

TRAFFIC IMPACT STUDY

For

**Manhattan Beach Phase I Urban Renewal, LLC
Proposed Townhouse Development**

Property Located at:

**North Rosewell Street
Block 161.02 – Lots 20, 23, 24 & 24.01
City of South Amboy, Middlesex County, NJ**

Prepared by:



**1904 Main Street | 245 Main Street, Suite #110
Lake Como, NJ 07719 | Chester, NJ 07930
(732) 681-0760**

**Corey Chase, PE
NJ PE License #47470**

**Kevin Savage, PE, PTOE
NJ PE License #55728**

October 30, 2025

3184-99-001T

INTRODUCTION

It is proposed to construct a townhouse development on a parcel of land that is currently undeveloped, located along the northbound side of North Rosewell Street between its intersections with Augusta Street and Raritan Reach Road in the City of South Amboy, Middlesex County, New Jersey, see Figure 1 in Appendix A. The site is designated as Block 161.02 – Lots 20, 23, 24 and 24.01 on the City of South Amboy Tax Maps. It is proposed to construct 196 townhouse dwelling units (The Project). The site is located in the RM – Medium Density Residential Zone within the Beach Club District (BCD) Redevelopment Zone. Access to the site is currently provided via three driveways along North Rosewell Street, one of which located opposite Augusta Street and another located opposite Henry Street. It is proposed to construct a full movement driveway along North Rosewell Street opposite Augusta Street and a full movement driveway along North Rosewell Street opposite Henry Street.

Dynamic Traffic LLC has been retained to prepare this study to assess the traffic impact associated with the construction of The Project on the adjacent roadway network. This study documents the methodology, analyses, findings and conclusions of our study and includes:

- A detailed field inspection was conducted to obtain an inventory of existing roadway geometry, traffic control, and location and geometry of existing driveways and intersections.
- Existing traffic data was collected via manual turning movement (MTM) counts during the weekday AM and weekday PM peak periods at the intersections of:
 - North Rosewell Street and Augusta Street
 - North Rosewell Street and Henry Street
- Projections of traffic to be generated by the proposed development were prepared utilizing trip generation data as published by the Institute of Transportation Engineers. Site traffic was then assigned to the adjacent street system based upon the anticipated directional distribution.
- Capacity analyses were conducted for the Existing, No Build, and Build conditions for the study intersections.
- The proposed points of ingress and egress were inspected for adequacy of geometric design, spacing and/or alignment to streets and driveways on the opposite side of the street, relationship to other driveways adjacent to the development, and conformance with accepted design standards.
- The site plan as designed was reviewed for sufficiency in accommodating large wheel base vehicles such as delivery trucks, refuse trucks, and emergency vehicles.
- The parking layout and supply was assessed based on accepted design standards, local requirements, and demand experienced at similar developments.

EXISTING CONDITIONS

A review of the existing roadway conditions near the proposed site was conducted to provide the basis for assessing the traffic impact of the development. This included field investigations of the surrounding roadways and intersections, collection of traffic volume data, and extensive analyses.

Existing Roadway Conditions

The following are descriptions of the roadways in the study area:

North Rosewell Street is a local roadway under the City of South Amboy jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 25 MPH and the roadway provides one travel lane in each direction. Curb and sidewalk are provided along both sides of the roadway and on street parking is permitted along both frontages. In the vicinity of the site, the roadway alignment is generally straight with a curve to the east along the southern portion of the property and relatively flat. The land uses along North Rosewell Street within the study area are predominantly residential with the South Amboy Middle High School located to the south of The Project.

Augusta Street is a local roadway under the City of South Amboy jurisdiction with a general east/west orientation. In the vicinity of the site the posted speed limit is 25 MPH and the roadway provides one travel lane in each direction. Curb and sidewalk are provided along both sides of the roadway and on street parking is permitted along both frontages. In the vicinity of the site, the roadway alignment is generally straight and relatively flat. The land uses along Augusta Street within the study area are predominantly residential with the South Amboy Station located at its intersection with Mason Avenue.

Henry Street is a local roadway under the City of South Amboy jurisdiction with a general east/west orientation. In the vicinity of the site the posted speed limit is not posted and the roadway provides one travel lane in each direction. Curb and sidewalk are provided along both sides of the roadway and on street parking is permitted along both frontages. In the vicinity of the site, the roadway alignment is generally straight and relatively flat. The land uses along Henry Street within the study area are residential.

Mass Transit Facilities

NJ Transit provides both train and bus service in the nearby area. Train service is provided via the North Jersey Coast Line, which runs from Bay Head to New York Penn Station with stops at Newark Penn Station and Secaucus Junction. The South Amboy Train Station is location less than ½ mile from The Project just north of the intersection of Augusta Street and Mason Avenue. Bus service is provided via the 815 Line, which runs from New Brunswick to Woodbridge Center, as well as the 817 Line, which runs from Perth Amboy to Campbell's Junction. The nearest NJ Transit bus stops are also located less than ½ mile from The Project, at the intersections of South Broadway with Augusta Street and John Street. Additionally, the Federal Transit Administration has a ferry terminal facility located within a ½ mile of the project that hosts passenger ferry service between South Amboy and Manhattan.

Existing Traffic Volumes

Manual turning movement (MTM) counts were conducted on Tuesday, January 5, and Tuesday, June 24, 2025 from 7:00 to 9:00 AM and from 4:30 to 6:30 PM at the following intersections:

- North Rosewell Street and Augusta Street
- North Rosewell Street and Henry Street

It should be noted that the counts conducted in 2025 were marginally higher than the counts previously conducted by our office in 2021. Collected data from connected vehicle data (SMATS Traffic Solutions) revealed that the counts conducted on June 24, 2025, held an average rate of traffic volumes higher than the previous 12 months of collected data. As such, there were no seasonal factors attributed to the existing counts as the counts collected represent the most conservative analysis. Review of the collected traffic data reveals that the weekday morning peak street hour (PSH) occurs between 7:15 - 8:15 AM for both study intersections. The weekday evening PSH occurs between 5:15 - 6:15 PM for the intersection of North Rosewell Street & Augusta Street and 5:30 – 6:30 PM for the intersection of North Rosewell Street & Henry Street. Located in Appendix A, Figure 2 shows the existing peak hour traffic volumes at the study intersections. All traffic counts are contained in Appendix B.

Existing Capacity Analysis

The methodology utilized in the capacity analyses is described in the *Highway Capacity Manual*, published by the Transportation Research Board. In general, the term Level of Service (LOS) is used to provide a “qualitative” evaluation of capacity based upon certain “quantitative” calculations related to empirical values, such as traffic volume and intersection control.

An unsignalized (STOP sign controlled) driveway or side street along a through route is seldom critical from an overall capacity standpoint, however, it may be of great significance to the capacity of the minor cross-route, and it may influence the quality of traffic flow on both. When analyzing an unsignalized intersection, it is assumed that both the major street through and right turn movements are unimpeded and have the right-of-way over all side street traffic and left turns from the major street. All other turning movements in the intersection cross, merge with, or are otherwise impeded by major street movements. Traffic delays at unsignalized intersections are determined by sequentially processing these impeded movements. Table 1 describes the level of service ranges for unsignalized (stop controlled) intersections.

**Table 1
Level of Service Criteria
for Unsignalized Intersections**

Level of Service	Average Control Delay (seconds per vehicle)
a	0.0 to 10.0
b	10.1 to 15.0
c	15.1 to 25.0
d	25.1 to 35.0
e	35.1 to 50.0
f	greater than 50.0

It should be noted that the analyses within the *Highway Capacity Manual* assume a random arrival for all the movements, which may not be the case if an adjacent traffic signal is present that platoons vehicles.

All capacity analyses were performed utilizing Synchro 12 software. Table 2 summarizes the existing levels of service (LOS) and delays. All capacity analysis calculation worksheets are contained in Appendix C.

**Table 2
Existing Levels of Service**

Intersection	Direction/ Movement		AM PSH	PM PSH
North Rosewell Street & Augusta Street	EB	LR	-	a (9)
	NB	L	a (7)	a (7)
North Rosewell Street & Henry Street/Driveway	EB	LTR	a (9)	a (9)
	WB	LTR	a (9)	-
	NB	LTR	a (7)	a (7)
	SB	LTR	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)

The following are discussions pertaining to each of the existing intersections analyzed. It should be noted that the existing percentage of trucks and peak hour factors were used in the existing analysis.

North Rosewell Street and Augusta Street

Augusta Street intersects North Rosewell Street to form a T-intersection with the eastbound approach of Augusta Street operating under stop control. The northbound approach of North Rosewell Street provides a shared left turn/through lane, while the southbound approach provides a shared through/right turn lane. The eastbound approach of Augusta Street provides a shared left/right turn lane.

A review of the existing analysis reveals that all intersection movements operate at levels of service “A” during the analyzed peak periods. See Table 2 for the individual movement levels of service and delays.

North Rosewell Street and Henry Street/Driveway

Henry Street and the existing driveway both intersect North Rosewell Street to form a four-leg intersection with the eastbound approach of Henry Street and the westbound approach of the existing site driveway operating under stop control. The northbound and southbound approaches of North Rosewell Street both provide a shared left turn/through/right turn lane. The eastbound approach of Henry Street and the westbound approach of the existing driveway both provide a shared left turn/through/right turn lane.

A review of the existing analysis reveals that all intersection movements operate at levels of service “A” during the analyzed peak periods. See Table 2 for the individual movement levels of service and delays.

FUTURE CONDITIONS

Traffic volumes and operational analyses were developed for both the 2027 No Build and Build conditions. The No Build conditions provide a baseline for assessing the impact of the site development traffic on the roadway system. The process of developing the No Build and Build traffic volumes and the subsequent analyses is outlined below.

Regardless of whether the subject site is developed or not, traffic volumes on the surrounding roadways are expected to increase as a result of developments throughout the region. A growth rate for roadways within the study area was obtained from the NJDOT Annual Background Growth Rate Table, which indicates a growth rate of 1.0% per year.

Through consultation with the City of South Amboy Planning Board staff, there are two other developments in the vicinity of the site that have been approved but not yet constructed that are identified as significant traffic generators. It was assumed that the background growth rate was adequate to account for the traffic associated with all developments not listed.

- 111 David Street – Block 38 – Lots 1 & 28: A development consisting of a 2-story, 5-apartment building, located at 111 David Street, has been approved. Projections of the associated traffic volumes were developed using Institute of Transportation Engineers (ITE) publication *Trip Generation, 11th Edition* for Land Use Code (LUC) 220 – Multifamily Housing (Low-Rise) Close to Rail Transit. The adjacent development traffic volumes are shown in Figure 3.

**Table 3
Trip Generation**

Trip Type	AM PSH			PM PSH		
	In	Out	Total	In	Out	Total
Multifamily Housing – 5 Dwelling Units	1	1	2	2	1	3

- Manhattan Beach Club – Block 161.02 – Lots 6.03 & 6.004: A development consisting of two development phases, located at 2000 Schindler Drive, has been approved. Phase 1 consists of 17 studio units, 137 one-bedroom units, and 137 two-bedroom units with Phase 2 consisting of 113 one-bedroom units and 97 two-bedroom units. Projections of the associated traffic volumes were referenced from Figure 4 of *Traffic Impact Assessment*, prepared by Dolan & Dean Consulting Engineers, LLC. and dated March 14, 2019. The adjacent development traffic volumes are shown in Figure 4.

Future 2027 No Build traffic volumes were developed by applying the background growth rate of 1.0% for two (2) years to the study area roadways existing traffic volumes and adding the adjacent development traffic volumes. Figure 5, in Appendix A, shows the 2027 No Build traffic volumes.

Traffic Generation

Trip generation projections for The Project were prepared utilizing trip generation research data as published under Land Use Code 215 – Single-Family Attached Housing in the Institute of Transportation Engineers’ (ITE) publication, *Trip Generation, 11th Edition*. This publication sets forth trip generation rates based on traffic counts conducted at research sites throughout the country.

Table 4
Trip Generation

Trip Type	AM PSH			PM PSH		
	In	Out	Total	In	Out	Total
Single-Family Attached Housing – 196 Dwelling Units	30	66	96	65	49	114

As previously mentioned, there is access to the South Amboy Train Station and NJ Transit 815 and 817 bus lines and the NY Waterway South Amboy Ferry Terminal within ½ mile from The Project. NJ Transit documentation specific to New Jersey communities identifies a “Station Influence Area” to be within a one to two-mile radius of the train station. This mass transit availability will result in trip generation even lower than that which is projected by the ITE data, shown in Table 4 as these residential units will appeal to tenants who utilize mass transit as a means to commute to and from work.

Based on current US Census Bureau data for the City of South Amboy, 7% of residents utilize mass transportation as their primary means of commuting and an additional 3.5% walk. However, with the location of The Project in close proximity to both NJ Transit rail and bus lines as well as the ferry service to Manhattan, it is anticipated that the mass transit utilization will be greater than 10.5%. Conservatively, no credit was taken for close proximity of mass transportation.

Once the magnitude of traffic to be generated by the site is known, it is necessary to assign that traffic to the adjacent street system. The distribution of new traffic to the surrounding roadways is based on the location of primary arterial roadways, major signalized intersections and existing traffic patterns. Located in Appendix A, Figures 6 and 7 illustrate the Site Generated Traffic Trip Distribution and Site Generated Volumes, respectively. The Site Generated Volumes assigned to the study area network were added to the No Build traffic volumes to generate the Build traffic volumes, which are shown in Figure 8.

Future Capacity Analysis

Operational conditions at the study intersections were analyzed under the No Build and Build conditions and are summarized in Table 5 below.

Table 5
Future Levels of Service

Intersection	Direction/ Movement		AM PSH		PM PSH	
			No Build	Build	No Build	Build
North Rosewell Street & Augusta Street/Site Driveway	EB	LTR	a (8)	a (9)	a (9)	a (9)
	WB	LTR	-	a (10)	-	a (10)
	NB	LTR	a (7)	a (7)	a (7)	a (7)
North Rosewell Street & Henry Street/Site Driveway	EB	LTR	a (9)	a (10)	a (9)	a (10)
	WB	LTR	a (10)	a (10)	-	b (10)
	NB	LTR	a (7)	a (7)	a (7)	a (7)
	SB	LTR	-	-	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)

North Rosewell Street and Augusta Street/Site Driveway

The site driveway is proposed to intersect North Rosewell Street to form an unsignalized four-leg intersection with the eastbound approach of Augusta Street and the westbound approach of the site driveway operating under stop control. The northbound approach of South Street is proposed to provide a shared left turn/through/right turn lane. The southbound approach of South Street is proposed to provide a shared left turn/through/right turn lane. The eastbound approach of Augusta Street is proposed to provide a shared left turn/through/right turn lane. The westbound approach the site driveway is proposed to provide a shared left turn/through/right turn lane.

With the addition of site generated traffic, all intersection movements are anticipated to continue to operate at No Build levels of service “A” during the analyzed peak hours. See Table 5 for the individual movement levels of service and delays.

North Rosewell Street and Henry Street/Site Driveway

With the addition of site generated traffic and reconstruction of the driveway approach, all intersection movements are anticipated to continue to operate at No Build levels of service “B” or better during the analyzed peak hours. See Table 5 for the individual movement levels of service and delays.

SITE PLAN

Site Access and Circulation

The site plan was reviewed with respect to the site access and on-site circulation design. As noted previously, access to The Project will be provided via a full movement driveway along North Rosewell Street opposite Augusta Street and a full movement driveway along North Rosewell Street opposite Henry Street.

The parking lot will be serviced by parking aisles with widths of 24' for two-way circulation and 90 degree parking, which meet the Ordinance's requirements of 24'. Review of the site plan design indicates that the site can sufficiently accommodate, within paved areas, a large wheel base vehicle, such as a single unit truck (SU), along with the automobile traffic anticipated.

Parking

The Residential Site Improvement Standards (RSIS) set forth a parking requirement of 2.3 parking spaces per two-bedroom unit for townhouses. The Project proposes 196 two-bedroom units which equates to a parking requirement of 451 spaces for The Project based on RSIS requirements. The RSIS notes that alternative parking standards shall be accepted if they better reflect local conditions. Accordingly, these considerations which include the proximity to various forms of mass transit were evaluated as part of the development of the Redevelopment Plan for the subject property.

The City of South Amboy BCD Redevelopment Plan sets forth a parking requirement of 2.0 parking spaces per two-bedroom unit for residential uses. This equates to a parking requirement of 392 parking spaces for the proposed 196 dwelling unit townhouse development. The site as proposed provides a garage and driveway combination per dwelling unit as well as 98 guest spaces which satisfies the Redevelopment Plan requirement.

It is proposed to provide parking stalls with dimensions of 9'x18', which satisfy the Ordinance and the RSIS minimum requirement of 9'x18'.

FINDINGS & CONCLUSIONS

Findings

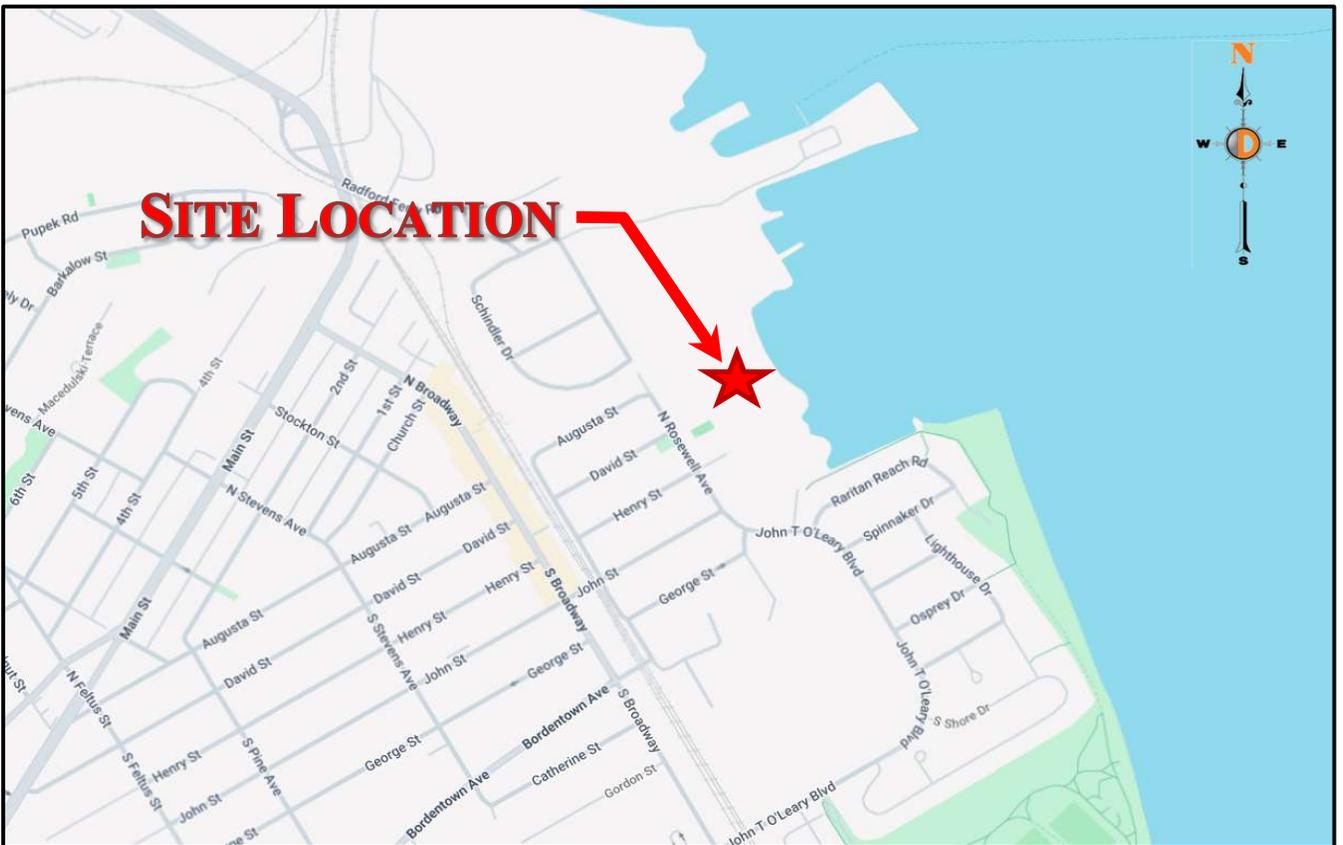
Based upon the detailed analyses as documented herein, the following findings are noted:

- The proposed 196 dwelling unit townhouse development is projected to generate 30 entering trips and 66 exiting trips during the weekday morning peak hour and 65 entering trips and 49 exiting trips during the evening peak hour that are “new” to the adjacent roadway network. Note that conservatively no credit was taken for the close proximity of mass transportation as well as the future ferry terminal.
- Access to the site is proposed to construct a full movement driveway along North Rosewell Street opposite Augusta Street and a full movement driveway along North Rosewell Street opposite Henry Street.
- With the addition of site generated traffic and the designed site driveway, the intersection of North Rosewell Street and Augusta Street/Site Driveway is anticipated to operate at levels of service “A” during the peak hours studied.
- With the addition of site generated traffic and reconstruction of the driveway approach, the intersection of North Rosewell Street and Henry Street/Site Driveway is anticipated to operate at levels of service “B” or better during the peak hours studied.
- As proposed, The Project’s site driveways and internal circulation have been designed to provide for safe and efficient movement of automobiles and large wheel base vehicles.
- The proposed parking supply and design is sufficient to support the projected demand and satisfies the Ordinance and BCD Redevelopment Plan requirements.

Conclusions

Based upon our Traffic Impact Study as detailed in the body of this report, it is the professional opinion of Dynamic Traffic LLC that the adjacent street system of the City of South Amboy will not experience any significant degradation in operating conditions with the construction of The Project. The site driveways are located to provide safe and efficient access to the adjacent roadway system. The site plan as proposed provides for good circulation throughout the site and provides adequate parking to accommodate The Project’s needs.

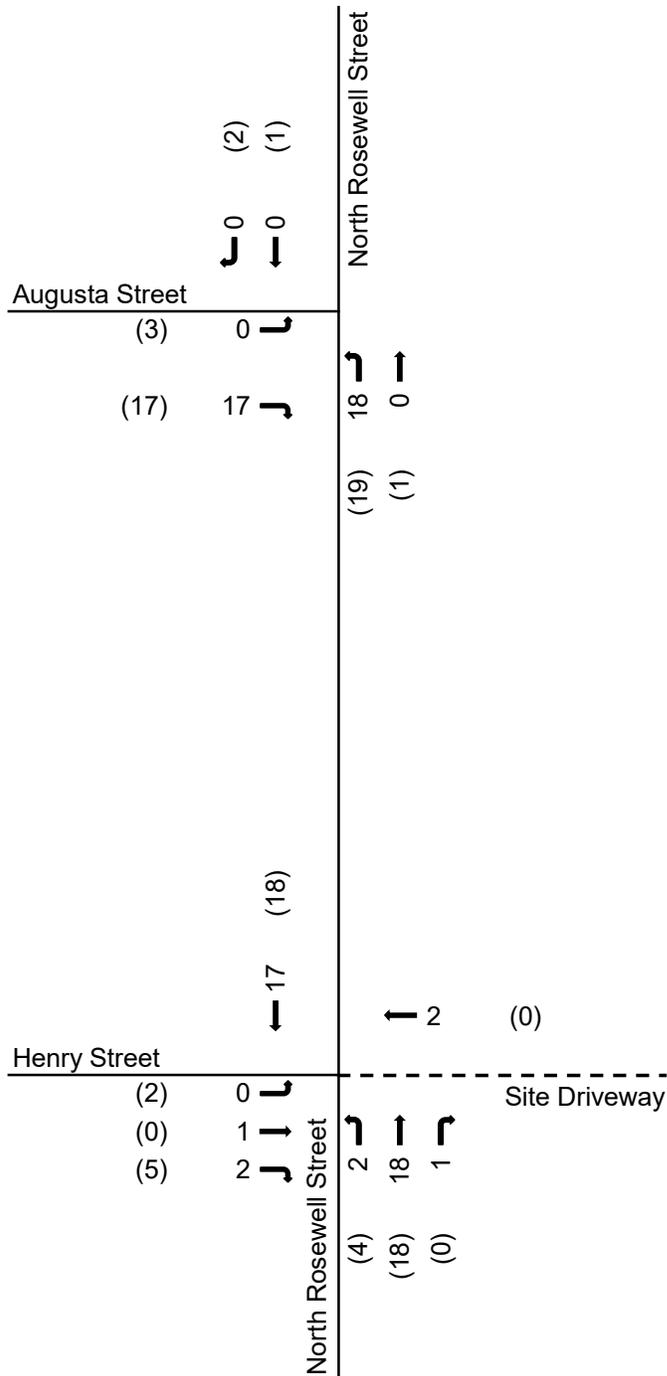
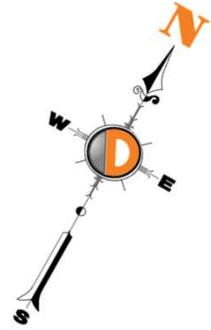
Appendix A
Traffic Volume Figures



Proposed Townhouse Development
 Traffic Impact Study
 3184-99-001T

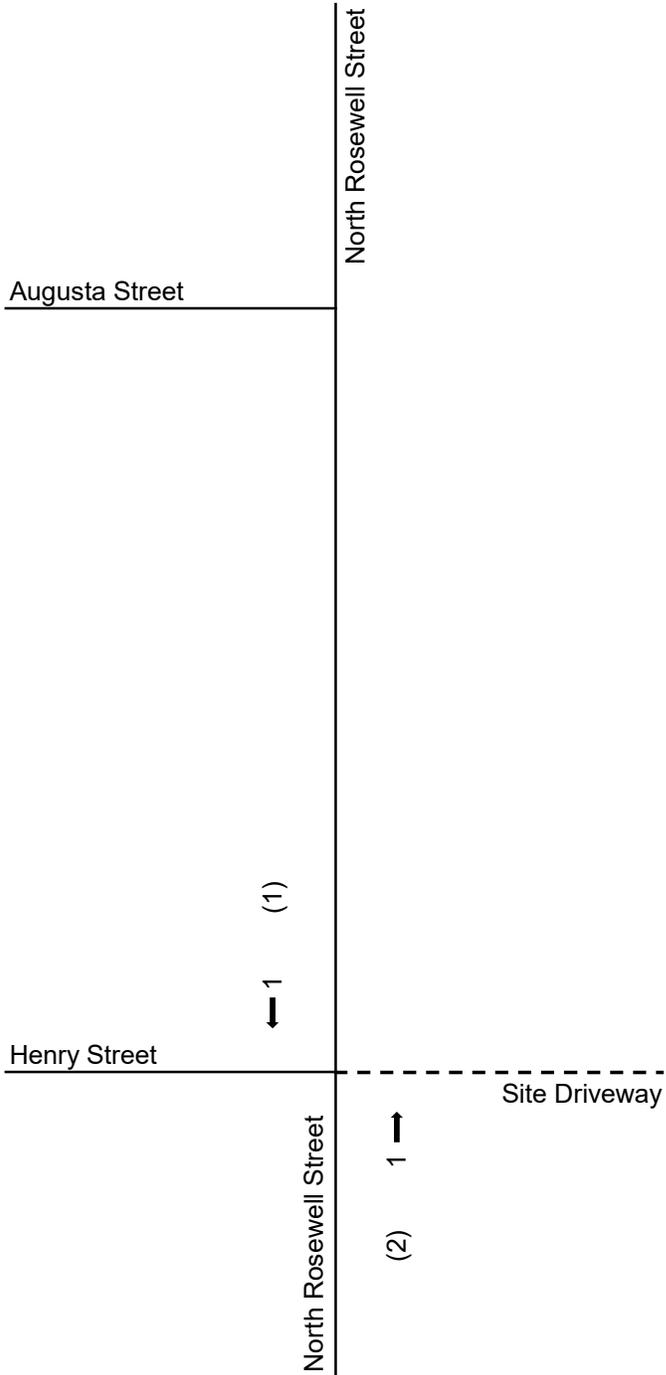
Figure 1

Site Location Map



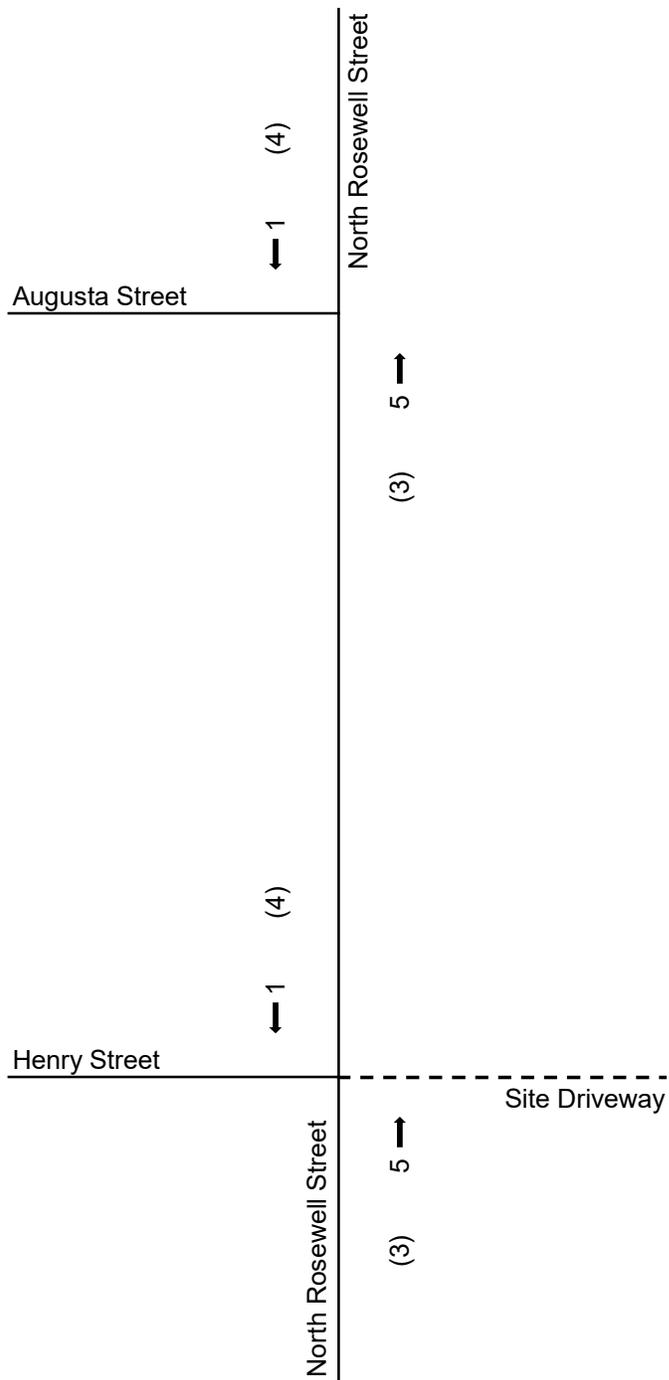
LEGEND

- Existing Roadway
- - - Proposed Roadway
- ← AM (PM)



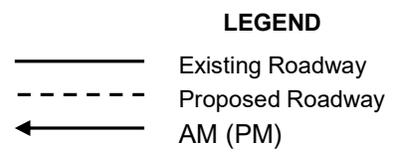
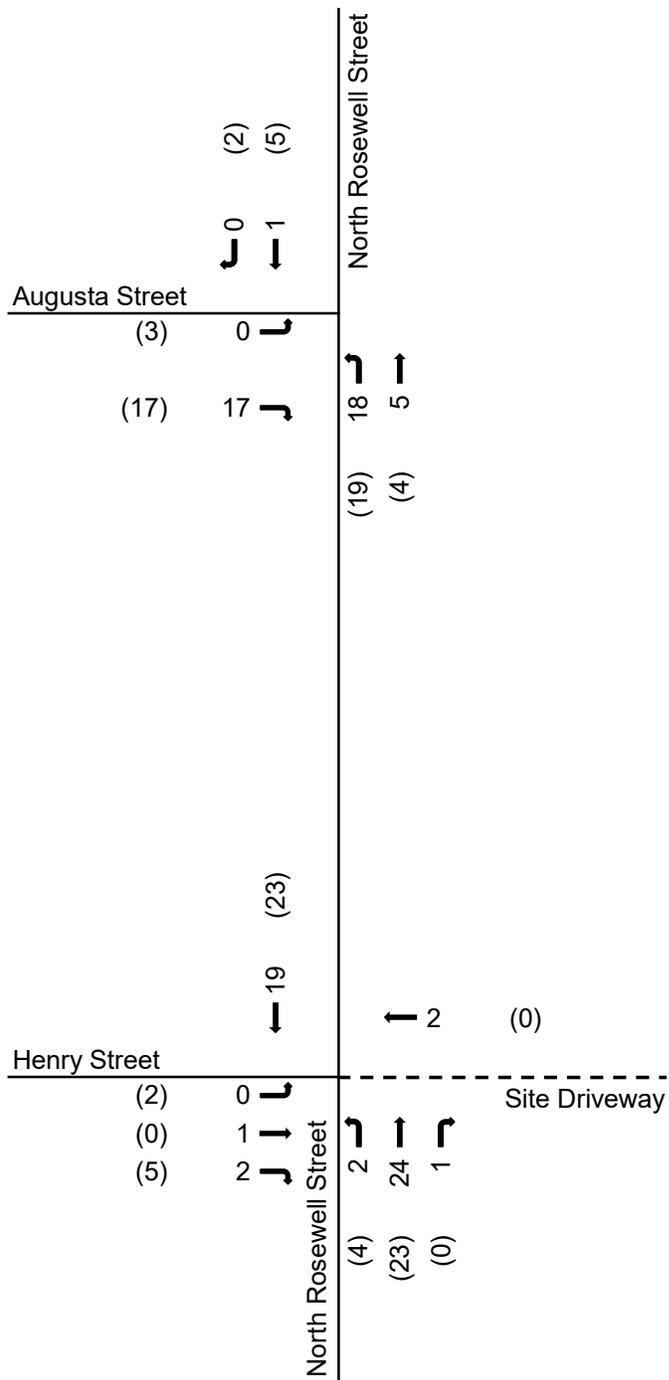
LEGEND

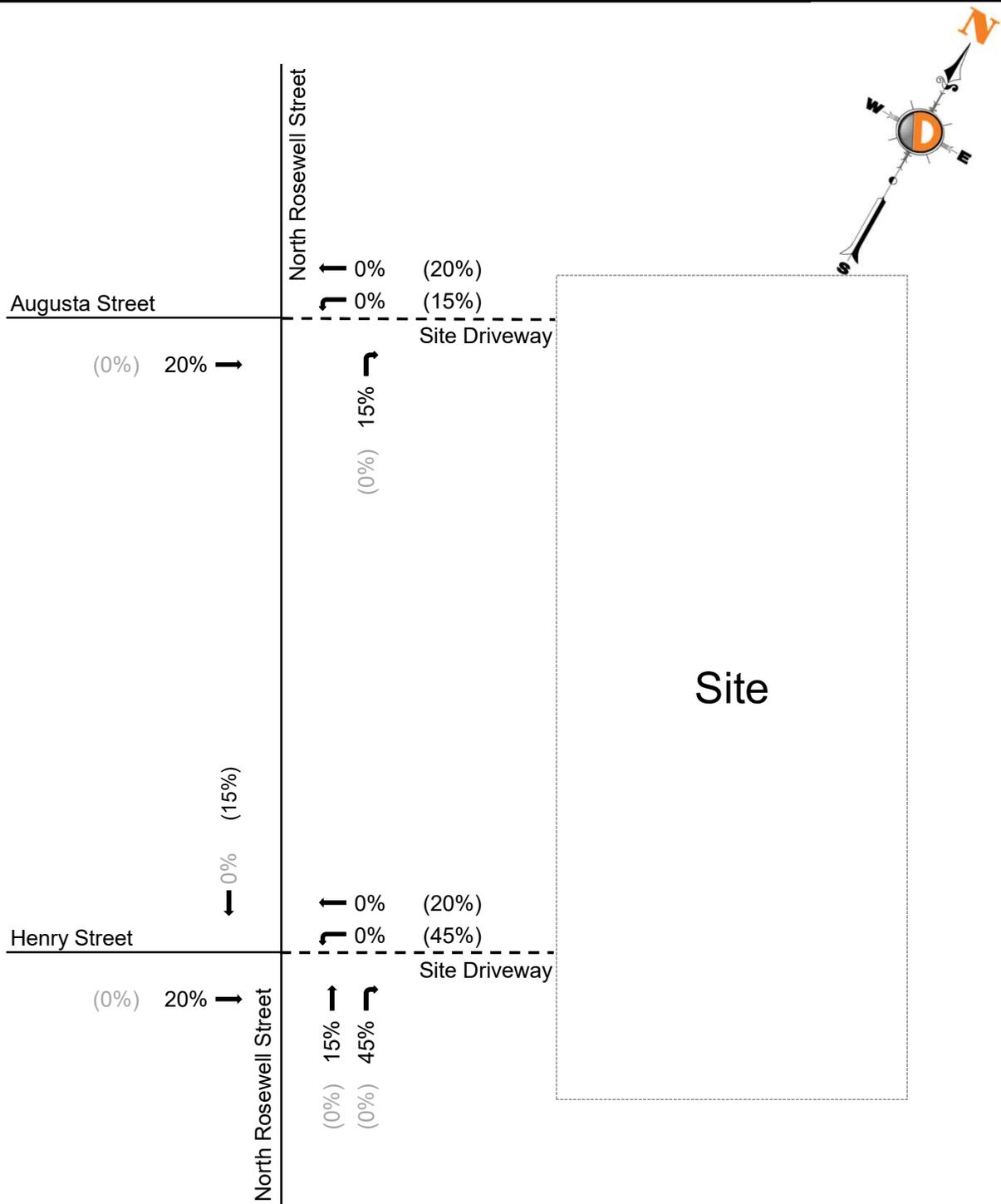
—	Existing Roadway
- - -	Proposed Roadway
←	AM (PM)



LEGEND

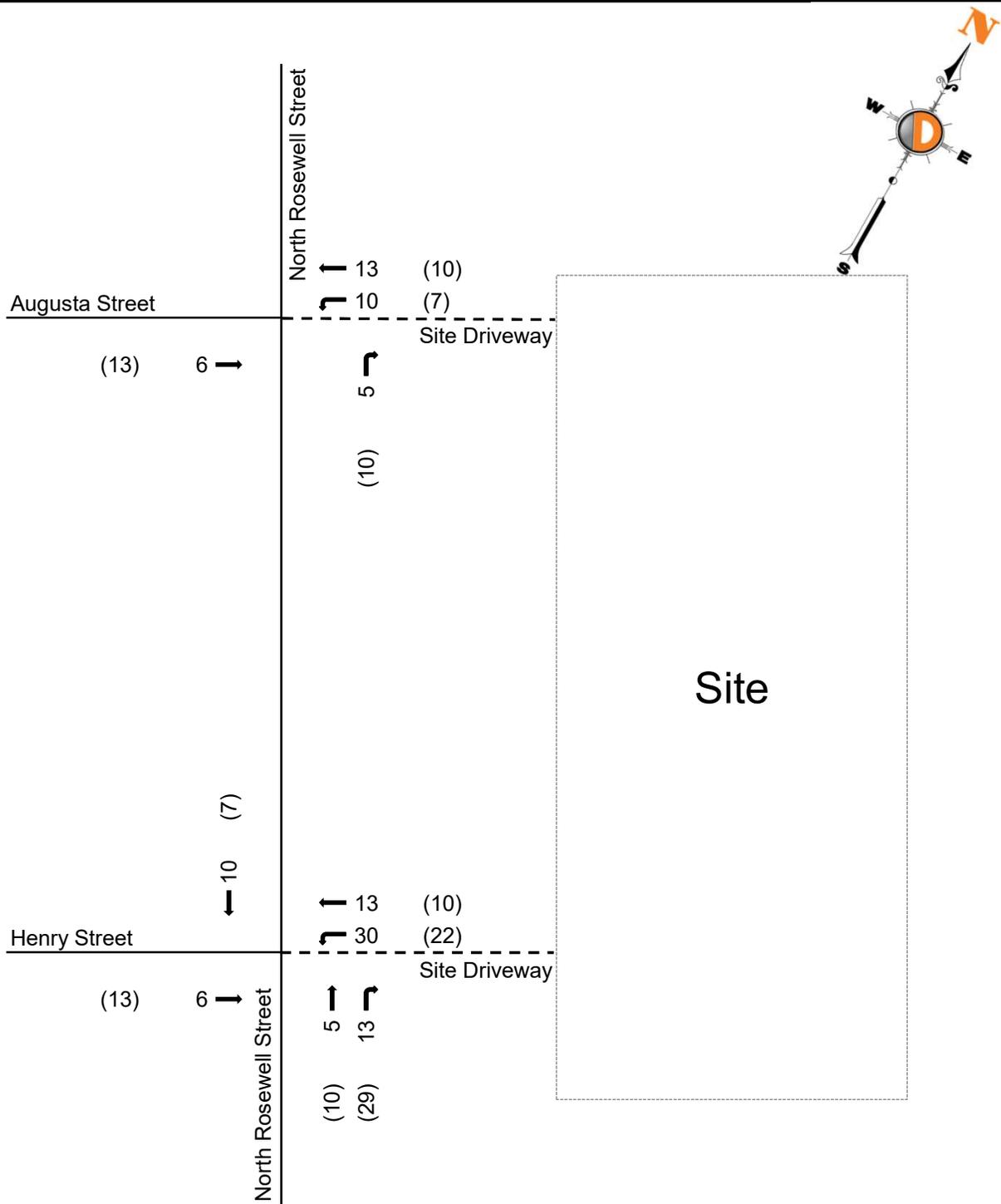
	Existing Roadway
	Proposed Roadway
	AM (PM)





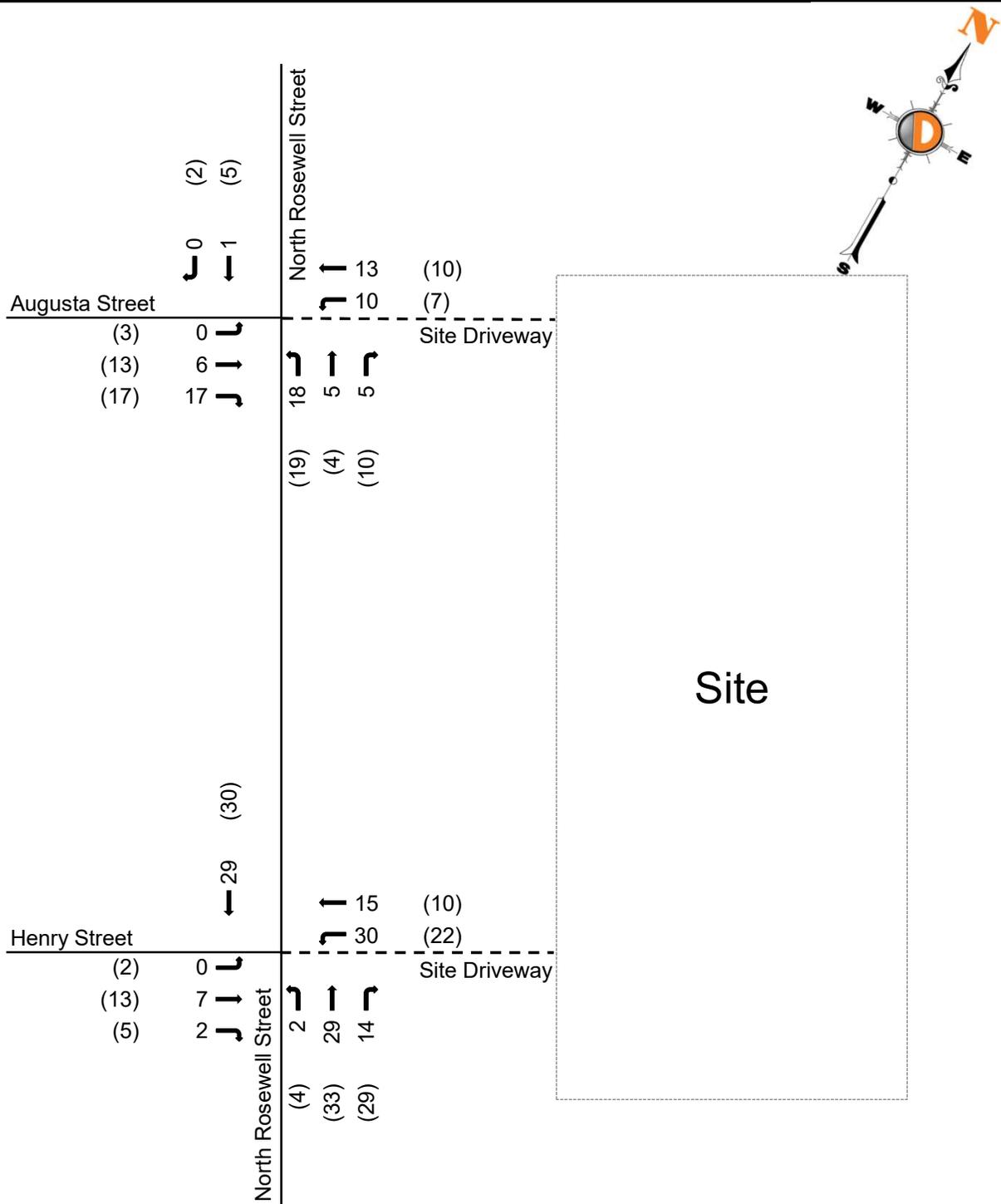
LEGEND

- Existing Roadway
- - - Proposed Roadway
- ← IN (OUT)



LEGEND

- Existing Roadway
- - - Proposed Roadway
- ← AM (PM)



LEGEND

- Existing Roadway
- - - Proposed Roadway
- ← AM (PM)

Appendix B
Project Information

Dynamic Traffic, LLC

www.dynamictraffic.com

732-681-0760

E/W: Henry Street/Driveway
 N/S: Rosewell Avenue
 Town/County: South Amboy/Middlesex
 Job #: 3184-99-001T

File Name : Rosewell Ave & Henry St-Dway - AMPM
 Site Code : 00000000
 Start Date : 6/24/2025
 Page No : 1

Groups Printed- Cars - Trucks (SU) - Trucks (TT)

Start Time	Henry Street Eastbound					Driveway Westbound					Rosewell Avenue Northbound					Rosewell Avenue Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	3	1	4	0	0	0	0	0	0	7	0	0	7	0	3	0	0	3	14
07:15 AM	0	0	0	0	0	0	0	0	2	2	0	4	0	0	4	0	4	0	0	4	10
07:30 AM	0	1	0	0	1	0	0	0	1	1	0	4	1	0	5	0	4	0	0	4	11
07:45 AM	0	0	1	2	3	0	1	0	0	1	0	3	0	0	3	0	2	0	0	2	9
Total	0	1	4	3	8	0	1	0	3	4	0	18	1	0	19	0	13	0	0	13	44
08:00 AM	0	0	1	3	4	0	1	0	0	1	2	7	0	0	9	0	7	0	0	7	21
08:15 AM	0	0	1	1	2	0	0	0	0	0	0	1	0	0	1	0	4	0	0	4	7
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	1	0	5	0	5	0	0	5	10
08:45 AM	0	0	1	1	2	2	0	0	1	3	2	1	0	0	3	0	0	0	0	0	8
Total	0	0	3	5	8	2	1	0	1	4	4	13	1	0	18	0	16	0	0	16	46
*** BREAK ***																					
04:30 PM	0	0	0	0	0	0	0	0	1	1	3	1	0	0	4	0	3	0	1	4	9
04:45 PM	0	0	2	0	2	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	6
Total	0	0	2	0	2	0	0	0	1	1	3	3	0	0	6	0	5	0	1	6	15
05:00 PM	0	0	2	0	2	0	0	0	0	0	1	1	0	0	2	0	3	0	0	3	7
05:15 PM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	0	1	0	0	1	4
05:30 PM	2	0	0	0	2	0	0	0	0	0	0	3	0	0	3	0	6	0	0	6	11
05:45 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	2	0	1	0	0	1	4
Total	2	0	2	0	4	0	0	0	1	1	3	7	0	0	10	0	11	0	0	11	26
06:00 PM	0	0	0	0	0	0	0	0	0	0	4	3	0	0	7	0	3	0	0	3	10
06:15 PM	0	0	5	0	5	0	0	0	1	1	0	10	0	0	10	0	8	0	0	8	24
Grand Total	2	1	16	8	27	2	2	0	7	11	14	54	2	0	70	0	56	0	1	57	165
Apprch %	7.4	3.7	59.3	29.6		18.2	18.2	0	63.6		20	77.1	2.9	0		0	98.2	0	1.8		
Total %	1.2	0.6	9.7	4.8	16.4	1.2	1.2	0	4.2	6.7	8.5	32.7	1.2	0	42.4	0	33.9	0	0.6	34.5	
Cars	2	1	16	8	27	2	2	0	7	11	14	54	2	0	70	0	56	0	1	57	165
% Cars	100	100	100	100	100	100	100	0	100	100	100	100	100	0	100	0	100	0	100	100	100
Trucks (SU)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks (SU)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Dynamic Traffic, LLC

www.dynamictraffic.com

732-681-0760

E/W: Henry Street/Driveway
 N/S: Rosewell Avenue
 Town/County: South Amboy/Middlesex
 Job #: 3184-99-001T

File Name : Rosewell Ave & Henry St-Dway - AMPM
 Site Code : 00000000
 Start Date : 6/24/2025
 Page No : 2

Start Time	Henry Street Eastbound					Driveway Westbound					Rosewell Avenue Northbound					Rosewell Avenue Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	0	0	0	2	2	0	4	0	0	4	0	4	0	0	4	10
07:30 AM	0	1	0	0	1	0	0	0	1	1	0	4	1	0	5	0	4	0	0	4	11
07:45 AM	0	0	1	2	3	0	1	0	0	1	0	3	0	0	3	0	2	0	0	2	9
08:00 AM	0	0	1	3	4	0	1	0	0	1	2	7	0	0	9	0	7	0	0	7	21
Total Volume	0	1	2	5	8	0	2	0	3	5	2	18	1	0	21	0	17	0	0	17	51
% App. Total	0	12.5	25	62.5		0	40	0	60		9.5	85.7	4.8	0		0	100	0	0		
PHF	.000	.250	.500	.417	.500	.000	.500	.000	.375	.625	.250	.643	.250	.000	.583	.000	.607	.000	.000	.607	.607
Cars	0	1	2	5	8	0	2	0	3	5	2	18	1	0	21	0	17	0	0	17	51
% Cars	0	100	100	100	100	0	100	0	100	100	100	100	100	0	100	0	100	0	0	100	100
Trucks (SU)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks (SU)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 12:00 PM to 06:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:30 PM

05:30 PM	2	0	0	0	2	0	0	0	0	0	0	3	0	0	3	0	6	0	0	6	11
05:45 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	2	0	1	0	0	1	4
06:00 PM	0	0	0	0	0	0	0	0	0	0	4	3	0	0	7	0	3	0	0	3	10
06:15 PM	0	0	5	0	5	0	0	0	1	1	0	10	0	0	10	0	8	0	0	8	24
Total Volume	2	0	5	0	7	0	0	0	2	2	4	18	0	0	22	0	18	0	0	18	49
% App. Total	28.6	0	71.4	0		0	0	0	100		18.2	81.8	0	0		0	100	0	0		
PHF	.250	.000	.250	.000	.350	.000	.000	.000	.500	.500	.250	.450	.000	.000	.550	.000	.563	.000	.000	.563	.510
Cars	2	0	5	0	7	0	0	0	2	2	4	18	0	0	22	0	18	0	0	18	49
% Cars	100	0	100	0	100	0	0	0	100	100	100	100	0	0	100	0	100	0	0	100	100
Trucks (SU)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks (SU)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Intersections: N Rosewell Ave & Augsta St, N Rosewell Ave & Henry St

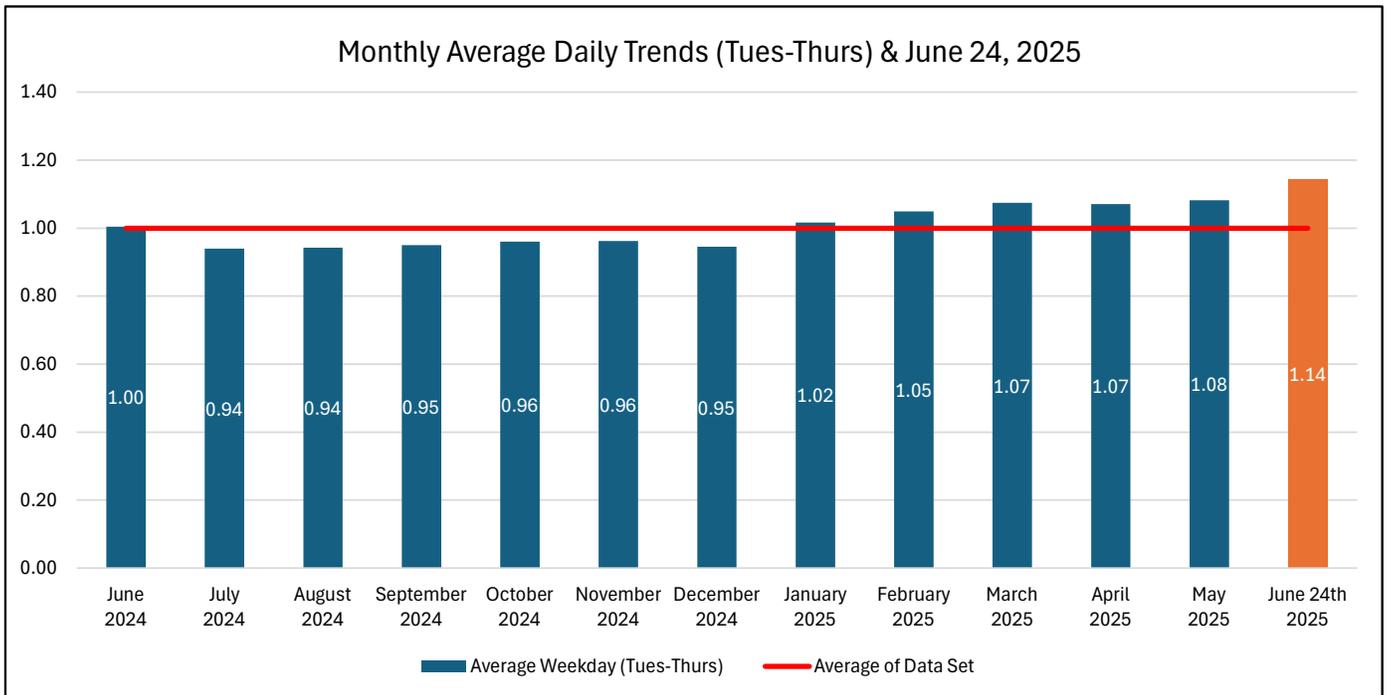
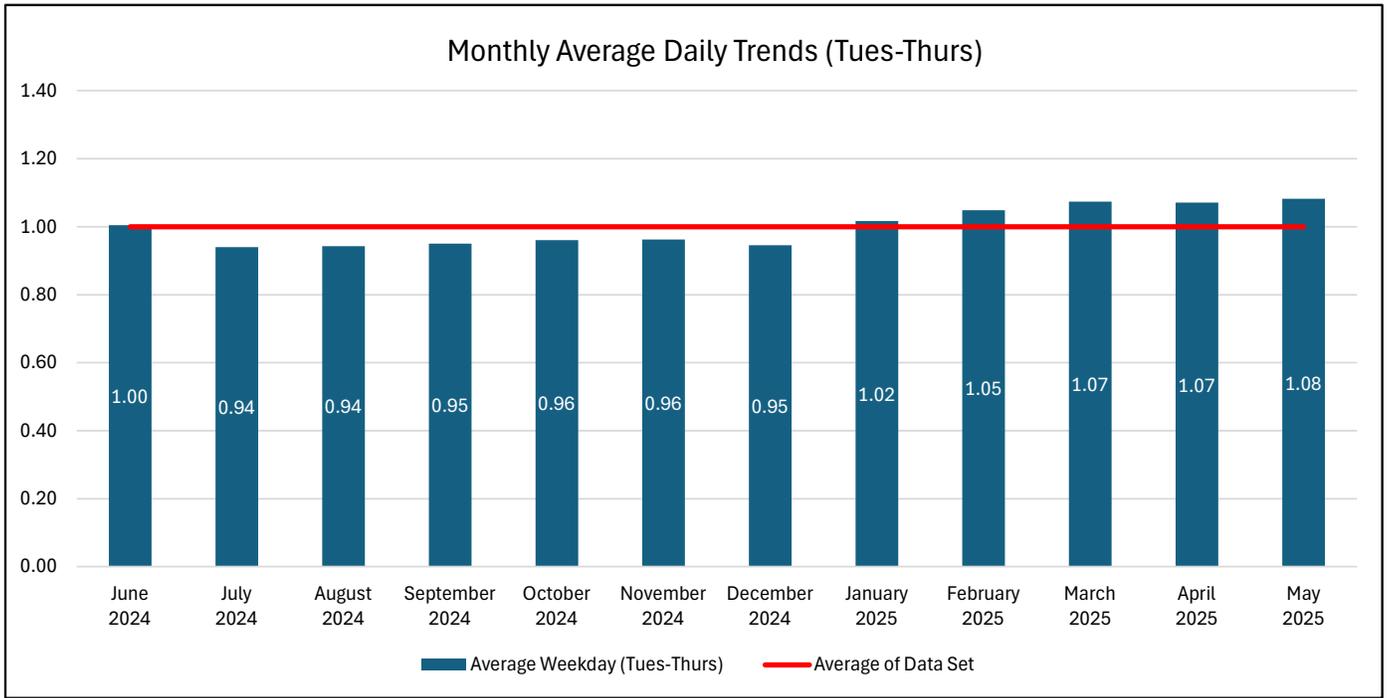
City/County: South Amboy/Middlesex

DTraffic Project #: 3184-99-001T

Data Period: June 2024 - May 2025

Analyst: J. Nadolny

N Rosewell Ave & Augusta St and N Rosewell Ave & Henry St Monthly Traffic Variation



Appendix C

Capacity Analysis

10: North Rosewell Street & Augusta Street/Site Driveway

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	17	0	0	0	18	0	0	0	0	0
Future Vol, veh/h	0	0	17	0	0	0	18	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	2	-	-	0	-
Peak Hour Factor	50	50	50	50	50	50	50	50	50	50	50	50
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	34	0	0	0	36	0	0	0	0	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	74	74	2	74	74	0	2	0	0	0	0	0
Stage 1	2	2	-	72	72	-	-	-	-	-	-	-
Stage 2	72	72	-	2	2	-	-	-	-	-	-	-
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	921	820	1088	921	820	-	1634	-	-	-	-	-
Stage 1	1026	898	-	943	839	-	-	-	-	-	-	-
Stage 2	943	839	-	1026	898	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	802	1088	873	802	-	1634	-	-	-	-	-
Mov Cap-2 Maneuver	-	802	-	873	802	-	-	-	-	-	-	-
Stage 1	1026	898	-	922	820	-	-	-	-	-	-	-
Stage 2	922	820	-	994	898	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v		0	7.25	0
HCM LOS	-	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1634	-	-	-	-	-	-
HCM Lane V/C Ratio	0.022	-	-	-	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	-	0	0	-
HCM Lane LOS	A	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	-	-

10: North Rosewell Street & Augusta Street/Site Driveway

Intersection												
Int Delay, s/veh	7.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	0	17	0	0	0	19	1	0	0	1	2
Future Vol, veh/h	3	0	17	0	0	0	19	1	0	0	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	0	0	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	2	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	0	22	0	0	0	25	1	0	0	1	3

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	58	58	8	52	60	1	9	0	0	1	0	0
Stage 1	8	8	-	51	51	-	-	-	-	-	-	-
Stage 2	51	51	-	1	9	-	-	-	-	-	-	-
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	943	837	1080	952	835	1089	1624	-	-	1635	-	-
Stage 1	1019	893	-	967	857	-	-	-	-	-	-	-
Stage 2	967	857	-	1027	892	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	924	820	1075	918	819	1089	1617	-	-	1635	-	-
Mov Cap-2 Maneuver	924	820	-	918	819	-	-	-	-	-	-	-
Stage 1	1014	889	-	953	844	-	-	-	-	-	-	-
Stage 2	953	844	-	1006	888	-	-	-	-	-	-	-

Approach	EB		WB			NB			SB			
HCM Ctrl Dly, s/v	8.52		0			6.9			0			
HCM LOS	A		A									

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1615	-	-	1050	-	1635	-	-
HCM Lane V/C Ratio	0.015	-	-	0.025	-	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.5	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-

10: North Rosewell Street & Augusta Street/Site Driveway

Intersection												
Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	17	0	0	0	18	5	0	0	1	0
Future Vol, veh/h	0	0	17	0	0	0	18	5	0	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	2	-	-	0	-
Peak Hour Factor	50	50	50	50	50	50	50	50	50	50	50	50
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	34	0	0	0	36	10	0	0	2	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	84	84	2	84	84	10	2	0	0	10	0	0
Stage 1	2	2	-	82	82	-	-	-	-	-	-	-
Stage 2	82	82	-	2	2	-	-	-	-	-	-	-
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	908	810	1088	908	810	1077	1634	-	-	1623	-	-
Stage 1	1026	898	-	931	831	-	-	-	-	-	-	-
Stage 2	931	831	-	1026	898	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	887	792	1088	860	792	1077	1634	-	-	1623	-	-
Mov Cap-2 Maneuver	887	792	-	860	792	-	-	-	-	-	-	-
Stage 1	1026	898	-	911	812	-	-	-	-	-	-	-
Stage 2	911	812	-	994	898	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	8.42		0		5.68		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1409	-	-	1088	-	1623	-	-
HCM Lane V/C Ratio	0.022	-	-	0.031	-	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.4	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	0	-	-

10: North Rosewell Street & Augusta Street/Site Driveway

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	0	17	0	0	0	19	4	0	0	5	2
Future Vol, veh/h	3	0	17	0	0	0	19	4	0	0	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	0	0	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	2	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	0	22	0	0	0	25	5	0	0	6	3

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	67	67	13	61	69	5	14	0	0	5	0	0
Stage 1	13	13	-	55	55	-	-	-	-	-	-	-
Stage 2	55	55	-	6	14	-	-	-	-	-	-	-
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	930	827	1073	939	826	1084	1617	-	-	1629	-	-
Stage 1	1013	889	-	963	853	-	-	-	-	-	-	-
Stage 2	963	853	-	1021	888	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	912	811	1068	906	809	1084	1610	-	-	1629	-	-
Mov Cap-2 Maneuver	912	811	-	906	809	-	-	-	-	-	-	-
Stage 1	1008	885	-	948	840	-	-	-	-	-	-	-
Stage 2	948	840	-	999	884	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	8.55		0		6.01		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1487	-	-	1041	-	1629	-	-
HCM Lane V/C Ratio	0.015	-	-	0.025	-	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.5	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-

10: North Rosewell Street & Augusta Street/Site Driveway

Intersection												
Int Delay, s/veh	7.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	6	17	10	13	0	18	5	5	0	1	0
Future Vol, veh/h	0	6	17	10	13	0	18	5	5	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	2	-	-	0	-
Peak Hour Factor	50	50	50	50	50	50	50	50	50	50	50	50
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	12	34	20	26	0	36	10	10	0	2	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	97	94	2	95	89	15	2	0	0	20	0	0
Stage 1	2	2	-	87	87	-	-	-	-	-	-	-
Stage 2	95	92	-	8	2	-	-	-	-	-	-	-
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	890	800	1088	893	805	1070	1634	-	-	1609	-	-
Stage 1	1026	898	-	926	827	-	-	-	-	-	-	-
Stage 2	917	823	-	1019	898	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	842	782	1088	833	787	1070	1634	-	-	1609	-	-
Mov Cap-2 Maneuver	842	782	-	833	787	-	-	-	-	-	-	-
Stage 1	1026	898	-	905	808	-	-	-	-	-	-	-
Stage 2	867	804	-	974	898	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	8.82		9.73		4.66		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1052	-	-	987	806	1609	-	-
HCM Lane V/C Ratio	0.022	-	-	0.047	0.057	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.8	9.7	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-

10: North Rosewell Street & Augusta Street/Site Driveway

Intersection												
Int Delay, s/veh	6.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	13	17	7	10	0	19	4	10	0	5	2
Future Vol, veh/h	3	13	17	7	10	0	19	4	10	0	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	0	0	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	2	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	17	22	9	13	0	25	5	13	0	6	3

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	74	80	13	76	75	12	14	0	0	18	0	0
Stage 1	13	13	-	61	61	-	-	-	-	-	-	-
Stage 2	61	68	-	15	14	-	-	-	-	-	-	-
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	921	814	1073	919	819	1075	1617	-	-	1612	-	-
Stage 1	1013	889	-	955	848	-	-	-	-	-	-	-
Stage 2	955	843	-	1010	888	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	888	797	1068	867	803	1075	1610	-	-	1612	-	-
Mov Cap-2 Maneuver	888	797	-	867	803	-	-	-	-	-	-	-
Stage 1	1008	885	-	940	835	-	-	-	-	-	-	-
Stage 2	926	830	-	970	884	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	9.07		9.47		4.19		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	907	-	-	927	828	1612	-	-
HCM Lane V/C Ratio	0.015	-	-	0.046	0.027	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	9.1	9.5	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

20: North Rosewell Street & Henry Street/Site Driveway

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	2	0	2	0	2	18	1	0	17	0
Future Vol, veh/h	0	1	2	0	2	0	2	18	1	0	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	3	3	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	61	61	61	61	61	61	61	61	61	61	61	61
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2	3	0	3	0	3	30	2	0	28	0

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	71	74	33	69	73	33	33	0	0	34	0	0
Stage 1	33	33	-	40	40	-	-	-	-	-	-	-
Stage 2	38	41	-	29	33	-	-	-	-	-	-	-
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	926	821	1046	929	822	1046	1592	-	-	1590	-	-
Stage 1	988	872	-	980	866	-	-	-	-	-	-	-
Stage 2	983	865	-	993	872	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	916	813	1041	919	814	1043	1585	-	-	1586	-	-
Mov Cap-2 Maneuver	916	813	-	919	814	-	-	-	-	-	-	-
Stage 1	984	867	-	975	861	-	-	-	-	-	-	-
Stage 2	977	861	-	988	867	-	-	-	-	-	-	-

Approach	EB		WB			NB			SB			
HCM Ctrl Dly, s/v	8.8		9.44			0.69			0			
HCM LOS	A		A									

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	170	-	-	952	814	1586	-	-
HCM Lane V/C Ratio	0.002	-	-	0.005	0.004	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.8	9.4	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

20: North Rosewell Street & Henry Street/Site Driveway

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	0	5	0	0	0	4	18	0	0	18	0
Future Vol, veh/h	2	0	5	0	0	0	4	18	0	0	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	51	51	51	51	51	51	51	51	51	51	51	51
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	0	10	0	0	0	8	35	0	0	35	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	86	88	35	88	88	37	35	0	0	37	0	0
Stage 1	35	35	-	53	53	-	-	-	-	-	-	-
Stage 2	51	53	-	35	35	-	-	-	-	-	-	-
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	905	806	1043	902	806	1041	1589	-	-	1586	-	-
Stage 1	986	870	-	965	855	-	-	-	-	-	-	-
Stage 2	967	855	-	986	870	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	900	800	1043	887	800	1039	1589	-	-	1583	-	-
Mov Cap-2 Maneuver	900	800	-	887	800	-	-	-	-	-	-	-
Stage 1	986	870	-	958	849	-	-	-	-	-	-	-
Stage 2	962	849	-	976	870	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	8.66		0		1.32		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	327	-	-	998	-	1583	-	-
HCM Lane V/C Ratio	0.005	-	-	0.014	-	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.7	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

20: North Rosewell Street & Henry Street/Site Driveway

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	2	0	2	0	2	24	1	0	19	0
Future Vol, veh/h	0	1	2	0	2	0	2	24	1	0	19	0
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	3	3	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	61	61	61	61	61	61	61	61	61	61	61	61
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2	3	0	3	0	3	39	2	0	31	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	84	87	36	82	86	43	36	0	0	44	0	0
Stage 1	36	36	-	50	50	-	-	-	-	-	-	-
Stage 2	48	51	-	32	36	-	-	-	-	-	-	-
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	908	807	1042	911	808	1033	1588	-	-	1577	-	-
Stage 1	985	869	-	969	857	-	-	-	-	-	-	-
Stage 2	971	857	-	990	869	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	898	799	1037	902	800	1030	1580	-	-	1573	-	-
Mov Cap-2 Maneuver	898	799	-	902	800	-	-	-	-	-	-	-
Stage 1	980	865	-	964	853	-	-	-	-	-	-	-
Stage 2	965	852	-	985	865	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	8.84		9.52		0.54		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	132	-	-	944	800	1573	-	-
HCM Lane V/C Ratio	0.002	-	-	0.005	0.004	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.8	9.5	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

20: North Rosewell Street & Henry Street/Site Driveway

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	0	5	0	0	0	4	23	0	0	23	0
Future Vol, veh/h	2	0	5	0	0	0	4	23	0	0	23	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	51	51	51	51	51	51	51	51	51	51	51	51
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	0	10	0	0	0	8	45	0	0	45	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	106	108	45	108	108	47	45	0	0	47	0	0
Stage 1	45	45	-	63	63	-	-	-	-	-	-	-
Stage 2	61	63	-	45	45	-	-	-	-	-	-	-
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	878	786	1030	876	786	1028	1576	-	-	1573	-	-
Stage 1	974	861	-	953	847	-	-	-	-	-	-	-
Stage 2	956	847	-	974	861	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	874	780	1030	861	780	1026	1576	-	-	1570	-	-
Mov Cap-2 Maneuver	874	780	-	861	780	-	-	-	-	-	-	-
Stage 1	974	861	-	947	841	-	-	-	-	-	-	-
Stage 2	951	841	-	965	861	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	8.72		0		1.08		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	267	-	-	980	-	1570	-	-
HCM Lane V/C Ratio	0.005	-	-	0.014	-	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.7	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

20: North Rosewell Street & Henry Street/Site Driveway

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	7	2	30	15	0	2	29	14	0	29	0
Future Vol, veh/h	0	7	2	30	15	0	2	29	14	0	29	0
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	3	3	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	61	61	61	61	61	61	61	61	61	61	61	61
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	11	3	49	25	0	3	48	23	0	48	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	119	133	53	122	121	62	53	0	0	73	0	0
Stage 1	53	53	-	69	69	-	-	-	-	-	-	-
Stage 2	66	80	-	53	53	-	-	-	-	-	-	-
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	861	762	1021	858	773	1009	1566	-	-	1539	-	-
Stage 1	965	855	-	947	842	-	-	-	-	-	-	-
Stage 2	949	832	-	964	855	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	828	754	1016	838	765	1006	1559	-	-	1535	-	-
Mov Cap-2 Maneuver	828	754	-	838	765	-	-	-	-	-	-	-
Stage 1	961	851	-	942	838	-	-	-	-	-	-	-
Stage 2	919	828	-	948	851	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	9.58		9.88		0.33		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	75	-	-	800	812	1535	-	-
HCM Lane V/C Ratio	0.002	-	-	0.018	0.091	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	9.6	9.9	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0	-	-

20: North Rosewell Street & Henry Street/Site Driveway

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	13	5	22	10	0	4	33	29	0	30	0
Future Vol, veh/h	2	13	5	22	10	0	4	33	29	0	30	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	51	51	51	51	51	51	51	51	51	51	51	51
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	25	10	43	20	0	8	65	57	0	59	0

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	149	198	59	182	170	95	59	0	0	124	0	0
Stage 1	59	59	-	111	111	-	-	-	-	-	-	-
Stage 2	90	139	-	72	59	-	-	-	-	-	-	-
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	824	701	1013	783	727	967	1558	-	-	1476	-	-
Stage 1	958	850	-	899	808	-	-	-	-	-	-	-
Stage 2	922	785	-	943	850	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	797	696	1013	742	722	965	1558	-	-	1473	-	-
Mov Cap-2 Maneuver	797	696	-	742	722	-	-	-	-	-	-	-
Stage 1	958	850	-	893	802	-	-	-	-	-	-	-
Stage 2	895	780	-	906	850	-	-	-	-	-	-	-

Approach	EB		WB			NB			SB		
HCM Ctrl Dly, s/v	9.96		10.35			0.44			0		
HCM LOS	A		B								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	100	-	-	766	736	1473	-	-
HCM Lane V/C Ratio	0.005	-	-	0.051	0.085	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	10	10.4	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.3	0	-	-