

# TRAFFIC IMPACT STUDY

*For*

**Renard Management, Inc.  
Proposed Self-Storage Facility**

*Property Located at:*

**1026 Georgetown Franklin Turnpike (CR 518)  
Block 29002 – Lots 49 & 50  
Montgomery Township, Somerset County, NJ**

Prepared by:



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2334-22-01462

## INTRODUCTION

It is proposed to construct a 2-story self-storage facility and a 2-story drive-up self-storage building on a parcel of land that is currently developed with a vacant office building, located along the westbound side of Georgetown Franklin Turnpike (CR 518) just east of US Route 206 in Montgomery Township, Somerset County, New Jersey (see Figure 1 in Appendix A). The site is designated as Block 29002 – Lots 49 and 50 on the Montgomery Township Tax Maps. The existing use consists of an approximate 2-story 47,000 SF office building with a surface parking lot. It is proposed to raze the existing site and construct a 2-story self-storage facility totaling 84,904 SF and a 2-story drive-up self-storage building totaling 22,846 SF (“The Project”). The site is located within the HC – Highway Commercial District. Access to the site is currently provided via two full movement stop-controlled driveways along Georgetown Franklin Turnpike (CR 518), opposite the Bank of America ingress and egress driveways. It is proposed to close the existing access points and provide access to the site via a full movement ingress and right turn egress driveway along Georgetown Franklin Turnpike (CR 518).

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 PM and Saturday peak periods at the intersections of:
  - US Route 206 & Georgetown Franklin Turnpike (CR 518)
  - Georgetown Franklin Turnpike (CR 518) and Bank of America Ingress Driveway/ West Site Driveway
  - Georgetown Franklin Turnpike (CR 518) and Bank of America Egress Driveway/ East Site Driveway
- 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 point of ingress and egress was 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:

US Route 206 (Van Horne Memorial Highway) is an Urban Principal Arterial roadway under NJDOT jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 40 MPH and the roadway provides one travel lane in each direction with additional turning/auxiliary lanes at major intersections. Curb is provided along both sides of the roadway, while sidewalk is not provided along either side of the roadway. Along this portion of US Route 206, there is a horizontal curvature in the alignment with a downgrade from north to south. The land uses along this roadway in the vicinity of The Project are primarily commercial.

Georgetown Franklin Turnpike (CR 518) is an Urban Minor Arterial roadway under County jurisdiction with a general east/west orientation. The posted speed limit is 45 MPH to the west of Route 206 and 35 MPH to the east of Route 206, and the roadway provides one travel lane in each direction with additional turning lanes at major intersections. Curb and sidewalk are present along the westbound side of Georgetown Franklin Turnpike, only. In the vicinity of the site, the roadway provides a generally straight horizontal alignment and a slightly rolling vertical alignment. The land uses along Georgetown Franklin Turnpike are primarily commercial between The Project and US Route 206 with residential land uses to the east of the Project.

### **Existing Traffic Volumes**

Manual turning movement (MTM) counts were conducted on Tuesday, July 26, 2022 from 4:30 PM to 6:30 PM and Saturday, July 30, 2022 from 11:00 AM to 2:00 PM at the following intersections:

- US Route 206 & Georgetown Franklin Turnpike (CR 518)
- Georgetown Franklin Turnpike (CR 518) and Bank of America Ingress Driveway/  
West Site Driveway
- Georgetown Franklin Turnpike (CR 518) and Bank of America Egress Driveway/  
East Site Driveway

Review of the collected traffic data reveals that the weekday evening network peak street hour (PSH) occurs between 5:00 PM – 6:00 PM and the Saturday midday network PSH occurs between 11:00 AM – 12:00 PM. Figure 2, located in Appendix A, shows the existing peak hour traffic volumes at the study intersections. All traffic counts are contained in Appendix B.

### Seasonal Adjustment Factor

The Project is located within an area designated as Region 3 by the NJDOT, which is defined as: “Traffic in central and southern New Jersey that serve pharmaceutical companies, retail, warehousing, agricultural and through-truck movements.” In order to account for the fact that the traffic counts were conducted in July, the NJDOT seasonal adjustment factors were reviewed to determine if an adjustment factor may be necessary to normalize the summer counts. Per the NJDOT seasonal adjustment factors table for Region 3, it was determined that the July counts are above the average month of traffic volumes and within 5% of the highest month of traffic volumes. As such, a seasonal adjustment factor was not found to be necessary.

### 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.

At signalized intersections, factors that affect the various approach capacities include width of approach, number of lanes, signal “green time”, turning percentages, truck volumes, etc. However, delays cannot be related to capacity in a simple one-to-one fashion. For example, it is possible to have delays in the Level of Service “F” range without exceeding roadway capacity. Substantial delays can exist without exceeding capacity if one or more of the following conditions exist: long signal cycle lengths; a particular traffic movement experiences a long red time; or progressive movement for a particular lane group is poor. Table I describes the level of service ranges for signalized intersections.

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 II describes the level of service ranges for unsignalized (stop controlled) intersections.

**Table I  
Level of Service Criteria  
for Signalized Intersections**

Level of Service	Average Control Delay (seconds per vehicle)
A	0.0 to 10.0
B	10.1 to 20.0
C	20.1 to 35.0
D	35.1 to 55.0
E	55.1 to 80.0
F	greater than 80.0

**Table II  
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, such as the signalized intersection of US Route 206 and Georgetown Franklin Turnpike (CR 518).

All capacity analyses were performed utilizing Synchro 11 software. It should be noted that the existing percentage of trucks and peak hour factors were used in the existing analysis. Table III summarizes the existing levels of service (LOS) and delays. All capacity analysis calculation worksheets are contained in Appendix C.

**Table III  
Existing Levels of Service**

Intersection	Direction/ Movement		PM PSH	Sat PSH
US Route 206 and Georgetown Franklin Turnpike (CR 518)	EB	L	D (43)	C (28)
		TR	E (60)	D (43)
	WB	L	C (23)	C (22)
		TR	E (62)	D (53)
	NB	L	B (14)	A (10)
		TR	C (27)	B (18)
	SB	L	B (19)	B (14)
		TR	C (33)	C (23)
	<b>Overall</b>		<b>D (38)</b>	<b>C (26)</b>
	Georgetown Franklin Turnpike (CR 518) and Bank of America Ingress Driveway/West Site Driveway	WB	L	a (9)
SB		LR	-	-
Georgetown Franklin Turnpike (CR 518) and Bank of America Egress Driveway/East Site Driveway	NB	LR	c (19)	b (13)

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

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

The following are discussions pertaining to each of the existing intersections analyzed.

**US Route 206 and Georgetown Franklin Turnpike (CR 518)**

Georgetown Franklin Turnpike (CR 518) intersects US Route 206 to form a four-leg intersection controlled by a traffic signal. The signal timing directive was obtained from the New Jersey Department of Transportation which indicates that four-phase 70-second, 95-second, 110-second and 135-second background cycles are utilized (the traffic signal timing directive is included in Appendix B).

The eastbound and westbound approaches of Georgetown Franklin Turnpike each provide a dedicated left turn lane and a shared through/right turn lane. The northbound approach of US Route 206 provides a dedicated left turn lane, a dedicated through lane and a shared through/right turn lane, while the southbound approach provides a dedicated left turn lane and a shared through/right turn lane.

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

#### **Georgetown Franklin Turnpike (CR 518) and Bank of America Ingress Driveway/West Site Driveway**

The Bank of America ingress driveway and the existing west site driveway both intersect Georgetown Franklin Turnpike (CR 518) at an approximate 40’ offset to form a four-leg intersection with the southbound approach of the driveway operating under stop control. The eastbound and westbound approaches of Georgetown Franklin Turnpike (CR 518) each provide a shared left turn/through/right turn lane. The northbound approach of the Bank of America driveway provides one lane for travel away from the intersection. The southbound approach of the existing west site driveway provides a shared left turn/through/right turn lane.

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

#### **Georgetown Franklin Turnpike (CR 518) and Bank of America Egress Driveway/East Site Driveway**

The Bank of America egress driveway and the existing east site driveway both intersect Georgetown Franklin Turnpike (CR 518) to form a four-leg intersection with the northbound and southbound approaches of the driveways operating under stop control. The eastbound approach of Georgetown Franklin Turnpike (CR 518) provides a shared left turn/through lane, while the westbound approach provides a shared through/right turn lane. The northbound approach of the Bank of America driveway and the southbound approach of the existing site driveway each provide a shared left turn/through/right turn lane.

A review of the existing analysis reveals that the intersection operates at levels of service “C” or better during the analyzed peak periods. See Table III for the individual movement levels of service and delays.

## FUTURE CONDITIONS

Traffic volumes and operational analyses were developed for both the 2025 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 1.25% per year.

Through consultation with the Montgomery Township staff, there are several developments in the vicinity of the site that have been approved but not yet constructed that are identified as potential significant traffic generators, shown below. It is assumed that the background growth rate is adequate to account for the traffic associated with all developments not listed hereafter.

- A residential townhome development, known as Country Classics, located along the northbound side of US Route 206 just north of Montgomery Center, is currently under construction. The 115-unit development will replace an existing 38,000 SF office / warehouse / flex-space building. Projections for the increase in traffic associated with the residential development were obtained from the Traffic Impact Assessment completed by Dolan & Dean Consulting Engineers, LLC and dated August 20, 2019. The traffic volumes for this development in the vicinity of The Project are shown on Figure 3.
- Montgomery Walk is an approved mixed-use development that will replace the Village Shopper II development. It will consist of 50 multifamily housing units and 56,000 square feet of commercial retail. Traffic associated with the change of use is obtained from the Traffic Impact Analysis for Montgomery Walk completed by McDonough & Rea Associates and dated January 16, 2018. The traffic volumes for this development in the vicinity of The Project are shown on Figure 4.
- A car dealership, known as Baker Auto, located at the northwestern corner of US Route 206 and Airport Road has been approved. Traffic generated by the 28,170 SF site is found in the Traffic Impact Study completed by Harlyn Associates and dated June 20, 2016. The traffic volumes for this development in the vicinity of The Project are shown on Figure 5.
- An 8,040 SF expansion of the existing Enrollment Management Association campus has been approved. The office is located at the northwest corner of Georgetown Franklin Turnpike and Vreeland Drive. The increase in traffic affiliated with this improvement is provided in the Traffic Statement executed by Langan Engineering and Environmental Services and dated December 19, 2016. The traffic volumes for this development in the vicinity of The Project are shown on Figure 6.
- A residential development consisting of 107 townhomes, 40 condominiums and 86 apartment units known as Sharbell Kepner, located along Research Road just north of Georgetown Franklin Turnpike, has been approved. Traffic projections for this development were obtained from the Traffic Impact Study, prepared by Dynamic Traffic, dated March 5, 2018. The traffic volumes for this development in the vicinity of The Project are shown on Figure 7.

- A mixed-use development known as Montgomery Promenade, is proposed at the southwest corner of US Route 206 and Georgetown Franklin Turnpike (CR 518). It will consist of 34-single family dwelling units and 320,000 square feet of commercial retail space. Traffic projections for this development were obtained from the Traffic Impact Analysis prepared by Atlantic Traffic & Design Engineers, Inc. and dated December 28, 2017. Because the status of this development is unknown, No Build and Build scenarios have been prepared with and without the traffic generation from this proposed development. The traffic volumes for this development in the vicinity of The Project are shown on Figure 8 and the rerouted traffic volumes associated with the roadway improvements included with the construction of this development are shown separately on Figure 10.

Future 2025 No Build traffic volumes were developed by applying the background growth rate of 1.25% for three (3) years to the study area roadways existing traffic volumes and adding the adjacent development traffic volumes. Figures 9 and 11, in Appendix A, show the 2024 No Build traffic volumes without and with the Montgomery Promenade Development, respectively.

### Traffic Generation

Trip generation projections for The Project were prepared utilizing trip generation research data as published under Land Use Code (LUC) 151 – Mini-Warehouse in the Institute of Transportation Engineers’ (ITE) publication, *Trip Generation, 11<sup>th</sup> Edition*. This publication sets forth trip generation rates based on empirical traffic count data conducted at numerous research sites. Table IV below details the traffic volumes associated with the Project.

**Table IV  
Trip Generation**

Land Use	PM PSH			SAT Peak		
	In	Out	Total	In	Out	Total
107,750 SF Self-Storage Facility	8	8	16	11	7	18

As previously mentioned, the site is currently developed with an approximate 2-story 47,000 SF office building that is currently vacant. However, in order to provide a conservative analysis, no credit has been taken for the trip generation associated with the existing use. Table V shows the comparison of trips between the existing and proposed use. A net decrease in traffic can be expected with the proposed self-storage facility when compared to the prior office use.

**Table V  
Trip Generation Comparison  
Existing Office vs. Proposed Self Storage Facility**

Land Use	AM PSH			PM PSH			SAT Peak		
	In	Out	Total	In	Out	Total	In	Out	Total
94,000 SF Office	140	19	159	27	131	158	27	23	50
107,750 SF Self-Storage	6	4	10	8	8	16	11	7	18
<b>Difference</b>	<b>-134</b>	<b>-15</b>	<b>-149</b>	<b>-19</b>	<b>-123</b>	<b>-142</b>	<b>-16</b>	<b>-16</b>	<b>-32</b>

Additionally, as shown above, the proposed self-storage facility is anticipated to generate a maximum of 18 total peak hour trips. It should be noted that the number of new trips falls below the industry accepted standard of a significant increase in traffic of 50 trips. Based on Transportation Impact

Analysis for Site Development, published by the ITE “it is suggested that a transportation impact study be conducted whenever a proposed development will generate 50 or more added (new) trips during the adjacent roadways’ peak hour or the development’s peak hour.” Additionally, NJDOT has determined that 100 vehicle threshold is considered a “significant increase in traffic,” hence, it is not anticipated that the self-storage facility will not have any perceptible impact on the traffic operation of the adjacent roadway network.

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. Figures 12 and 13, located in Appendix A, illustrate the Trip Distribution and the 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 on Figure 15 (without Montgomery Promenade) and Figure 16 (with Montgomery Promenade).

### Future Capacity Analysis

Operational conditions at the study intersections were analyzed under the opening year No Build and Build conditions without Montgomery Promenade included and are summarized in Table VI and, the opening year No Build and Build conditions which include traffic from the Montgomery Promenade are summarized in Table VII.

**Table VI  
Future Levels of Service without Montgomery Promenade**

Intersection	Direction/ Movement		PM PSH			SAT PSH	
			No Build	Build	Build w/ Mit.	No Build	Build
US Route 206 and Georgetown Franklin Turnpike (CR 518)	EB	L	E (65)	E (65)	E (65)	C (31)	C (31)
		TR	E (65)	E (66)	E (60)	D (41)	D (41)
	WB	L	C (24)	C (24)	C (23)	C (22)	C (22)
		TR	F (82)	F (85)	E (76)	E (71)	E (73)
	NB	L	B (18)	B (18)	B (19)	B (12)	B (12)
		TR	C (29)	C (29)	C (31)	C (20)	C (21)
	SB	L	D (39)	D (40)	D (44)	C (32)	C (33)
		TR	D (42)	D (42)	D (44)	C (31)	C (31)
<b>Overall</b>			<b>D (48)</b>	<b>D (48)</b>	<b>D (47)</b>	<b>C (34)</b>	<b>C (34)</b>
Georgetown Franklin Turnpike (CR 518) and Bank of America Ingress Driveway	WB	L	a (10)	a (10)	-	a (9)	a (9)
Georgetown Franklin Turnpike (CR 518) and Bank of America Egress Driveway	NB	LR	c (23)	c (20)	-	b (15)	b (14)
Georgetown Franklin Turnpike (CR 518) and Site Driveway	EB	L	-	a (9)	-	-	a (8)
	SB	R	-	b (12)	-	-	b (11)

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

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

**Table VII  
Future Levels of Service with Montgomery Promenade**

Intersection	Direction/ Movement		PM PSH		SAT PSH	
			No Build	Build	No Build	Build
US Route 206 and Georgetown Franklin Turnpike (CR 518)	EB	L	C (21)	C (22)	B (20)	C (20)
		TR	D (47)	D (47)	D (56)	E (58)
	WB	L	B (18)	B (19)	B (17)	B (17)
		TR	D (37)	D (38)	D (46)	D (47)
	NB	TR	D (37)	D (37)	C (24)	C (24)
	SB	TR	D (41)	D (41)	C (30)	C (30)
<b>Overall</b>			<b>D (39)</b>	<b>D (40)</b>	<b>C (35)</b>	<b>C (35)</b>
Georgetown Franklin Turnpike (CR 518) and Bank of America Ingress Driveway	WB	L	a (10)	a (10)	a (9)	a (9)
Georgetown Franklin Turnpike (CR 518) and Bank of America Egress Driveway	NB	LR	d (28)	c (24)	c (18)	c (16)
Georgetown Franklin Turnpike (CR 518) and Site Driveway	EB	L	-	a (9)	-	a (9)
	SB	R	-	b (13)	-	b (12)

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

### US Route 206 and Georgetown Franklin Turnpike (CR 518)

With the addition of site generated traffic and without the proposed Montgomery Promenade Development, the intersection is anticipated to operate at No Build levels of service “D” or better during the studied peak hours. Additionally, each intersection movement is anticipated to operate at levels of service “E” or better during the studied peak hours, with the exception of the westbound through/right turn movement, which is anticipated to operate with level of service “F” during the PM peak hour, as a result of a 2-second increase in delay. It should be noted that with a minor signal timing adjustment to reallocate 1 second of green time from the US Route 206 phase to the Georgetown Franklin Turnpike phase during the PM peak hour, all movements would operate at levels of service “E” or better. See Table VI for the individual movement levels of service and delays.

The Montgomery Promenade Development proposes to eliminate northbound and southbound left turns at the intersection by constructing two new loop roads to accommodate these movements. Additionally, the southbound approach is proposed to provide a dedicated through lane and a shared through/right turn lane. The proposed signal timings from the Montgomery Promenade Development Traffic Impact Analysis have been incorporated into the capacity analysis.

With the addition of site generated traffic and with the proposed Montgomery Promenade Development, the intersection is anticipated to operate at No Build levels of service “D” or better during the peak hours. Additionally, each intersection movement is anticipated to operate at levels of service “E” or better during the studied peak hours. See Table VII for the individual movement levels of service and delays.

### **Georgetown Franklin Turnpike (CR 518) and Bank of America Ingress Driveway**

With the addition of site generated traffic as well as the removal of the existing west site driveway, the intersection is anticipated to operate at levels of service “A” during the studied peak hours, both without and with the Montgomery Promenade Development. See Tables VI and VII for the individual movement levels of service and delays.

### **Georgetown Franklin Turnpike (CR 518) and Bank of America Egress Driveway**

With the addition of site generated traffic as well as the removal of the existing east site driveway, the intersection is anticipated to operate at levels of service “D” or better during the studied peak hours, both without and with the Montgomery Promenade Development. See Tables VI and VII for the individual movement levels of service and delays.

### **Georgetown Franklin Turnpike (CR 518) and Site Driveway**

The site driveway is proposed to intersect Georgetown Franklin Turnpike (CR 518) to form an unsignalized intersection with the southbound approach of the site driveway operating under stop control. The eastbound approach of Georgetown Franklin Turnpike (CR 518) is proposed to provide a shared left turn/through lane. The westbound approach of Georgetown Franklin Turnpike (CR 518) is proposed to provide a shared through/right turn lane. The southbound approach of the site driveway is proposed to provide a dedicated right turn lane.

As designed, the western site driveway is anticipated to operate at levels of service “B” or better during the studied peak hours, both without and with the Montgomery Promenade Development. See Tables VI and VII 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 new full movement ingress and right turn egress driveway along Georgetown Franklin Turnpike (CR 518).

The parking lot will be serviced by a parking aisle that is 30 feet wide, which satisfies the Ordinance's minimum requirement of 28 feet. This aisle will allow for two-way circulation and 90-degree parking. Review of the site plan design indicates that the site can sufficiently accommodate a large wheel base vehicle, such as a single unit truck (SU), along with the automobile traffic anticipated.

### **Parking**

The Project is located in the Highway Commercial (HC) district. Self-storage facilities are not a permitted use and a use variance is sought. Each use shall provide parking spaces according to the minimum provisions. The total number of required spaces will be determined and approved by the board. A total of 16 spaces will be provided which includes one ADA space and one make-ready EV charging space. ITE identifies an average parking demand of 0.10 spaces per 1,000 SF for a mini-warehouse (LUC 151). This equates to a total demand for the site of 11 spaces, which is exceeded as designed.

It is proposed to provide parking stalls with dimensions of 9-feet x 20-feet, which satisfy the Ordinance minimum requirement of 9-feet x 20-feet. Industry standards recommend stall widths of between 8-feet 6-inches and 9-feet and a length of 18-feet for low-turnover land uses such as The Project, which is met as designed.

The Ordinance also sets forth a loading requirement of 1 loading space per principal building or group of buildings. No dedicated loading spaces are provided, as all loading activities will be accommodated by the proposed drive-through lane. A variance is sought.

## **FINDINGS & CONCLUSIONS**

### **Findings**

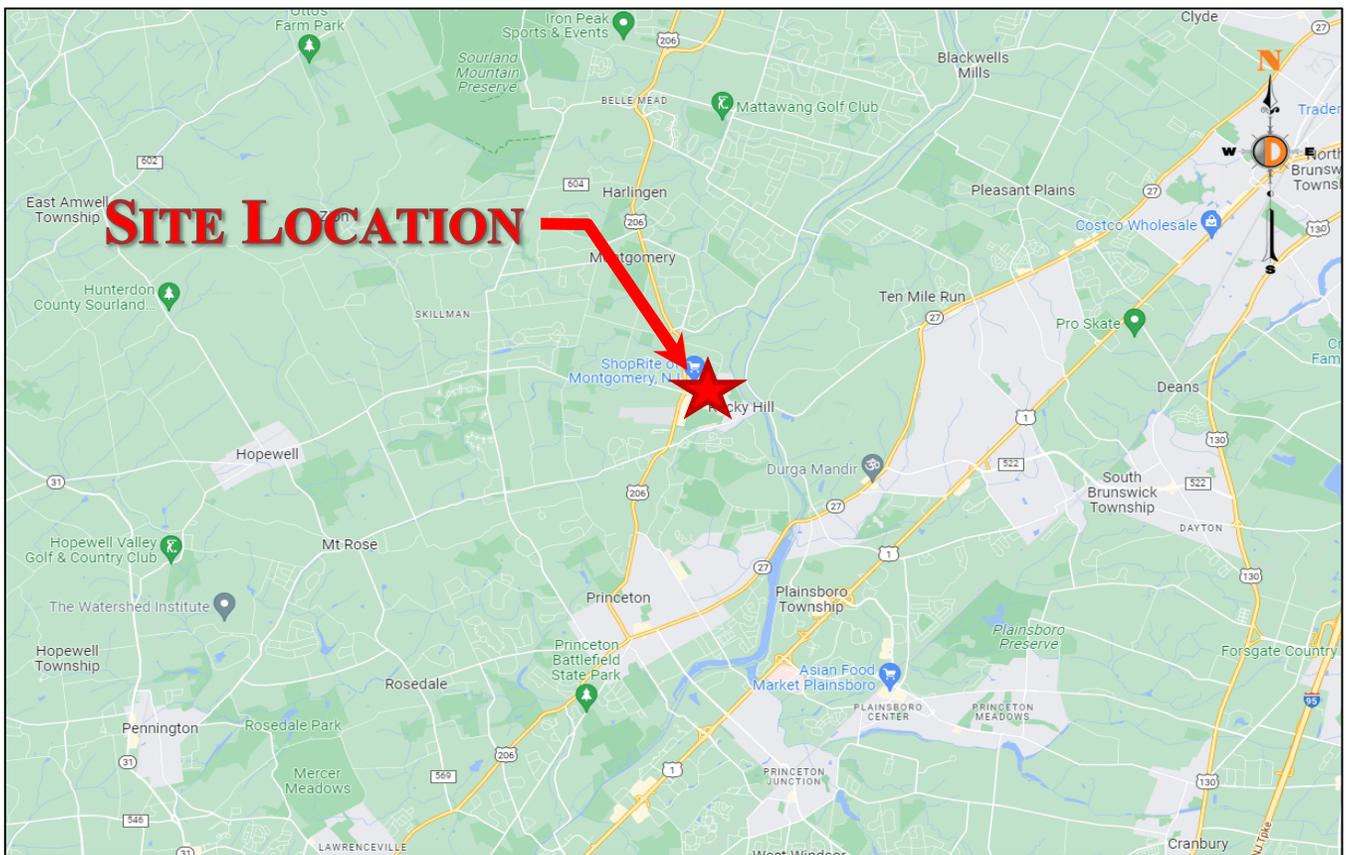
Based upon the detailed analyses as documented herein, the following findings are noted:

- The proposed 107,750 SF self-storage facility, is projected to generate 8 entering trips and 8 exiting trips during the weekday evening peak hour, and 11 entering trips and 7 exiting trips during the Saturday peak hour that are “new” to the adjacent roadway network. It is noted that conservatively no credit was taken for the trips associated with the existing office building.
- Access to the site is proposed to be provided via a new full movement ingress and right turn egress driveway along Georgetown Franklin Turnpike (CR 518).
- With the addition of site generated traffic as well as a minor signal timing adjustment, the intersection of US Route 206 and Georgetown Franklin Turnpike (CR 518) is anticipated to operate at levels of service “E” or better during the peak hours studied, both with and without the Montgomery Promenade development.
- With the addition of the site generated traffic as well as the removal of the existing west site driveway, the intersection of Georgetown Franklin Turnpike (CR 518) and the Bank of America ingress driveway is anticipated to operate at levels of service “A” during the peak hours studied.
- With the addition of site generated traffic as well as the removal of the existing east site driveway, the intersection of Georgetown Franklin Turnpike (CR 518) and the Bank of America egress driveway is anticipated to operate at levels of service “D” or better during the peak hours studied.
- As designed, the intersection of Georgetown Franklin Turnpike (CR518) and the site driveway is anticipated to operate at levels of service “B” or better during the peak hours studied.
- As proposed, the Project’s site driveway and internal circulation have been designed to provide for safe and efficient movement of automobiles and large wheel base vehicles.
- The proposed design is sufficient to support the projected demand and satisfies the Ordinance requirements. A variance is sought for the required number of parking spaces and loading spaces that will be provided. The provided parking quantity is greater than the parking demand recommended by the Institute of Transportation Engineers (ITE).

### **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 NJDOT and Somerset County will not experience any significant degradation in operating conditions with the construction of The Project. The site driveway is 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.

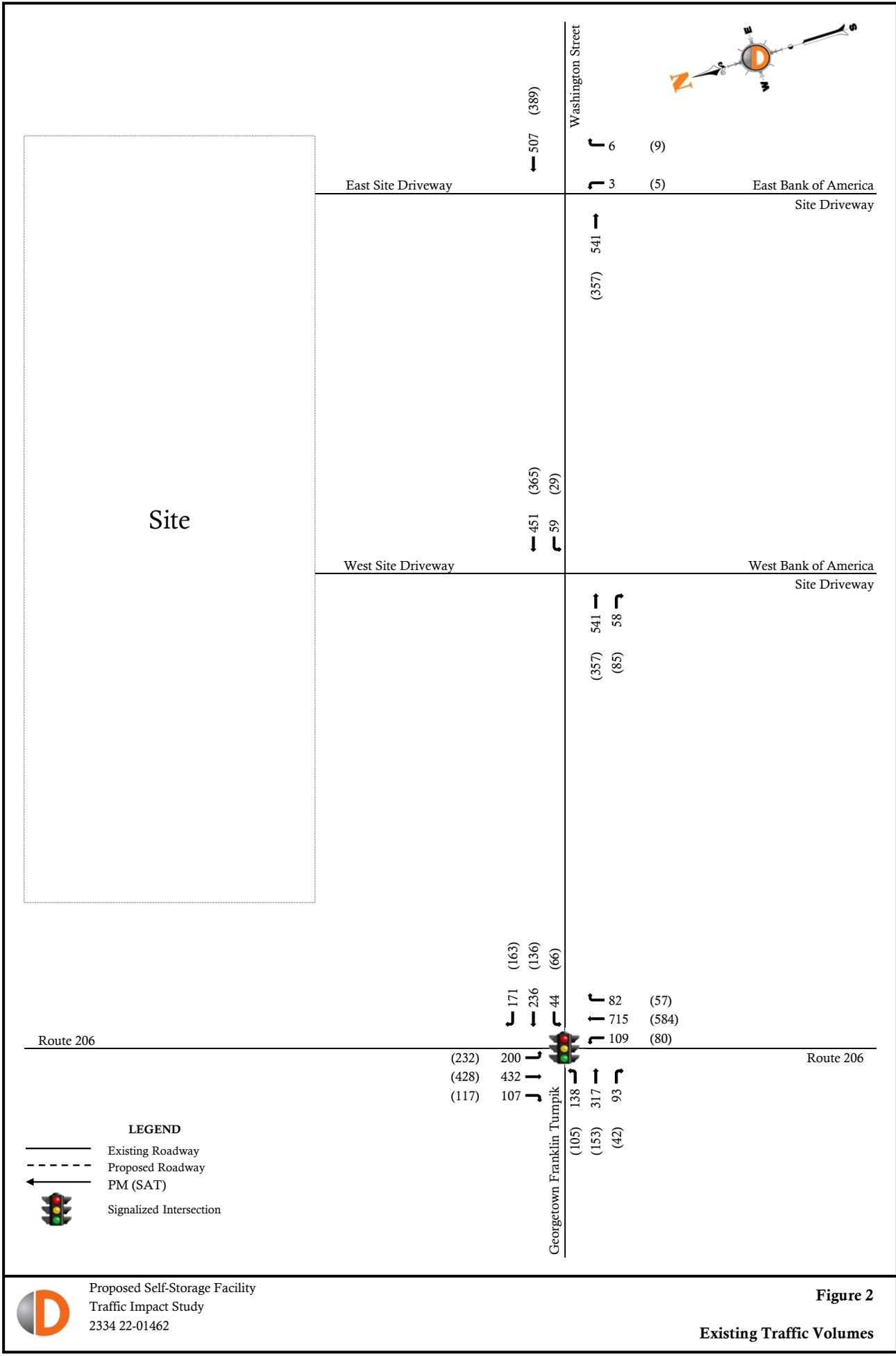
**Appendix A**  
**Traffic Volume Figures**

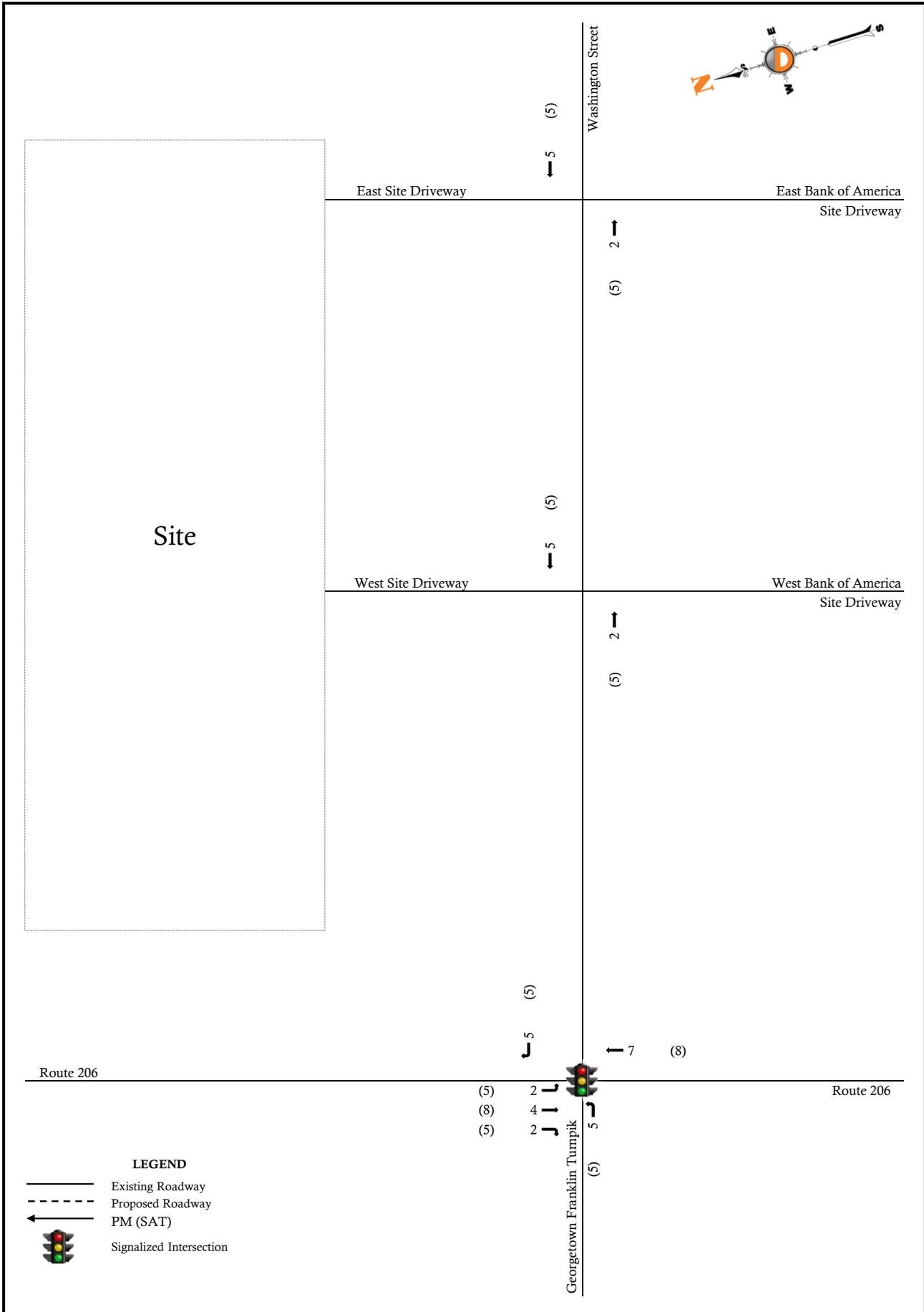


Proposed Self-Storage Facility  
Traffic Impact Study  
2334 22-01462

Figure 1

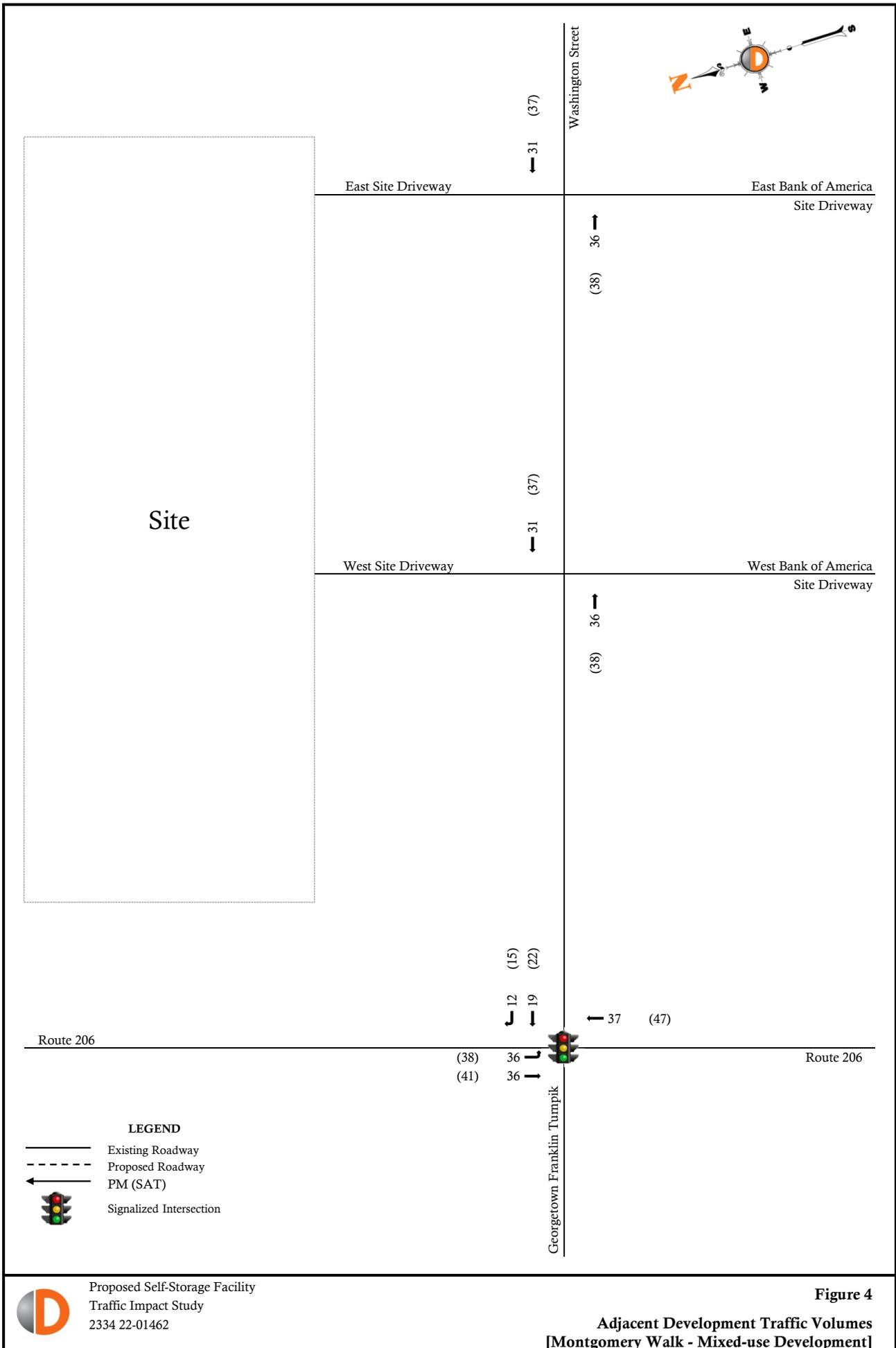
Site Location Map





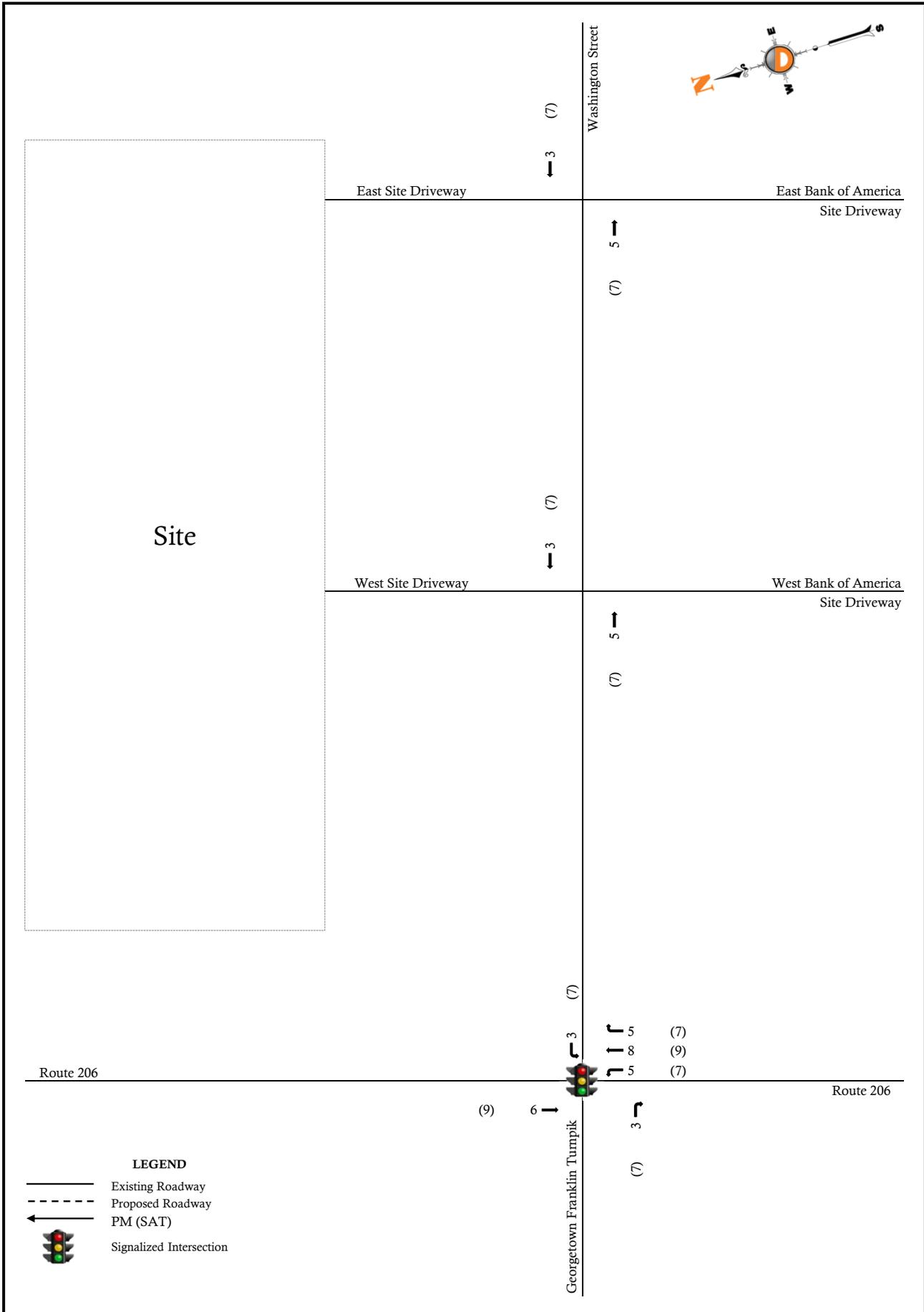
Proposed Self-Storage Facility  
 Traffic Impact Study  
 2334 22-01462

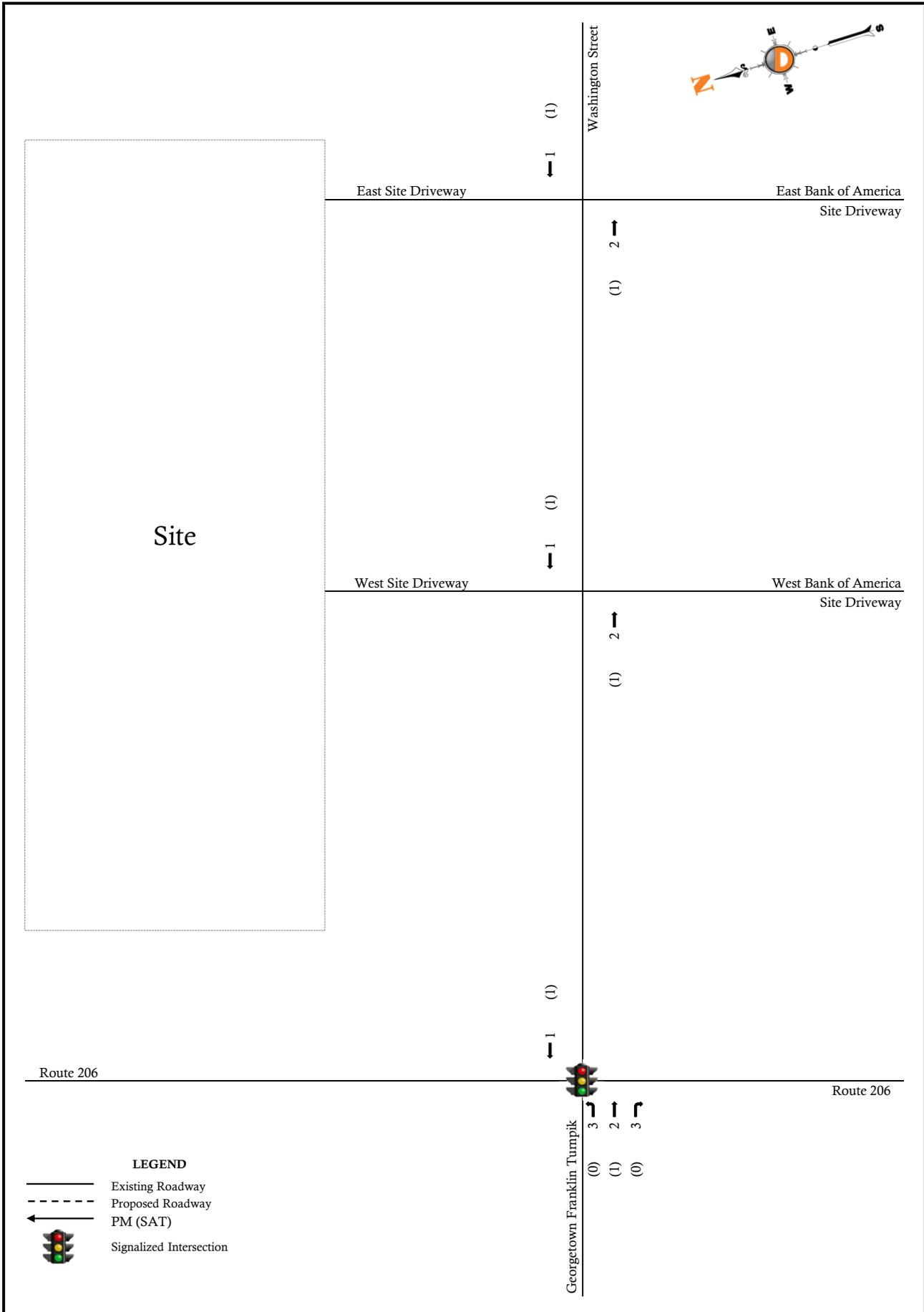
**Figure 3**  
 Adjacent Development Traffic Volumes  
 [Country Classics - Residential Development]

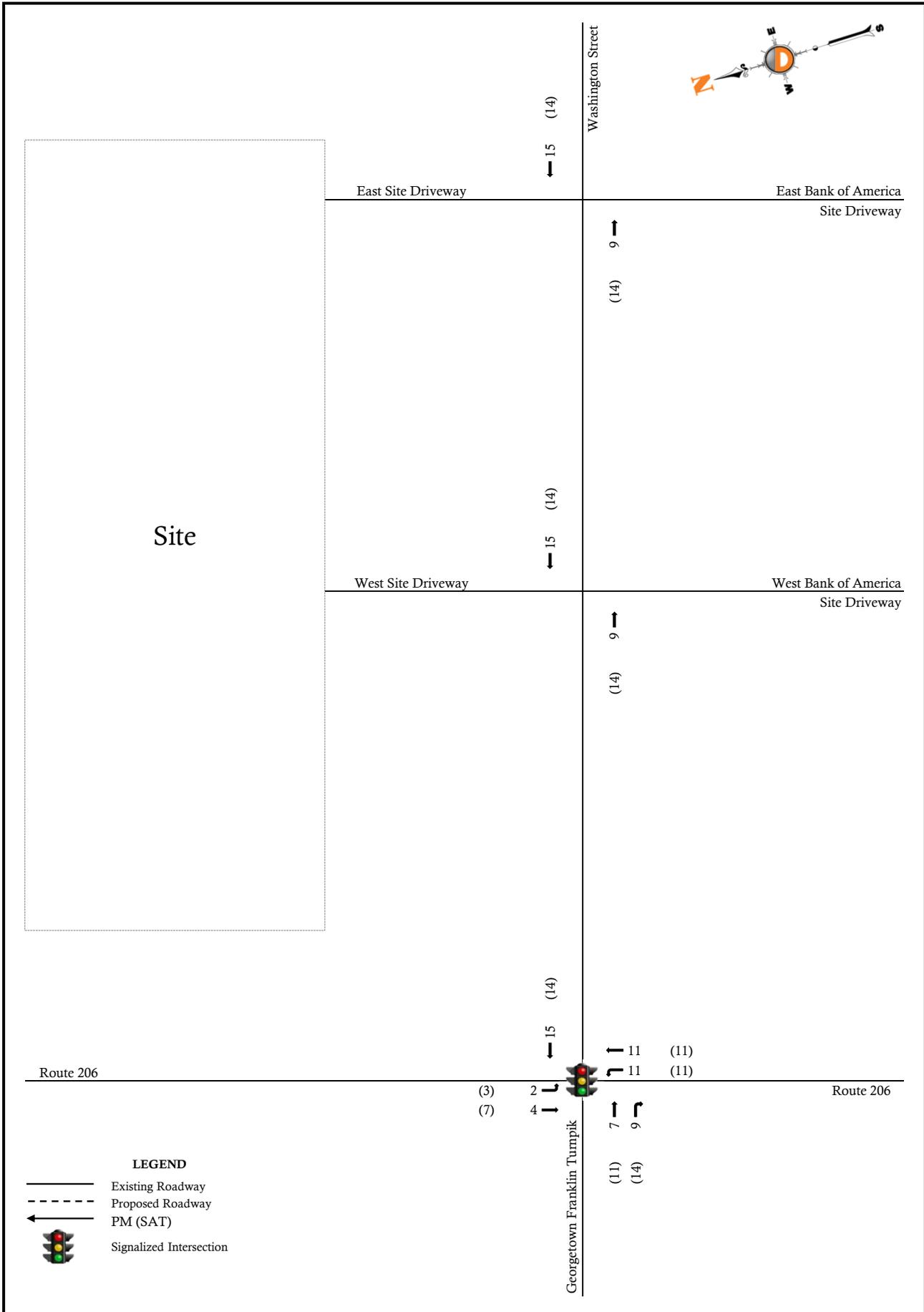


Proposed Self-Storage Facility  
 Traffic Impact Study  
 2334 22-01462

**Figure 4**  
 Adjacent Development Traffic Volumes  
 [Montgomery Walk - Mixed-use Development]

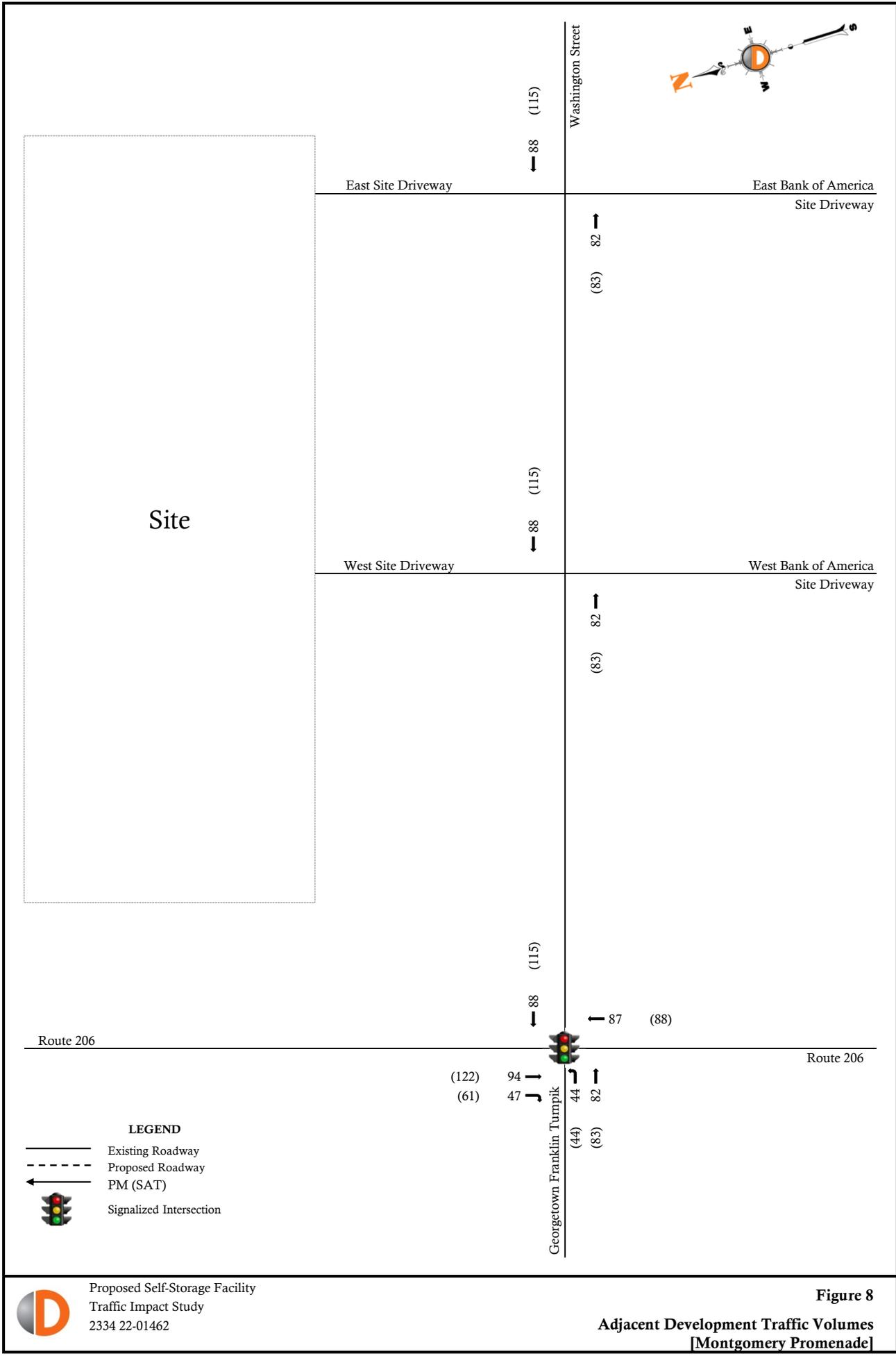


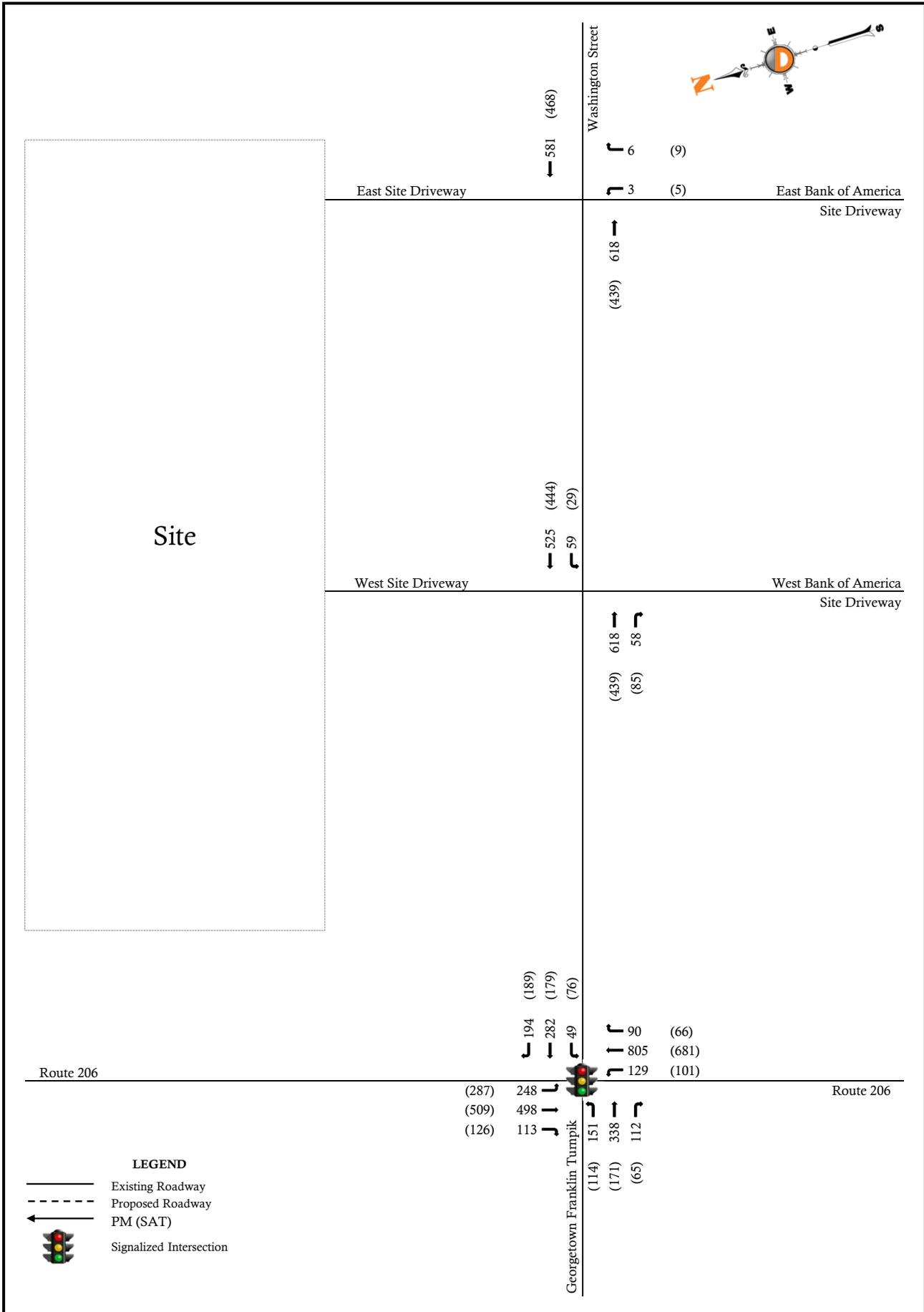


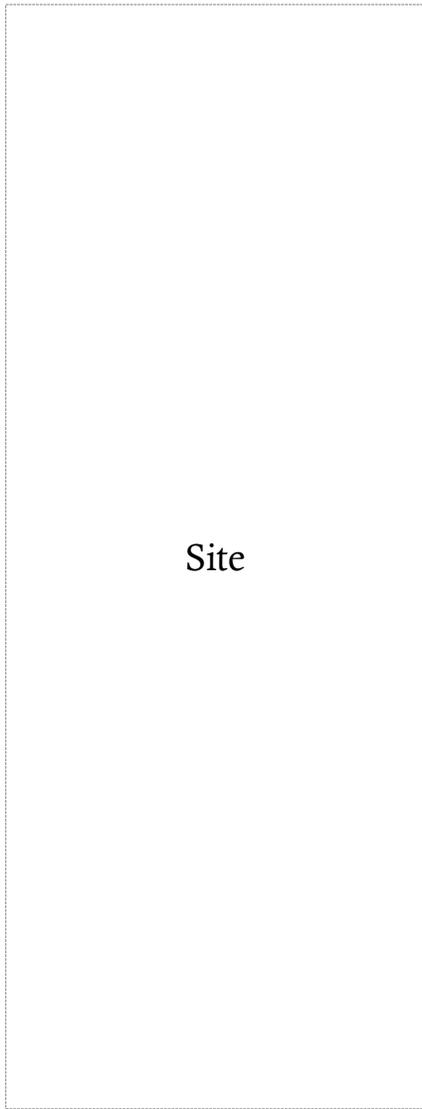


Proposed Self-Storage Facility  
 Traffic Impact Study  
 2334 22-01462

**Figure 7**  
**Adjacent Development Traffic Volumes**  
**[Sharbell]**

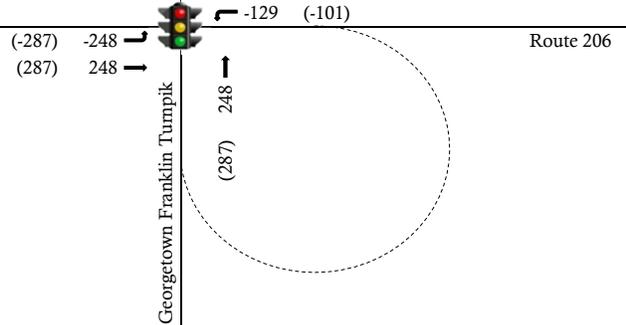






Site

Route 206



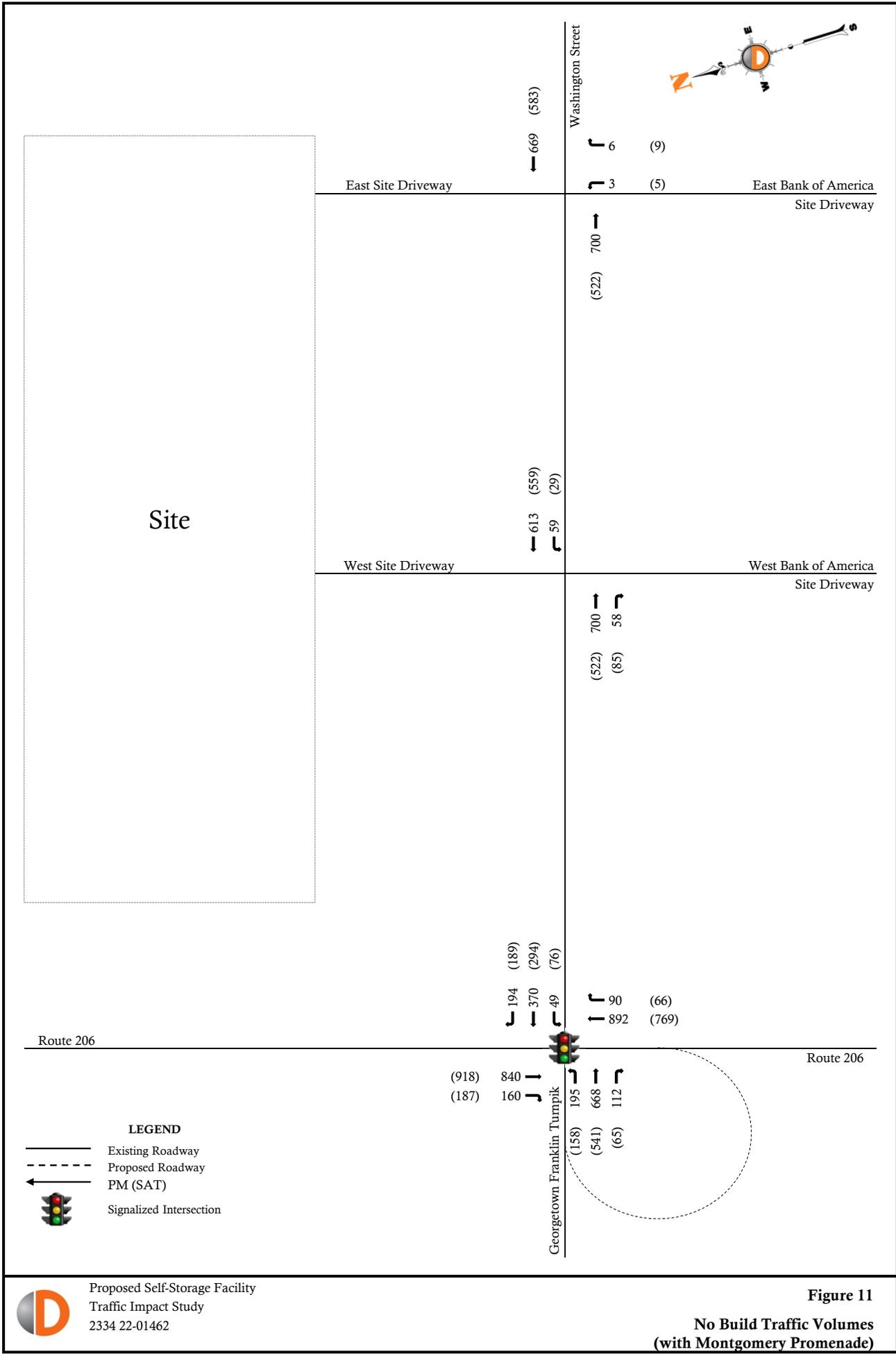
- LEGEND**
- Existing Roadway
  - - - Proposed Roadway
  - ← PM (SAT)
  -  Signalized Intersection

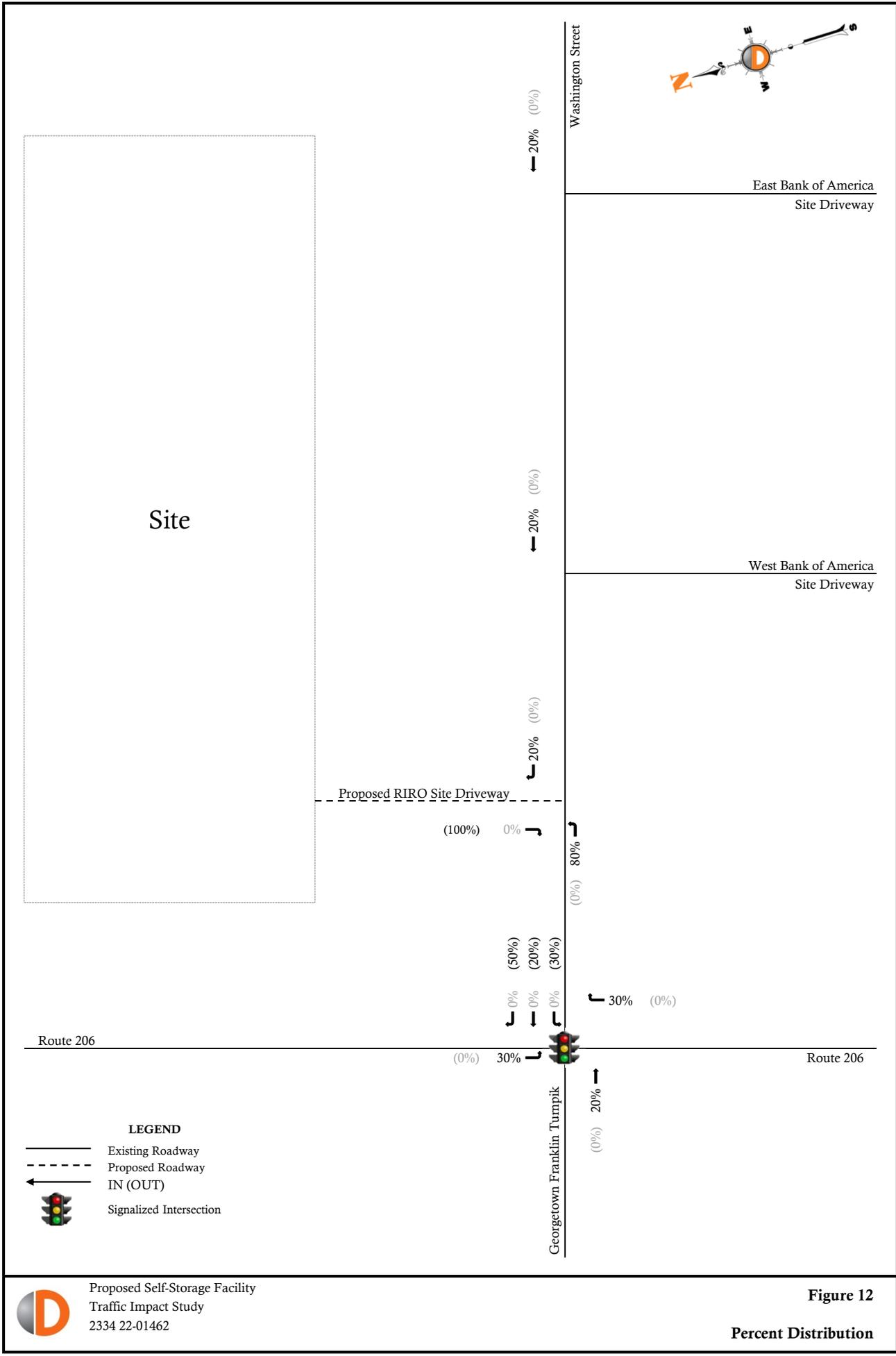


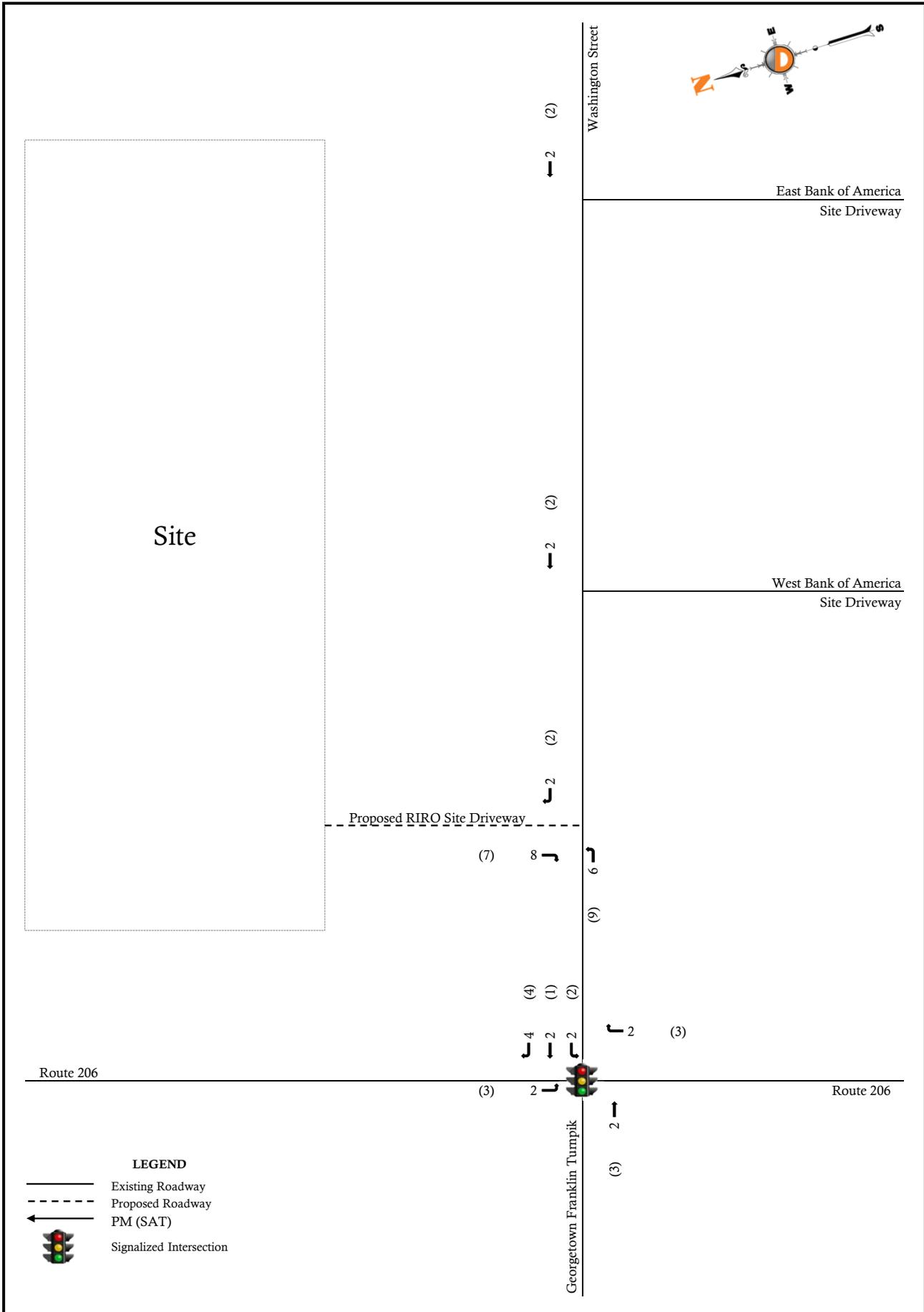
Proposed Self-Storage Facility  
Traffic Impact Study  
2334 22-01462

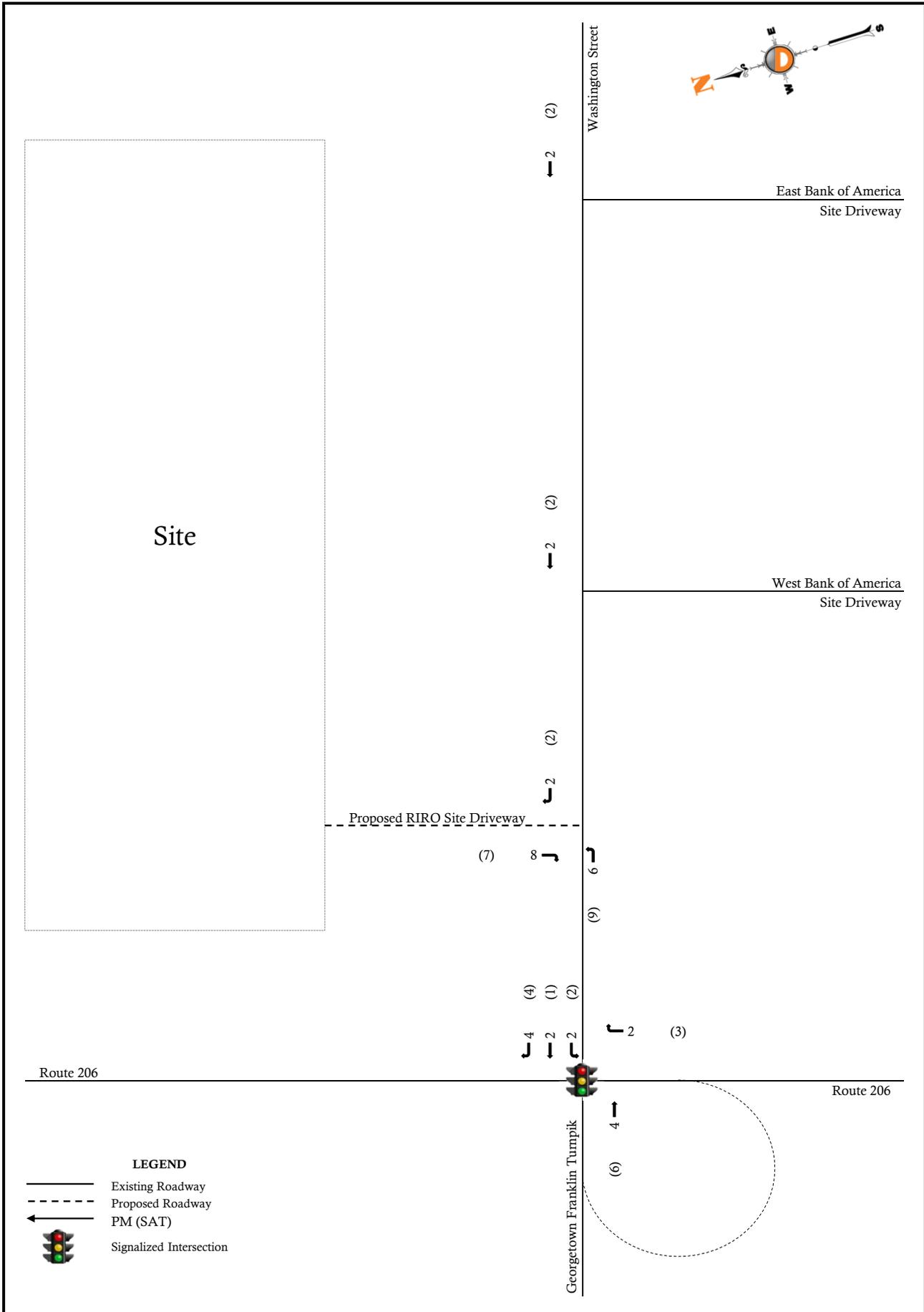
Figure 10

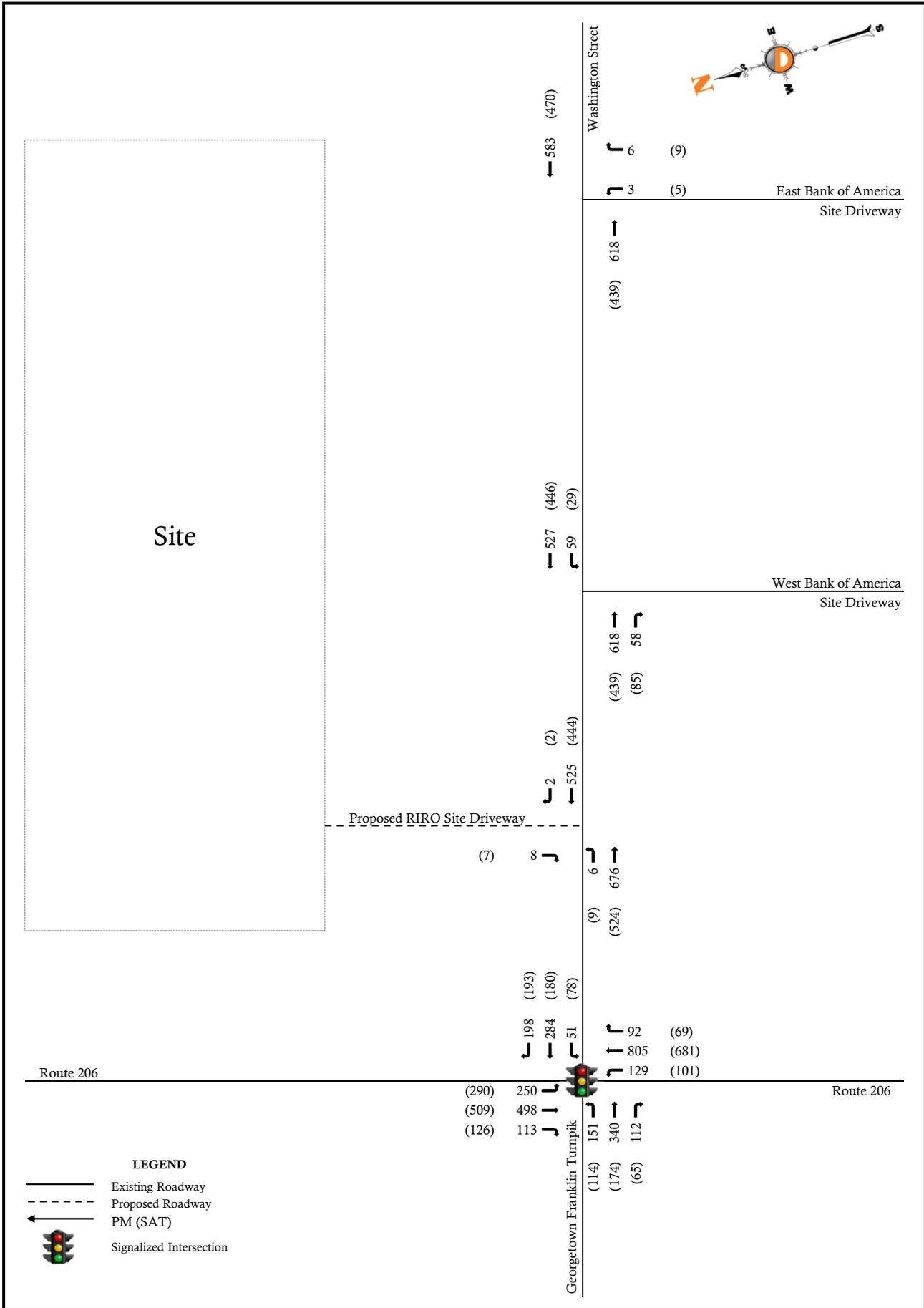
Re-Routed Traffic Volumes  
(associated with construction of Montgomery Promenade)





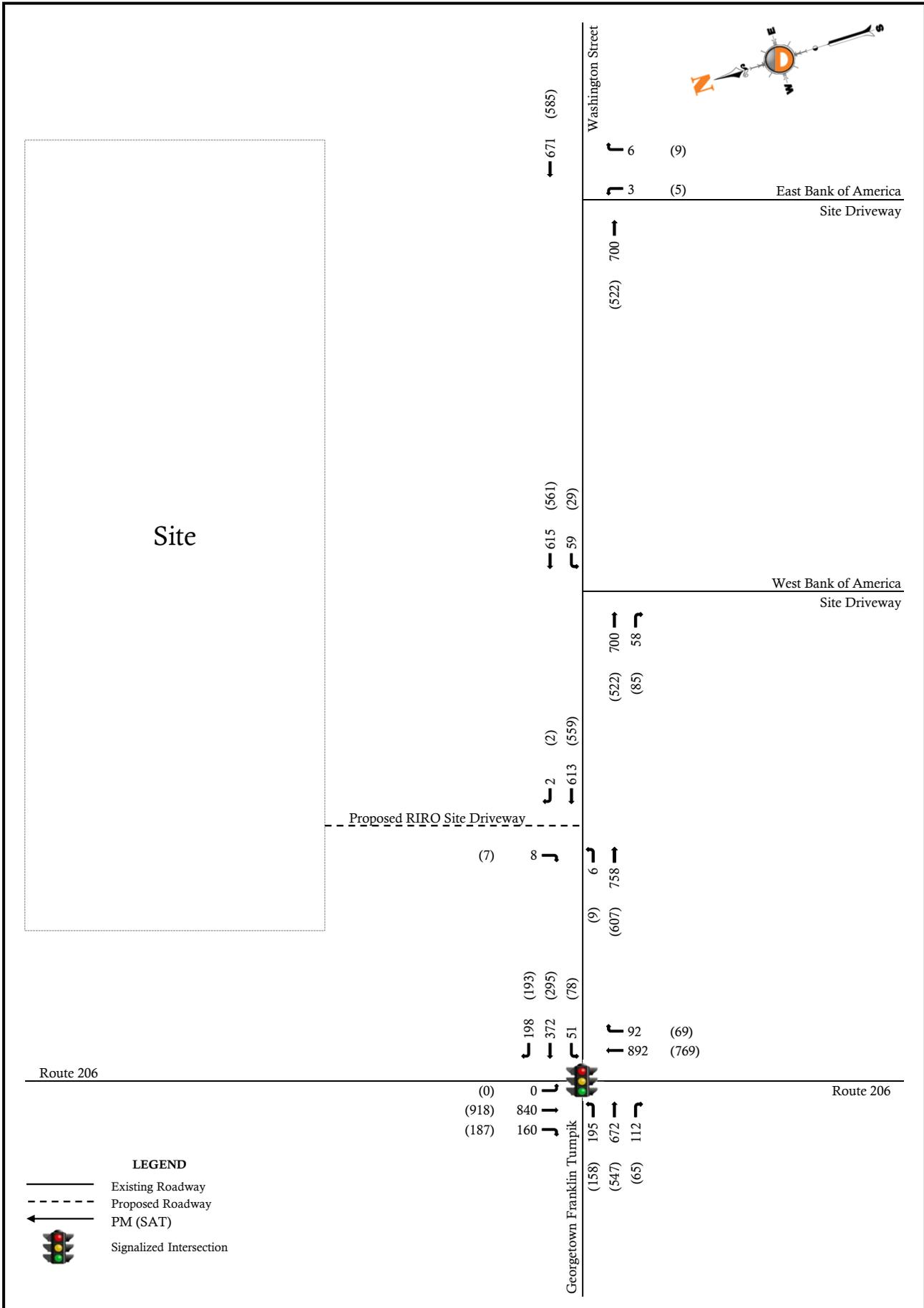






Proposed Self-Storage Facility  
 Traffic Impact Study  
 2334 22-01462

**Figure 15**  
**Build Traffic Volumes**  
**(without Montgomery Promenade)**



**Appendix B**  
**Project Information**

# Dynamic Traffic, LLC

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

E/W: CR 518  
 N/S: Route 206  
 Town/County: Montgomery/Somerset  
 Job #: 2334-22-01462

File Name : Rt 206 & CR 518 - PM  
 Site Code : 00000000  
 Start Date : 7/26/2022  
 Page No : 1

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

Start Time	Georgetown Franklin Turnpike (CR 518) Eastbound					Washington Street (CR 518) Westbound					Route 206 Northbound					Route 206 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	
04:30 PM	31	67	21	0	119	17	70	41	0	128	20	183	13	0	216	54	102	31	0	187	650
04:45 PM	34	52	23	0	109	12	53	30	0	95	24	160	18	0	202	51	101	27	0	179	585
Total	65	119	44	0	228	29	123	71	0	223	44	343	31	0	418	105	203	58	0	366	1235
05:00 PM	36	76	21	0	133	10	56	35	0	101	27	174	21	0	222	45	104	28	0	177	633
05:15 PM	39	85	29	0	153	17	48	44	0	109	28	196	14	0	238	51	102	30	1	184	684
05:30 PM	28	74	20	0	122	7	66	48	0	121	27	188	19	0	234	48	110	29	0	187	664
05:45 PM	35	82	23	0	140	10	66	44	0	120	27	157	28	1	213	56	116	20	0	192	665
Total	138	317	93	0	548	44	236	171	0	451	109	715	82	1	907	200	432	107	1	740	2646
06:00 PM	40	50	13	0	103	12	47	40	0	99	26	176	15	0	217	54	113	27	0	194	613
06:15 PM	27	48	12	0	87	4	70	36	0	110	24	155	19	0	198	47	118	37	0	202	597
Grand Total	270	534	162	0	966	89	476	318	0	883	203	1389	147	1	1740	406	866	229	1	1502	5091
Apprch %	28	55.3	16.8	0		10.1	53.9	36	0		11.7	79.8	8.4	0.1		27	57.7	15.2	0.1		
Total %	5.3	10.5	3.2	0	19	1.7	9.3	6.2	0	17.3	4	27.3	2.9	0	34.2	8	17	4.5	0	29.5	
Cars	268	529	162	0	959	88	469	318	0	875	203	1362	146	1	1712	400	845	228	1	1474	5020
% Cars	99.3	99.1	100	0	99.3	98.9	98.5	100	0	99.1	100	98.1	99.3	100	98.4	98.5	97.6	99.6	100	98.1	98.6
Trucks (SU)	2	3	0	0	5	1	7	0	0	8	0	12	1	0	13	4	11	1	0	16	42
% Trucks (SU)	0.7	0.6	0	0	0.5	1.1	1.5	0	0	0.9	0	0.9	0.7	0	0.7	1	1.3	0.4	0	1.1	0.8
Trucks (TT)	0	2	0	0	2	0	0	0	0	0	0	15	0	0	15	2	10	0	0	12	29
% Trucks (TT)	0	0.4	0	0	0.2	0	0	0	0	0	0	1.1	0	0	0.9	0.5	1.2	0	0	0.8	0.6

# Dynamic Traffic, LLC

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

E/W: CR 518  
 N/S: Route 206  
 Town/County: Montgomery/Somerset  
 Job #: 2334-22-01462

File Name : Rt 206 & CR 518 - PM  
 Site Code : 00000000  
 Start Date : 7/26/2022  
 Page No : 2

Start Time	Georgetown Franklin Turnpike (CR 518) Eastbound					Washington Street (CR 518) Westbound					Route 206 Northbound					Route 206 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 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	36	76	21	0	133	10	56	35	0	101	27	174	21	0	222	45	104	28	0	177	633
05:15 PM	39	85	29	0	153	17	48	44	0	109	28	196	14	0	238	51	102	30	1	184	684
05:30 PM	28	74	20	0	122	7	66	48	0	121	27	188	19	0	234	48	110	29	0	187	664
05:45 PM	35	82	23	0	140	10	66	44	0	120	27	157	28	1	213	56	116	20	0	192	665
Total Volume	138	317	93	0	548	44	236	171	0	451	109	715	82	1	907	200	432	107	1	740	2646
% App. Total	25.2	57.8	17	0		9.8	52.3	37.9	0		12	78.8	9	0.1		27	58.4	14.5	0.1		
PHF	.885	.932	.802	.000	.895	.647	.894	.891	.000	.932	.973	.912	.732	.250	.953	.893	.931	.892	.250	.964	.967
Cars	136	315	93	0	544	44	233	171	0	448	109	705	81	1	896	196	419	107	1	723	2611
% Cars	98.6	99.4	100	0	99.3	100	98.7	100	0	99.3	100	98.6	98.8	100	98.8	98.0	97.0	100	100	97.7	98.7
Trucks (SU)	2	2	0	0	4	0	3	0	0	3	0	3	1	0	4	3	7	0	0	10	21
% Trucks (SU)	1.4	0.6	0	0	0.7	0	1.3	0	0	0.7	0	0.4	1.2	0	0.4	1.5	1.6	0	0	1.4	0.8
Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	1	6	0	0	7	14
% Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	1.0	0	0	0.8	0.5	1.4	0	0	0.9	0.5

# Dynamic Traffic, LLC

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

E/W: CR 518  
 N/S: Route 206  
 Town/County: Montgomery/Somerset  
 Job #: 2334-22-01462

File Name : Rt 206 & CR 518 - SAT  
 Site Code : 00000000  
 Start Date : 7/30/2022  
 Page No : 1

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

Start Time	Georgetown Franklin Turnpike (CR 518) Eastbound					Georgetown Franklin Turnpike (CR 518) Westbound					Route 206 Northbound					Route 206 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	
11:00 AM	30	35	7	0	72	17	32	32	0	81	23	167	11	0	201	53	104	23	2	182	536
11:15 AM	34	40	9	0	83	20	37	37	0	94	25	136	17	0	178	53	114	32	0	199	554
11:30 AM	22	37	10	0	69	12	36	48	0	96	13	147	14	0	174	65	92	29	2	188	527
11:45 AM	19	41	16	0	76	17	31	46	0	94	19	134	15	0	168	61	118	33	0	212	550
Total	105	153	42	0	300	66	136	163	0	365	80	584	57	0	721	232	428	117	4	781	2167
12:00 PM	18	27	9	0	54	20	35	50	0	105	15	129	19	0	163	63	108	26	0	197	519
12:15 PM	24	34	11	0	69	13	36	36	0	85	17	119	10	0	146	54	132	24	0	210	510
12:30 PM	20	44	19	0	83	15	15	34	0	64	19	153	24	0	196	54	92	35	0	181	524
12:45 PM	28	28	12	0	68	8	32	32	0	72	22	148	16	0	186	63	122	32	0	217	543
Total	90	133	51	0	274	56	118	152	0	326	73	549	69	0	691	234	454	117	0	805	2096
01:00 PM	19	32	9	0	60	15	40	38	0	93	18	149	13	0	180	53	122	21	0	196	529
01:15 PM	24	28	14	0	66	15	24	44	0	83	15	149	15	0	179	52	125	22	0	199	527
01:30 PM	18	30	6	0	54	13	35	35	0	83	15	166	13	0	194	50	102	26	1	179	510
01:45 PM	21	6	12	0	39	11	32	24	0	67	21	207	12	0	240	48	110	24	0	182	528
Total	82	96	41	0	219	54	131	141	0	326	69	671	53	0	793	203	459	93	1	756	2094
Grand Total	277	382	134	0	793	176	385	456	0	1017	222	1804	179	0	2205	669	1341	327	5	2342	6357
Approch %	34.9	48.2	16.9	0		17.3	37.9	44.8	0		10.1	81.8	8.1	0		28.6	57.3	14	0.2		
Total %	4.4	6	2.1	0	12.5	2.8	6.1	7.2	0	16	3.5	28.4	2.8	0	34.7	10.5	21.1	5.1	0.1	36.8	
Cars	277	379	131	0	787	170	379	451	0	1000	220	1788	178	0	2186	654	1317	326	5	2302	6275
% Cars	100	99.2	97.8	0	99.2	96.6	98.4	98.9	0	98.3	99.1	99.1	99.4	0	99.1	97.8	98.2	99.7	100	98.3	98.7
Trucks (SU)	0	3	2	0	5	6	6	3	0	15	2	11	1	0	14	12	15	1	0	28	62
% Trucks (SU)	0	0.8	1.5	0	0.6	3.4	1.6	0.7	0	1.5	0.9	0.6	0.6	0	0.6	1.8	1.1	0.3	0	1.2	1
Trucks (TT)	0	0	1	0	1	0	0	2	0	2	0	5	0	0	5	3	9	0	0	12	20
% Trucks (TT)	0	0	0.7	0	0.1	0	0	0.4	0	0.2	0	0.3	0	0	0.2	0.4	0.7	0	0	0.5	0.3

# Dynamic Traffic, LLC

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

E/W: CR 518  
 N/S: Route 206  
 Town/County: Montgomery/Somerset  
 Job #: 2334-22-01462

File Name : Rt 206 & CR 518 - SAT  
 Site Code : 00000000  
 Start Date : 7/30/2022  
 Page No : 2

Start Time	Georgetown Franklin Turnpike (CR 518) Eastbound					Georgetown Franklin Turnpike (CR 518) Westbound					Route 206 Northbound					Route 206 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 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:00 AM																					
11:00 AM	30	35	7	0	72	17	32	32	0	81	23	167	11	0	201	53	104	23	2	182	536
11:15 AM	34	40	9	0	83	20	37	37	0	94	25	136	17	0	178	53	114	32	0	199	554
11:30 AM	22	37	10	0	69	12	36	48	0	96	13	147	14	0	174	65	92	29	2	188	527
11:45 AM	19	41	16	0	76	17	31	46	0	94	19	134	15	0	168	61	118	33	0	212	550
Total Volume	105	153	42	0	300	66	136	163	0	365	80	584	57	0	721	232	428	117	4	781	2167
% App. Total	35	51	14	0		18.1	37.3	44.7	0		11.1	81	7.9	0		29.7	54.8	15	0.5		
PHF	.772	.933	.656	.000	.904	.825	.919	.849	.000	.951	.800	.874	.838	.000	.897	.892	.907	.886	.500	.921	.978
Cars	105	153	42	0	300	64	132	161	0	357	80	579	57	0	716	224	424	117	4	769	2142
% Cars	100	100	100	0	100	97.0	97.1	98.8	0	97.8	100	99.1	100	0	99.3	96.6	99.1	100	100	98.5	98.8
Trucks (SU)	0	0	0	0	0	2	4	1	0	7	0	4	0	0	4	8	3	0	0	11	22
% Trucks (SU)	0	0	0	0	0	3.0	2.9	0.6	0	1.9	0	0.7	0	0	0.6	3.4	0.7	0	0	1.4	1.0
Trucks (TT)	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	3
% Trucks (TT)	0	0	0	0	0	0	0	0.6	0	0.3	0	0.2	0	0	0.1	0	0.2	0	0	0.1	0.1

# Dynamic Traffic, LLC

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

E/W: Washington Street (CR 518)  
 N/S: East Driveways  
 Town/County: Montgomery/Somerset  
 Job #: 2334-22-01462

File Name : Washington St (CR 518) & East Driveways - PM  
 Site Code : 00000000  
 Start Date : 7/26/2022  
 Page No : 1

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

Start Time	Washington Street (CR 518) Eastbound				Washington Street (CR 518) Westbound				1 Washington Street East Driveway Northbound				1026 Washington Street East Driveway Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Right	Peds	App. Total	Left	Right	Peds	App. Total	Left	Right	Peds	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	1	3	0	4	0	0	1	1	5
04:45 PM	0	0	1	1	0	0	0	0	1	0	1	2	0	0	2	2	5
Total	0	0	1	1	0	0	0	0	2	3	1	6	0	0	3	3	10
05:00 PM	0	0	1	1	0	0	0	0	2	2	1	5	0	0	2	2	8
05:15 PM	0	0	0	0	0	0	0	0	0	1	2	3	0	0	3	3	6
05:30 PM	0	0	0	0	0	1	0	1	1	2	0	3	0	0	4	4	8
05:45 PM	0	0	3	3	0	0	0	0	0	1	1	2	0	0	2	2	7
Total	0	0	4	4	0	1	0	1	3	6	4	13	0	0	11	11	29
06:00 PM	0	0	1	1	0	0	0	0	4	4	0	8	0	0	7	7	16
06:15 PM	0	0	0	0	0	0	0	0	2	3	0	5	0	0	3	3	8
Grand Total	0	0	6	6	0	1	0	1	11	16	5	32	0	0	24	24	63
Apprch %	0	0	100		0	100	0		34.4	50	15.6		0	0	100		
Total %	0	0	9.5	9.5	0	1.6	0	1.6	17.5	25.4	7.9	50.8	0	0	38.1	38.1	
Cars	0	0	6	6	0	1	0	1	11	16	5	32	0	0	24	24	63
% Cars	0	0	100	100	0	100	0	100	100	100	100	100	0	0	100	100	100
Trucks (SU)	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
Trucks (TT)	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

Start Time	Washington Street (CR 518) Eastbound				Washington Street (CR 518) Westbound				1 Washington Street East Driveway Northbound				1026 Washington Street East Driveway Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Right	Peds	App. Total	Left	Right	Peds	App. Total	Left	Right	Peds	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	1	1	0	0	0	0	2	2	1	5	0	0	2	2	8
05:15 PM	0	0	0	0	0	0	0	0	0	1	2	3	0	0	3	3	6
05:30 PM	0	0	0	0	0	1	0	1	1	2	0	3	0	0	4	4	8
05:45 PM	0	0	3	3	0	0	0	0	0	1	1	2	0	0	2	2	7
Total Volume	0	0	4	4	0	1	0	1	3	6	4	13	0	0	11	11	29
% App. Total	0	0	100		0	100	0		23.1	46.2	30.8		0	0	100		
PHF	.000	.000	.333	.333	.000	.250	.000	.250	.375	.750	.500	.650	.000	.000	.688	.688	.906
Cars	0	0	4	4	0	1	0	1	3	6	4	13	0	0	11	11	29
% Cars	0	0	100	100	0	100	0	100	100	100	100	100	0	0	100	100	100
Trucks (SU)	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
Trucks (TT)	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

# Dynamic Traffic, LLC

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

E/W: Washington Street (CR 518)  
 N/S: East Driveways  
 Town/County: Montgomery/Somerset  
 Job #: 2334-22-01462

File Name : Washington St (CR 518) & East Driveways - SAT  
 Site Code : 00000000  
 Start Date : 7/30/2022  
 Page No : 1

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

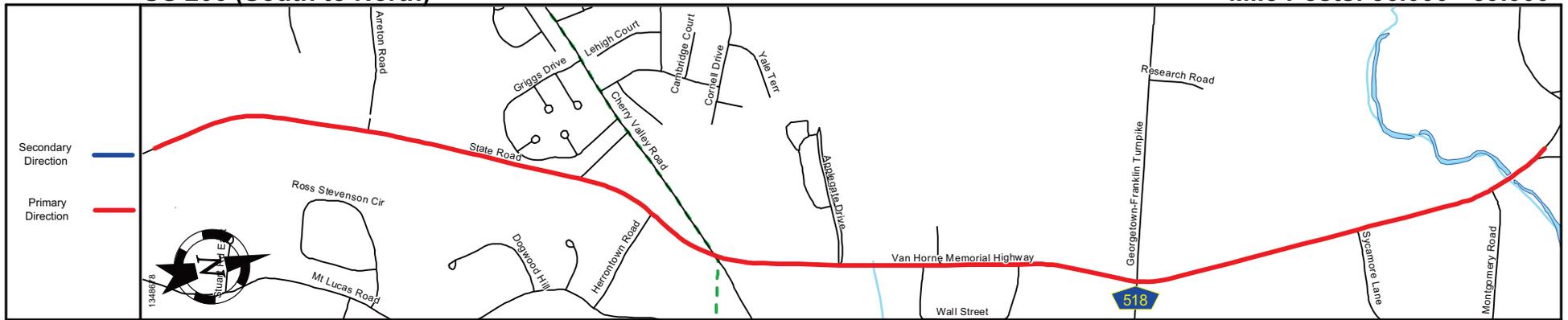
Start Time	Washington Street (CR 518) Eastbound				Washington Street (CR 518) Westbound				1 Washington Street East Driveway Northbound				1026 Washington Street East Driveway Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Right	Peds	App. Total	Left	Right	Peds	App. Total	Left	Right	Peds	App. Total	
11:00 AM	0	0	0	0	0	0	0	0	3	1	2	6	0	0	1	1	7
11:15 AM	0	0	0	0	0	0	0	0	0	2	2	4	0	0	2	2	6
11:30 AM	0	0	3	3	0	0	0	0	0	2	4	6	0	0	1	1	10
11:45 AM	0	0	0	0	0	0	0	0	2	4	2	8	0	0	3	3	11
Total	0	0	3	3	0	0	0	0	5	9	10	24	0	0	7	7	34
12:00 PM	0	0	0	0	0	0	0	0	3	1	1	5	0	0	0	0	5
12:15 PM	0	0	0	0	0	0	0	0	2	1	0	3	0	0	1	1	4
12:30 PM	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	5
12:45 PM	0	1	0	1	0	0	1	1	0	1	2	3	0	0	0	0	5
Total	0	1	0	1	0	0	1	1	10	3	3	16	0	0	1	1	19
01:00 PM	0	0	0	0	0	0	0	0	0	2	2	4	0	0	4	4	8
01:15 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	1	1	3
01:30 PM	0	0	0	0	0	0	0	0	1	4	1	6	0	0	7	7	13
01:45 PM	0	0	1	1	0	0	0	0	2	2	1	5	0	0	3	3	9
Total	0	0	1	1	0	0	0	0	5	8	4	17	0	0	15	15	33
Grand Total	0	1	4	5	0	0	1	1	20	20	17	57	0	0	23	23	86
Apprch %	0	20	80		0	0	100		35.1	35.1	29.8		0	0	100		
Total %	0	1.2	4.7	5.8	0	0	1.2	1.2	23.3	23.3	19.8	66.3	0	0	26.7	26.7	
Cars	0	1	4	5	0	0	1	1	19	20	17	56	0	0	23	23	85
% Cars	0	100	100	100	0	0	100	100	95	100	100	98.2	0	0	100	100	98.8
Trucks (SU)	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
Trucks (TT)	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
% Trucks (TT)	0	0	0	0	0	0	0	0	5	0	0	1.8	0	0	0	0	1.2



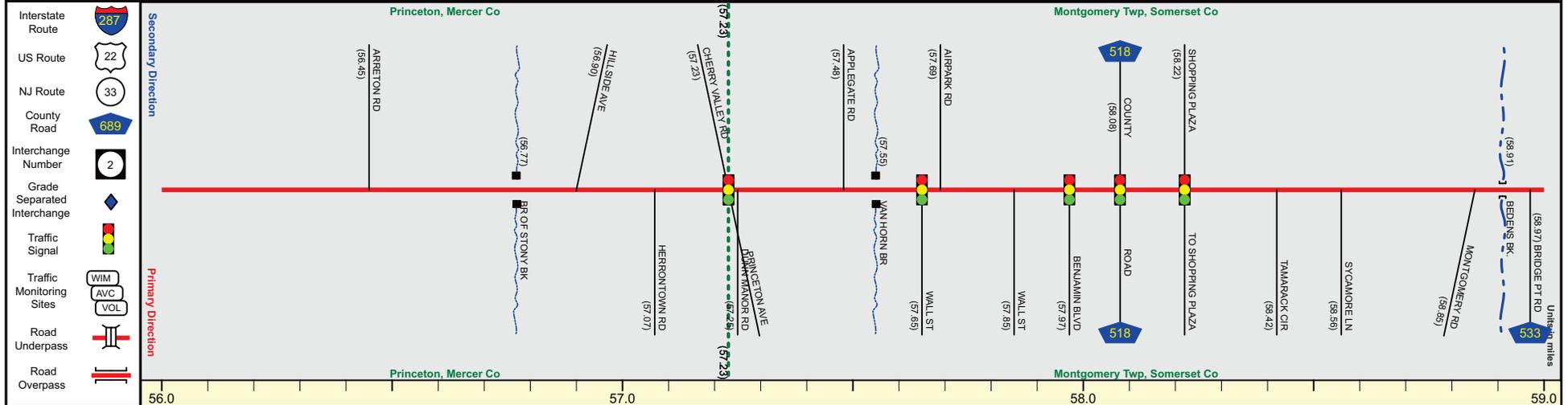








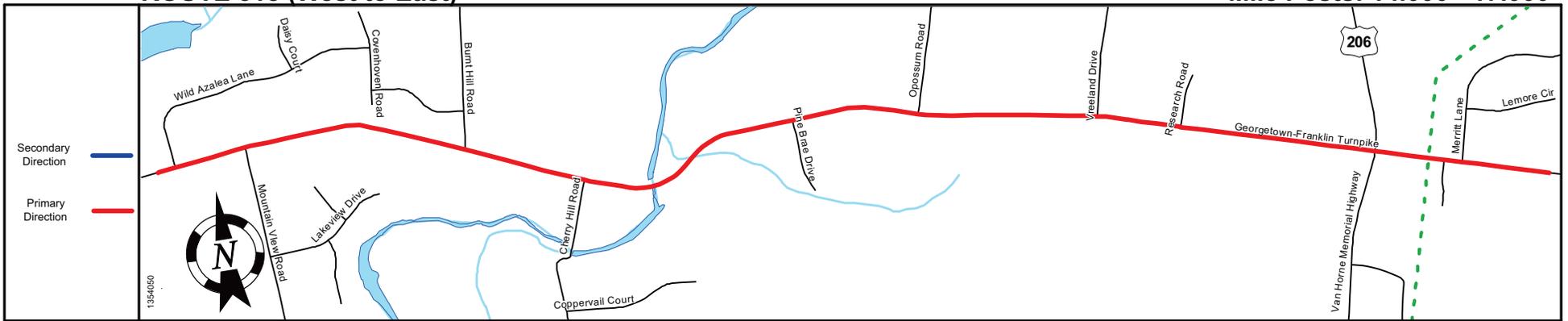
Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



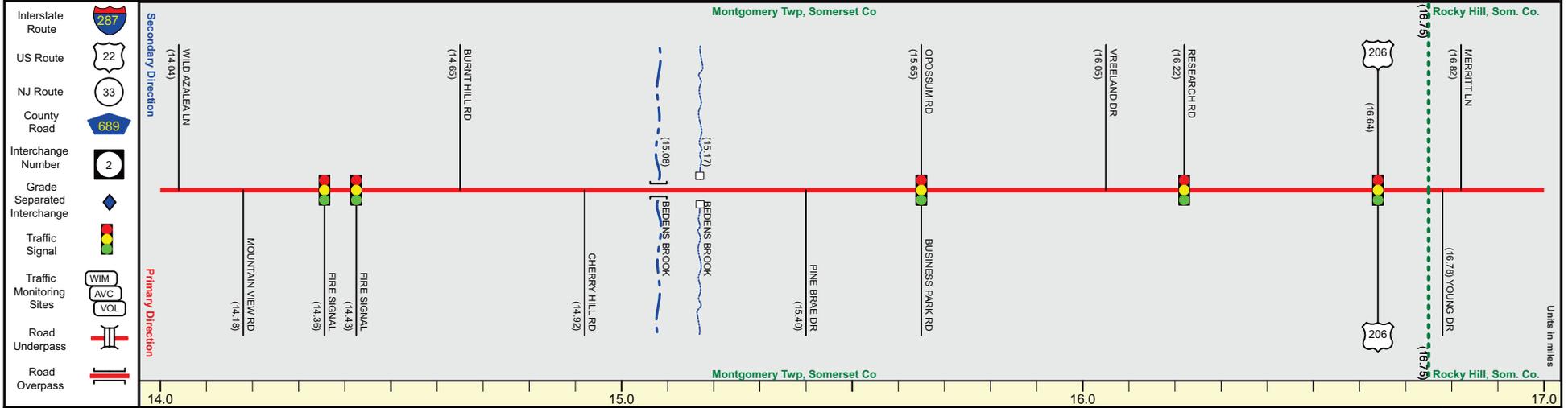
Street Name	State Road		Van Horne Memorial Highway	
Jurisdiction	N.J.D.O.T.			
Functional Class	Urban Principal Arterial			
Federal Aid - NHS Sy	NHS			
Control Section	1129		1810	
Speed Limit	35		45	
Number of Lanes	2		3	
Med. Type	None			
Med. Width	0			
Pavement	24		36	
Shoulder	4		10	
Traffic Volume	16,704 (2018)		18,266 (2017)	
Traffic Sta. ID	13mp08		11sp11	
Structure No.	1129157		1810150	
Enlarged Views				

# ROUTE 518 (West to East)

Mile Posts: 14.000 - 17.000



Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



Street Name	Georgetown-Franklin Turnpike		+	Washington Street
Jurisdiction	County			
Functional Class	Urban Minor Arterial			
Federal Aid - NHS Sy	STP			
Control Section				
Speed Limit	45		+	35
Number of Lanes	2			
Med. Type	None			
Med. Width	0			
Pavement	24		+	32
Shoulder	6		+	6
Traffic Volume	8,615 (2018)			
Traffic Sta. ID	91808			
Structure No.	18D0206 18D0204			
Enlarged Views				

SRI = 0000518\_\_

Date last inventoried: October 2012

70, 95, 110 & 135 – SECOND BACKGROUND CYCLES

Phase	Signal Indications						Time (Seconds)			
	<u>1, 2</u>	<u>4, 5</u>	<u>3, 11</u>	<u>6, 12</u>	<u>7, 8</u>	<u>9, 10</u>	<u>Plan I</u> (135 Sec.)	<u>Plan II</u> (110 Sec.)	<u>Plan III</u> (70 Sec.)	<u>Plan IV</u> (95 Sec.)
A) Route US 206 ROW Change Clearance	G Y <sup>(3)</sup> R <sup>(3)</sup>	G Y <sup>(4)</sup> R <sup>(4)</sup>	G Y <sup>(3)</sup> R <sup>(3)</sup>	G Y <sup>(4)</sup> R <sup>(4)</sup>	R R R	R R R	93 – 62 5* 2	68 – 43 5* 2	30 – 20 5* 2	53 – 41 5* 2
B) Rocky Hill Road Lead Lefts Change	R R	R R	R R	R R	R/<G- R/<Y- <sup>(5)</sup>	R/<G- R/<Y- <sup>(6)</sup>	7 3	7 3	5 3	7 3
C) Rocky Hill Road ROW Change Clearance	R R R	R R R	R R R	R R R	G Y R	G Y R	7 – 34** 5 3	7 – 28** 5 3	7 – 17** 5 3	7 – 19** 5 3
D) Route US 206 Lead Lefts Change	R R	R R	R/<G- R/<Y- <sup>(7)</sup>	R/<G- R/<Y- <sup>(8)</sup>	R R	R R	7-11 3	7-11 3	7 3	7 3
Emergency Flash	Y	Y	Y	Y	R	R	-	-	-	-

**NOTES:**

1. \*Offsets are measured from the beginning of yellow to Route US 206 traffic at this intersection.
2. \*\*Actuation of a pedestrian push button shall guarantee 17 seconds of green time to Phase C.
3. Phase C must follow Phase B.
4. Phase D can only follow Phase C.
5. The manual control cord is to be removed.
6. The vehicle interval is to be 2 seconds.
7. The memory circuit is to be off.
8. The left turn slots of Phase B are to be operating independently but timed concurrently.
9. The left turn slots of Phase D are to be operating independently but timed concurrently if actuation occurs in both slots. Each left turn slot is to be capable of terminating or extending separately or independently of each other, thereby reverting the timing to the non-conflicting through movement.

**HOURS OF OPERATION**

**CYCLE LENGTH**

**\*OFFSETS**

Plan I	- Monday thru Friday / 6:30 A.M. – 9:30 A.M.	135-Second Background Cycle	0 Seconds
Plan II	- Monday thru Friday / 3:30 P.M. – 6:30 P.M.	110-Second Background Cycle	0 Seconds
Plan III	- Monday thru Sunday / 10:00 P.M. – 6:30 A.M.	70-Second Background Cycle	0 Seconds
Plan IV	- All Other Times	95-Second Background Cycle	0 Seconds

**EMERGENCY SEQUENCE** <sup>(1)</sup>

<u>Phase</u>	<u>Signal Indications</u>						<u>Time (Seconds)</u>
	<u>1, 2</u>	<u>4, 5</u>	<u>3, 11</u>	<u>6, 12</u>	<u>7, 8</u>	<u>9, 10</u>	
E) Route US 206 N/B Change Route US 206 ROW	G	R	G/<G-	R	R	R	(2)
	G	R	G/<Y-	R	R	R	3
	G	G	G	G	R	R	10
<b><i>Resume Normal Operation</i></b>							
F) Route US 206 S/B Change Route US 206 ROW	R	G	R	G/<G-	R	R	(2)
	R	G	R	G/<Y-	R	R	3
	G	G	G	G	R	R	10
<b><i>Resume Normal Operation</i></b>							
G) Rocky Hill Road W/B Change Clearance Route US 206 ROW	R	R	R	R	G/<G-	R	(2)
	R	R	R	R	Y	R	5
	R	R	R	R	R	R	2
	G	G	G	G	R	R	10
<b><i>Resume Normal Operation</i></b>							
H) Rocky Hill Road E/B Change Clearance Route US 206 ROW	R	R	R	R	R	G/<G-	(2)
	R	R	R	R	R	Y	5
	R	R	R	R	R	R	2
	G	G	G	G	R	R	10
<b><i>Resume Normal Operation</i></b>							

**EMERGENCY OPERATION NOTES:**

- (1) Remote-control pre-emption is permitted from all approaches to the intersection. The controller shall guarantee all vehicular and pedestrian minimums, pedestrian clearances, and change and clearance times before leaving normal operation to sequence into the appropriate emergency sequence.
- (2) Green interval is to be held until emergency call terminates.
- (3) To remain green if Emergency Sequence E is next.
- (4) To remain green if Emergency Sequence F is next.
- (5) To remain R/<G- if Emergency Sequence G is next.
- (6) To remain R/<G- if Emergency Sequence H is next.
- (7) To remain R/<G- if Emergency Sequence E is next.
- (8) To remain R/<G- if Emergency Sequence F is next.

**Appendix C**  
**Capacity Analysis**

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	138	317	93	44	236	171	109	715	82	200	432	107
Future Volume (vph)	138	317	93	44	236	171	109	715	82	200	432	107
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		0%			-2%			-6%				4%
Storage Length (ft)	0		300	120		0	130		225	300		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			40			35			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	0.99			0.99							
Frt		0.966			0.937			0.984				0.970
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1712	1859	0	1746	1824	0	1844	3718	0	1721	1810	0
Flt Permitted	0.181			0.218			0.259			0.229		
Satd. Flow (perm)	326	1859	0	401	1824	0	503	3718	0	415	1810	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)					32							
Link Speed (mph)		45			35			40				40
Link Distance (ft)		1125			486			680				548
Travel Time (s)		17.0			9.5			11.6				9.3
Confl. Peds. (#/hr)	1		1	1		1						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	0%	0%	1%	0%	0%	1%	1%	2%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	142	423	0	45	419	0	112	822	0	206	555	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	43.0		7.0	43.0	
Minimum Split (s)	10.0	15.0		10.0	15.0		10.0	50.0		10.0	50.0	
Total Split (s)	10.0	36.0		10.0	36.0		14.0	50.0		14.0	50.0	
Total Split (%)	9.1%	32.7%		9.1%	32.7%		12.7%	45.5%		12.7%	45.5%	
Yellow Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	8.0		3.0	8.0		3.0	7.0		3.0	7.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	39.1	28.5		38.5	26.5		57.7	45.5		61.3	47.3	
Actuated g/C Ratio	0.36	0.26		0.35	0.24		0.52	0.41		0.56	0.43	
v/c Ratio	0.70	0.88		0.20	0.90		0.31	0.53		0.59	0.71	
Control Delay	43.3	60.2		23.3	61.5		13.9	26.5		19.4	32.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	43.3	60.2		23.3	61.5		13.9	26.5		19.4	32.9	
LOS	D	E		C	E		B	C		B	C	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	153	42	66	136	163	80	584	57	232	428	117
Future Volume (vph)	105	153	42	66	136	163	80	584	57	232	428	117
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		0%			-2%			-6%				4%
Storage Length (ft)	0		300	120		0	130		225	300		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			40			35			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00				0.99							
Frt		0.968			0.918			0.987			0.968	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1729	1888	0	1695	1756	0	1844	3733	0	1704	1835	0
Flt Permitted	0.302			0.568			0.318			0.348		
Satd. Flow (perm)	548	1888	0	1014	1756	0	617	3733	0	624	1835	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)					57							
Link Speed (mph)		45			35			40			40	
Link Distance (ft)		1125			486			680			548	
Travel Time (s)		17.0			9.5			11.6			9.3	
Confl. Peds. (#/hr)	4						4					
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	3%	3%	1%	0%	1%	0%	3%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	107	199	0	67	305	0	82	654	0	237	556	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	41.0		7.0	41.0	
Minimum Split (s)	10.0	15.0		10.0	15.0		10.0	48.0		10.0	48.0	
Total Split (s)	10.0	27.0		10.0	27.0		10.0	48.0		10.0	48.0	
Total Split (%)	10.5%	28.4%		10.5%	28.4%		10.5%	50.5%		10.5%	50.5%	
Yellow Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	8.0		3.0	8.0		3.0	7.0		3.0	7.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	27.4	16.8		27.4	16.8		56.2	45.2		56.8	47.2	
Actuated g/C Ratio	0.29	0.18		0.29	0.18		0.59	0.48		0.60	0.50	
v/c Ratio	0.44	0.60		0.20	0.85		0.18	0.37		0.52	0.61	
Control Delay	27.9	43.3		22.4	52.9		9.6	17.7		14.3	23.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	27.9	43.3		22.4	52.9		9.6	17.7		14.3	23.4	
LOS	C	D		C	D		A	B		B	C	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	151	338	112	49	282	194	129	805	90	248	498	113
Future Volume (vph)	151	338	112	49	282	194	129	805	90	248	498	113
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		0%			-2%			-6%				4%
Storage Length (ft)	0		300	120		0	130		225	300		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			40			35			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99							
Frt		0.963			0.939			0.985				0.972
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1712	1853	0	1746	1828	0	1844	3722	0	1721	1813	0
Flt Permitted	0.133			0.179			0.166			0.171		
Satd. Flow (perm)	240	1853	0	329	1828	0	322	3722	0	310	1813	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)					30							
Link Speed (mph)		45			35			40				40
Link Distance (ft)		1125			486			680				548
Travel Time (s)		17.0			9.5			11.6				9.3
Confl. Peds. (#/hr)	1		1	1		1						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	0%	0%	1%	0%	0%	1%	1%	2%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	156	463	0	51	491	0	133	923	0	256	629	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	43.0		7.0	43.0	
Minimum Split (s)	10.0	15.0		10.0	15.0		10.0	50.0		10.0	50.0	
Total Split (s)	10.0	36.0		10.0	36.0		14.0	50.0		14.0	50.0	
Total Split (%)	9.1%	32.7%		9.1%	32.7%		12.7%	45.5%		12.7%	45.5%	
Yellow Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	8.0		3.0	8.0		3.0	7.0		3.0	7.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effect Green (s)	40.6	30.0		40.0	28.0		55.9	43.2		60.0	45.3	
Actuated g/C Ratio	0.37	0.27		0.36	0.25		0.51	0.39		0.55	0.41	
v/c Ratio	0.86	0.91		0.24	1.00		0.46	0.63		0.83	0.84	
Control Delay (s/veh)	65.1	64.5		24.1	82.0		17.6	29.4		38.5	41.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	65.1	64.5		24.1	82.0		17.6	29.4		38.5	41.6	
LOS	E	E		C	F		B	C		D	D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		64.8			76.6			27.9			40.8	
Approach LOS		E			E			C			D	
Queue Length 50th (ft)	73	326		22	~334		43	273		90	392	
Queue Length 95th (ft)	#177	#535		48	#556		74	343		#215	#625	
Internal Link Dist (ft)		1045			406			600			468	
Turn Bay Length (ft)				120			130			300		
Base Capacity (vph)	181	505		209	487		322	1460		310	746	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.86	0.92		0.24	1.01		0.41	0.63		0.83	0.84	

**Intersection Summary**

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay (s/veh): 47.5      Intersection LOS: D

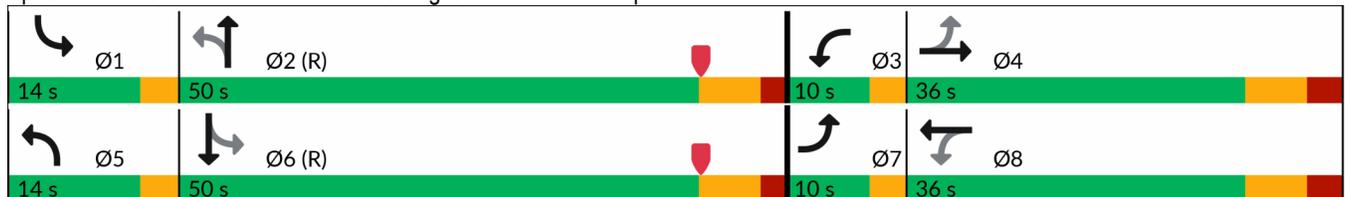
Intersection Capacity Utilization 102.6%      ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 10: Route 206 & Georgetown Franklin Turnpike



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	668	112	49	370	194	0	892	90	0	840	160
Future Volume (vph)	195	668	112	49	370	194	0	892	90	0	840	160
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		0%			-2%			-6%				4%
Storage Length (ft)	0		300	120		0	130		225	300		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			40			35			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99			0.99							
Frt		0.979			0.948			0.986				0.976
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1712	1889	0	1746	1846	0	0	3725	0	0	3457	0
Flt Permitted	0.184			0.093								
Satd. Flow (perm)	332	1889	0	171	1846	0	0	3725	0	0	3457	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)					29							
Link Speed (mph)		45			35			40				40
Link Distance (ft)		1125			486			680				548
Travel Time (s)		17.0			9.5			11.6				9.3
Confl. Peds. (#/hr)	1		1	1		1						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	0%	0%	1%	0%	0%	1%	1%	2%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	201	804	0	51	581	0	0	1013	0	0	1031	0
Turn Type	pm+pt	NA		pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8			2			6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0			35.0			35.0	
Minimum Split (s)	10.0	15.0		10.0	15.0			42.0			42.0	
Total Split (s)	15.0	61.0		7.0	53.0			42.0			42.0	
Total Split (%)	13.6%	55.5%		6.4%	48.2%			38.2%			38.2%	
Yellow Time (s)	3.0	5.0		3.0	5.0			5.0			5.0	
All-Red Time (s)	0.0	3.0		0.0	3.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.0	8.0		3.0	8.0			7.0			7.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	None		None	None			C-Max			C-Max	
Act Effct Green (s)	60.8	50.2		51.2	42.2			39.2			39.2	
Actuated g/C Ratio	0.55	0.46		0.47	0.38			0.36			0.36	
v/c Ratio	0.63	0.93		0.37	0.80			0.76			0.83	
Control Delay (s/veh)	21.2	46.8		18.4	37.4			37.1			41.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	21.2	46.8		18.4	37.4			37.1			41.1	
LOS	C	D		B	D			D			D	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	171	65	76	179	189	101	681	66	287	509	126
Future Volume (vph)	114	171	65	76	179	189	101	681	66	287	509	126
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		0%			-2%			-6%				4%
Storage Length (ft)	0		300	120		0	130		225	300		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			40			35			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	0.99				0.99							
Frt		0.959			0.923			0.987				0.970
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1729	1870	0	1695	1766	0	1844	3732	0	1704	1839	0
Flt Permitted	0.195			0.547			0.197			0.276		
Satd. Flow (perm)	354	1870	0	976	1766	0	382	3732	0	495	1839	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)					50							
Link Speed (mph)		45			35			40				40
Link Distance (ft)		1125			486			680				548
Travel Time (s)		17.0			9.5			11.6				9.3
Confl. Peds. (#/hr)	4						4					
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	3%	3%	1%	0%	1%	0%	3%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	240	0	78	376	0	103	762	0	293	648	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	41.0		7.0	41.0	
Minimum Split (s)	10.0	15.0		10.0	15.0		10.0	48.0		10.0	48.0	
Total Split (s)	10.0	27.0		10.0	27.0		10.0	48.0		10.0	48.0	
Total Split (%)	10.5%	28.4%		10.5%	28.4%		10.5%	50.5%		10.5%	50.5%	
Yellow Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	8.0		3.0	8.0		3.0	7.0		3.0	7.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effect Green (s)	31.5	20.9		30.9	18.9		52.1	41.1		52.7	43.1	
Actuated g/C Ratio	0.33	0.22		0.33	0.20		0.55	0.43		0.55	0.45	
v/c Ratio	0.53	0.58		0.21	0.95		0.32	0.47		0.80	0.77	
Control Delay (s/veh)	30.8	40.7		22.2	70.7		11.8	20.4		31.7	30.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	30.8	40.7		22.2	70.7		11.8	20.4		31.7	30.8	
LOS	C	D		C	E		B	C		C	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		37.5			62.4			19.5			31.1	
Approach LOS		D			E			B			C	
Queue Length 50th (ft)	48	134		31	199		26	167		84	334	
Queue Length 95th (ft)	88	215		63	#380		48	220		#175	#529	
Internal Link Dist (ft)		1045			406			600			468	
Turn Bay Length (ft)				120			130			300		
Base Capacity (vph)	218	412		370	393		316	1612		363	833	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.53	0.58		0.21	0.96		0.33	0.47		0.81	0.78	

**Intersection Summary**

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay (s/veh): 33.6      Intersection LOS: C

Intersection Capacity Utilization 95.6%      ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 10: Route 206 & Georgetown Franklin Turnpike



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	541	65	76	294	189	0	769	66	0	918	187
Future Volume (vph)	158	541	65	76	294	189	0	769	66	0	918	187
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		0%			-2%			-6%			4%	
Storage Length (ft)	0		300	120		0	130		225	300		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			40			35			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99				0.99							
Fr <sub>t</sub>		0.984			0.941			0.988			0.975	
Fl <sub>t</sub> Protected	0.950			0.950								
Satd. Flow (prot)	1729	1919	0	1695	1800	0	0	3736	0	0	3511	0
Fl <sub>t</sub> Permitted	0.183			0.138								
Satd. Flow (perm)	332	1919	0	246	1800	0	0	3736	0	0	3511	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)					36							
Link Speed (mph)		45			35			40			40	
Link Distance (ft)		1125			486			680			548	
Travel Time (s)		17.0			9.5			11.6			9.3	
Confl. Peds. (#/hr)	4					4						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	3%	3%	1%	0%	1%	0%	3%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	161	618	0	78	493	0	0	852	0	0	1128	0
Turn Type	pm+pt	NA		pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8			2			6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0			35.0			35.0	
Minimum Split (s)	10.0	15.0		10.0	15.0			42.0			42.0	
Total Split (s)	14.0	39.0		14.0	39.0			42.0			42.0	
Total Split (%)	14.7%	41.1%		14.7%	41.1%			44.2%			44.2%	
Yellow Time (s)	3.0	5.0		3.0	5.0			5.0			5.0	
All-Red Time (s)	0.0	3.0		0.0	3.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.0	8.0		3.0	8.0			7.0			7.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	None		None	None			C-Max			C-Max	
Act Effct Green (s)	45.3	32.3		41.0	28.5			39.1			39.1	
Actuated g/C Ratio	0.48	0.34		0.43	0.30			0.41			0.41	
v/c Ratio	0.54	0.94		0.35	0.87			0.55			0.78	
Control Delay (s/veh)	20.2	55.8		16.7	46.4			23.9			30.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	20.2	55.8		16.7	46.4			23.9			30.1	
LOS	C	E		B	D			C			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		48.5			42.4			24.0			30.2	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	51	359		24	257			207			312	
Queue Length 95th (ft)	83	#569		45	#415			282			#432	
Internal Link Dist (ft)		1045			406			600			468	
Turn Bay Length (ft)				120								
Base Capacity (vph)	321	653		282	611			1538			1445	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.50	0.95		0.28	0.81			0.55			0.78	

**Intersection Summary**

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

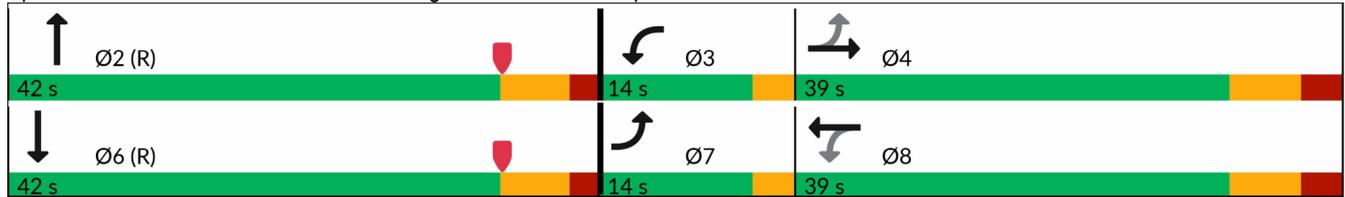
Intersection Signal Delay (s/veh): 35.0      Intersection LOS: C

Intersection Capacity Utilization 83.8%      ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 10: Route 206 & Georgetown Franklin Turnpike



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	151	340	112	51	284	198	129	805	92	250	498	113
Future Volume (vph)	151	340	112	51	284	198	129	805	92	250	498	113
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		0%			-2%			-6%				4%
Storage Length (ft)	0		300	120		0	130		225	300		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			40			35			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99							
Frt		0.963			0.938			0.985				0.972
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1712	1853	0	1746	1826	0	1844	3722	0	1721	1813	0
Flt Permitted	0.133			0.174			0.167			0.169		
Satd. Flow (perm)	240	1853	0	320	1826	0	324	3722	0	306	1813	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)					31							
Link Speed (mph)		45			35			40				40
Link Distance (ft)		1125			329			680				548
Travel Time (s)		17.0			6.4			11.6				9.3
Confl. Peds. (#/hr)	1		1	1		1						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	0%	0%	1%	0%	0%	1%	1%	2%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	156	466	0	53	497	0	133	925	0	258	629	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	43.0		7.0	43.0	
Minimum Split (s)	10.0	15.0		10.0	15.0		10.0	50.0		10.0	50.0	
Total Split (s)	10.0	36.0		10.0	36.0		14.0	50.0		14.0	50.0	
Total Split (%)	9.1%	32.7%		9.1%	32.7%		12.7%	45.5%		12.7%	45.5%	
Yellow Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	8.0		3.0	8.0		3.0	7.0		3.0	7.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effect Green (s)	40.6	30.0		40.0	28.0		55.8	43.1		60.0	45.3	
Actuated g/C Ratio	0.37	0.27		0.36	0.25		0.51	0.39		0.55	0.41	
v/c Ratio	0.86	0.92		0.25	1.02		0.46	0.63		0.84	0.84	
Control Delay (s/veh)	65.1	65.5		24.3	84.9		17.5	29.4		40.1	41.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	65.1	65.5		24.3	84.9		17.5	29.4		40.1	41.6	
LOS	E	E		C	F		B	C		D	D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		65.5			79.1			28.0				41.3
Approach LOS		E			E			C				D
Queue Length 50th (ft)	73	329		23	~346		43	274		91	392	
Queue Length 95th (ft)	#177	#539		50	#564		74	343		#221	#625	
Internal Link Dist (ft)		1045			249			600			468	
Turn Bay Length (ft)				120			130			300		
Base Capacity (vph)	181	505		207	487		322	1459		308	746	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.86	0.92		0.26	1.02		0.41	0.63		0.84	0.84	

**Intersection Summary**

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay (s/veh): 48.3      Intersection LOS: D

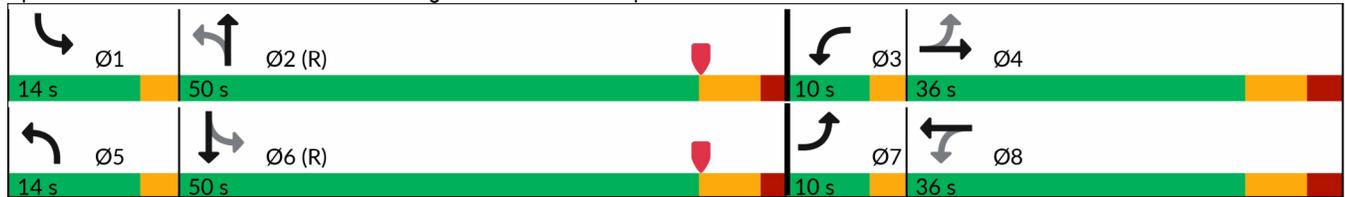
Intersection Capacity Utilization 103.0%      ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 10: Route 206 & Georgetown Franklin Turnpike



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	672	112	51	372	198	0	892	92	0	840	160
Future Volume (vph)	195	672	112	51	372	198	0	892	92	0	840	160
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		0%			-2%			-6%				4%
Storage Length (ft)	0		300	120		0	130		225	300		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			40			35			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99			0.99							
Frt		0.979			0.948			0.986				0.976
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1712	1889	0	1746	1846	0	0	3725	0	0	3457	0
Flt Permitted	0.179			0.093								
Satd. Flow (perm)	323	1889	0	171	1846	0	0	3725	0	0	3457	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)					29							
Link Speed (mph)		45			35			40				40
Link Distance (ft)		1125			319			680				548
Travel Time (s)		17.0			6.2			11.6				9.3
Confl. Peds. (#/hr)	1		1	1		1						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	0%	0%	1%	0%	0%	1%	1%	2%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	201	808	0	53	588	0	0	1015	0	0	1031	0
Turn Type	pm+pt	NA		pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8			2			6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0			35.0			35.0	
Minimum Split (s)	10.0	15.0		10.0	15.0			42.0			42.0	
Total Split (s)	15.0	61.0		7.0	53.0			42.0			42.0	
Total Split (%)	13.6%	55.5%		6.4%	48.2%			38.2%			38.2%	
Yellow Time (s)	3.0	5.0		3.0	5.0			5.0			5.0	
All-Red Time (s)	0.0	3.0		0.0	3.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.0	8.0		3.0	8.0			7.0			7.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	None		None	None			C-Max			C-Max	
Act Effect Green (s)	61.0	50.4		51.4	42.4			39.0			39.0	
Actuated g/C Ratio	0.55	0.46		0.47	0.39			0.35			0.35	
v/c Ratio	0.64	0.93		0.38	0.80			0.76			0.84	
Control Delay (s/veh)	21.5	46.9		18.9	37.7			37.4			41.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	21.5	46.9		18.9	37.7			37.4			41.4	
LOS	C	D		B	D			D			D	

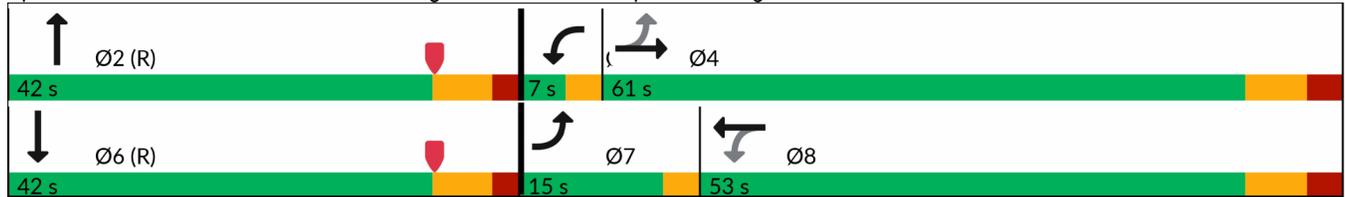


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		41.9			36.2			37.4			41.4	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	62	502		15	328			351			369	
Queue Length 95th (ft)	99	#756		32	478			438			#503	
Internal Link Dist (ft)		1045			239			600			468	
Turn Bay Length (ft)				120								
Base Capacity (vph)	330	910		137	776			1322			1226	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.61	0.89		0.39	0.76			0.77			0.84	

Intersection Summary

Area Type: Other  
 Cycle Length: 110  
 Actuated Cycle Length: 110  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.94  
 Intersection Signal Delay (s/veh): 39.6      Intersection LOS: D  
 Intersection Capacity Utilization 91.9%      ICU Level of Service F  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 10: Route 206 & Georgetown Franklin Turnpike/Washington Street



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	151	340	112	51	284	198	129	805	92	250	498	113
Future Volume (vph)	151	340	112	51	284	198	129	805	92	250	498	113
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		0%			-2%			-6%				4%
Storage Length (ft)	0		300	120		0	130		225	300		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			40			35			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99							
Frt		0.963			0.938			0.985				0.972
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1712	1853	0	1746	1826	0	1844	3722	0	1721	1813	0
Flt Permitted	0.129			0.191			0.155			0.162		
Satd. Flow (perm)	232	1853	0	351	1826	0	301	3722	0	293	1813	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)					31							
Link Speed (mph)		45			35			40				40
Link Distance (ft)		1125			329			680				548
Travel Time (s)		17.0			6.4			11.6				9.3
Confl. Peds. (#/hr)	1		1	1		1						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	0%	0%	1%	0%	0%	1%	1%	2%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	156	466	0	53	497	0	133	925	0	258	629	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	43.0		7.0	43.0	
Minimum Split (s)	10.0	15.0		10.0	15.0		10.0	50.0		10.0	50.0	
Total Split (s)	10.0	37.0		10.0	37.0		14.0	49.0		14.0	49.0	
Total Split (%)	9.1%	33.6%		9.1%	33.6%		12.7%	44.5%		12.7%	44.5%	
Yellow Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	8.0		3.0	8.0		3.0	7.0		3.0	7.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	41.6	31.0		41.0	29.0		54.8	42.0		59.0	44.3	
Actuated g/C Ratio	0.38	0.28		0.37	0.26		0.50	0.38		0.54	0.40	
v/c Ratio	0.86	0.89		0.24	0.98		0.48	0.65		0.86	0.86	
Control Delay (s/veh)	64.7	60.0		23.3	75.5		18.8	30.5		44.3	44.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	64.7	60.0		23.3	75.5		18.8	30.5		44.3	44.2	
LOS	E	E		C	E		B	C		D	D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		61.2			70.5			29.1			44.3	
Approach LOS		E			E			C			D	
Queue Length 50th (ft)	72	324		23	332		44	278		93	398	
Queue Length 95th (ft)	#178	#527		49	#552		76	348		#233	#638	
Internal Link Dist (ft)		1045			249			600			468	
Turn Bay Length (ft)				120			130			300		
Base Capacity (vph)	181	522		219	504		310	1422		299	729	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.86	0.89		0.24	0.99		0.43	0.65		0.86	0.86	

**Intersection Summary**

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay (s/veh): 47.1      Intersection LOS: D

Intersection Capacity Utilization 103.0%      ICU Level of Service G

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 10: Route 206 & Georgetown Franklin Turnpike



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	174	65	78	180	193	101	681	69	290	509	126
Future Volume (vph)	114	174	65	78	180	193	101	681	69	290	509	126
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		0%			-2%			-6%				4%
Storage Length (ft)	0		300	120		0	130		225	300		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			40			35			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	0.99				0.99							
Frt		0.959			0.922			0.986				0.970
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1729	1870	0	1695	1764	0	1844	3729	0	1704	1839	0
Flt Permitted	0.190			0.539			0.196			0.274		
Satd. Flow (perm)	345	1870	0	962	1764	0	381	3729	0	491	1839	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)					51							
Link Speed (mph)		45			35			40				40
Link Distance (ft)		1125			329			680				548
Travel Time (s)		17.0			6.4			11.6				9.3
Confl. Peds. (#/hr)	4						4					
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	3%	3%	1%	0%	1%	0%	3%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	244	0	80	381	0	103	765	0	296	648	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	41.0		7.0	41.0	
Minimum Split (s)	10.0	15.0		10.0	15.0		10.0	48.0		10.0	48.0	
Total Split (s)	10.0	27.0		10.0	27.0		10.0	48.0		10.0	48.0	
Total Split (%)	10.5%	28.4%		10.5%	28.4%		10.5%	50.5%		10.5%	50.5%	
Yellow Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	8.0		3.0	8.0		3.0	7.0		3.0	7.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effect Green (s)	31.6	21.0		31.0	19.0		52.0	41.0		52.6	43.0	
Actuated g/C Ratio	0.33	0.22		0.33	0.20		0.55	0.43		0.55	0.45	
v/c Ratio	0.53	0.59		0.21	0.96		0.32	0.47		0.81	0.77	
Control Delay (s/veh)	31.0	40.9		22.3	72.7		11.8	20.5		33.3	30.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	31.0	40.9		22.3	72.7		11.8	20.5		33.3	30.9	
LOS	C	D		C	E		B	C		C	C	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	547	65	78	295	193	0	769	69	0	918	187
Future Volume (vph)	158	547	65	78	295	193	0	769	69	0	918	187
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		0%			-2%			-6%			4%	
Storage Length (ft)	0		300	120		0	130		225	300		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			40			35			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99				0.99							
Fr <sub>t</sub>		0.984			0.941			0.988			0.975	
Fl <sub>t</sub> Protected	0.950			0.950								
Satd. Flow (prot)	1729	1919	0	1695	1800	0	0	3736	0	0	3511	0
Fl <sub>t</sub> Permitted	0.178			0.137								
Satd. Flow (perm)	323	1919	0	244	1800	0	0	3736	0	0	3511	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)					37							
Link Speed (mph)		45			35			40			40	
Link Distance (ft)		1125			319			680			548	
Travel Time (s)		17.0			6.2			11.6			9.3	
Confl. Peds. (#/hr)	4					4						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	3%	3%	1%	0%	1%	0%	3%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	161	624	0	80	498	0	0	855	0	0	1128	0
Turn Type	pm+pt	NA		pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8			2			6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0			35.0			35.0	
Minimum Split (s)	10.0	15.0		10.0	15.0			42.0			42.0	
Total Split (s)	14.0	39.0		14.0	39.0			42.0			42.0	
Total Split (%)	14.7%	41.1%		14.7%	41.1%			44.2%			44.2%	
Yellow Time (s)	3.0	5.0		3.0	5.0			5.0			5.0	
All-Red Time (s)	0.0	3.0		0.0	3.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.0	8.0		3.0	8.0			7.0			7.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	None		None	None			C-Max			C-Max	
Act Effct Green (s)	45.3	32.3		41.1	28.5			39.1			39.1	
Actuated g/C Ratio	0.48	0.34		0.43	0.30			0.41			0.41	
v/c Ratio	0.54	0.95		0.36	0.87			0.55			0.78	
Control Delay (s/veh)	20.4	57.6		16.9	47.1			24.0			30.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	20.4	57.6		16.9	47.1			24.0			30.2	
LOS	C	E		B	D			C			C	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		50.0			42.9			24.0			30.2	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	51	362		24	259			208			313	
Queue Length 95th (ft)	83	#578		46	#422			283			#432	
Internal Link Dist (ft)		1045			239			600			468	
Turn Bay Length (ft)				120								
Base Capacity (vph)	318	653		281	612			1536			1444	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.51	0.96		0.28	0.81			0.56			0.78	

Intersection Summary

Area Type: Other  
 Cycle Length: 95  
 Actuated Cycle Length: 95  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.96  
 Intersection Signal Delay (s/veh): 35.5      Intersection LOS: D  
 Intersection Capacity Utilization 84.1%      ICU Level of Service E  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 10: Route 206 & Georgetown Franklin Turnpike/Washington Street



Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	0	541	58	59	451	0	0	0	0	0	0	0
Future Vol, veh/h	0	541	58	59	451	0	0	0	0	0	0	0
Conflicting Peds, #/hr	11	0	4	4	0	11	4	0	0	0	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	1082023936	-	-	0	-	-
Grade, %	-	2	-	-	-2	-	-	0	-	-	-4	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	1	2	0	1	2	0	0	0	2	0	2
Mvmt Flow	0	615	66	67	513	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	524	0	0	685	0	0	1306	1343	528
Stage 1	-	-	-	-	-	-	658	658	-
Stage 2	-	-	-	-	-	-	648	685	-
Critical Hdwy	4.12	-	-	4.1	-	-	5.62	5.7	5.82
Critical Hdwy Stg 1	-	-	-	-	-	-	4.62	4.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.62	4.7	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.518	4	3.318
Pot Cap-1 Maneuver	1043	-	-	918	-	-	236	207	584
Stage 1	-	-	-	-	-	-	596	537	-
Stage 2	-	-	-	-	-	-	601	526	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1032	-	-	918	-	-	208	0	576
Mov Cap-2 Maneuver	-	-	-	-	-	-	208	0	-
Stage 1	-	-	-	-	-	-	590	0	-
Stage 2	-	-	-	-	-	-	534	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	1.1	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1032	-	-	918	-	-	-
HCM Lane V/C Ratio	-	-	-	0.073	-	-	-
HCM Control Delay (s)	0	-	-	9.2	0	-	0
HCM Lane LOS	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	-	-	0.2	-	-	-

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	0	357	85	29	365	0	0	0	0	0	0	0
Future Vol, veh/h	0	357	85	29	365	0	0	0	0	0	0	0
Conflicting Peds, #/hr	7	0	10	10	0	7	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	1082023936	-	-	0	-	-
Grade, %	-	2	-	-	-2	-	-	0	-	-	-4	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	0	0	2	2	0	0	0	2	0	2
Mvmt Flow	0	368	88	30	376	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	383	0	0	466	0	0	855	909	386
Stage 1	-	-	-	-	-	-	443	443	-
Stage 2	-	-	-	-	-	-	412	466	-
Critical Hdwy	4.12	-	-	4.1	-	-	5.62	5.7	5.82
Critical Hdwy Stg 1	-	-	-	-	-	-	4.62	4.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.62	4.7	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.518	4	3.318
Pot Cap-1 Maneuver	1175	-	-	1106	-	-	397	339	691
Stage 1	-	-	-	-	-	-	714	639	-
Stage 2	-	-	-	-	-	-	733	628	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1167	-	-	1106	-	-	378	0	685
Mov Cap-2 Maneuver	-	-	-	-	-	-	378	0	-
Stage 1	-	-	-	-	-	-	709	0	-
Stage 2	-	-	-	-	-	-	704	0	-

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

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1167	-	-	1106	-	-	-
HCM Lane V/C Ratio	-	-	-	0.027	-	-	-
HCM Control Delay (s)	0	-	-	8.3	0	-	0
HCM Lane LOS	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	-	-	0.1	-	-	-

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	0	618	58	59	525	0	0	0	0	0	0	0
Future Vol, veh/h	0	618	58	59	525	0	0	0	0	0	0	0
Conflicting Peds, #/hr	11	0	4	4	0	11	4	0	0	0	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	-2	-	-	0	-	-	-4	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	1	2	0	1	2	0	0	0	2	0	2
Mvmt Flow	0	702	66	67	597	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	608	0	0	772	0	0	1477	1514	612
Stage 1	-	-	-	-	-	-	742	742	-
Stage 2	-	-	-	-	-	-	735	772	-
Critical Hdwy	4.12	-	-	4.1	-	-	5.62	5.7	5.82
Critical Hdwy Stg 1	-	-	-	-	-	-	4.62	4.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.62	4.7	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.518	4	3.318
Pot Cap-1 Maneuver	970	-	-	852	-	-	193	169	528
Stage 1	-	-	-	-	-	-	555	502	-
Stage 2	-	-	-	-	-	-	559	489	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	960	-	-	852	-	-	167	0	521
Mov Cap-2 Maneuver	-	-	-	-	-	-	167	0	-
Stage 1	-	-	-	-	-	-	549	0	-
Stage 2	-	-	-	-	-	-	488	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	1	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	960	-	-	852	-	-	-
HCM Lane V/C Ratio	-	-	-	0.079	-	-	-
HCM Control Delay (s/veh)	0	-	-	9.6	0	-	0
HCM Lane LOS	A	-	-	A	A	-	A
HCM 95th %tile Q (veh)	0	-	-	0.3	-	-	-

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	0	700	58	59	613	0	0	0	0	0	0	0
Future Vol, veh/h	0	700	58	59	613	0	0	0	0	0	0	0
Conflicting Peds, #/hr	11	0	4	4	0	11	4	0	0	0	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	-2	-	-	0	-	-	-4	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	1	2	0	1	2	0	0	0	2	0	2
Mvmt Flow	0	795	66	67	697	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	708	0	0	865	0	0	1670	1707	712
Stage 1	-	-	-	-	-	-	842	842	-
Stage 2	-	-	-	-	-	-	828	865	-
Critical Hdwy	4.12	-	-	4.1	-	-	5.62	5.7	5.82
Critical Hdwy Stg 1	-	-	-	-	-	-	4.62	4.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.62	4.7	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.518	4	3.318
Pot Cap-1 Maneuver	891	-	-	787	-	-	153	135	468
Stage 1	-	-	-	-	-	-	510	462	-
Stage 2	-	-	-	-	-	-	516	453	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	882	-	-	787	-	-	129	0	461
Mov Cap-2 Maneuver	-	-	-	-	-	-	129	0	-
Stage 1	-	-	-	-	-	-	505	0	-
Stage 2	-	-	-	-	-	-	440	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.9	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	882	-	-	787	-	-	-
HCM Lane V/C Ratio	-	-	-	0.085	-	-	-
HCM Control Delay (s/veh)	0	-	-	10	0	-	0
HCM Lane LOS	A	-	-	B	A	-	A
HCM 95th %tile Q (veh)	0	-	-	0.3	-	-	-

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	0	439	85	29	444	0	0	0	0	0	0	0
Future Vol, veh/h	0	439	85	29	444	0	0	0	0	0	0	0
Conflicting Peds, #/hr	7	0	10	10	0	7	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	-2	-	-	0	-	-	-4	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	0	0	2	2	0	0	0	2	0	2
Mvmt Flow	0	453	88	30	458	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	465	0	0	551	0	0	1022	1076	468
Stage 1	-	-	-	-	-	-	525	525	-
Stage 2	-	-	-	-	-	-	497	551	-
Critical Hdwy	4.12	-	-	4.1	-	-	5.62	5.7	5.82
Critical Hdwy Stg 1	-	-	-	-	-	-	4.62	4.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.62	4.7	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.518	4	3.318
Pot Cap-1 Maneuver	1096	-	-	1029	-	-	328	281	627
Stage 1	-	-	-	-	-	-	667	599	-
Stage 2	-	-	-	-	-	-	683	586	-
Platoon blocked, %		-	-	-	-	-			
Mov Cap-1 Maneuver	1089	-	-	1029	-	-	311	0	621
Mov Cap-2 Maneuver	-	-	-	-	-	-	311	0	-
Stage 1	-	-	-	-	-	-	662	0	-
Stage 2	-	-	-	-	-	-	652	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.5	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1089	-	-	1029	-	-	-
HCM Lane V/C Ratio	-	-	-	0.029	-	-	-
HCM Control Delay (s/veh)	0	-	-	8.6	0	-	0
HCM Lane LOS	A	-	-	A	A	-	A
HCM 95th %tile Q (veh)	0	-	-	0.1	-	-	-

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	0	522	85	29	559	0	0	0	0	0	0	0
Future Vol, veh/h	0	522	85	29	559	0	0	0	0	0	0	0
Conflicting Peds, #/hr	7	0	10	10	0	7	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	-2	-	-	0	-	-	-4	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	0	0	2	2	0	0	0	2	0	2
Mvmt Flow	0	538	88	30	576	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	583	0	0	636	0	0	1225	1279	586
Stage 1	-	-	-	-	-	-	643	643	-
Stage 2	-	-	-	-	-	-	582	636	-
Critical Hdwy	4.12	-	-	4.1	-	-	5.62	5.7	5.82
Critical Hdwy Stg 1	-	-	-	-	-	-	4.62	4.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.62	4.7	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.518	4	3.318
Pot Cap-1 Maneuver	991	-	-	957	-	-	259	223	545
Stage 1	-	-	-	-	-	-	604	544	-
Stage 2	-	-	-	-	-	-	636	547	-
Platoon blocked, %		-	-	-	-	-			
Mov Cap-1 Maneuver	984	-	-	957	-	-	244	0	540
Mov Cap-2 Maneuver	-	-	-	-	-	-	244	0	-
Stage 1	-	-	-	-	-	-	600	0	-
Stage 2	-	-	-	-	-	-	603	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.4	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	984	-	-	957	-	-	-
HCM Lane V/C Ratio	-	-	-	0.031	-	-	-
HCM Control Delay (s/veh)	0	-	-	8.9	0	-	0
HCM Lane LOS	A	-	-	A	A	-	A
HCM 95th %tile Q (veh)	0	-	-	0.1	-	-	-

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	618	58	59	527	0	0
Future Vol, veh/h	618	58	59	527	0	0
Conflicting Peds, #/hr	0	4	4	0	4	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	2	-	-	-2	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	2	0	1	0	0
Mvmt Flow	702	66	67	599	0	0

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	0	0	772	0
Stage 1	-	-	-	739
Stage 2	-	-	-	737
Critical Hdwy	-	-	4.1	-
Critical Hdwy Stg 1	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-
Pot Cap-1 Maneuver	-	-	852	-
Stage 1	-	-	-	476
Stage 2	-	-	-	477
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	848	-
Mov Cap-2 Maneuver	-	-	-	123
Stage 1	-	-	-	474
Stage 2	-	-	-	419

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	848	-
HCM Lane V/C Ratio	-	-	-	0.079	-
HCM Control Delay (s/veh)	0	-	-	9.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q (veh)	-	-	-	0.3	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	700	58	59	615	0	0
Future Vol, veh/h	700	58	59	615	0	0
Conflicting Peds, #/hr	0	4	4	0	4	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	2	-	-	-2	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	2	0	1	0	0
Mvmt Flow	795	66	67	699	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	865	0	1669 832
Stage 1	-	-	-	-	832 -
Stage 2	-	-	-	-	837 -
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	-	-	787	-	107 372
Stage 1	-	-	-	-	431 -
Stage 2	-	-	-	-	428 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	783	-	91 370
Mov Cap-2 Maneuver	-	-	-	-	91 -
Stage 1	-	-	-	-	429 -
Stage 2	-	-	-	-	367 -

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.9	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	783	-
HCM Lane V/C Ratio	-	-	-	0.086	-
HCM Control Delay (s/veh)	0	-	-	10	0
HCM Lane LOS	A	-	-	B	A
HCM 95th %tile Q (veh)	-	-	-	0.3	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	439	85	29	446	0	0
Future Vol, veh/h	439	85	29	446	0	0
Conflicting Peds, #/hr	0	10	10	0	3	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	2	-	-	-2	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	453	88	30	460	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	551	0	1030 507
Stage 1	-	-	-	-	507 -
Stage 2	-	-	-	-	523 -
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	-	-	1029	-	261 570
Stage 1	-	-	-	-	609 -
Stage 2	-	-	-	-	599 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1016	-	247 563
Mov Cap-2 Maneuver	-	-	-	-	247 -
Stage 1	-	-	-	-	601 -
Stage 2	-	-	-	-	573 -

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1016	-
HCM Lane V/C Ratio	-	-	-	0.029	-
HCM Control Delay (s/veh)	0	-	-	8.7	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q (veh)	-	-	-	0.1	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Vol, veh/h	522	85	29	561	0	0
Future Vol, veh/h	522	85	29	561	0	0
Conflicting Peds, #/hr	0	10	10	0	3	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	2	-	-	-2	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	538	88	30	578	0	0

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	636	0	1233
Stage 1	-	-	-	-	592
Stage 2	-	-	-	-	641
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	957	-	197
Stage 1	-	-	-	-	557
Stage 2	-	-	-	-	528
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	945	-	185
Mov Cap-2 Maneuver	-	-	-	-	185
Stage 1	-	-	-	-	550
Stage 2	-	-	-	-	502

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.4	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	945	-
HCM Lane V/C Ratio	-	-	-	0.032	-
HCM Control Delay (s/veh)	0	-	-	8.9	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q (veh)	-	-	-	0.1	-

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	0	541	0	0	507	0	3	0	6	0	0	0
Future Vol, veh/h	0	541	0	0	507	0	3	0	6	0	0	0
Conflicting Peds, #/hr	1	0	1	1	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	-4	-	-	2	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	615	0	0	576	0	3	0	7	0	0	0

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	577	0	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.2	-	-	-
Pot Cap-1 Maneuver	1006	-	0	0
Stage 1	-	-	0	0
Stage 2	-	-	0	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	1005	-	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	18.8	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	271	1005	-	-	-	-
HCM Lane V/C Ratio	0.038	-	-	-	-	-
HCM Control Delay (s)	18.8	0	-	-	-	0
HCM Lane LOS	C	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	-	-

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	0	357	0	0	389	0	5	0	9	0	0	0
Future Vol, veh/h	0	357	0	0	389	0	5	0	9	0	0	0
Conflicting Peds, #/hr	7	0	10	10	0	7	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	-4	-	-	2	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	2	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	0	368	0	0	401	0	5	0	9	0	0	0

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	408	0	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.2	-	-	-
Pot Cap-1 Maneuver	1162	-	0	0
Stage 1	-	-	0	0
Stage 2	-	-	0	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	1153	-	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	13.1	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	458	1153	-	-	-	-
HCM Lane V/C Ratio	0.032	-	-	-	-	-
HCM Control Delay (s)	13.1	0	-	-	-	0
HCM Lane LOS	B	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	-	-

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	618	0	0	581	0	3	0	6	0	0	0
Future Vol, veh/h	0	618	0	0	581	0	3	0	6	0	0	0
Conflicting Peds, #/hr	1	0	1	1	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	-4	-	-	2	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	702	0	0	660	0	3	0	7	0	0	0

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	661	0	-	-	-	0	1362	1363	702	1367	1363	661
Stage 1	-	-	-	-	-	-	702	702	-	661	661	-
Stage 2	-	-	-	-	-	-	660	661	-	706	702	-
Critical Hdwy	4.1	-	-	-	-	-	7.5	6.9	6.4	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.9	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.9	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	937	-	0	0	-	-	109	128	425	125	149	466
Stage 1	-	-	0	0	-	-	400	410	-	455	463	-
Stage 2	-	-	0	0	-	-	423	430	-	430	443	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	936	-	-	-	-	-	109	128	425	123	149	465
Mov Cap-2 Maneuver	-	-	-	-	-	-	109	128	-	123	149	-
Stage 1	-	-	-	-	-	-	400	410	-	455	463	-
Stage 2	-	-	-	-	-	-	423	430	-	423	443	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	22.5	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	216	936	-	-	-	-
HCM Lane V/C Ratio	0.047	-	-	-	-	-
HCM Control Delay (s/veh)	22.5	0	-	-	-	0
HCM Lane LOS	C	A	-	-	-	A
HCM 95th %tile Q (veh)	0.1	0	-	-	-	-

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	700	0	0	669	0	3	0	6	0	0	0
Future Vol, veh/h	0	700	0	0	669	0	3	0	6	0	0	0
Conflicting Peds, #/hr	1	0	1	1	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	-4	-	-	2	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	795	0	0	760	0	3	0	7	0	0	0

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	761	0	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.2	-	-	-
Pot Cap-1 Maneuver	860	-	0	0
Stage 1	-	-	0	0
Stage 2	-	-	0	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	859	-	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	28.3	0
HCM LOS			D	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	165	859	-	-	-	-
HCM Lane V/C Ratio	0.062	-	-	-	-	-
HCM Control Delay (s/veh)	28.3	0	-	-	-	0
HCM Lane LOS	D	A	-	-	-	A
HCM 95th %tile Q (veh)	0.2	0	-	-	-	-

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	439	0	0	468	0	5	0	9	0	0	0
Future Vol, veh/h	0	439	0	0	468	0	5	0	9	0	0	0
Conflicting Peds, #/hr	7	0	10	10	0	7	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	-4	-	-	2	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	2	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	0	453	0	0	482	0	5	0	9	0	0	0

Major/Minor	Major1		Major2			Minor1			Minor2			
Conflicting Flow All	489	0	-	-	-	0	938	942	453	947	942	492
Stage 1	-	-	-	-	-	-	453	453	-	489	489	-
Stage 2	-	-	-	-	-	-	485	489	-	458	453	-
Critical Hdwy	4.1	-	-	-	-	-	7.5	6.9	6.4	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.9	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.9	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1085	-	0	0	-	-	222	239	596	243	265	581
Stage 1	-	-	0	0	-	-	561	545	-	564	553	-
Stage 2	-	-	0	0	-	-	537	523	-	587	573	-
Platoon blocked, %		-										
Mov Cap-1 Maneuver	1077	-	-	-	-	-	221	237	596	237	263	575
Mov Cap-2 Maneuver	-	-	-	-	-	-	221	237	-	237	263	-
Stage 1	-	-	-	-	-	-	561	545	-	559	549	-
Stage 2	-	-	-	-	-	-	536	519	-	578	573	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	15.1	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	371	1077	-	-	-	-
HCM Lane V/C Ratio	0.039	-	-	-	-	-
HCM Control Delay (s/veh)	15.1	0	-	-	-	0
HCM Lane LOS	C	A	-	-	-	A
HCM 95th %tile Q (veh)	0.1	0	-	-	-	-

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	522	0	0	583	0	5	0	9	0	0	0
Future Vol, veh/h	0	522	0	0	583	0	5	0	9	0	0	0
Conflicting Peds, #/hr	7	0	10	10	0	7	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	-4	-	-	2	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	2	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	0	538	0	0	601	0	5	0	9	0	0	0

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	608	0	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.2	-	-	-
Pot Cap-1 Maneuver	980	-	0	0
Stage 1	-	-	0	0
Stage 2	-	-	0	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	972	-	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	18.2	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	288	972	-	-	-	-
HCM Lane V/C Ratio	0.05	-	-	-	-	-
HCM Control Delay (s/veh)	18.2	0	-	-	-	0
HCM Lane LOS	C	A	-	-	-	A
HCM 95th %tile Q (veh)	0.2	0	-	-	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↓	
Traffic Vol, veh/h	618	0	0	583	3	6
Future Vol, veh/h	618	0	0	583	3	6
Conflicting Peds, #/hr	0	1	1	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, %	2	-	-	-4	2	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	702	0	0	663	3	7
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	-	-	1365	702
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	663	-
Critical Hdwy	-	-	-	-	6.8	6.4
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	-	0	0	-	141	425
Stage 1	-	0	0	-	458	-
Stage 2	-	0	0	-	480	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	141	425
Mov Cap-2 Maneuver	-	-	-	-	141	-
Stage 1	-	-	-	-	458	-
Stage 2	-	-	-	-	480	-
Approach	EB	WB	NB			
HCM Control Delay, s/v	0	0	19.8			
HCM LOS						C
Minor Lane/Major Mvmt	NBLn1	EBT	WBT			
Capacity (veh/h)	254	-	-			
HCM Lane V/C Ratio	0.04	-	-			
HCM Control Delay (s/veh)	19.8	-	-			
HCM Lane LOS	C	-	-			
HCM 95th %tile Q (veh)	0.1	-	-			

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Vol, veh/h	700	0	0	671	3	6
Future Vol, veh/h	700	0	0	671	3	6
Conflicting Peds, #/hr	0	1	1	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, %	2	-	-	-4	2	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	795	0	0	763	3	7

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	-	1558 795
Stage 1	-	-	-	-	795 -
Stage 2	-	-	-	-	763 -
Critical Hdwy	-	-	-	-	6.8 6.4
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	-	0	0	-	105 374
Stage 1	-	0	0	-	410 -
Stage 2	-	0	0	-	426 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	105 374
Mov Cap-2 Maneuver	-	-	-	-	105 -
Stage 1	-	-	-	-	410 -
Stage 2	-	-	-	-	426 -

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	23.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	202	-	-
HCM Lane V/C Ratio	0.051	-	-
HCM Control Delay (s/veh)	23.8	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q (veh)	0.2	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↓	
Traffic Vol, veh/h	439	0	0	470	5	9
Future Vol, veh/h	439	0	0	470	5	9
Conflicting Peds, #/hr	0	10	10	0	3	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, %	2	-	-	-4	2	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	453	0	0	485	5	9
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	-	-	941	453
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	488	-
Critical Hdwy	-	-	-	-	6.8	6.4
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	-	0	0	-	265	596
Stage 1	-	0	0	-	613	-
Stage 2	-	0	0	-	588	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	264	596
Mov Cap-2 Maneuver	-	-	-	-	264	-
Stage 1	-	-	-	-	613	-
Stage 2	-	-	-	-	586	-
Approach	EB	WB	NB			
HCM Control Delay, s/v	0	0	14.1			
HCM LOS						B
Minor Lane/Major Mvmt	NBLn1	EBT	WBT			
Capacity (veh/h)	411	-	-			
HCM Lane V/C Ratio	0.035	-	-			
HCM Control Delay (s/veh)	14.1	-	-			
HCM Lane LOS	B	-	-			
HCM 95th %tile Q (veh)	0.1	-	-			

**Intersection**

Int Delay, s/veh 0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↓	
Traffic Vol, veh/h	522	0	0	585	5	9
Future Vol, veh/h	522	0	0	585	5	9
Conflicting Peds, #/hr	0	10	10	0	3	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, %	2	-	-	-4	2	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	538	0	0	603	5	9

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	-	1144 538
Stage 1	-	-	-	-	538 -
Stage 2	-	-	-	-	606 -
Critical Hdwy	-	-	-	-	6.8 6.4
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	-	0	0	-	196 531
Stage 1	-	0	0	-	555 -
Stage 2	-	0	0	-	513 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	195 531
Mov Cap-2 Maneuver	-	-	-	-	195 -
Stage 1	-	-	-	-	555 -
Stage 2	-	-	-	-	511 -

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	16.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	329	-	-
HCM Lane V/C Ratio	0.044	-	-
HCM Control Delay (s/veh)	16.4	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q (veh)	0.1	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔			↔
Traffic Vol, veh/h	6	676	525	2	0	8
Future Vol, veh/h	6	676	525	2	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	2	-2	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	751	583	2	0	9

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	585	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	6.2
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	3.3
Pot Cap-1 Maneuver	1000	-	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1000	-	515
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.1	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1000	-	-	-	515
HCM Lane V/C Ratio	0.007	-	-	-	0.017
HCM Control Delay (s/veh)	8.6	0	-	-	12.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q (veh)	0	-	-	-	0.1

**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕			↕
Traffic Vol, veh/h	6	758	613	2	0	8
Future Vol, veh/h	6	758	613	2	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	2	-2	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	842	681	2	0	9

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	683	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	919	-	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	919	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.1	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	919	-	-	-	453
HCM Lane V/C Ratio	0.007	-	-	-	0.02
HCM Control Delay (s/veh)	8.9	0	-	-	13.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q (veh)	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔			↔
Traffic Vol, veh/h	9	524	444	2	0	7
Future Vol, veh/h	9	524	444	2	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	2	-2	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	582	493	2	0	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	495	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	1079	-	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1079	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.1	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1079	-	-	-	579
HCM Lane V/C Ratio	0.009	-	-	-	0.013
HCM Control Delay (s/veh)	8.4	0	-	-	11.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q (veh)	0	-	-	-	0

**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕			↕
Traffic Vol, veh/h	9	607	559	2	0	7
Future Vol, veh/h	9	607	559	2	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	2	-2	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	674	621	2	0	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	623	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	968	-	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	968	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.1	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	968	-	-	-	490
HCM Lane V/C Ratio	0.01	-	-	-	0.016
HCM Control Delay (s/veh)	8.8	0	-	-	12.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q (veh)	0	-	-	-	0