0	1	1	0	2	0	2	10
05:45 PM	0	6	0	6	0	0	0	0	0	4	0	4	0	1	0	1	11
Total	0	21	2	23	2	1	0	3	0	11	3	14	4	5	0	9	49
Grand Total	6	165	16	187	9	13	3	25	1	53	10	64	33	49	46	128	404
Apprch %	3.2	88.2	8.6		36	52	12		1.6	82.8	15.6		25.8	38.3	35.9		
Total %	1.5	40.8	4	46.3	2.2	3.2	0.7	6.2	0.2	13.1	2.5	15.8	8.2	12.1	11.4	31.7	
Unshifted	6	161	16	183	9	13	3	25	1	50	10	61	33	47	46	126	395
% Unshifted	100	97.6	100	97.9	100	100	100	100	100	94.3	100	95.3	100	95.9	100	98.4	97.8
School Busses	0	4	0	4	0	0	0	0	0	3	0	3	0	2	0	2	9
% School Busses	0	2.4	0	2.1	0	0	0	0	0	5.7	0	4.7	0	4.1	0	1.6	2.2

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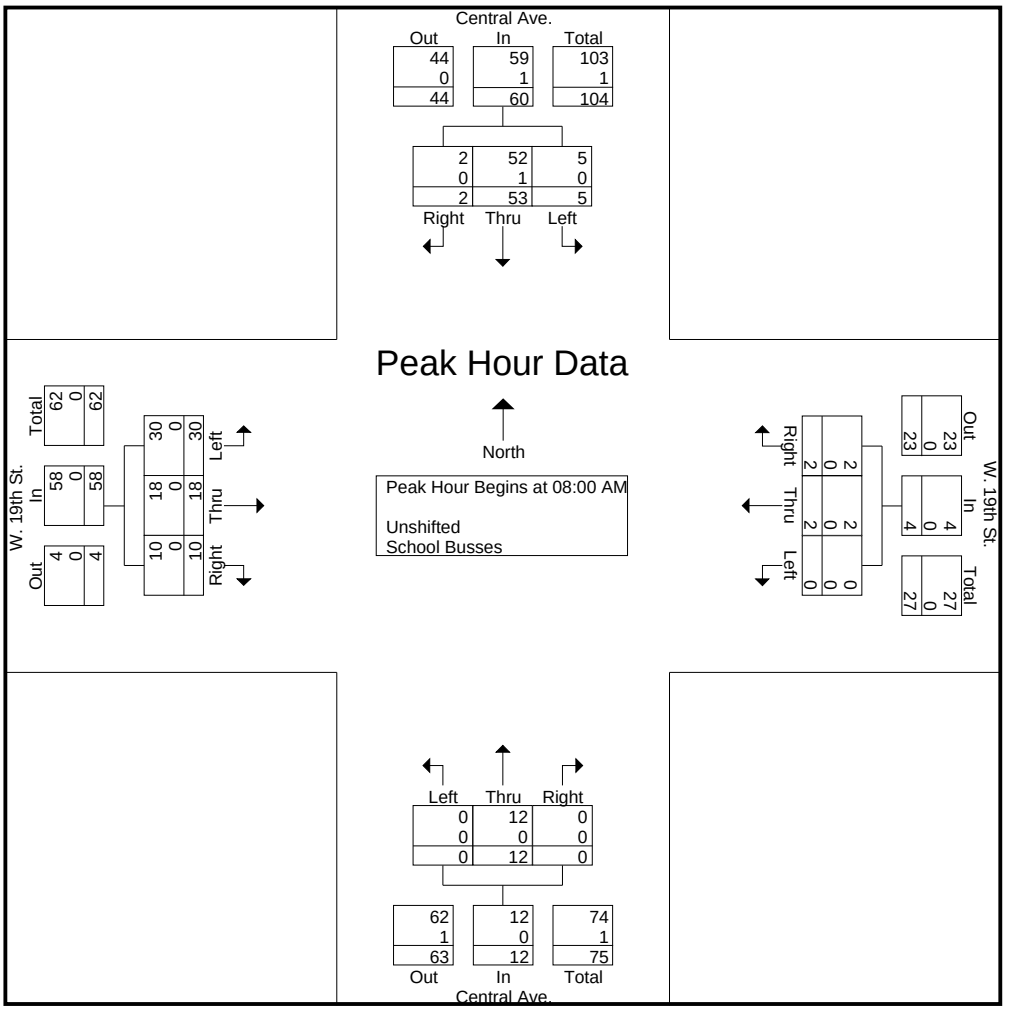
N/S Route: Central Ave.
E/W Route: W. 19th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/LW/D4-2584

File Name : 24033001
Site Code : 24033001
Start Date : 2/13/2024
Page No : 2

	Central Ave. Southbound				W. 19th St. Westbound				Central Ave. Northbound				W. 19th St. Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**2**	14	**3**	**19**	**1**	**1**	0	**2**	0	0	0	0	2	**8**	**22**	**32**	**53**
08:15 AM	0	7	1	8	1	1	0	2	0	4	0	4	**4**	8	8	20	34
08:30 AM	0	**18**	0	18	0	0	0	0	0	2	0	2	2	2	0	4	24
08:45 AM	0	14	1	15	0	0	0	0	0	**6**	0	**6**	2	0	0	2	23
Total Volume	2	53	5	60	2	2	0	4	0	12	0	12	10	18	30	58	134
% App. Total	3.3	88.3	8.3		50	50	0		0	100	0		17.2	31	51.7		
PHF	.250	.736	.417	.789	.500	.500	.000	.500	.000	.500	.000	.500	.625	.563	.341	.453	.632
Unshifted	2	52	5	59	2	2	0	4	0	12	0	12	10	18	30	58	133
% Unshifted	100	98.1	100	98.3	100	100	0	100	0	100	0	100	100	100	100	100	99.3
School Busses	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% School Busses	0	1.9	0	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0.7



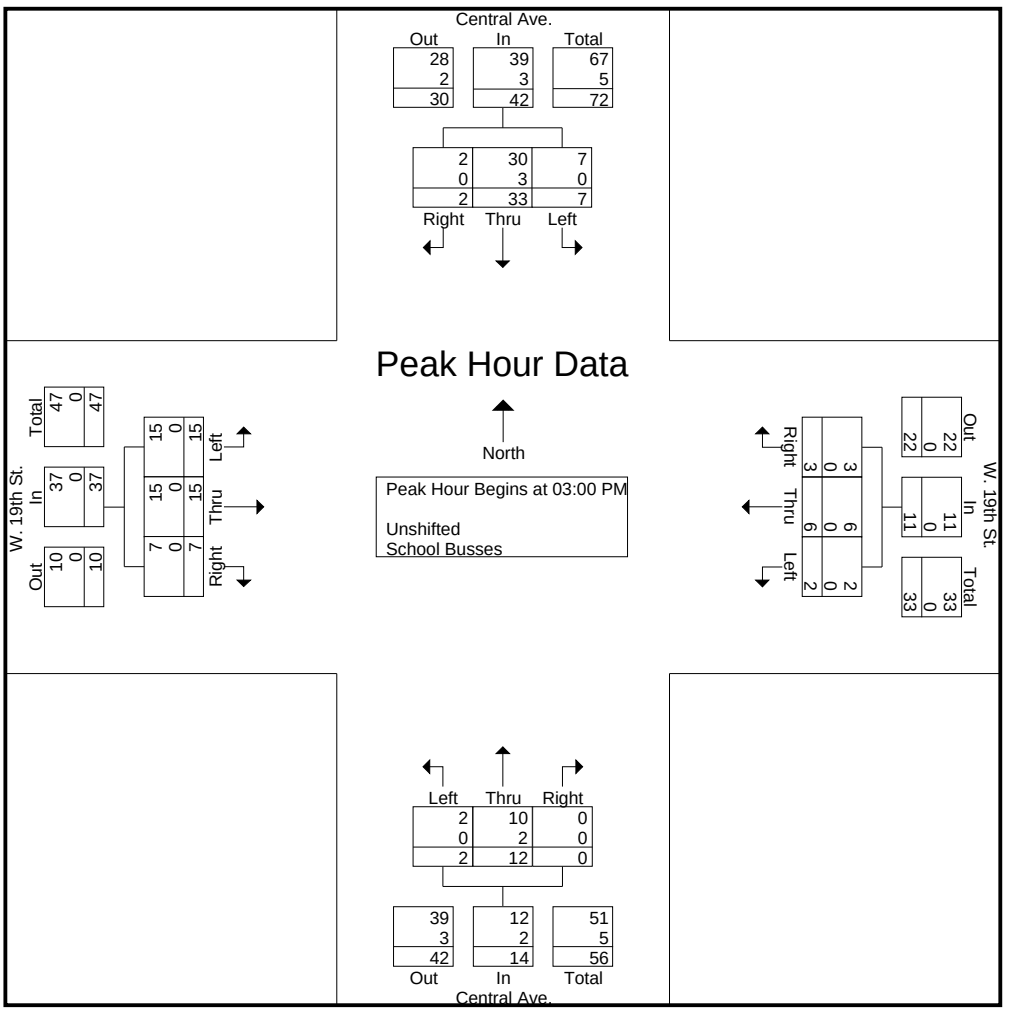
Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: Central Ave.
E/W Route: W. 19th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/LW/D4-2584

File Name : 24033001
Site Code : 24033001
Start Date : 2/13/2024
Page No : 3

	Central Ave. Southbound				W. 19th St. Westbound				Central Ave. Northbound				W. 19th St. Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	6	2	8	0	**4**	**1**	**5**	0	**6**	0	**6**	**5**	**11**	**15**	**31**	**50**
03:15 PM	0	9	**3**	12	**2**	0	1	3	0	3	0	3	1	0	0	1	19
03:30 PM	**2**	**11**	1	**14**	1	1	0	2	0	1	**1**	2	1	4	0	5	23
03:45 PM	0	7	1	8	0	1	0	1	0	2	1	3	0	0	0	0	12
Total Volume	2	33	7	42	3	6	2	11	0	12	2	14	7	15	15	37	104
% App. Total	4.8	78.6	16.7		27.3	54.5	18.2		0	85.7	14.3		18.9	40.5	40.5		
PHF	.250	.750	.583	.750	.375	.375	.500	.550	.000	.500	.500	.583	.350	.341	.250	.298	.520
Unshifted	2	30	7	39	3	6	2	11	0	10	2	12	7	15	15	37	99
% Unshifted	100	90.9	100	92.9	100	100	100	100	0	83.3	100	85.7	100	100	100	100	95.2
School Busses	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
% School Busses	0	9.1	0	7.1	0	0	0	0	0	16.7	0	14.3	0	0	0	0	4.8



Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: Central Ave.
E/W Route: W. 20th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/LW/D4-2584

File Name : 24033001
Site Code : 24033001
Start Date : 2/13/2024
Page No : 1

Groups Printed- W. 20th St. Turns

	Central Ave. Southbound			W. 20th St. Westbound				Central Ave. Northbound			W. 20th St. Eastbound				
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
07:30 AM	1	0	1	0	1	0	1	0	0	0	0	1	0	1	3
07:45 AM	2	2	4	0	1	0	1	1	0	1	0	0	0	0	6
Total	5	2	7	0	2	0	2	1	0	1	0	2	1	3	13
08:00 AM	6	0	6	0	8	0	8	0	0	0	0	2	0	2	16
08:15 AM	1	3	4	0	0	0	0	1	0	1	0	0	0	0	5
08:30 AM	0	1	1	0	1	0	1	1	0	1	0	0	0	0	3
08:45 AM	1	0	1	0	0	0	0	0	1	1	1	1	1	3	5
Total	8	4	12	0	9	0	9	2	1	3	1	3	1	5	29
*** BREAK ***															
03:00 PM	2	0	2	0	0	0	0	0	0	0	2	3	2	7	9
03:15 PM	0	1	1	0	0	0	0	0	0	0	0	3	0	3	4
03:30 PM	1	1	2	1	1	0	2	0	0	0	2	1	0	3	7
03:45 PM	1	1	2	1	2	0	3	0	0	0	0	0	0	0	5
Total	4	3	7	2	3	0	5	0	0	0	4	7	2	13	25
04:00 PM	0	1	1	0	0	0	0	0	0	0	0	2	0	2	3
04:15 PM	0	4	4	1	1	1	3	1	0	1	0	0	0	0	8
*** BREAK ***															
04:45 PM	0	0	0	1	0	0	1	2	0	2	1	0	0	1	4
Total	0	5	5	2	1	1	4	3	0	3	1	2	0	3	15
*** BREAK ***															
05:15 PM	0	0	0	1	0	1	2	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	2	0	0	2	0	0	0	0	0	0	0	2
Total	0	0	0	3	0	1	4	0	0	0	0	1	0	1	5
Grand Total	17	14	31	7	15	2	24	6	1	7	6	15	4	25	87
Apprch %	54.8	45.2		29.2	62.5	8.3		85.7	14.3		24	60	16		
Total %	19.5	16.1	35.6	8	17.2	2.3	27.6	6.9	1.1	8	6.9	17.2	4.6	28.7	

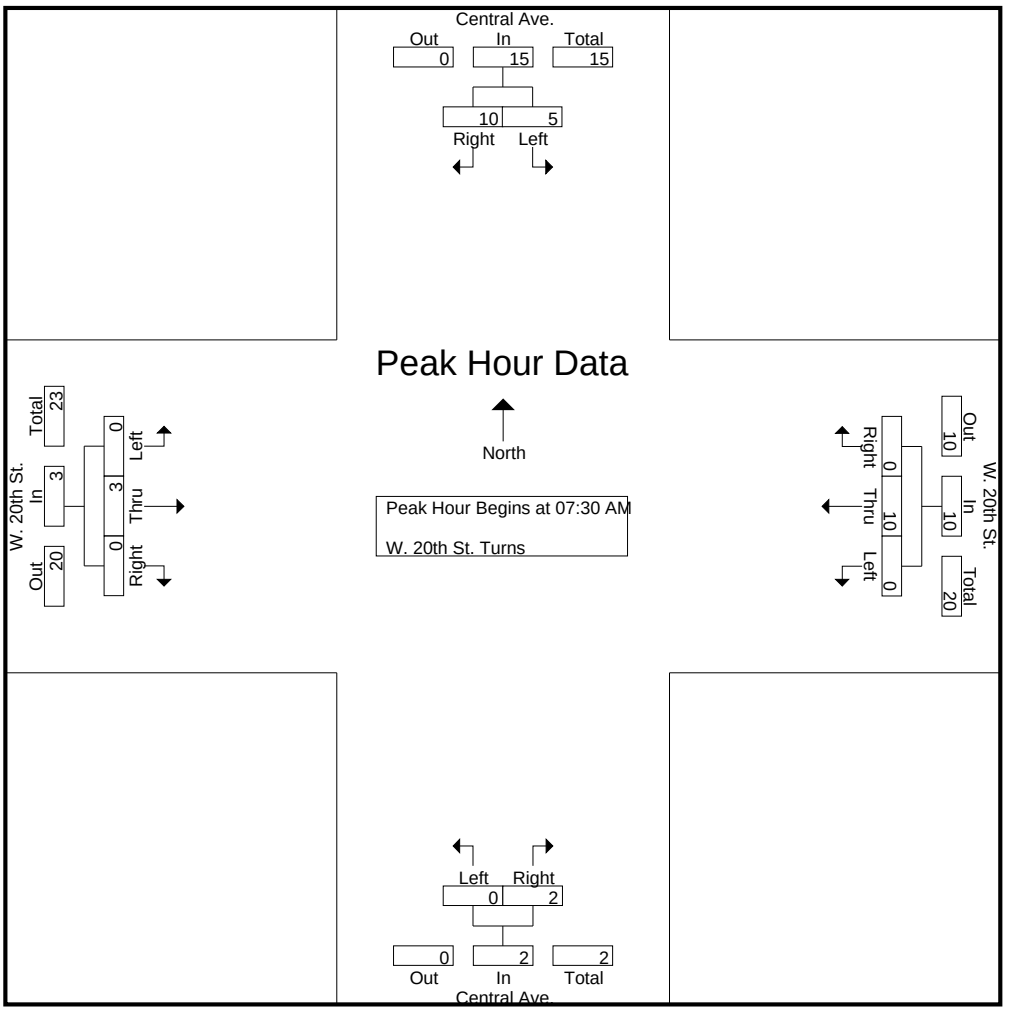
Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: Central Ave.
E/W Route: W. 20th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/LW/D4-2584

File Name : 24033001
Site Code : 24033001
Start Date : 2/13/2024
Page No : 2

	Central Ave. Southbound			W. 20th St. Westbound				Central Ave. Northbound			W. 20th St. Eastbound				
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1															
Peak Hour for Entire Intersection Begins at 07:30 AM															
07:30 AM	1	0	1	0	1	0	1	0	0	0	0	1	0	1	3
07:45 AM	2	2	4	0	1	0	1	**1**	0	**1**	0	0	0	0	6
08:00 AM	**6**	0	**6**	0	**8**	0	**8**	0	0	0	0	**2**	0	**2**	**16**
08:15 AM	1	**3**	4	0	0	0	0	1	0	1	0	0	0	0	5
Total Volume	10	5	15	0	10	0	10	2	0	2	0	3	0	3	30
% App. Total	66.7	33.3		0	100	0		100	0		0	100	0		
PHF	.417	.417	.625	.000	.313	.000	.313	.500	.000	.500	.000	.375	.000	.375	.469



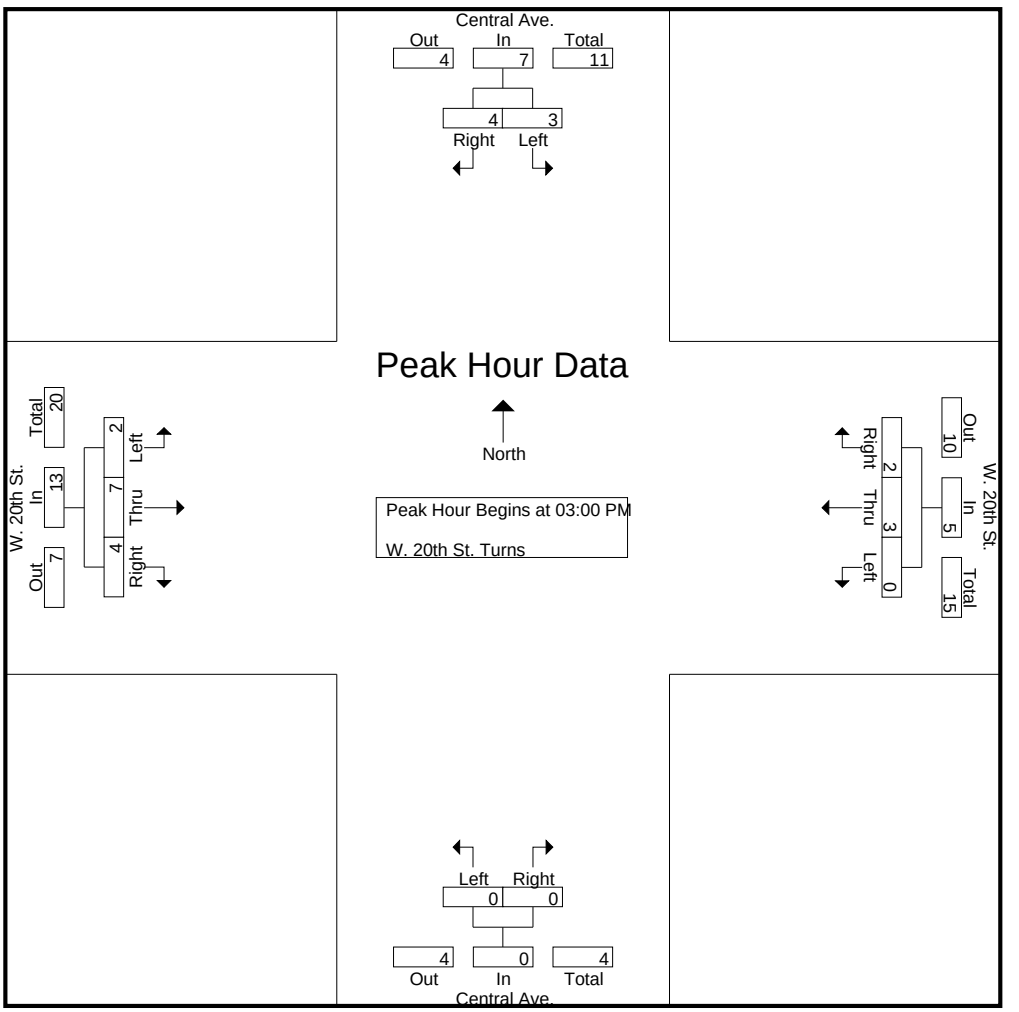
Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: Central Ave.
E/W Route: W. 20th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/LW/D4-2584

File Name : 24033001
Site Code : 24033001
Start Date : 2/13/2024
Page No : 3

	Central Ave. Southbound			W. 20th St. Westbound				Central Ave. Northbound			W. 20th St. Eastbound				
Start Time	Right	Left	App. Total	Right	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1															
Peak Hour for Entire Intersection Begins at 03:00 PM															
03:00 PM	**2**	0	**2**	0	0	0	0	0	0	0	**2**	**3**	**2**	**7**	**9**
03:15 PM	0	**1**	1	0	0	0	0	0	0	0	0	3	0	3	4
03:30 PM	1	1	2	**1**	1	0	2	0	0	0	2	1	0	3	7
03:45 PM	1	1	2	1	**2**	0	**3**	0	0	0	0	0	0	0	5
Total Volume	4	3	7	2	3	0	5	0	0	0	4	7	2	13	25
% App. Total	57.1	42.9		40	60	0		0	0		30.8	53.8	15.4		
PHF	.500	.750	.875	.500	.375	.000	.417	.000	.000	.000	.500	.583	.250	.464	.694



Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: E. Bay Terrace
E/W Route: W. 20th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/EM & LE/D4-3142

File Name : 24033002
Site Code : 24033002
Start Date : 2/13/2024

Groups Printed- Unshifted - School Busses

	E. Bay Terrace Southbound			W. 20th St. Westbound			E. Bay Terrace Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
07:00 AM	0	0	0	2	0	2	0	1	1	3
07:15 AM	0	2	2	0	0	0	0	0	0	2
07:30 AM	0	2	2	1	0	1	0	1	1	4
07:45 AM	0	5	5	0	0	0	0	0	0	5
Total	0	9	9	3	0	3	0	2	2	14
08:00 AM	1	4	5	8	0	8	0	2	2	15
08:15 AM	1	3	4	6	2	8	0	0	0	12
08:30 AM	0	1	1	0	1	1	0	0	0	2
08:45 AM	0	1	1	1	1	2	0	1	1	4
Total	2	9	11	15	4	19	0	3	3	33
*** BREAK ***										
03:00 PM	4	3	7	3	0	3	0	0	0	10
03:15 PM	1	0	1	6	1	7	1	0	1	9
03:30 PM	1	0	1	2	0	2	0	0	0	3
03:45 PM	0	1	1	1	0	1	0	0	0	2
Total	6	4	10	12	1	13	1	0	1	24
04:00 PM	2	3	5	1	0	1	0	1	1	7
04:15 PM	0	0	0	1	0	1	0	0	0	1
04:30 PM	1	0	1	0	0	0	0	0	0	1
04:45 PM	0	2	2	0	0	0	0	1	1	3
Total	3	5	8	2	0	2	0	2	2	12
05:00 PM	0	0	0	0	0	0	0	3	3	3
05:15 PM	2	0	2	0	0	0	0	2	2	4
*** BREAK ***										
05:45 PM	0	0	0	0	0	0	0	1	1	1
Total	2	0	2	0	0	0	0	6	6	8
Grand Total	13	27	40	32	5	37	1	13	14	91
Apprch %	32.5	67.5		86.5	13.5		7.1	92.9		
Total %	14.3	29.7	44	35.2	5.5	40.7	1.1	14.3	15.4	
Unshifted	13	22	35	28	5	33	1	13	14	82
% Unshifted	100	81.5	87.5	87.5	100	89.2	100	100	100	90.1
School Busses	0	5	5	4	0	4	0	0	0	9
% School Busses	0	18.5	12.5	12.5	0	10.8	0	0	0	9.9

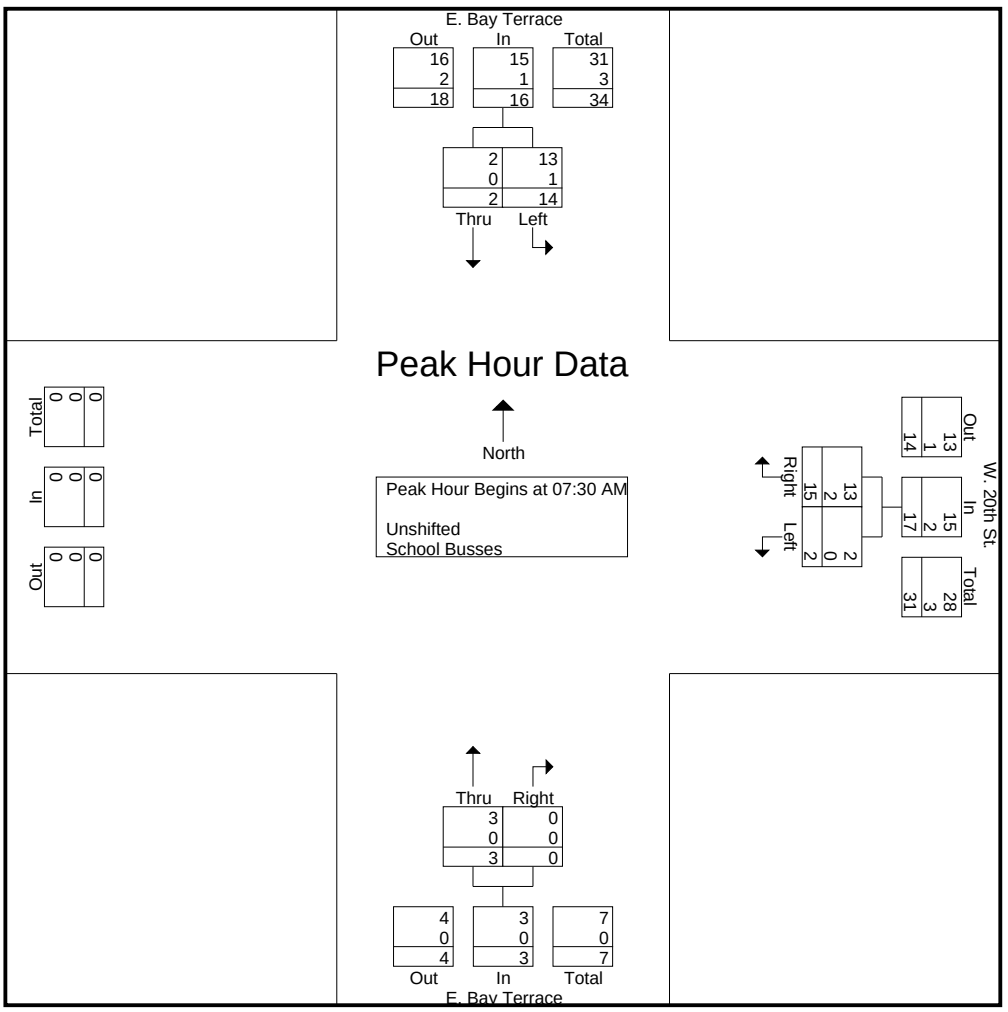
Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: E. Bay Terrace
E/W Route: W. 20th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/EM & LE/D4-3142

File Name : 24033002
Site Code : 24033002
Start Date : 2/13/2024
Page No : 2

	E. Bay Terrace Southbound			W. 20th St. Westbound			E. Bay Terrace Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	2	2	1	0	1	0	1	1	4
07:45 AM	0	**5**	**5**	0	0	0	0	0	0	5
08:00 AM	**1**	4	5	**8**	0	**8**	0	**2**	**2**	**15**
08:15 AM	1	3	4	6	**2**	8	0	0	0	12
Total Volume	2	14	16	15	2	17	0	3	3	36
% App. Total	12.5	87.5		88.2	11.8		0	100		
PHF	.500	.700	.800	.469	.250	.531	.000	.375	.375	.600
Unshifted	2	13	15	13	2	15	0	3	3	33
% Unshifted	100	92.9	93.8	86.7	100	88.2	0	100	100	91.7
School Busses	0	1	1	2	0	2	0	0	0	3
% School Busses	0	7.1	6.3	13.3	0	11.8	0	0	0	8.3



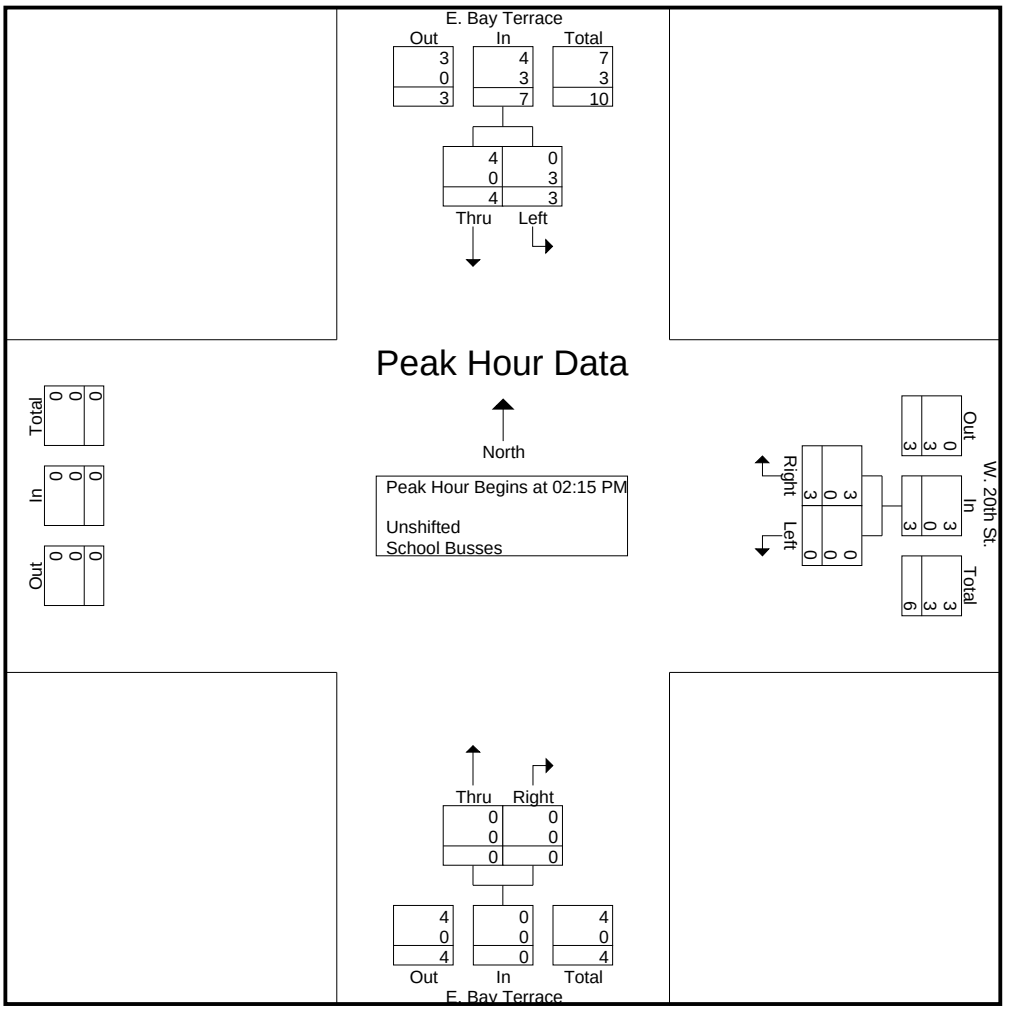
Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: E. Bay Terrace
E/W Route: W. 20th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/EM & LE/D4-3142

File Name : 24033002
Site Code : 24033002
Start Date : 2/13/2024
Page No : 3

	E. Bay Terrace Southbound			W. 20th St. Westbound			E. Bay Terrace Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 03:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:15 PM										
02:15 PM	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0
03:00 PM	**4**	**3**	**7**	**3**	0	**3**	0	0	0	**10**
Total Volume	4	3	7	3	0	3	0	0	0	10
% App. Total	57.1	42.9		100	0		0	0		
PHF	.250	.250	.250	.250	.000	.250	.000	.000	.000	.250
Unshifted	4	0	4	3	0	3	0	0	0	7
% Unshifted	100	0	57.1	100	0	100	0	0	0	70.0
School Busses	0	3	3	0	0	0	0	0	0	3
% School Busses	0	100	42.9	0	0	0	0	0	0	30.0



Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: S. Barnegat Ave.
E/W Route: W. 19th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/RS/D4-2870

File Name : 24033003
Site Code : 24033003
Start Date : 2/13/2024
Page No : 1

Groups Printed- Unshifted - School Busses

	S. Barnegat Ave. Southbound				W. 19th St. Westbound				S. Barnegat Ave. Northbound				W. 19th St. Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	1	1	3
07:15 AM	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	4
07:30 AM	0	1	4	5	1	0	0	1	1	0	0	1	0	0	1	1	8
07:45 AM	2	0	19	21	0	0	0	0	0	0	0	0	0	0	0	0	21
Total	2	2	27	31	2	0	0	2	1	0	0	1	0	0	2	2	36
08:00 AM	0	1	31	32	1	0	1	2	0	0	0	0	0	1	0	1	35
08:15 AM	0	0	14	14	6	0	0	6	0	0	0	0	0	2	1	3	23
08:30 AM	0	0	1	1	2	0	0	2	1	0	0	1	0	1	1	2	6
08:45 AM	1	0	3	4	1	1	0	2	0	0	0	0	0	0	0	0	6
Total	1	1	49	51	10	1	1	12	1	0	0	1	0	4	2	6	70
*** BREAK ***																	
03:00 PM	0	0	13	13	4	2	0	6	0	0	0	0	0	3	0	3	22
03:15 PM	0	0	1	1	7	0	0	7	0	0	0	0	0	0	0	0	8
03:30 PM	0	1	4	5	3	0	0	3	1	0	0	1	0	0	0	0	9
03:45 PM	0	0	2	2	5	1	0	6	0	0	0	0	0	0	1	1	9
Total	0	1	20	21	19	3	0	22	1	0	0	1	0	3	1	4	48
04:00 PM	0	0	7	7	6	0	0	6	0	0	0	0	0	0	0	0	13
04:15 PM	0	0	3	3	3	0	0	3	0	0	0	0	0	0	0	0	6
04:30 PM	1	0	2	3	3	0	0	3	0	0	0	0	0	0	1	1	7
04:45 PM	0	0	4	4	1	0	0	1	0	0	0	0	0	0	1	1	6
Total	1	0	16	17	13	0	0	13	0	0	0	0	0	0	2	2	32
05:00 PM	1	0	1	2	3	1	0	4	0	0	0	0	0	0	0	0	6
05:15 PM	1	2	4	7	2	0	0	2	1	0	1	2	0	1	1	2	13
05:30 PM	0	0	2	2	0	1	0	1	0	0	0	0	0	1	0	1	4
05:45 PM	0	0	1	1	2	0	0	2	0	0	0	0	0	0	0	0	3
Total	2	2	8	12	7	2	0	9	1	0	1	2	0	2	1	3	26
Grand Total	6	6	120	132	51	6	1	58	4	0	1	5	0	9	8	17	212
Apprch %	4.5	4.5	90.9		87.9	10.3	1.7		80	0	20		0	52.9	47.1		
Total %	2.8	2.8	56.6	62.3	24.1	2.8	0.5	27.4	1.9	0	0.5	2.4	0	4.2	3.8	8	
Unshifted	6	6	114	126	49	6	1	56	4	0	1	5	0	9	8	17	204
% Unshifted	100	100	95	95.5	96.1	100	100	96.6	100	0	100	100	0	100	100	100	96.2
School Busses	0	0	6	6	2	0	0	2	0	0	0	0	0	0	0	0	8
% School Busses	0	0	5	4.5	3.9	0	0	3.4	0	0	0	0	0	0	0	0	3.8

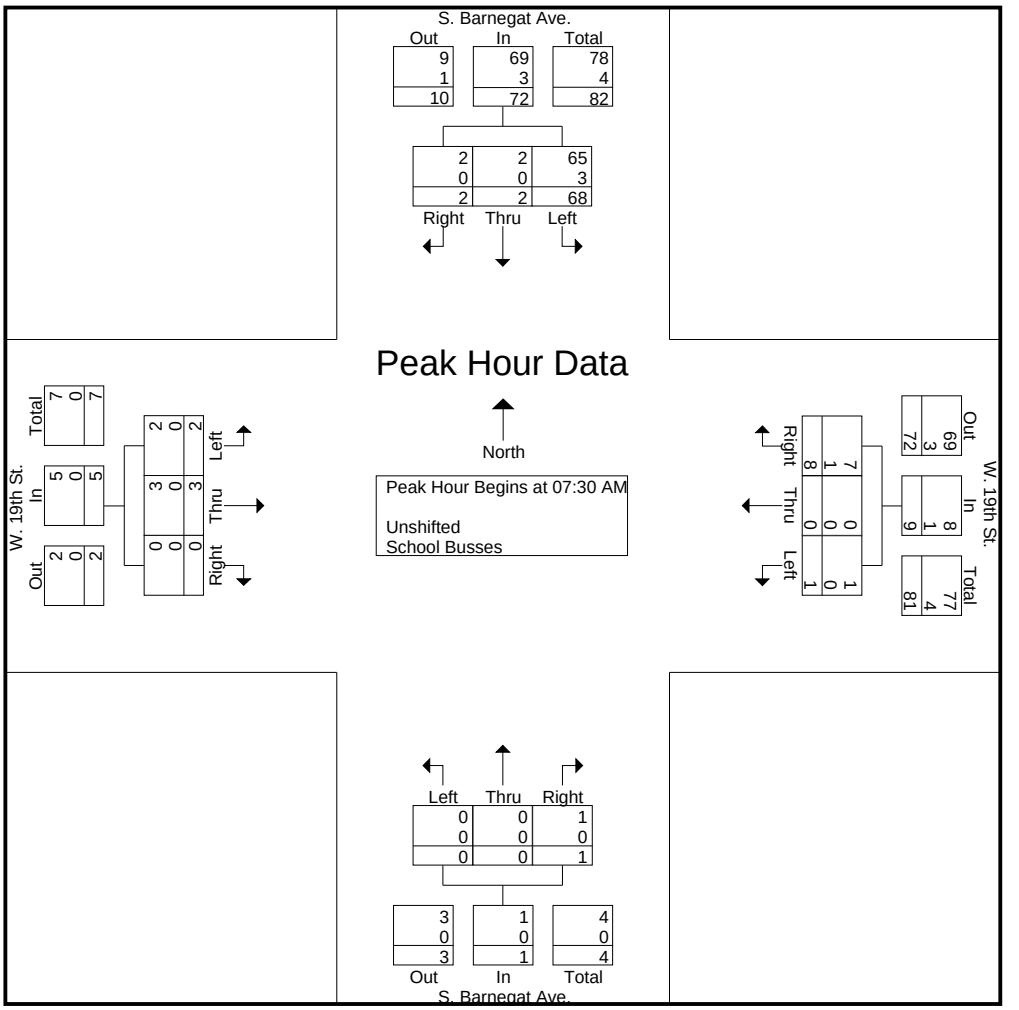
Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: S. Barnegat Ave.
E/W Route: W. 19th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/RS/D4-2870

File Name : 24033003
Site Code : 24033003
Start Date : 2/13/2024
Page No : 2

	S. Barnegat Ave. Southbound				W. 19th St. Westbound				S. Barnegat Ave. Northbound				W. 19th St. Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**1**	4	5	1	0	0	1	**1**	0	0	**1**	0	0	**1**	1	8
07:45 AM	**2**	0	19	21	0	0	0	0	0	0	0	0	0	0	0	0	21
08:00 AM	0	1	**31**	**32**	1	0	**1**	2	0	0	0	0	0	1	0	1	**35**
08:15 AM	0	0	14	14	**6**	0	0	**6**	0	0	0	0	0	**2**	1	**3**	23
Total Volume	2	2	68	72	8	0	1	9	1	0	0	1	0	3	2	5	87
% App. Total	2.8	2.8	94.4		88.9	0	11.1		100	0	0		0	60	40		
PHF	.250	.500	.548	.563	.333	.000	.250	.375	.250	.000	.000	.250	.000	.375	.500	.417	.621
Unshifted	2	2	65	69	7	0	1	8	1	0	0	1	0	3	2	5	83
% Unshifted	100	100	95.6	95.8	87.5	0	100	88.9	100	0	0	100	0	100	100	100	95.4
School Busses	0	0	3	3	1	0	0	1	0	0	0	0	0	0	0	0	4
% School Busses	0	0	4.4	4.2	12.5	0	0	11.1	0	0	0	0	0	0	0	0	4.6



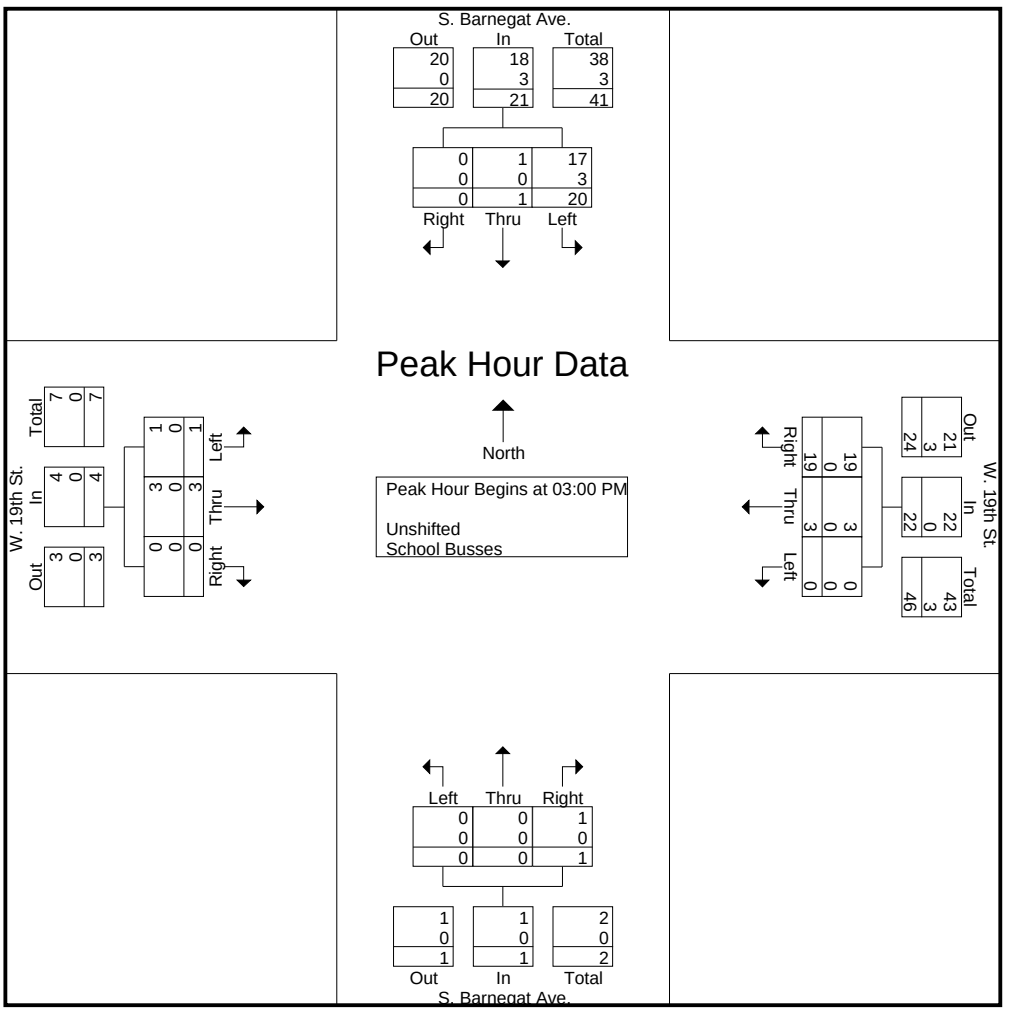
Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: S. Barnegat Ave.
E/W Route: W. 19th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/RS/D4-2870

File Name : 24033003
Site Code : 24033003
Start Date : 2/13/2024
Page No : 3

	S. Barnegat Ave. Southbound				W. 19th St. Westbound				S. Barnegat Ave. Northbound				W. 19th St. Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	0	**13**	**13**	4	**2**	0	6	0	0	0	0	0	**3**	0	**3**	**22**
03:15 PM	0	0	1	1	**7**	0	0	**7**	0	0	0	0	0	0	0	0	8
03:30 PM	0	**1**	4	5	3	0	0	3	**1**	0	0	**1**	0	0	0	0	9
03:45 PM	0	0	2	2	5	1	0	6	0	0	0	0	0	0	**1**	1	9
Total Volume	0	1	20	21	19	3	0	22	1	0	0	1	0	3	1	4	48
% App. Total	0	4.8	95.2		86.4	13.6	0		100	0	0		0	75	25		
PHF	.000	.250	.385	.404	.679	.375	.000	.786	.250	.000	.000	.250	.000	.250	.250	.333	.545
Unshifted	0	1	17	18	19	3	0	22	1	0	0	1	0	3	1	4	45
% Unshifted	0	100	85.0	85.7	100	100	0	100	100	0	0	100	0	100	100	100	93.8
School Busses	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	3
% School Busses	0	0	15.0	14.3	0	0	0	0	0	0	0	0	0	0	0	0	6.3



Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: E. Bay Terrace
E/W Route: W. 19th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/RS/D4-2870

File Name : 24033003
Site Code : 24033003
Start Date : 2/13/2024
Page No : 1

Groups Printed- E. Bay Terrace Turns

	W. 19th St. Westbound		E. Bay Terrace Northbound			W. 19th St. Eastbound		
Start Time	Left	App. Total	Right	Left	App. Total	Right	App. Total	Int. Total
07:00 AM	0	0	0	1	1	0	0	1
07:15 AM	0	0	0	0	0	2	2	2
07:30 AM	0	0	0	1	1	1	1	2
07:45 AM	0	0	0	0	0	5	5	5
Total	0	0	0	2	2	8	8	10
08:00 AM	0	0	9	0	9	3	3	12
08:15 AM	0	0	0	5	5	7	7	12
08:30 AM	0	0	0	1	1	0	0	1
08:45 AM	0	0	0	2	2	1	1	3
Total	0	0	9	8	17	11	11	28
*** BREAK ***								
03:00 PM	1	1	0	3	3	6	6	10
03:15 PM	0	0	0	4	4	1	1	5
03:30 PM	0	0	0	2	2	1	1	3
03:45 PM	0	0	0	2	2	1	1	3
Total	1	1	0	11	11	9	9	21
04:00 PM	1	1	0	2	2	3	3	6
04:15 PM	0	0	0	1	1	0	0	1
04:30 PM	0	0	0	0	0	1	1	1
04:45 PM	0	0	0	1	1	2	2	3
Total	1	1	0	4	4	6	6	11
05:00 PM	0	0	0	2	2	0	0	2
05:15 PM	0	0	0	1	1	2	2	3
*** BREAK ***								
05:45 PM	0	0	0	1	1	0	0	1
Total	0	0	0	4	4	2	2	6
Grand Total	2	2	9	29	38	36	36	76
Apprch %	100		23.7	76.3		100		
Total %	2.6	2.6	11.8	38.2	50	47.4	47.4	

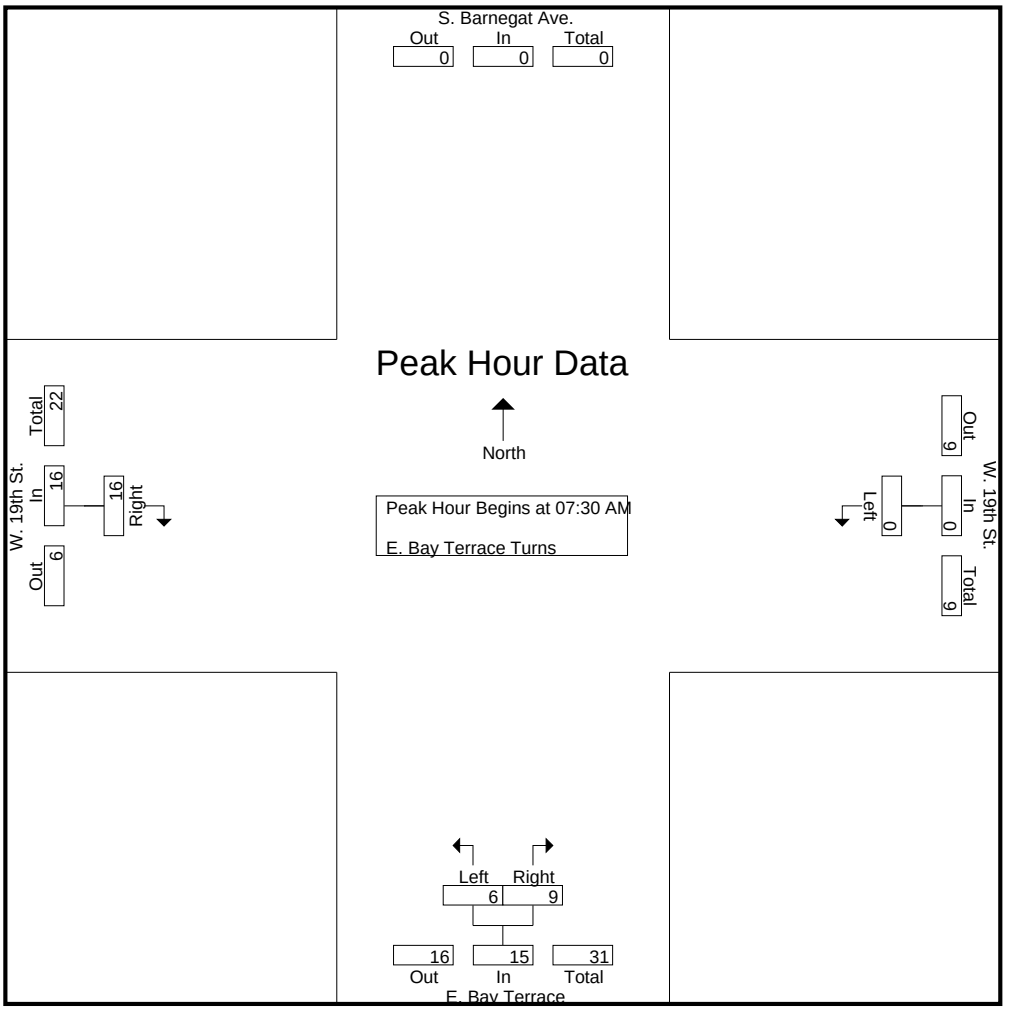
Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: E. Bay Terrace
E/W Route: W. 19th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/RS/D4-2870

File Name : 24033003
Site Code : 24033003
Start Date : 2/13/2024
Page No : 2

	W. 19th St. Westbound		E. Bay Terrace Northbound			W. 19th St. Eastbound		
Start Time	Left	App. Total	Right	Left	App. Total	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1								
Peak Hour for Entire Intersection Begins at 07:30 AM								
07:30 AM	0	0	0	1	1	1	1	2
07:45 AM	0	0	0	0	0	5	5	5
08:00 AM	0	0	**9**	0	**9**	3	3	**12**
08:15 AM	0	0	0	**5**	5	**7**	**7**	12
Total Volume	0	0	9	6	15	16	16	31
% App. Total	0		60	40		100		
PHF	.000	.000	.250	.300	.417	.571	.571	.646



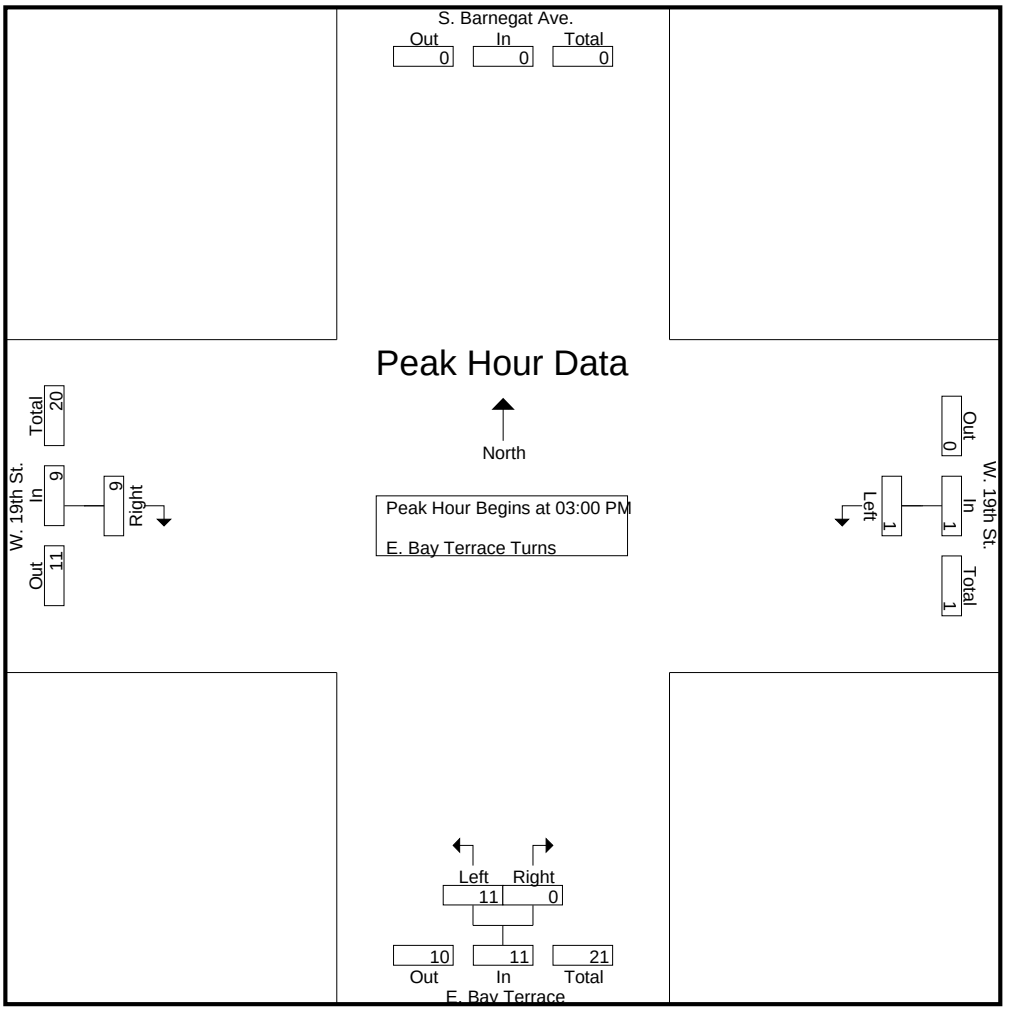
Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: E. Bay Terrace
E/W Route: W. 19th St.
Ship Bottom/Ocean County/NJ
Tuesday/Heavy Rain to Clear/RS/D4-2870

File Name : 24033003
Site Code : 24033003
Start Date : 2/13/2024
Page No : 3

	W. 19th St. Westbound		E. Bay Terrace Northbound			W. 19th St. Eastbound		
Start Time	Left	App. Total	Right	Left	App. Total	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1								
Peak Hour for Entire Intersection Begins at 03:00 PM								
03:00 PM	**1**	**1**	0	3	3	**6**	**6**	**10**
03:15 PM	0	0	0	**4**	**4**	1	1	5
03:30 PM	0	0	0	2	2	1	1	3
03:45 PM	0	0	0	2	2	1	1	3
Total Volume	1	1	0	11	11	9	9	21
% App. Total	100		0	100		100		
PHF	.250	.250	.000	.688	.688	.375	.375	.525



OCEAN COUNTY 89 (South to North)

Mile Posts: 0.000 - 2.000

Pavement

Shoulder

Number of Lanes

Speed Limit

Street Name

Interstate Route

US Route

NJ Route

County Road

Interchange Number

Grade Separated Interchange

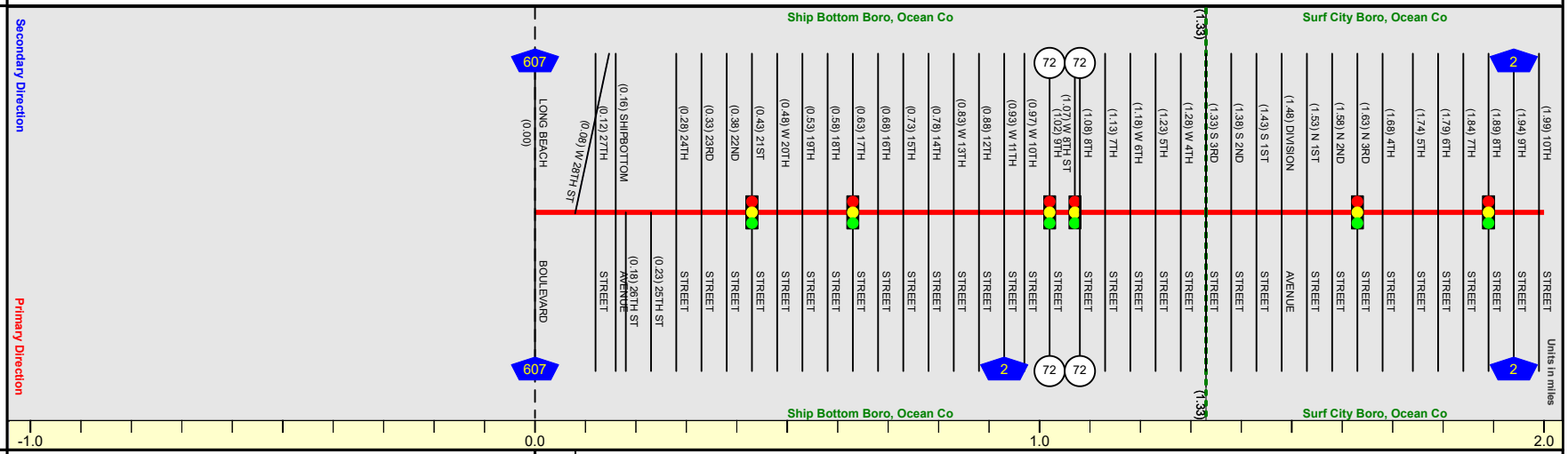
Traffic Signal

Traffic Monitoring Sites (WIM, AVC, VOL)

Road Underpass

Road Overpass

Dyn Msg Sign (DMS)



Street Name	West 28th Street — Central Avenue
Jurisdiction	County
Functional Class	Urban Local
Federal Aid - NHS Sy	Non-Federal Aid
Control Section	
Speed Limit	99 — 35
Number of Lanes	1 — 2 — 3 — 2
Med. Type	None
Med. Width	
Pavement	32 — 24 — 40 — 36 — 24
Shoulder	8 — 12 — 12
Traffic Volume	
Traffic Sta. ID	
Structure No.	
Enlarged Views	

Begin Ocean County 89 MP=0.00

SRI = 15000089__

Date last inventoried: September 2011

Page Created: June, 2020

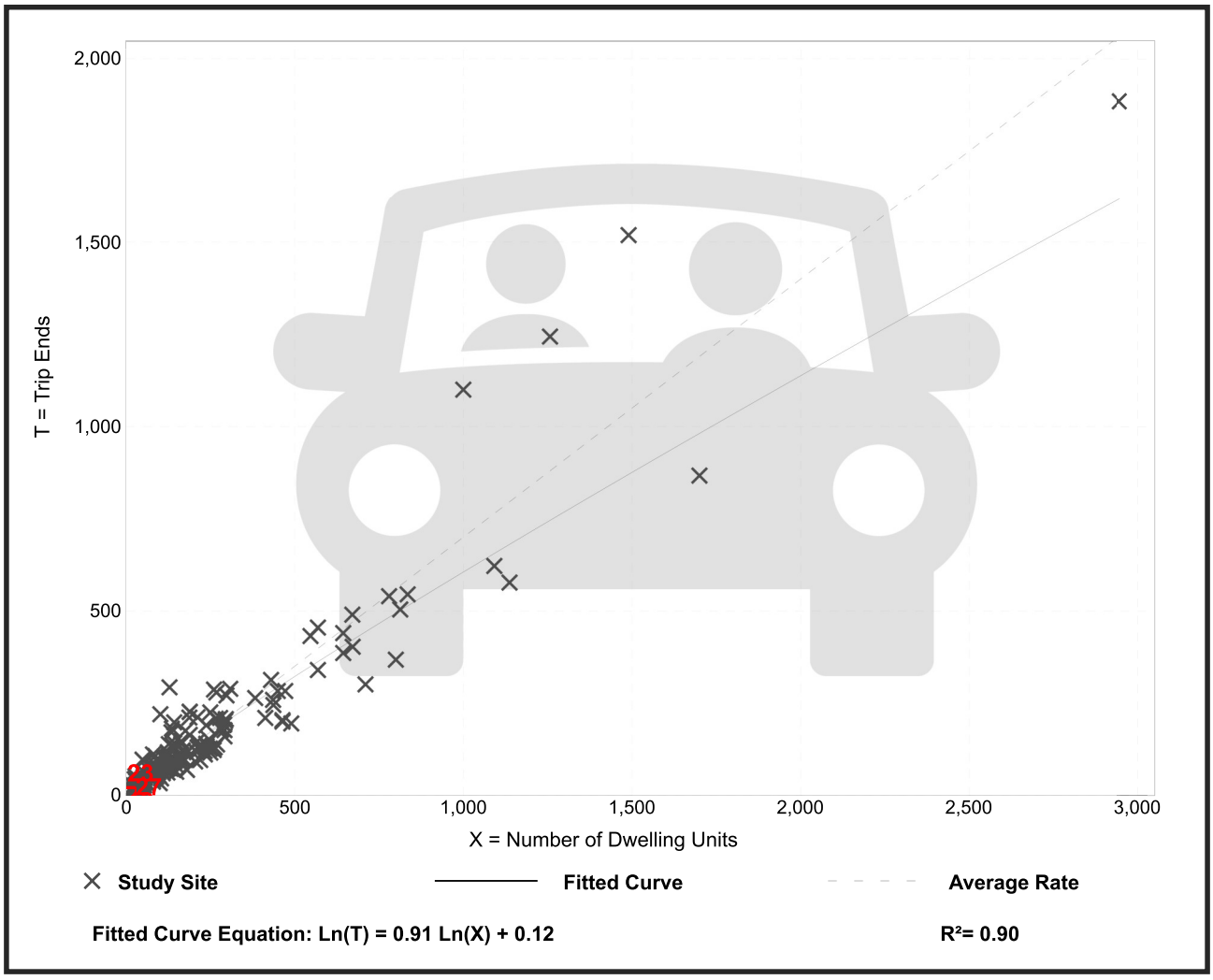
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	192
Avg. Num. of Dwelling Units:	226
Directional Distribution:	25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

Data Plot and Equation



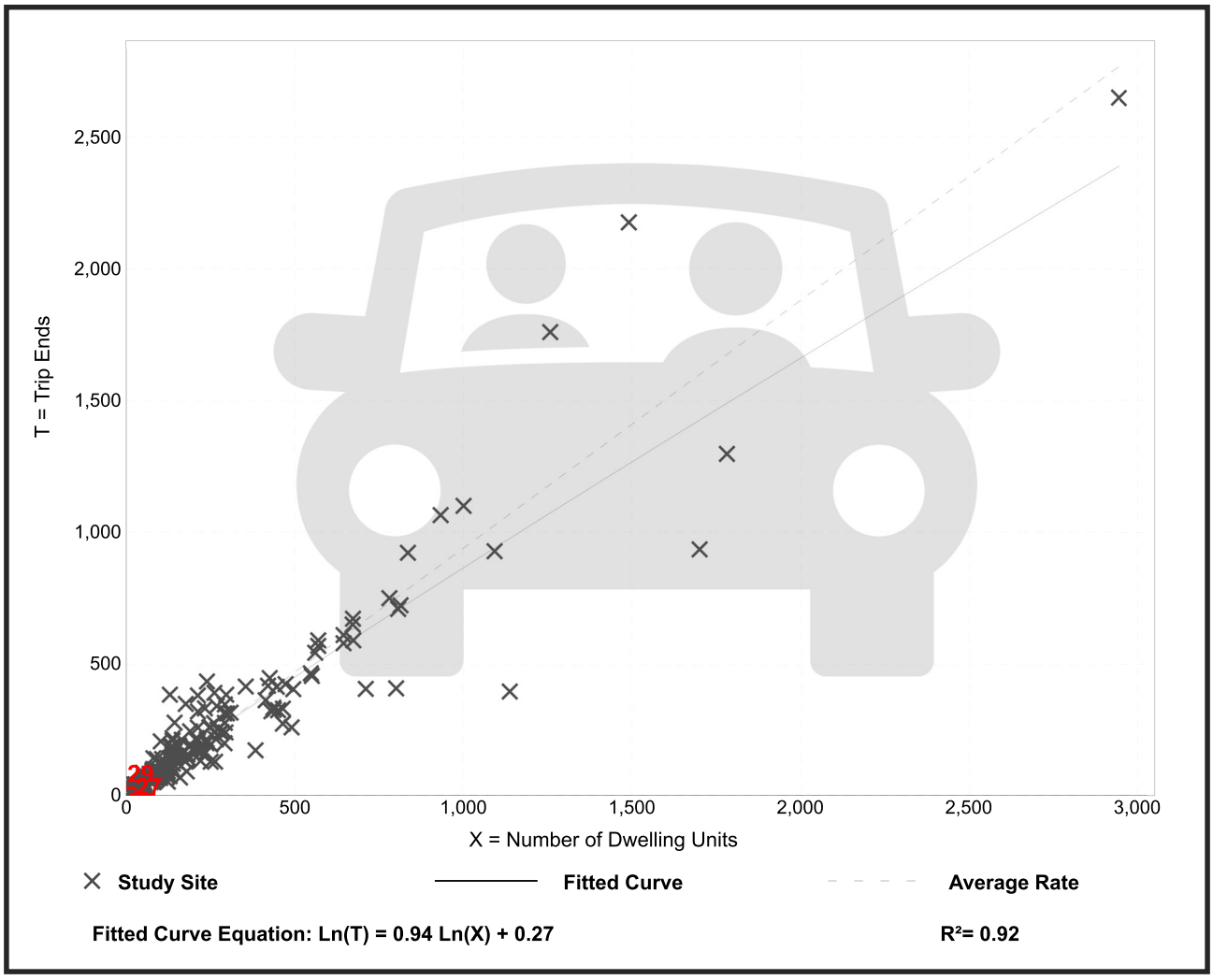
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 208
Avg. Num. of Dwelling Units: 248
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

Data Plot and Equation



Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	18	10	0	2	2	0	12	0	5	53	2
Future Vol, veh/h	30	18	10	0	2	2	0	12	0	5	53	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	48	29	16	0	3	3	0	19	0	8	84	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	124	121	86	143	122	19	87	0	0	19	0	0
Stage 1	102	102	-	19	19	-	-	-	-	-	-	-
Stage 2	22	19	-	124	103	-	-	-	-	-	-	-
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	855	773	978	831	772	1065	1522	-	-	1611	-	-
Stage 1	909	815	-	1005	884	-	-	-	-	-	-	-
Stage 2	1002	884	-	885	814	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	846	769	978	791	768	1065	1522	-	-	1611	-	-
Mov Cap-2 Maneuver	846	769	-	791	768	-	-	-	-	-	-	-
Stage 1	909	811	-	1005	884	-	-	-	-	-	-	-
Stage 2	995	884	-	836	810	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	9.1	0	0.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1522	-	-	839	892	1611	-	-
HCM Lane V/C Ratio	-	-	-	0.11	0.007	0.005	-	-
HCM Control Delay (s)	0	-	-	9.8	9.1	7.2	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	3	0	0	10	0	0	12	2	5	48	10
Future Vol, veh/h	0	3	0	0	10	0	0	12	2	5	48	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	5	0	0	16	0	0	19	3	8	76	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	129	122	84	124	129	21	92	0	0	22	0	0
Stage 1	100	100	-	21	21	-	-	-	-	-	-	-
Stage 2	29	22	-	103	108	-	-	-	-	-	-	-
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	849	772	981	855	765	1062	1515	-	-	1607	-	-
Stage 1	911	816	-	1003	882	-	-	-	-	-	-	-
Stage 2	993	881	-	908	810	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	832	768	981	847	761	1062	1515	-	-	1607	-	-
Mov Cap-2 Maneuver	832	768	-	847	761	-	-	-	-	-	-	-
Stage 1	911	812	-	1003	882	-	-	-	-	-	-	-
Stage 2	975	881	-	898	806	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	9.8	0	0.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1515	-	-	768	761	1607	-	-
HCM Lane V/C Ratio	-	-	-	0.006	0.021	0.005	-	-
HCM Control Delay (s)	0	-	-	9.7	9.8	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	56	16	0	3	6	9
Future Vol, veh/h	56	16	0	3	6	9
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	62	62	62	62	62	62
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	90	26	0	5	10	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	116	0	108	103
Stage 1	-	-	-	-	103	-
Stage 2	-	-	-	-	5	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1485	-	894	957
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	1023	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1485	-	894	957
Mov Cap-2 Maneuver	-	-	-	-	894	-
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	1023	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	931	-	-	1485	-
HCM Lane V/C Ratio	0.026	-	-	-	-
HCM Control Delay (s)	9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	6.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	15	3	0	14	2
Future Vol, veh/h	2	15	3	0	14	2
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	60	60	60	60	60	60
Heavy Vehicles, %	0	13	0	0	7	0
Mvmt Flow	3	25	5	0	23	3

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	54	5	0	0	5	0
Stage 1	5	-	-	-	-	-
Stage 2	49	-	-	-	-	-
Critical Hdwy	6.4	6.33	-	-	4.17	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.417	-	-	2.263	-
Pot Cap-1 Maneuver	959	1047	-	-	1584	-
Stage 1	1023	-	-	-	-	-
Stage 2	979	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	945	1047	-	-	1584	-
Mov Cap-2 Maneuver	945	-	-	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	964	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	6.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1034	1584	-
HCM Lane V/C Ratio	-	-	0.027	0.015	-
HCM Control Delay (s)	-	-	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	3	0	1	0	8	0	0	1	68	2	2
Future Vol, veh/h	2	3	0	1	0	8	0	0	1	68	2	2
Peak Hour Factor	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
Heavy Vehicles, %	0	0	0	0	0	13	0	0	0	4	0	0
Mvmt Flow	3	5	0	2	0	13	0	0	2	110	3	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	6.7	6.5	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	40%	11%	94%
Vol Thru, %	0%	60%	0%	3%
Vol Right, %	100%	0%	89%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	5	9	72
LT Vol	0	2	1	68
Through Vol	0	3	0	2
RT Vol	1	0	8	2
Lane Flow Rate	2	8	15	116
Geometry Grp	1	1	1	1
Degree of Util (X)	0.002	0.009	0.015	0.135
Departure Headway (Hd)	3.425	4.195	3.598	4.18
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1040	845	983	862
Service Time	1.46	2.262	1.664	2.189
HCM Lane V/C Ratio	0.002	0.009	0.015	0.135
HCM Control Delay	6.5	7.3	6.7	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0	0.5

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	15	7	2	6	3	2	12	0	7	33	2
Future Vol, veh/h	15	15	7	2	6	3	2	12	0	7	33	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	52	52	52	52	52	52	52	52	52	52	52	52
Heavy Vehicles, %	0	0	0	0	0	0	0	17	0	0	9	0
Mvmt Flow	29	29	13	4	12	6	4	23	0	13	63	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	131	122	65	143	124	23	67	0	0	23	0	0
Stage 1	91	91	-	31	31	-	-	-	-	-	-	-
Stage 2	40	31	-	112	93	-	-	-	-	-	-	-
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	846	772	1005	831	770	1060	1547	-	-	1605	-	-
Stage 1	921	823	-	991	873	-	-	-	-	-	-	-
Stage 2	980	873	-	898	822	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	825	764	1005	789	762	1060	1547	-	-	1605	-	-
Mov Cap-2 Maneuver	825	764	-	789	762	-	-	-	-	-	-	-
Stage 1	918	816	-	988	870	-	-	-	-	-	-	-
Stage 2	959	870	-	848	815	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	9.4	1	1.2
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1547	-	-	826	831	1605	-	-
HCM Lane V/C Ratio	0.002	-	-	0.086	0.025	0.008	-	-
HCM Control Delay (s)	7.3	0	-	9.8	9.4	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	7	4	0	3	2	0	10	0	3	35	4
Future Vol, veh/h	2	7	4	0	3	2	0	10	0	3	35	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	52	52	52	52	52	52	52	52	52	52	52	52
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	13	8	0	6	4	0	19	0	6	67	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	107	102	71	113	106	19	75	0	0	19	0	0
Stage 1	83	83	-	19	19	-	-	-	-	-	-	-
Stage 2	24	19	-	94	87	-	-	-	-	-	-	-
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	877	792	997	869	788	1065	1537	-	-	1611	-	-
Stage 1	930	830	-	1005	884	-	-	-	-	-	-	-
Stage 2	999	884	-	918	827	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	866	789	997	848	785	1065	1537	-	-	1611	-	-
Mov Cap-2 Maneuver	866	789	-	848	785	-	-	-	-	-	-	-
Stage 1	930	827	-	1005	884	-	-	-	-	-	-	-
Stage 2	989	884	-	893	824	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	9.2	0	0.5
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1537	-	-	856	877	1611	-	-
HCM Lane V/C Ratio	-	-	-	0.029	0.011	0.004	-	-
HCM Control Delay (s)	0	-	-	9.3	9.2	7.2	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	9	1	11	11	0
Future Vol, veh/h	15	9	1	11	11	0
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	55	55	55	55	55	55
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	27	16	2	20	20	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	43	0	59	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	24	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1579	-	953	1044
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	1004	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1579	-	952	1044
Mov Cap-2 Maneuver	-	-	-	-	952	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	1003	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	952	-	-	1579	-
HCM Lane V/C Ratio	0.021	-	-	0.001	-
HCM Control Delay (s)	8.9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	3	0	0	3	4
Future Vol, veh/h	1	3	0	0	3	4
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	25	25	25	25	25	25
Heavy Vehicles, %	0	0	0	0	100	0
Mvmt Flow	4	12	0	0	12	16

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	40	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	40	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	5.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	3.1	-
Pot Cap-1 Maneuver	977	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	988	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	977	-	-	-	-	-
Mov Cap-2 Maneuver	977	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	988	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	
HCM LOS	-		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	-	-	-
HCM Lane LOS	-	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	3	0	0	3	19	0	0	1	20	1	0
Future Vol, veh/h	1	3	0	0	3	19	0	0	1	20	1	0
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	15	0	0
Mvmt Flow	2	5	0	0	5	35	0	0	2	36	2	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.1	6.6	6.4	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	25%	0%	95%
Vol Thru, %	0%	75%	14%	5%
Vol Right, %	100%	0%	86%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	4	22	21
LT Vol	0	1	0	20
Through Vol	0	3	3	1
RT Vol	1	0	19	0
Lane Flow Rate	2	7	40	38
Geometry Grp	1	1	1	1
Degree of Util (X)	0.002	0.008	0.038	0.047
Departure Headway (Hd)	3.41	4.051	3.457	4.43
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1050	883	1034	812
Service Time	1.429	2.078	1.484	2.437
HCM Lane V/C Ratio	0.002	0.008	0.039	0.047
HCM Control Delay	6.4	7.1	6.6	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0.1	0.1

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	31	18	10	0	2	2	0	12	0	5	54	2
Future Vol, veh/h	31	18	10	0	2	2	0	12	0	5	54	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	49	29	16	0	3	3	0	19	0	8	86	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	126	123	88	145	124	19	89	0	0	19	0	0
Stage 1	104	104	-	19	19	-	-	-	-	-	-	-
Stage 2	22	19	-	126	105	-	-	-	-	-	-	-
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	852	771	976	828	770	1065	1519	-	-	1611	-	-
Stage 1	907	813	-	1005	884	-	-	-	-	-	-	-
Stage 2	1002	884	-	883	812	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	843	767	976	788	766	1065	1519	-	-	1611	-	-
Mov Cap-2 Maneuver	843	767	-	788	766	-	-	-	-	-	-	-
Stage 1	907	809	-	1005	884	-	-	-	-	-	-	-
Stage 2	995	884	-	834	808	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	9.1	0	0.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1519	-	-	837	891	1611	-	-
HCM Lane V/C Ratio	-	-	-	0.112	0.007	0.005	-	-
HCM Control Delay (s)	0	-	-	9.8	9.1	7.2	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	3	0	0	10	0	0	12	2	5	49	10
Future Vol, veh/h	0	3	0	0	10	0	0	12	2	5	49	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	5	0	0	16	0	0	19	3	8	78	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	131	124	86	126	131	21	94	0	0	22	0	0
Stage 1	102	102	-	21	21	-	-	-	-	-	-	-
Stage 2	29	22	-	105	110	-	-	-	-	-	-	-
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	846	770	978	852	763	1062	1513	-	-	1607	-	-
Stage 1	909	815	-	1003	882	-	-	-	-	-	-	-
Stage 2	993	881	-	906	808	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	829	766	978	844	759	1062	1513	-	-	1607	-	-
Mov Cap-2 Maneuver	829	766	-	844	759	-	-	-	-	-	-	-
Stage 1	909	811	-	1003	882	-	-	-	-	-	-	-
Stage 2	975	881	-	896	804	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	9.8	0	0.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1513	-	-	766	759	1607	-	-
HCM Lane V/C Ratio	-	-	-	0.006	0.021	0.005	-	-
HCM Control Delay (s)	0	-	-	9.7	9.8	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	57	16	0	3	6	9
Future Vol, veh/h	57	16	0	3	6	9
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	62	62	62	62	62	62
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	92	26	0	5	10	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	118	0	110	105
Stage 1	-	-	-	-	105	-
Stage 2	-	-	-	-	5	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1483	-	892	955
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	1023	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1483	-	892	955
Mov Cap-2 Maneuver	-	-	-	-	892	-
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	1023	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	929	-	-	1483	-
HCM Lane V/C Ratio	0.026	-	-	-	-
HCM Control Delay (s)	9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	6.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	15	3	0	14	2
Future Vol, veh/h	2	15	3	0	14	2
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	60	60	60	60	60	60
Heavy Vehicles, %	0	13	0	0	7	0
Mvmt Flow	3	25	5	0	23	3

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	54	5	0	0	5	0
Stage 1	5	-	-	-	-	-
Stage 2	49	-	-	-	-	-
Critical Hdwy	6.4	6.33	-	-	4.17	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.417	-	-	2.263	-
Pot Cap-1 Maneuver	959	1047	-	-	1584	-
Stage 1	1023	-	-	-	-	-
Stage 2	979	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	945	1047	-	-	1584	-
Mov Cap-2 Maneuver	945	-	-	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	964	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	6.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1034	1584	-
HCM Lane V/C Ratio	-	-	0.027	0.015	-
HCM Control Delay (s)	-	-	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	3	0	1	0	8	0	0	1	69	2	2
Future Vol, veh/h	2	3	0	1	0	8	0	0	1	69	2	2
Peak Hour Factor	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
Heavy Vehicles, %	0	0	0	0	0	13	0	0	0	4	0	0
Mvmt Flow	3	5	0	2	0	13	0	0	2	111	3	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	6.7	6.5	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	40%	11%	95%
Vol Thru, %	0%	60%	0%	3%
Vol Right, %	100%	0%	89%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	5	9	73
LT Vol	0	2	1	69
Through Vol	0	3	0	2
RT Vol	1	0	8	2
Lane Flow Rate	2	8	15	118
Geometry Grp	1	1	1	1
Degree of Util (X)	0.002	0.009	0.015	0.137
Departure Headway (Hd)	3.427	4.199	3.602	4.181
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1040	844	982	861
Service Time	1.461	2.266	1.668	2.189
HCM Lane V/C Ratio	0.002	0.009	0.015	0.137
HCM Control Delay	6.5	7.3	6.7	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0	0.5

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	15	7	2	6	3	2	12	0	7	34	2
Future Vol, veh/h	15	15	7	2	6	3	2	12	0	7	34	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	52	52	52	52	52	52	52	52	52	52	52	52
Heavy Vehicles, %	0	0	0	0	0	0	0	17	0	0	9	0
Mvmt Flow	29	29	13	4	12	6	4	23	0	13	65	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	133	124	67	145	126	23	69	0	0	23	0	0
Stage 1	93	93	-	31	31	-	-	-	-	-	-	-
Stage 2	40	31	-	114	95	-	-	-	-	-	-	-
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	844	770	1002	828	768	1060	1545	-	-	1605	-	-
Stage 1	919	822	-	991	873	-	-	-	-	-	-	-
Stage 2	980	873	-	896	820	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	823	762	1002	787	760	1060	1545	-	-	1605	-	-
Mov Cap-2 Maneuver	823	762	-	787	760	-	-	-	-	-	-	-
Stage 1	916	815	-	988	870	-	-	-	-	-	-	-
Stage 2	959	870	-	846	813	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	9.5	1	1.2
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1545	-	-	824	829	1605	-	-
HCM Lane V/C Ratio	0.002	-	-	0.086	0.026	0.008	-	-
HCM Control Delay (s)	7.3	0	-	9.8	9.5	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	7	4	0	3	2	0	10	0	3	35	4
Future Vol, veh/h	2	7	4	0	3	2	0	10	0	3	35	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	52	52	52	52	52	52	52	52	52	52	52	52
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	13	8	0	6	4	0	19	0	6	67	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	107	102	71	113	106	19	75	0	0	19	0	0
Stage 1	83	83	-	19	19	-	-	-	-	-	-	-
Stage 2	24	19	-	94	87	-	-	-	-	-	-	-
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	877	792	997	869	788	1065	1537	-	-	1611	-	-
Stage 1	930	830	-	1005	884	-	-	-	-	-	-	-
Stage 2	999	884	-	918	827	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	866	789	997	848	785	1065	1537	-	-	1611	-	-
Mov Cap-2 Maneuver	866	789	-	848	785	-	-	-	-	-	-	-
Stage 1	930	827	-	1005	884	-	-	-	-	-	-	-
Stage 2	989	884	-	893	824	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	9.2	0	0.5
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1537	-	-	856	877	1611	-	-
HCM Lane V/C Ratio	-	-	-	0.029	0.011	0.004	-	-
HCM Control Delay (s)	0	-	-	9.3	9.2	7.2	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	9	1	11	11	0
Future Vol, veh/h	15	9	1	11	11	0
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	55	55	55	55	55	55
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	27	16	2	20	20	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	43	0	59	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	24	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1579	-	953	1044
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	1004	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1579	-	952	1044
Mov Cap-2 Maneuver	-	-	-	-	952	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	1003	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	952	-	-	1579	-
HCM Lane V/C Ratio	0.021	-	-	0.001	-
HCM Control Delay (s)	8.9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	3	0	0	3	4
Future Vol, veh/h	1	3	0	0	3	4
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	25	25	25	25	25	25
Heavy Vehicles, %	0	0	0	0	100	0
Mvmt Flow	4	12	0	0	12	16

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	40	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	40	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	5.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	3.1	-
Pot Cap-1 Maneuver	977	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	988	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	977	-	-	-	-	-
Mov Cap-2 Maneuver	977	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	988	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	
HCM LOS	-		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	-	-	-
HCM Lane LOS	-	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	3	0	0	3	19	0	0	1	20	1	0
Future Vol, veh/h	1	3	0	0	3	19	0	0	1	20	1	0
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	15	0	0
Mvmt Flow	2	5	0	0	5	35	0	0	2	36	2	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.1	6.6	6.4	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	25%	0%	95%
Vol Thru, %	0%	75%	14%	5%
Vol Right, %	100%	0%	86%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	4	22	21
LT Vol	0	1	0	20
Through Vol	0	3	3	1
RT Vol	1	0	19	0
Lane Flow Rate	2	7	40	38
Geometry Grp	1	1	1	1
Degree of Util (X)	0.002	0.008	0.038	0.047
Departure Headway (Hd)	3.41	4.051	3.457	4.43
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1050	883	1034	812
Service Time	1.429	2.078	1.484	2.437
HCM Lane V/C Ratio	0.002	0.008	0.039	0.047
HCM Control Delay	6.4	7.1	6.6	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0.1	0.1

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	38	18	18	0	2	2	1	12	0	5	54	4
Future Vol, veh/h	38	18	18	0	2	2	1	12	0	5	54	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	60	29	29	0	3	3	2	19	0	8	86	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	131	128	89	157	131	19	92	0	0	19	0	0
Stage 1	105	105	-	23	23	-	-	-	-	-	-	-
Stage 2	26	23	-	134	108	-	-	-	-	-	-	-
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	846	766	975	814	763	1065	1515	-	-	1611	-	-
Stage 1	906	812	-	1000	880	-	-	-	-	-	-	-
Stage 2	997	880	-	874	810	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	837	761	975	764	758	1065	1515	-	-	1611	-	-
Mov Cap-2 Maneuver	837	761	-	764	758	-	-	-	-	-	-	-
Stage 1	905	808	-	999	879	-	-	-	-	-	-	-
Stage 2	989	879	-	814	806	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	9.1	0.6	0.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1515	-	-	846	886	1611	-	-
HCM Lane V/C Ratio	0.001	-	-	0.139	0.007	0.005	-	-
HCM Control Delay (s)	7.4	0	-	9.9	9.1	7.2	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	3	0	0	10	0	0	13	2	5	47	10
Future Vol, veh/h	0	3	0	0	10	0	0	13	2	5	47	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	5	0	0	16	0	0	21	3	8	75	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	130	123	83	125	130	23	91	0	0	24	0	0
Stage 1	99	99	-	23	23	-	-	-	-	-	-	-
Stage 2	31	24	-	102	107	-	-	-	-	-	-	-
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	847	771	982	854	764	1060	1517	-	-	1604	-	-
Stage 1	912	817	-	1000	880	-	-	-	-	-	-	-
Stage 2	991	879	-	909	811	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	830	767	982	846	760	1060	1517	-	-	1604	-	-
Mov Cap-2 Maneuver	830	767	-	846	760	-	-	-	-	-	-	-
Stage 1	912	813	-	1000	880	-	-	-	-	-	-	-
Stage 2	973	879	-	899	807	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	9.8	0	0.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1517	-	-	767	760	1604	-	-
HCM Lane V/C Ratio	-	-	-	0.006	0.021	0.005	-	-
HCM Control Delay (s)	0	-	-	9.7	9.8	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	60	16	0	5	6	9
Future Vol, veh/h	60	16	0	5	6	9
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	62	62	62	62	62	62
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	97	26	0	8	10	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	123	0	118	110
Stage 1	-	-	-	-	110	-
Stage 2	-	-	-	-	8	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1477	-	883	949
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	1020	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1477	-	883	949
Mov Cap-2 Maneuver	-	-	-	-	883	-
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	1020	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	921	-	-	1477	-
HCM Lane V/C Ratio	0.026	-	-	-	-
HCM Control Delay (s)	9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	6.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	15	3	0	14	2
Future Vol, veh/h	2	15	3	0	14	2
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	60	60	60	60	60	60
Heavy Vehicles, %	0	13	0	0	7	0
Mvmt Flow	3	25	5	0	23	3

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	54	5	0	0	5	0
Stage 1	5	-	-	-	-	-
Stage 2	49	-	-	-	-	-
Critical Hdwy	6.4	6.33	-	-	4.17	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.417	-	-	2.263	-
Pot Cap-1 Maneuver	959	1047	-	-	1584	-
Stage 1	1023	-	-	-	-	-
Stage 2	979	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	945	1047	-	-	1584	-
Mov Cap-2 Maneuver	945	-	-	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	964	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	6.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1034	1584	-
HCM Lane V/C Ratio	-	-	0.027	0.015	-
HCM Control Delay (s)	-	-	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	3	0	1	0	10	0	0	1	72	2	2
Future Vol, veh/h	2	3	0	1	0	10	0	0	1	72	2	2
Peak Hour Factor	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
Heavy Vehicles, %	0	0	0	0	0	13	0	0	0	4	0	0
Mvmt Flow	3	5	0	2	0	16	0	0	2	116	3	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	6.7	6.5	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	40%	9%	95%
Vol Thru, %	0%	60%	0%	3%
Vol Right, %	100%	0%	91%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	5	11	76
LT Vol	0	2	1	72
Through Vol	0	3	0	2
RT Vol	1	0	10	2
Lane Flow Rate	2	8	18	123
Geometry Grp	1	1	1	1
Degree of Util (X)	0.002	0.009	0.018	0.143
Departure Headway (Hd)	3.436	4.21	3.593	4.188
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1037	841	983	859
Service Time	1.473	2.28	1.663	2.196
HCM Lane V/C Ratio	0.002	0.01	0.018	0.143
HCM Control Delay	6.5	7.3	6.7	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0.1	0.5

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	59	3	3	4	2	15
Future Vol, veh/h	59	3	3	4	2	15
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	64	3	3	4	2	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	67	0	76	66
Stage 1	-	-	-	-	66	-
Stage 2	-	-	-	-	10	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1535	-	927	998
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	1013	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1535	-	925	998
Mov Cap-2 Maneuver	-	-	-	-	925	-
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	1011	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.2	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	989	-	-	1535	-
HCM Lane V/C Ratio	0.019	-	-	0.002	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	15	12	2	6	3	5	12	0	7	34	12
Future Vol, veh/h	19	15	12	2	6	3	5	12	0	7	34	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	52	52	52	52	52	52	52	52	52	52	52	52
Heavy Vehicles, %	0	0	0	0	0	0	0	17	0	0	9	0
Mvmt Flow	37	29	23	4	12	6	10	23	0	13	65	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	155	146	77	172	157	23	88	0	0	23	0	0
Stage 1	103	103	-	43	43	-	-	-	-	-	-	-
Stage 2	52	43	-	129	114	-	-	-	-	-	-	-
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	816	749	990	796	739	1060	1520	-	-	1605	-	-
Stage 1	908	814	-	976	863	-	-	-	-	-	-	-
Stage 2	966	863	-	880	805	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	792	737	990	745	727	1060	1520	-	-	1605	-	-
Mov Cap-2 Maneuver	792	737	-	745	727	-	-	-	-	-	-	-
Stage 1	902	807	-	969	857	-	-	-	-	-	-	-
Stage 2	941	857	-	821	798	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	9.6	2.2	1
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1520	-	-	815	799	1605	-	-
HCM Lane V/C Ratio	0.006	-	-	0.109	0.026	0.008	-	-
HCM Control Delay (s)	7.4	0	-	10	9.6	7.3	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	7	4	0	3	2	0	13	0	3	41	4
Future Vol, veh/h	2	7	4	0	3	2	0	13	0	3	41	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	52	52	52	52	52	52	52	52	52	52	52	52
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	13	8	0	6	4	0	25	0	6	79	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	125	120	83	131	124	25	87	0	0	25	0	0
Stage 1	95	95	-	25	25	-	-	-	-	-	-	-
Stage 2	30	25	-	106	99	-	-	-	-	-	-	-
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	854	774	982	846	770	1057	1522	-	-	1603	-	-
Stage 1	917	820	-	998	878	-	-	-	-	-	-	-
Stage 2	992	878	-	905	817	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	844	771	982	826	767	1057	1522	-	-	1603	-	-
Mov Cap-2 Maneuver	844	771	-	826	767	-	-	-	-	-	-	-
Stage 1	917	817	-	998	878	-	-	-	-	-	-	-
Stage 2	982	878	-	880	814	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	9.2	0	0.5
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1522	-	-	838	862	1603	-	-
HCM Lane V/C Ratio	-	-	-	0.03	0.011	0.004	-	-
HCM Control Delay (s)	0	-	-	9.4	9.2	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	9	1	13	11	0
Future Vol, veh/h	20	9	1	13	11	0
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	55	55	55	55	55	55
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	36	16	2	24	20	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	52	0	72	44
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1567	-	937	1032
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	1000	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1567	-	936	1032
Mov Cap-2 Maneuver	-	-	-	-	936	-
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	999	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	936	-	-	1567	-
HCM Lane V/C Ratio	0.021	-	-	0.001	-
HCM Control Delay (s)	8.9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	3	0	0	3	4
Future Vol, veh/h	1	3	0	0	3	4
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	25	25	25	25	25	25
Heavy Vehicles, %	0	0	0	0	100	0
Mvmt Flow	4	12	0	0	12	16

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	40	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	40	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	5.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	3.1	-
Pot Cap-1 Maneuver	977	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	988	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	977	-	-	-	-	-
Mov Cap-2 Maneuver	977	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	988	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	
HCM LOS	-		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	-	-	-
HCM Lane LOS	-	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	3	0	0	3	21	0	0	1	25	1	0
Future Vol, veh/h	1	3	0	0	3	21	0	0	1	25	1	0
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	15	0	0
Mvmt Flow	2	5	0	0	5	38	0	0	2	45	2	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.1	6.7	6.5	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	25%	0%	96%
Vol Thru, %	0%	75%	12%	4%
Vol Right, %	100%	0%	88%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	4	24	26
LT Vol	0	1	0	25
Through Vol	0	3	3	1
RT Vol	1	0	21	0
Lane Flow Rate	2	7	44	47
Geometry Grp	1	1	1	1
Degree of Util (X)	0.002	0.008	0.042	0.058
Departure Headway (Hd)	3.423	4.069	3.466	4.437
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1045	877	1029	810
Service Time	1.446	2.104	1.499	2.447
HCM Lane V/C Ratio	0.002	0.008	0.043	0.058
HCM Control Delay	6.5	7.1	6.7	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0.1	0.2

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	37	5	13	10	2	9
Future Vol, veh/h	37	5	13	10	2	9
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	40	5	14	11	2	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	45	0	82	43
Stage 1	-	-	-	-	43	-
Stage 2	-	-	-	-	39	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1563	-	920	1027
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	983	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1563	-	912	1027
Mov Cap-2 Maneuver	-	-	-	-	912	-
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	974	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.1	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1004	-	-	1563	-
HCM Lane V/C Ratio	0.012	-	-	0.009	-
HCM Control Delay (s)	8.6	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-