

Traffic Impact Study

Crotonville Conference Center 1 Old Albany Post Road Crotonville, Town of Ossining, New York

PREPARED FOR:

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1.0 EXECUTIVE SUMMARY

This Traffic Impact Study has been prepared by Kimley-Horn Engineering and Landscape Architecture of New York, P.C. (Kimley-Horn) to document the potential traffic impacts associated with the proposed zone text amendments to the BE District of the existing GE Training Facility (the "Project"), which is located at 1 Old Albany Post Road in Crotonville, Town of Ossining, New York. It has been updated to incorporate comments provided by the Town's traffic consultant.

The study provides a conservative analysis of both daily activity at the site and as well as of days when there might be large events at the facility. **As indicated herein, the proposed action will not result in any significant adverse impact on area traffic operating conditions.**

1.1 Project Description

The subject property contains an existing +/- 319,000 square foot executive training center located in 12 buildings with existing infrastructure on a 62-acre parcel located at 1 Old Albany Post Road. The facility is in a well-established campus setting and includes 248 guest rooms, recreation areas, 3 dining areas, a helipad, and landscaped grounds. The facility currently provides 217 parking spaces. Access to the site is provided via a driveway (Shady Lane Farm Road) to Old Albany Post Road, which is planned to remain under the proposed zone text amendments to the BE District.

It is proposed to amend the BE District zone for the property to permit the use of the facility by the public as a hotel/conference center. The proposed zone amendments would also permit senior residential living on the property (with a special permit). The owner has indicated that, while there are currently no proposed plans, it is possible that some of the existing building area could, at some point in the future, be converted to overnight accommodation facilities but, at no point would the number of overnight rooms/residences exceed 300. This traffic impact study evaluates the prospective use of the current facility to a 300-room hotel and conference center, as well as a conference center with 300 senior living residential units or some combination thereof, where the combined hotel rooms and senior living units does not exceed 300 (the "Project" or "Proposed Action").

1.2 Study Methodology

This study evaluates existing traffic conditions, as well as future conditions without the Project ("No-Build") and with the Project ("Build"). The No-Build condition is the benchmark against which the potential impacts of the proposed Project are compared.

One (1) signalized intersection and two (2) unsignalized intersections have been selected to be studied as indicated below:

- Albany Post Road (US 9) & Old Albany Post Road/Mystic Drive;
- Old Albany Post Road & Shady Lane Farm Road; and
- Shady Lane Farm Road & the Briarcliff Peekskill Parkway (NY 9A) Westbound Off-Ramp

Vehicle turning movement counts were conducted on a typical weekday in May of 2024, when schools were in session, during the AM and PM peak periods when the combined roadway and Project traffic is expected to be highest. Additional vehicle turning movement counts were conducted on a typical Saturday in June of 2024 during the Saturday midday peak period when the combined roadway and Project traffic is expected to be highest.

The Existing traffic volumes were grown to the year 2025 to represent future conditions without the Project (“No-Build”).

The number of trips expected to be generated by the Project during the peak hours were forecast based on data contained in the Institute of Transportation Engineers’ (ITE) publication, *Trip Generation Manual*, 11th Edition and anticipated Project operations. The Project-generated trips were distributed to the study intersections and added to the No-Build volumes to represent future conditions with the Project (“Build”).

Synchro intersection capacity analyses were conducted at the study intersections for the Existing, No-Build and the Build traffic volume conditions and compared to intersection capacities to identify Project impacts.

Qualitative analyses were performed as required.

1.3 Findings

As detailed hereafter, each of the study intersections currently and is projected to continue operate at acceptable Level of Service (“LOS”) “C” conditions or better in the future, with or without the Project. Specifically, under the Existing conditions, the intersection of Albany Post Road (US Route 9) & Old Albany Post Road/Mystic Drive operates at an overall Level of Service (“LOS”) “B” during the weekday AM and weekday PM peak hours and an overall LOS “A” during the Saturday midday peak hour. The westbound Shady Lane Farm Road approach to Old Albany Post Road operates at a LOS “B” during the weekday AM peak hour and a LOS “A” during the weekday PM and Saturday midday peak hours. The southbound Old Albany Post Road approach to Shady Lane Farm Road operates at a LOS “A” during the weekday AM, weekday PM and Saturday peak hours. Finally, the westbound Briarcliff Peekskill Parkway (NY 9A) Westbound Off-Ramp approach to Shady Lane Farm Road operates at a LOS “A” during the weekday AM, weekday PM and Saturday peak hours.

In the future under No-Build conditions (without the proposed Project, but with forecast increases in existing traffic volumes), the intersection of Albany Post Road (US Route 9) & Old Albany Post Road/Mystic Drive will operate at an overall Level of Service (“LOS”) “C” during the weekday AM peak hour, and an overall LOS “B” during the weekday PM and Saturday Midday peak hours. The westbound Shady Lane Farm

Road approach to Old Albany Post Road will operate at a LOS “B” during the weekday AM peak hour and a LOS “A” during the weekday PM and Saturday midday peak hours. The southbound Old Albany Post Road approach to Shady Lane Farm Road will operate at a LOS “A” during the weekday AM, weekday PM and Saturday peak hours. Finally, the westbound Briarcliff Peekskill Parkway (NY 9A) Westbound Off-Ramp approach to Shady Lane Farm Road will operate at a LOS “A” during the weekday AM, weekday PM and Saturday peak hours.

Under future Build conditions (with forecast increases in existing traffic volumes and Project traffic added), the intersection of Albany Post Road (US Route 9) & Old Albany Post Road/Mystic Drive is projected to operate at an overall Level of Service (“LOS”) “C” during the weekday AM peak hour and an overall LOS “B” during the weekday PM and Saturday midday peak hours. The westbound Shady Lane Farm Road approach to Old Albany Post Road is projected to operate at a LOS “B” during the weekday AM, weekday PM and Saturday midday peak hours. The southbound Old Albany Post Road approach to Shady Lane Farm Road is projected to operate at a LOS “A” during the weekday AM, weekday PM and Saturday peak hours. Finally, the westbound Briarcliff Peekskill Parkway (NY 9A) Westbound Off-Ramp approach to Shady Lane Farm Road is projected to operate at a LOS “B” during the weekday AM, weekday PM and Saturday peak hours¹.

It was noted that, during the busiest 15 minutes² of the weekday AM peak hour, the analysis indicates that the overall delay at the intersection of US Route 9 with Old Albany Post Road and Mystic Drive could increase by 7.7 seconds (and the Level of Service on the westbound, Old Albany Post Road approach to the intersection could change from “D” to “E”). Considering that, if this occurs, it would likely be only a few times per year (when there is a large morning event), because of the short duration of such increases and since intersection will have adequate capacity to accommodate all vehicles during this period, this impact was determined not to be significant. However, to ensure that there will not be a significant impact during this period, a 3-second timing change could be implemented to accommodate large events starting or finishing between 7:30 a.m. and 8:15 a.m., if needed.

1.4 Conclusions

Based on the analysis provided herein, it is concluded that traffic generated by Project will not result in any significant adverse impact on traffic conditions.

¹ The above Build conditions findings hold true for both regular day and event conditions at the hotel/conference center. For the event conditions, a weekday Midday peak-hour analysis was also conducted which indicates identical Levels of Service to the regular day weekday PM and Saturday Midday peak hours (“A”s and “B”s).

² By definition, the Peak-Hour Factor generates the hourly equivalent of the peak 15 minutes.

2.0 INTRODUCTION

This Traffic Impact Study has been prepared by Kimley-Horn Engineering and Landscape Architecture of New York, P.C. (Kimley-Horn) to document the potential traffic impacts associated with the proposed zone text amendments to the BE District relative to the existing GE Training Facility (the “Project”), which is located at 1 Old Albany Post Road in Crotonville, Town of Ossining, New York. The project location is shown in **Figure 1**.

2.1 Project Description

The subject property contains an existing +/- 319,000 square foot executive training center located in 12 buildings with existing infrastructure on a 62-acre parcel located at 1 Old Albany Post Road. The facility is in a well-established campus setting and includes 248 guest rooms, recreation areas, 3 dining areas, a helipad, and landscaped grounds. The facility currently provides 217 parking spaces. Access to the site is provided via a driveway (Shady Lane Farm Road) to Old Albany Post Road, which is planned to remain under the proposed zone text amendments to the BE District.

It is proposed to amend the BE District zone for the property to permit the use of the facility by the public as a hotel/conference center. The proposed zone amendments would also permit senior residential living on the property (with a special permit). The owner has indicated that, while there are currently no proposed plans, it is possible that some of the existing building area could, at some point in the future, be converted to overnight accommodation facilities but, at no point would the number of overnight rooms/residences exceed 300. This traffic impact study evaluates the prospective conversion of the current facility to a 300-room hotel and conference center, as well as a conference center with 300 senior living residential units or some combination thereof, where the combined hotel rooms and senior living units does not exceed 300.

This study evaluates existing traffic conditions, as well as future conditions without the Project (“No-Build”) and with the Project (“Build”). The No-Build condition is the benchmark against which the potential impacts of the proposed Project are compared.



Figure 1
Project Location
1 Old Albany Post Road
Crotonville, Westchester Co., NY

2.2 Study Locations

One (1) signalized intersection and two (2) unsignalized intersections have been selected to be studied and the type of analysis to be conducted are listed below.

Quantitative Analysis

1. Synchro Intersection Capacity Analysis:

- Albany Post Road (US 9) & Old Albany Post Road/Mystic Drive;
- Old Albany Post Road & Shady Lane Farm Road; and
- Shady Lane Farm Road & the Briarcliff Peekskill Parkway (NY 9A) Northbound Off-Ramp

Qualitative Analysis

1. Discussion of existing traffic conditions

- a. Albany Post Road (US 9) & Old Albany Post Road/Mystic Drive;
- b. Old Albany Post Road & Shady Lane Farm Road; and
- c. Shady Lane Farm Road & the Briarcliff Peekskill Parkway (NY 9A) Northbound Off-Ramp

3.0 EXISTING CONDITIONS

3.1 Roadway Network

Evaluation of the traffic impacts associated with the proposed Project requires a thorough understanding of the existing roadway system in the vicinity of the site. The existing conditions observed in the study area include an inventory of the roadways, speed limits, intersection geometry, traffic control devices, pavement condition and markings. This information is provided below.

Albany Post Road (US Route 9) is a north-south oriented State highway that is classified by the New York State Department of Transportation (NYSDOT) as an urban “Principal Arterial Other.” Albany Post Road stretches from Champlain, New York south to Laurel, Delaware. Within the environs of Old Albany Post Road, Albany Post Road provides four (4) 12-foot travel lanes separated by a 4-foot wide median (which is painted to the north of Old Albany Post Road and curbed to the south of Old Albany Post Road). Variable-width, paved shoulders are provided on both the eastern and western sides of Albany Post Road. Within the study area, the pavement is in fair condition. A bicycle path is provided on the western side of the roadway, north of Old Albany Post Road, and a sidewalk is provided on western side of the roadway, south of Old Albany Post Road. Parking is not permitted on either side of the roadway. Albany Post Road is under the jurisdiction of NYSDOT. The posted speed limit is 30 miles per hour (mph) within the study area. NYSDOT reports a 2023 estimated Average Annual Daily Traffic (AADT) volume of 15,611 on Albany Post Road.

Old Albany Post Road is a Village/Town roadway that is classified by NYSDOT as an urban “Local Roadway.” Old Albany Post Road is an east-west oriented roadway at its intersection with Albany Post Road (US Route 9) but bends to become a north-south oriented roadway at its intersection with Shady Lane Farm Road. Old Albany Post Road travels from Albany Post Road to its terminus at its intersection with Quaker Bridge Road/Old High Ridge Road, approximately 0.8 miles north of Albany Post Road. Near Albany Post Road, Old Albany Post Road provides one 18-foot travel lane and no paved shoulder on the eastbound side of the road and one 18-foot travel lane and no paved shoulder on the westbound side of the road. Near Shady Lane Farm Road, Old Albany Post Road provides one 11-foot travel lane on the northbound side of the road and one 11-foot travel lane on the southbound side of the road. Variable-width, paved shoulders are provided south of Shady Lane Farm Road, but no shoulders are provided north of Shady Lane Farm Road, where there is a 5-ton weight limit posted. Within the study area, the pavement is in fair condition. Sidewalk is not provided on either side of the roadway. Parking is expressly prohibited on Old Albany Post Road in the study area. At its intersection with Albany Post Road, Old Albany Post Road is under the jurisdiction of the Village of Ossining. At its intersection with Shady Lane Farm Road, Old Albany Post Road is under the jurisdiction of the Town of Ossining. The posted speed limit is 30 miles per hour (mph) within the study area. NSYDOT does not report AADT on Old Albany Post Road.

Shady Lane Farm Road is a Town roadway that is classified by NYSDOT as an urban “Local Roadway.” Shady Lane Farm Road is an east-west oriented roadway at its intersection with Old

Albany Post Road but bends to become a north-south oriented highway at its intersection with the Briarcliff Peekskill Parkway (NY Route 9A) Northbound Off-Ramp. Shady Lane Farm Road travels from Old Albany Post Road approximately 175 feet north to become the entrance to the Project. Near Old Albany Post Road, Shady Lane Farm Road provides one 10-foot travel lane and no paved shoulder on the eastbound side of the road and one 10-foot travel lane and no paved shoulder on the westbound side of the road. Near the Briarcliff Peekskill Parkway Northbound Off-Ramp, Shady Lane Farm Road provides one 10-foot travel lane and no paved shoulder on the northbound side of the road and one 12-foot travel lane with a concrete curb on the southbound side of the road. Within the study area, the pavement is in fair condition. Sidewalk is not provided on either side of the roadway. Parking is not expressly prohibited on either side of the roadway. Shady Lane Farm Road is under the jurisdiction of the Town of Ossining. There is no posted speed limit on Shady Lane Farm Road. NSYDOT does not report AADT on Shady Lane Farm Road.

Briarcliff Peekskill Parkway (NY Route 9A) Northbound Off-Ramp is a north-south oriented State roadway that is classified by NYSDOT as the off-ramp from an urban "Principal Arterial Other." The Briarcliff Peekskill Parkway Northbound Off-Ramp travels from the Briarcliff Peekskill Parkway approximately 750 feet west to its terminus at Shady Lane Farm Road. Near Shady Lane Farm Road, the Briarcliff Peekskill Parkway Northbound Off-Ramp provides one 24-foot travel lane and no paved shoulders for westbound traffic. Within the study area, the pavement is in fair condition. Sidewalk is not provided on either side of the roadway. Parking is not permitted on either side of the roadway. The Briarcliff Peekskill Parkway Northbound Off-Ramp is under the jurisdiction of NYSDOT. There is a 25 mile per hour advisory speed posted on the Briarcliff Peekskill Parkway Northbound Off-Ramp. NYSDOT reports a 2023 estimated Average Annual Daily Traffic (AADT) volume of 1,132 on the Briarcliff Peekskill Parkway Northbound Off-Ramp.

3.2 Description of Study Intersections

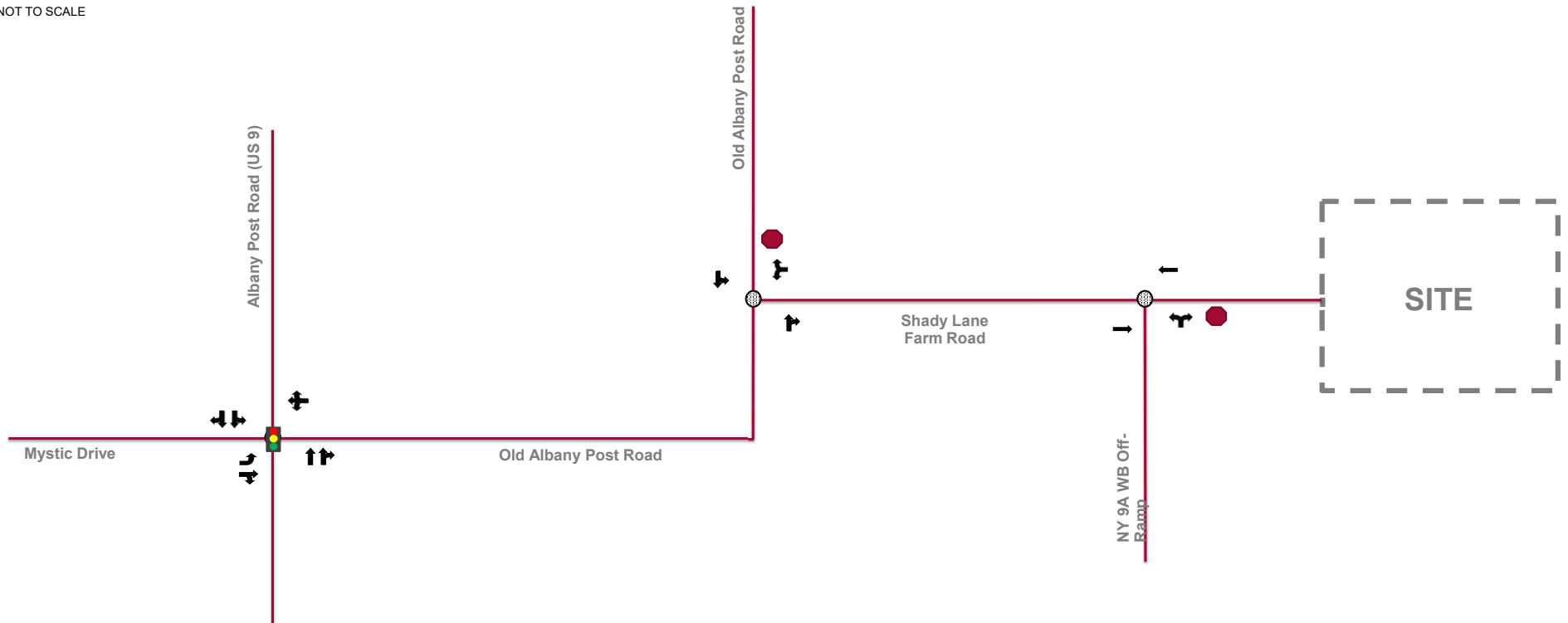
The following provides a description of the intersection geometry and traffic controls at each of the study intersections. This information is also provided graphically on **Figure 2**.

Albany Post Road (US 9) & Old Albany Post Road/Mystic Drive – Mystic Drive forms the eastbound approach and Old Albany Post Road forms the westbound approach to this signalized four-way intersection with Albany Post Road (US 9). Although the eastbound Mystic Drive approach to the intersection provides no line striping, historical imagery of the intersection indicates that the 24-foot-wide roadway is used as a two-lane approach to Albany Post Road (an exclusive left turn lane and a shared through/right turn lane). The westbound Old Albany Post Road approach to the intersection provides one travel lane. Northbound Albany Post Road provides a two-lane approach to the intersection (an exclusive through lane – no left-turns are permitted from northbound Route 9 into Mystic Drive - and a shared through/right turn lane). Southbound Albany Post Road provides a two-lane approach to the intersection (a shared left turn/through lane and a shared through/right turn lane).

Old Albany Post Road & Shady Lane Farm Road – Shady Lane Farm Road forms the westbound approach to this unsignalized, “T”-intersection with Old Albany Post Road. It provides one Stop-controlled travel lane. Old Albany Post Road forms the northbound and southbound approaches to the intersection, each providing one free-flowing travel lane (a through/right-turn lane northbound and a left/through lane southbound).

Shady Lane Farm Road & the Briarcliff Peekskill Parkway (NY 9A) Northbound Off-Ramp – The Briarcliff Peekskill Parkway (NY 9A) Northbound Off-Ramp forms the westbound approach to this unsignalized, “T”-intersection with Shady Lane Farm Road. It provides one Stop-controlled travel lane. Shady Lane Farm Road forms the northbound and southbound approaches to the intersection, each providing one free-flowing, through travel lane.

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Figure 2
Intersection Geometry
1 Old Albany Post Road
Crotonville, Westchester Co., NY

3.3 Traffic Data Collection

Turning movement, pedestrian and classification traffic counts were conducted on Thursday, May 30, 2024, during the weekday AM peak period (7:00 to 9:00 AM.) and weekday PM peak period (4:15 to 6:15 PM) at each of the study intersections. Additional turning movement, pedestrian and classification traffic counts were conducted at each of the study intersections on Saturday, June 1, 2024, during the Saturday midday peak period (12:30 to 2:30 PM.).

The data indicates that weekday AM peak hour occurs from 7:45 to 8:45 AM, while the weekday PM peak hour from between 4:45 to 5:45 PM. and the peak hour on Saturday is from 12:30 and 1:30 PM³.

The existing peak hour traffic volumes are shown in **Figure 3**.

The raw intersection counts are provided in the Appendix to this report.

³ Using the NYSDOT continuous count station data on NYS 9A over the Croton River, the Saturday Midday peak period count was extended (11:00 to 3:00 pm). Based on the review of the extended Saturday peak period, it was determined that the 2 to 3 PM peak hour volumes are 7% higher than the previously studied 12:30 to 1:30 pm volumes. Therefore, the existing Saturday peak hour volumes were increased by 7%.



- Legend**
- Study Roadway
 - XX AM Peak Hour Traffic
 - (XX) PM Peak Hour Traffic
 - <XX> SAT Peak Hour Traffic
 - Study Intersection

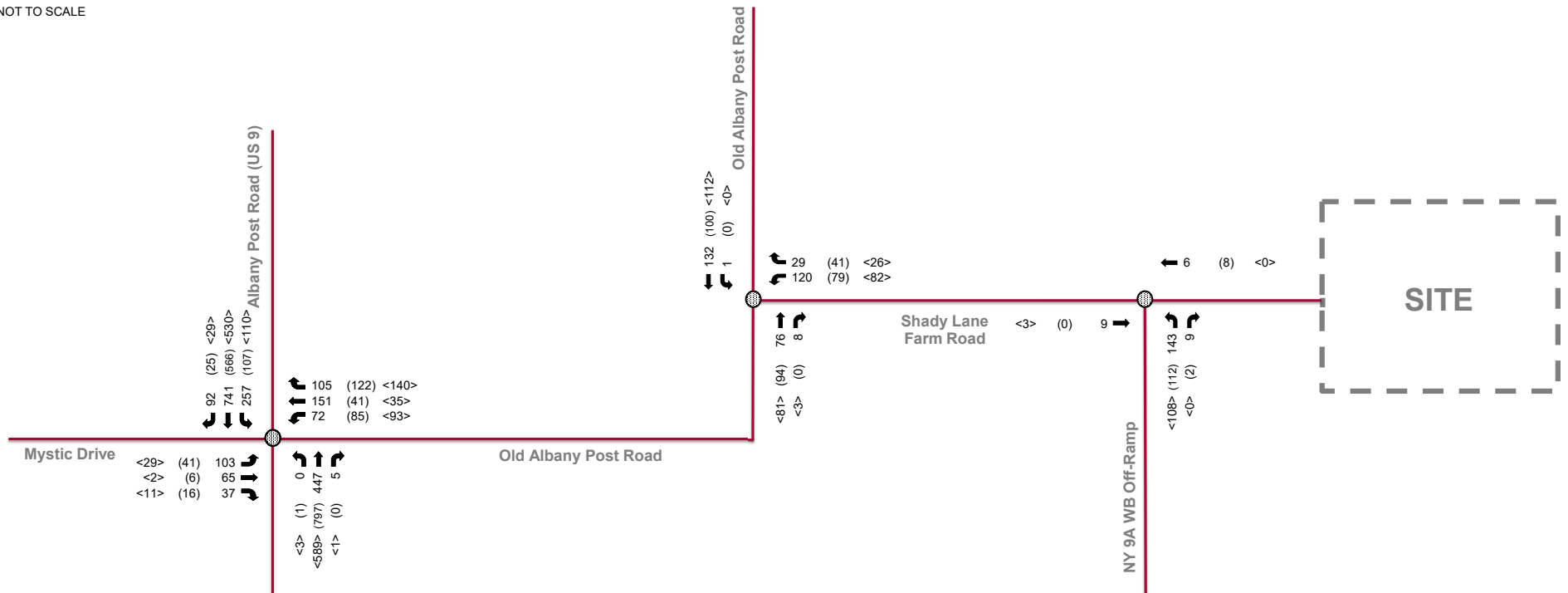
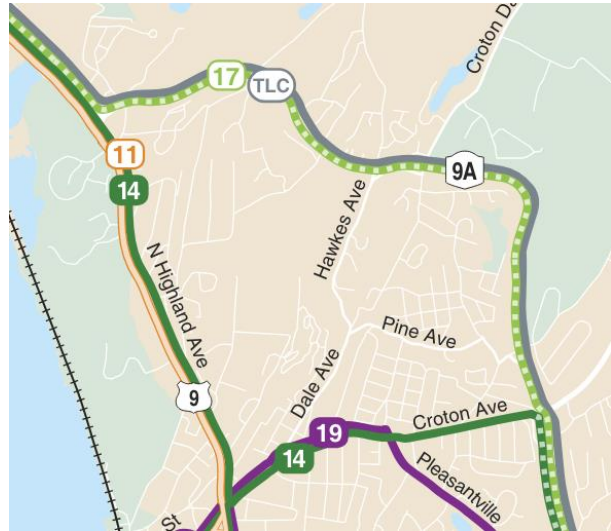


Figure 3
Existing 2024 Traffic Volumes
1 Old Albany Post Road
Crotonville, Westchester Co., NY

3.4 Public Transportation

Bus service in the study area is provided by Westchester County's Bee-Line bus System. The nearest bus routes to the Project site are route #11 and route #14. Route #11 operates on weekdays only between Croton and Elmsford/White Plains. It runs primarily north-south along US Route 9 and NY Route 9A. Route #14 operates 7 days a week between Peekskill/Ossining and White Plains. It runs primarily north-south along the US Route 9. The nearest bus stop for both route #11 and route #14 is on Albany Post Road (US Route 9) immediately south of Old Albany Post Road/Mystic Drive on both the northbound and southbound sides of the roadway. Route #11 runs 2 northbound and 2 southbound buses on weekdays. Route #14 runs 18 northbound and 16 southbound buses on weekdays, 16 northbound and 14 southbound buses on Saturdays, and 5 northbound and 5 southbound buses on Sundays.



Commuter rail service is provided 1.5 miles northwest of the site at the Croton Harmon railroad station.

4.0 FUTURE NO-BUILD CONDITIONS

The future No-Build conditions are the forecast traffic conditions that are expected to occur without the proposed development in the year 2025, when the full build-out of the Project is anticipated (the one-year timeframe is related to the request to simply permit the proposed usage of the existing buildings, as is, for a public facing hotel and conference center, which is expected to occur by 2025 if not before). This includes background traffic growth and traffic associated with any other known planned / approved developments. The derivation of the No-Build traffic volumes is described below.

4.1 Background Traffic Growth

Background traffic growth represents typical traffic growth not associated with any planned development. The Existing Volumes were grown to the year 2025 by 1%, a conservative projection based on NYSDOT historical traffic growth rates for roadways of similar classification in Westchester County (see attached annual growth rate data). The “Grown” traffic volumes are shown on **Figure 4** for the Weekday AM and PM peak hours.

4.2 Vicinity Developments

The only known project in the vicinity of the development that is likely to add significant traffic volumes to the study intersections is the Specialty Hospital proposed for 2016 Quaker Ridge Road in the Town of Cortlandt. Peak-hour traffic for this development was obtained from materials submitted by the applicant for that project to the Town of Cortlandt. The Vicinity Development traffic volumes are shown in **Figure 5**.

4.3 Continued use of Facility as a Training Center

The alternative to the Proposed Action is for the facility to continue to function as a training facility (as it did in the past). To determine the potential traffic that would be generated by this alternative, Kimley-Horn performed manual trip generation counts at the existing GE Training Facility during the week of February 19, 2024. During this week, a total of 150 guests were training at the facility. It is also noted that the training typically occurs during weekdays (Monday through Friday). Therefore, the trip generation of the existing GE Training Facility on a typical Saturday is negligible. A summary of the results of the manual trip generation counts performed at the existing GE training center is included in **Table 1**.

Table 1 – Observed GE Training Facility Trip Generation				
Development	Size	Weekday		Saturday
		AM Peak Hour	PM Peak Hour	Peak Hour
Existing Facility	248 Rooms	17	13	3

However, it is understood that, during the peak usage of the GE Training Facility, an average of approximately 300 guests were training at the facility per week, or approximately two times the number of guests that were training during the performance of the manual trip generation counts. Therefore, the trip generation of the GE Training Facility during its peak usage was determined by doubling the existing trip

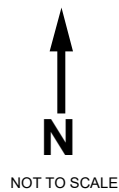
generation summarized in **Table 1**. The estimated peak trip generation of the existing GE Training Facility is summarized in **Table 2**.

Table 2 – Estimated Peak GE Training Facility Trip Generation				
Development	Size	Weekday		Saturday
		AM Peak Hour	PM Peak Hour	Peak Hour
Existing Facility	248 Rooms	34	26	6

The additional training Center peak-hour traffic volumes are shown in **Figure 6** and full occupancy corporate training center traffic volumes are shown in **Figure 7**.

4.4 No-Build Traffic Volumes

The No-Build or, more correctly, No-Action, traffic volumes are the sum of the Grown traffic volumes, the Vicinity Development traffic volumes, and the Training Facility traffic volumes. The Forecasted 2025 No-Build traffic volumes are shown in **Figure 8**.



- Legend**
- Study Roadway
 - XX AM Peak Hour Traffic
 - (XX) PM Peak Hour Traffic
 - <XX> SAT Peak Hour Traffic
 - Study Intersection

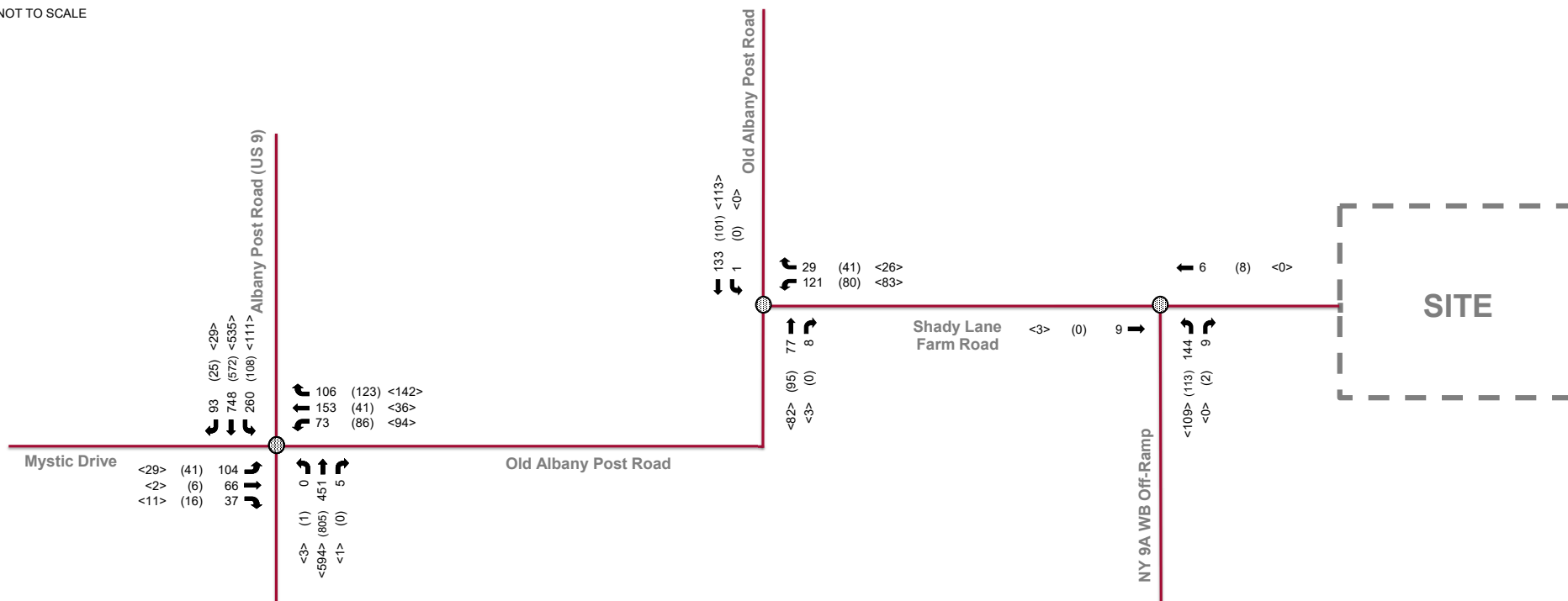


Figure 4
Grown Traffic Volumes
1 Old Albany Post Road
Crotonville, Westchester Co., NY

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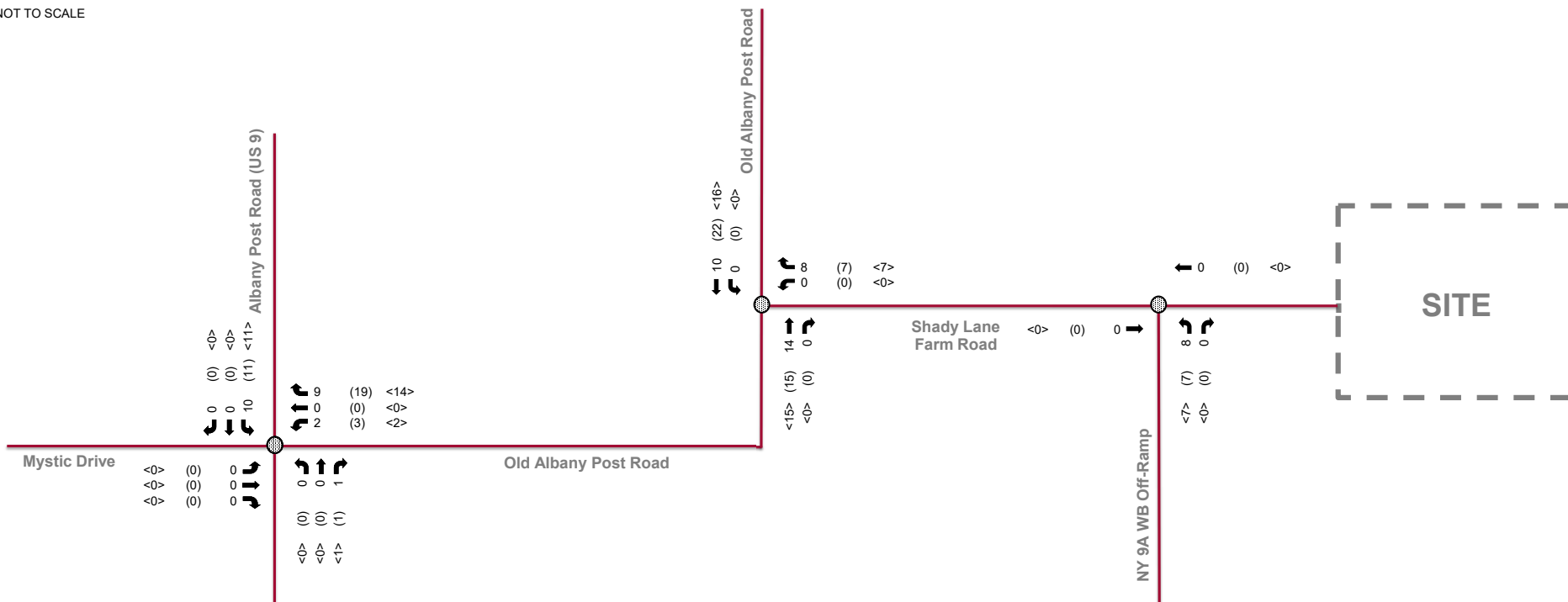


Figure 5
Vicinity Development Traffic Volumes
1 Old Albany Post Road
Crotonville, Westchester Co., NY

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NOT TO SCALE

Legend
 — Study Roadway
 XX AM Peak Hour Traffic
 (XX) PM Peak Hour Traffic
 <XX> SAT Peak Hour Traffic
 ● Study Intersection

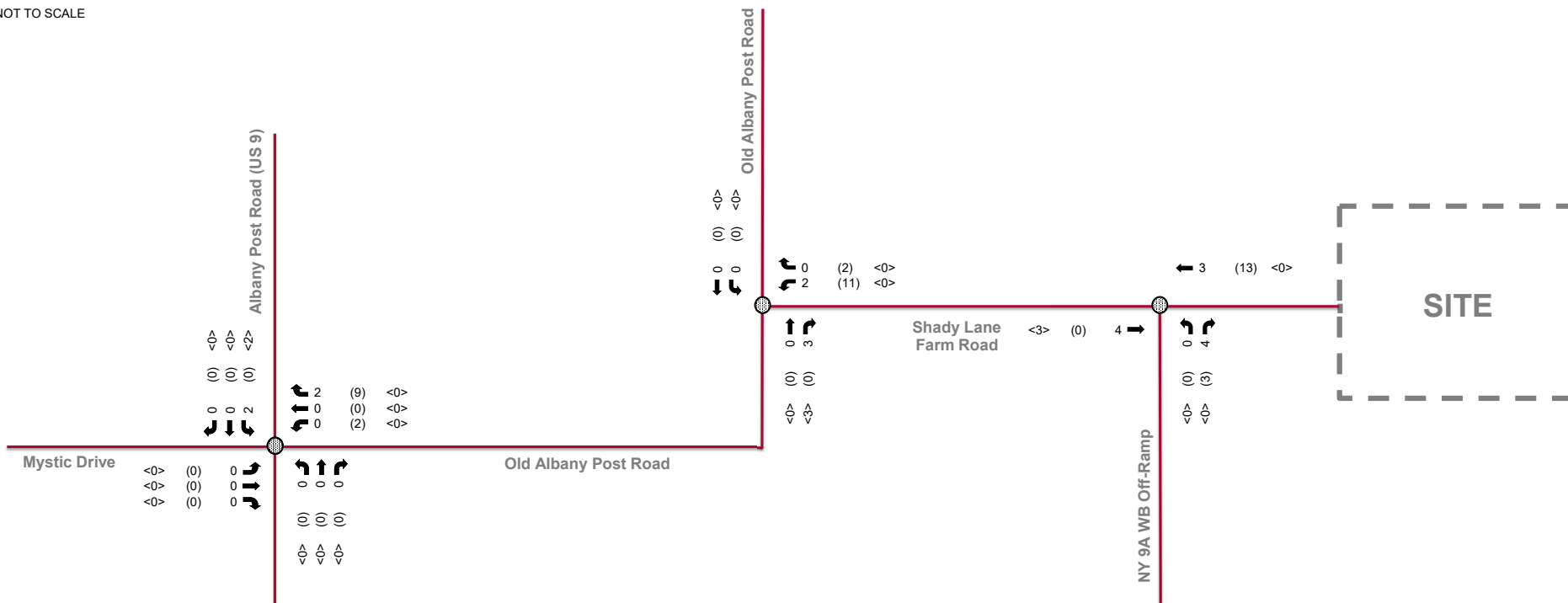
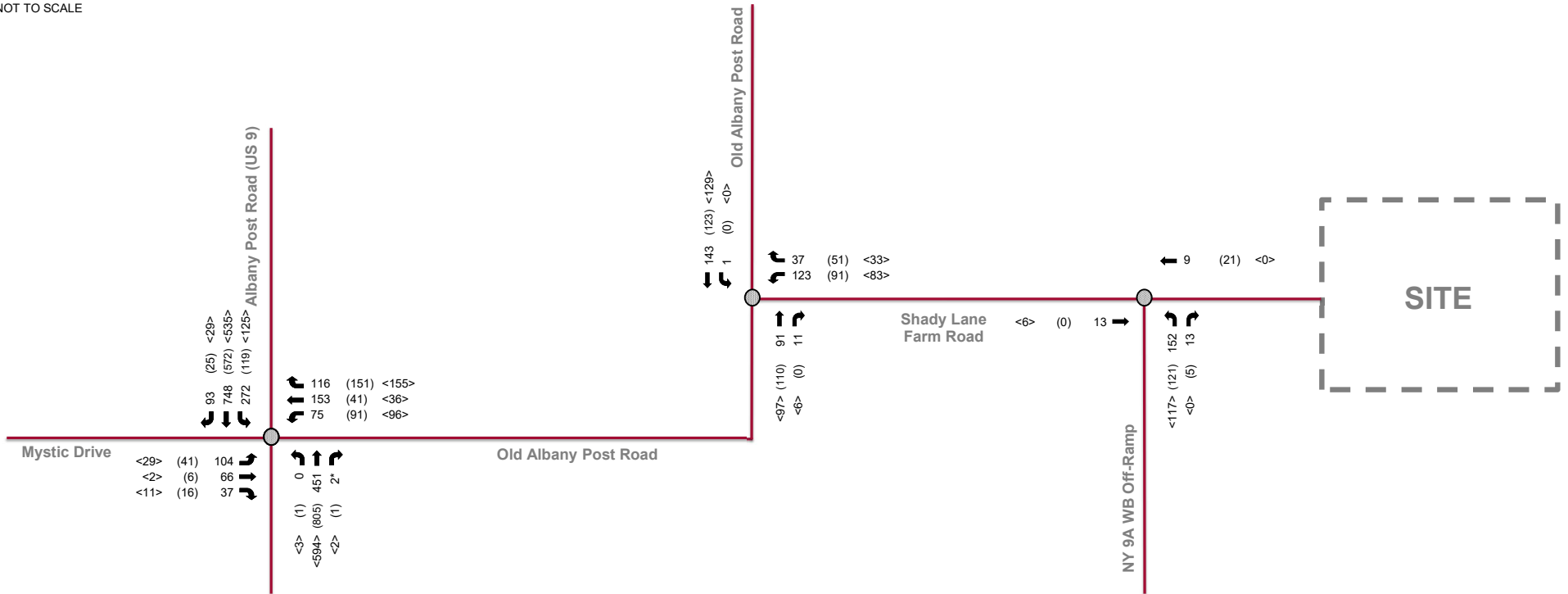


Figure 6
Additional Training Center Traffic Volumes
1 Old Albany Post Road
Crotonville, Westchester Co., NY



NOT TO SCALE

- Legend**
- Study Roadway
 - XX AM Peak Hour Traffic
 - (XX) PM Peak Hour Traffic
 - <XX> SAT Peak Hour Traffic
 - Study Intersection



* 13% take Brooke Club Drive

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Figure 8
Forecasted 2025 No-Build Traffic Volumes
1 Old Albany Post Road
Crotonville, Westchester Co., NY

5.0 PROJECT TRAFFIC

Project traffic is the number of vehicle trips forecast to be generated by the proposed development. The Project traffic is calculated and dispersed onto the road network and through the study intersections by applying the trip distribution to the trip generation to get the trip assignment.

5.1 Trip Generation

To evaluate the potential traffic impacts of the Project, it is necessary to determine the traffic volumes expected to be generated by the Proposed Action. The existing training facility consists of a number of different elements which, combined, served its core mission. These elements included:

- Lodging (guestrooms)
- Catering facilities
- Recreation facilities
- Meeting facilities
- Event facilities
- Maintenance facilities
- Parking facilities
- Security facilities
- Storage facilities
- Residence for manager

When converted to a public-facing hotel and conference center these individual elements will continue to operate in an accessory role to the overall conference center use. While some of the individual elements could generate traffic specifically and only for that element, the facility will be owned and operated as an integrated hotel and conference center.

The Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, describes Land Use Code 310, Hotel, as “a place of lodging that provides sleeping accommodations and supporting facilities such as a full-service restaurant, cocktail lounge, meeting rooms, banquet room, and convention facilities. A hotel typically provides a swimming pool or another recreational facility such as a fitness room.” Thus, the proposed Crotonville facility, when open for use by the public, would best fit the ITE definition of a hotel and Land Use Code 310 could be used to project the volumes of traffic⁴.

To understand how much traffic the proposed Crotonville facility might generate on a typical day (one when there is not a major meeting or banquet event), trip generation calculations were performed using the average rates published by ITE for Land Use Code 310. The results of these trip generation calculations are summarized in **Table 3**.

⁴ Due to the nature of the proposed land use, the Project was not considered for pass-by or internal trip-capture reductions.

Table 3 – Anticipated Trip Generation - Hotel				
Development	Size	Weekday		Saturday
		AM Peak Hour	PM Peak Hour	Peak Hour
Hotel	300 Rooms	143	194	216

It is noted, however, that, based on historical data obtained by Kimley-Horn, the former executive training center was estimated to generate 34 vehicular trips during the weekday AM peak hour, 26 vehicular trips during the weekday PM peak hour, and 6 vehicular trips during the Saturday midday peak hour. Therefore, the Project is anticipated to add on 109 new vehicular trips to the surrounding roadways during the weekday AM peak hour, 168 new vehicular trips during the weekday PM peak hour, and 210 new vehicular trips during the Saturday midday peak hour.

To provide a better breakdown of the prospective traffic generation associated with the proposed zone text amendments to the BE District (and to provide a mechanism for understanding how potential substitution of future senior housing units for hotel rooms might impact traffic), Kimley-Horn took a further look into available data from ITE⁵.

First, it was assumed that the traffic associated solely with the lodging aspect of the facility (the rooms or, more precisely, the keys) would best be predicted using ITE Land Use Code 312, Business Hotel, which ITE defines as “a place of lodging aimed toward the business traveler but also accommodates a growing number of recreational travelers. These hotels provide sleeping accommodations and other *limited facilities*, such as a breakfast buffet bar and afternoon beverage bar. Some provide a full-service restaurant geared toward hotel guests. Some provide a swimming pool; most provide fitness facilities” (emphasis added). Business hotels typically generate little or no outside traffic associated with their bar, restaurant, meeting, banquet, swimming or fitness facilities (in instances where these facilities are provided).

Therefore, to understand how much of the traffic generated by the proposed Crotonville facility would be generated by only the guest rooms (keys) of the facility, trip generation calculations were performed using the average rates published by ITE for Land Use Code 312. The results of these trip generation calculations are summarized in **Table 4**.

⁵ While each of the individual business activities at a hotel are likely to add or generate their own traffic (i.e., restaurants, rooms and meeting/banquet spaces), there is a strong synergy between the uses (i.e., someone who stays at the hotel is likely to attending a meeting/event or patron a restaurant).

Table 4 – Anticipated Trip Generation – Hotel Lodging Trips				
Development	Size	Weekday		Saturday
		AM Peak Hour	PM Peak Hour	Peak Hour
Hotel	300 Rooms	108	93	138

The difference in trips generated using Land Use Code 310 and Land Use Code 312 was therefore estimated to be the traffic associated with the facility's typical daily non-lodging activities (including, but not limited to, restaurants or bars and smaller meetings/gatherings). The anticipated trip generation of the non-lodging activities are summarized in **Table 5**.

Table 5 – Anticipated Trip Generation – Non-Lodging Trips				
Development	Size	Weekday		Saturday
		AM Peak Hour	PM Peak Hour	Peak Hour
Total Hotel	300 Rooms	143	194	216
Hotel Lodging Trips	300 Rooms	108	93	138
Typical Hotel Non-Lodging Trips		35	101	78

To understand how much traffic the proposed Crotonville facility might generate on a day when there was a meeting or an event held at the facility, the trip generation rates for the busiest 30% of the data points provided by ITE for Land Use Code 310, *Hotel*, were evaluated⁶. The results of these trip generation calculations are summarized in **Table 6**.

Table 6 – Anticipated Trip Generation – Hotel with Meeting/Event Traffic				
Development	Size	Weekday		Saturday
		AM Peak Hour	PM Peak Hour	Peak Hour
Hotel with Meeting/Event	300 Rooms	207	217	282

(232 trips for weekday Midday Event)

The difference in trip generation calculated using the busiest 30% of the data points provided by ITE for Land Use Code 310 and the trips generation calculated using all of the data points provided by ITE for Land use Code 310 was therefore estimated to be the traffic associated with a meeting or event held at the facility. The anticipated trip generation of the meeting/event activities are summarized in **Table 7**.

Table 7 – Anticipated Trip Generation – Meeting/Event				
Development	Size	Weekday		Saturday
		AM Peak Hour	PM Peak Hour	Peak Hour
Hotel with Meeting/Event	300 Rooms	207	217	282
Total Hotel Trips	300 Rooms	143	194	216
Meeting/Event Trips		64	23	66

⁶ Equivalent of the 85th percentile (30/2=15. 100-15=85. Dividing by 2 equates to the average of the top 30%)

Possible Future Use

At some point in the future, it is possible that the owner of the property may wish to convert some (or all) of the guest rooms for use by permanent residents (who would continue to have the ability to avail of the property's other program elements (recreational and dining facilities). However, the Applicant has requested that the zone text amendment change request for this use be limited to senior citizens⁷.

To understand how much traffic the proposed Crotonville facility might generate if the rooms were converted to senior living instead of being used for conference center accommodation, trip generation calculations were performed using the average rates published by ITE for either a 300-room assisted living/memory care facility or a 300- room combination of independent living units with an assisted living/memory care facility.

The average rates for ITE, Land Use Code 253, Congregate Care⁸ Facility, Land Use Code 254, Assisted Living, were used to estimate the anticipated trip generation of the independent living and assisted living components of the two senior living scenarios, respectively. The results of these trip generation calculations are summarized in **Table 8**⁹.

⁷ Specifically, conversion or replacement of existing hotel keys/units with either an assisted living/memory care facility or a combination of independent living units with an assisted living/memory care facility, depending on market demand. No more than 75% of the units would be independent living units.

⁸ Congregate Care is used in this report because that is the ITE use category that most closely matches the proposed "Service-Enriched Senior Housing Residence" use to be added to the BE District regulations to permit the IL portion of the combined AL/IL residence. Land Use: 253 Congregate Care Facility: "A congregate care facility is an independent living development that provides centralized amenities such as dining, housekeeping, communal transportation, and organized social/ recreational activities. Each individual dwelling unit often has a kitchenette. Assistance is typically available for housekeeping or minor household maintenance. Limited medical services (such as nursing and dental) may or may not be provided. The resident may contract additional medical services or personal assistance."

Land Use: 254 Assisted Living: "An assisted living complex is a residential setting that provides either routine general protective oversight or assistance with activities necessary for independent living to persons with mental or physical limitations. The typical resident has difficulty managing in an independent living arrangement but does not require nursing home care. Its centralized services typically include dining, housekeeping, social and physical activities, medication administration, and communal transportation. The complex commonly provides separate living quarters for each resident. Alzheimer's and ALS care are commonly offered at an assisted living facility. Living quarters for these patients may be located separately from the other residents. Assisted care commonly bridges the gap between independent living and a nursing home. In some areas of the country, an assisted living residence may be called personal care, residential care, or domiciliary care. Staff may be available at an assisted care facility 24 hours a day, but skilled medical care—which is limited in nature—is not required."

⁹ While only a portion of the rooms/units might be converted for senior living, to provide a conservative analysis, it was assumed that all 300 hotel keys would be converted to senior living units.

Table 8 – Anticipated Trip Generation – Senior Living Land Uses

Development	Size	Weekday		Saturday
		AM Peak Hour	PM Peak Hour	Peak Hour
Combined Independent and Assisted Living ¹	300 Rooms	32	59	65 ¹⁰
Assisted Living	300 Rooms	54	72	81

1. Assumes a maximum of 225 Independent Living units and 75 Assisted Living Units

To determine whether the facility's trip generation potential under the senior living scenarios on a typical day would be more or less than with the currently-proposed lodging/hotel use, the Hotel non-lodging trips, summarized in **Table 5**, were added to each of the senior living scenarios summarized in **Table 8** and then compared to the Proposed Action trips presented in **Table 3**. This comparison is presented in Table in **Table 9**.

Table 9 – Anticipated Trip Generation – Senior Living Land Uses (Typical Day)

Development	Size	Weekday		Saturday
		AM Peak Hour	PM Peak Hour	Peak Hour
Combined Independent and Assisted Living ¹	300 Rooms	67	160	143
Assisted Living	300 Rooms	89	173	159
Hotel Typical Trips	300 Rooms	143	194	216

1. Assumes a maximum of 225 Independent Living units and 75 Assisted Living Units

As can be seen from **Table 9**, both of the senior living scenarios would generate less traffic than the proposed hotel lodging use. Thus, the prospect of converting some (or all) of the hotel rooms to senior residential use would only have a positive impact on traffic operating conditions, compared to the proposed, public-facing hotel/conference center use.

To determine whether the facility's trip generation potential under the senior living scenarios on an event day would be more or less than with the currently-proposed lodging/hotel use, the Hotel non-lodging trips, summarized in **Table 5**, and the event trips, summarized in **Table 7**, were added to each of the senior living scenarios summarized in **Table 8** and then compared to the Proposed-Action-with-event trips presented in **Table 6**. This comparison is presented in Table in **Table 10**.

¹⁰ Using the ITE Trip Generation Manual, 11th Edition, data for Land Use Code 254: Congregate Care. Saturday Peak Hour trips are not provided, ergo, a ratio-based estimation approach was used to approximate the potential Saturday peak-hour trips. Using the largest available trip generation number as a baseline (Weekday, PM Peak Hour) and applying a proportional ratio, a conservative estimation was extrapolated and resulted in 65 Combined Independent Assistant Living trips on Saturday at peak hour.

Table 10 – Anticipated Trip Generation – Senior Living Land Uses (Event Day)				
Development	Size	Weekday		Saturday
		AM Peak Hour	PM Peak Hour	Peak Hour
Combined Independent and Assisted Living ¹	300 Rooms	131	183	209
Assisted Living	300 Rooms	153	196	225
Hotel Event Trips	300 Rooms	207	217	282

1. Assumes a maximum of 225 Independent Living units and 75 Assisted Living Units

As can be seen from **Table 10**, both of the senior living scenarios would generate less traffic than the proposed hotel lodging use. Thus, the prospect of converting some (or all) of the hotel rooms to senior residential use would only have a positive impact on traffic operating conditions, compared to the proposed, public-facing conference center use.

5.2 Trip Distribution and Assignment

Trip distribution was based on a review of existing Average Daily Traffic (ADT) volumes published by the NYSDOT for the roadways within the environs of the Project. Specifically, ADT volumes on the Croton Expressway (US Route 9/State Route 9A - north of Old Albany Post Road), ADT volumes on Albany Post Road, south of Old Albany Post Road, and ADT volumes on the Briarcliff-Peekskill Parkway, east of US Route 9 were reviewed. Based on this evaluation, the distribution of Project trips to the adjacent roadway network is generally forecast to be:

- 45% to/from the north on the Croton Expressway (US Route 9/ NY Route 9A)/Albany Post Road (US Route 9)
- 30% to/from the east on the Briarcliff Peekskill Parkway (NY Route 9A)
- 20% to/from the south on Albany Post Road (US Route 9)
- 5% to/from the north on Old Albany Post Road

The arrival and departure patterns for the Project-Generated Trips are shown in **Figure 9**. The new Project-Generated Trips for the proposed development, which are summarized in **Figure 10**, were determined by applying the Project-generated regular-day vehicular trips (shown in **Table 3**) to the arrival and departure distribution percentages (shown in **Figure 9**).



NOT TO SCALE

- Legend**
- Study Roadway
 - XX IN% Distribution
 - (XX) OUT% Distribution
 - Study Intersection

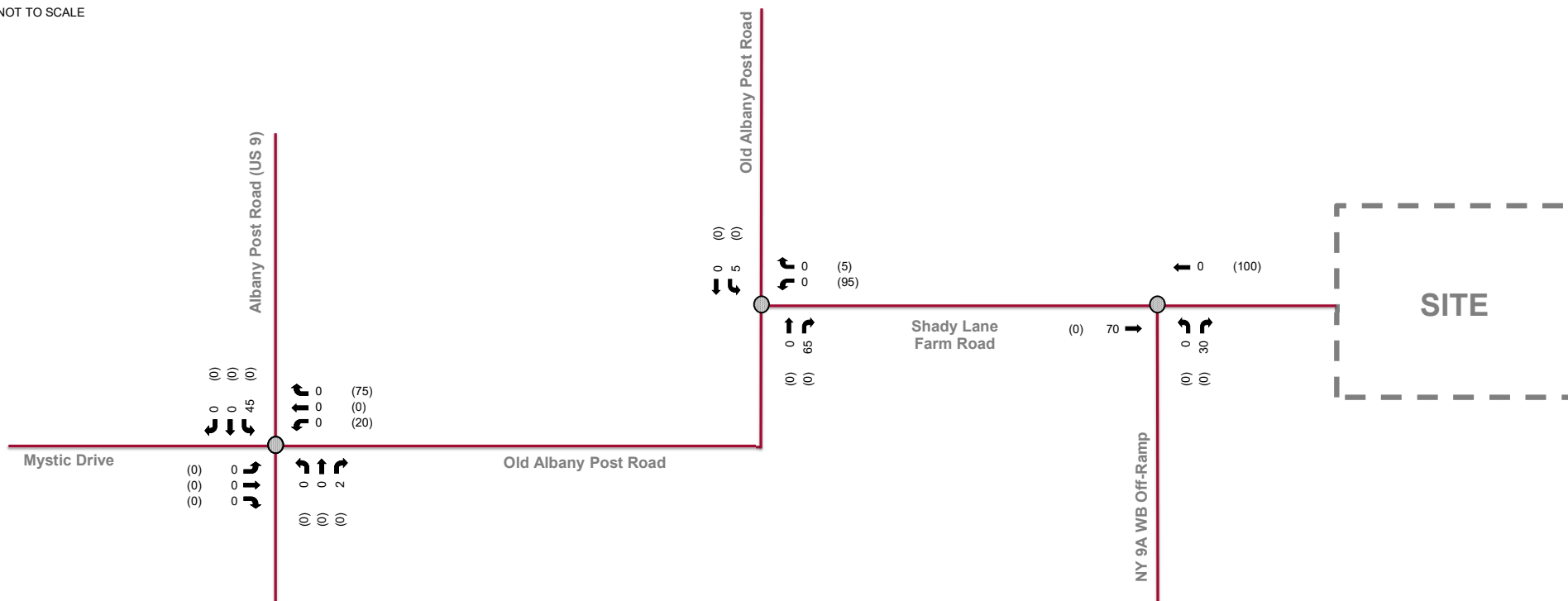


Figure 9
Trip Distribution
1 Old Albany Post Road
Crotonville, Westchester Co., NY

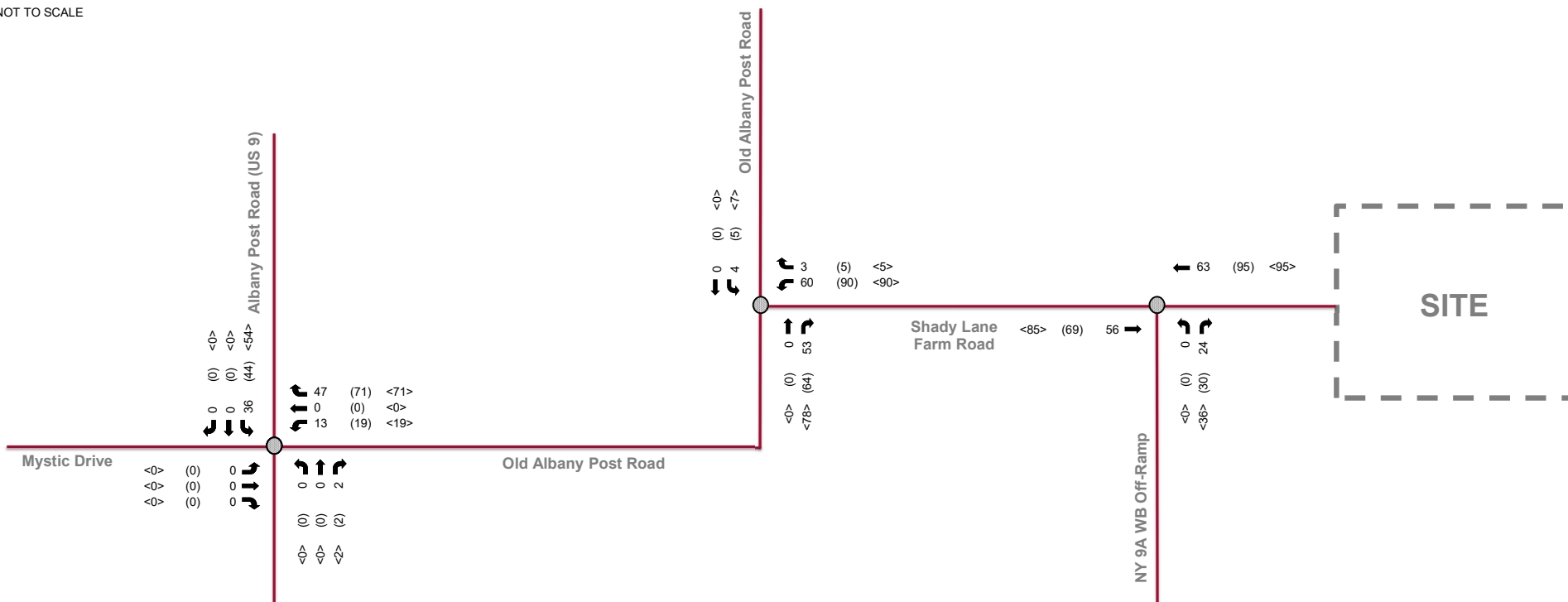
6.0 FUTURE BUILD TRAFFIC CONDITIONS

The Future Build conditions are defined as the forecast traffic conditions on the roadway network in the year 2025, with the proposed Project. The future traffic volumes with the Project were determined by subtracting the Training Facility traffic volumes (shown in **Figure 7**) from the No-Build traffic volumes, (shown in **Figure 8**) and adding the total Project trips shown in **Figure 10**, resulting in the 2025 Build traffic volumes shown in **Figure 11**.



NOT TO SCALE

- Legend**
- Study Roadway
 - XX AM Peak Hour Traffic
 - (XX) PM Peak Hour Traffic
 - <XX> SAT Peak Hour Traffic
 - Study Intersection



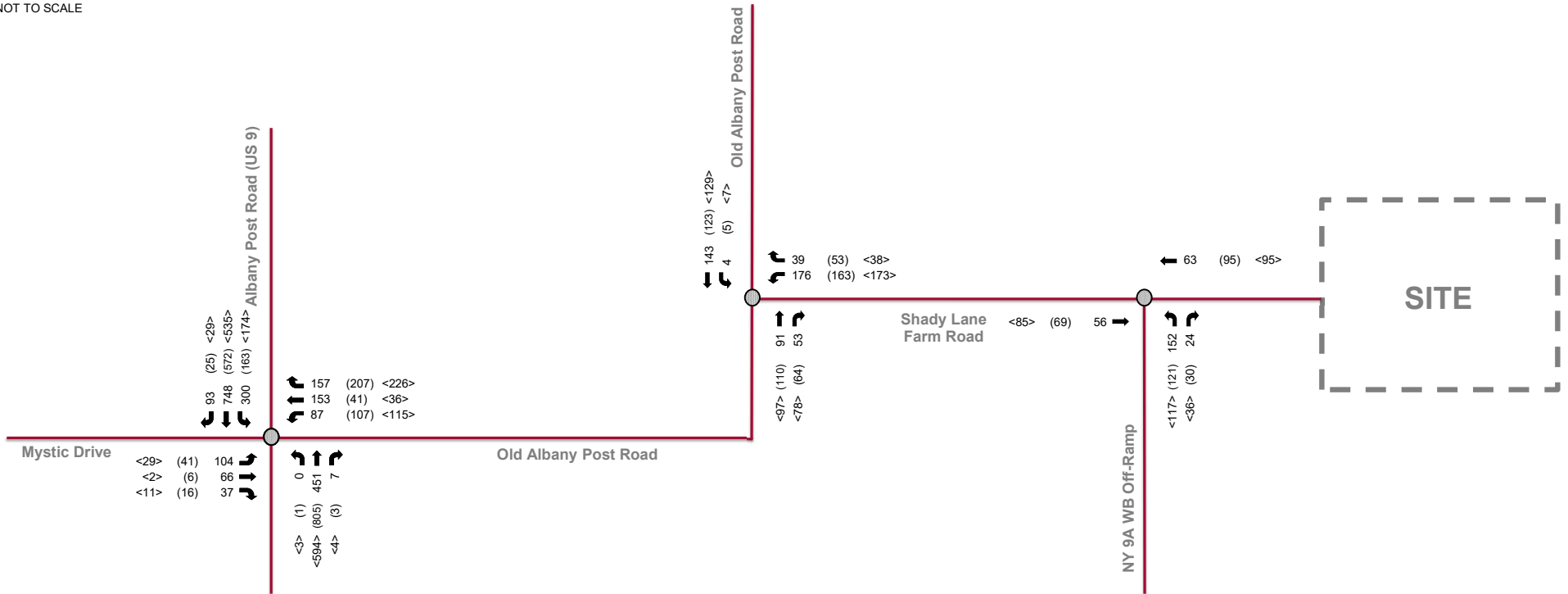
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Figure 10
Trip Assignment
1 Old Albany Post Road
Crotonville, Westchester Co., NY



NOT TO SCALE

- Legend**
- Study Roadway
 - XX AM Peak Hour Traffic
 - (XX) PM Peak Hour Traffic
 - <XX> SAT Peak Hour Traffic
 - Study Intersection



SITE

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Figure 11
Forecasted 2025 Build Traffic Volumes
1 Old Albany Post Road
Crotonville, Westchester Co., NY

7.0 CAPACITY ANALYSIS

7.1 Intersection Capacity Analysis

An intersection capacity analysis was conducted using the Existing, No-Build and Build peak-hour traffic volumes shown in **Figure 3**, **Figure 8**, and **Figure 11**, respectively, to assess the quality of the traffic flow at the study intersections.

The criteria used to analyze the study intersections is based on the evaluation criteria contained in the Transportation Research Board's *Highway Capacity Manual* ("HCM") 7th Edition (with the exception of the intersection of Albany Post Road (US Route 9) with Old Albany Post Road/Mystic Drive, which was required to be analyzed based on the evaluation criteria contained in the *Highway Capacity Manual 2000* because of the existing traffic signal phasing). The term "Level of Service" ("LOS") is used to denote the different operating conditions that occur at an intersection under various traffic volume loads. It is a qualitative measure that considers a number of factors including roadway geometry, speed, travel delay, and freedom to maneuver. LOS provides an index to the operational qualities of a roadway segment or an intersection. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions.

Synchro software (Version 12) was used to model the study intersections based on the parameters mentioned above. Synchro software is widely used by traffic engineering professionals, is approved for use by the NYSDOT, and is consistent with the procedures in the HCM.

The LOS designations are based on delay. For unsignalized intersections, the analysis assumes that traffic on the mainline is not affected by traffic on the side streets. Thus, the LOS designation is for the critical movement exiting the side street, which is generally the left turn out of the side street or site driveway. For the purposes of this analysis, control delay is defined as the total elapsed time that includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation. The control delay criteria for the range of service levels for signalized and unsignalized intersections are shown in **Table 11**.

TABLE 11- LEVEL OF SERVICE CRITERIA		
Level of Service	Signalized Intersection Control Delay Per Vehicle	Unsignalized Intersection Control Delay Per Vehicle
A	≤ 10.0 seconds	≤ 10.0 seconds
B	>10.0 and ≤20.0 seconds	>10.0 and ≤15.0 seconds
C	>20.0 and ≤35.0 seconds	>15.0 and ≤25.0 seconds
D	>35.0 and ≤55.0 seconds	>25.0 and ≤45.0 seconds
E	>55.0 and ≤80.0 seconds	>35.0 and ≤50.0 seconds
F	>80.0 seconds	>50.0 seconds

The results of the intersection analysis for the Existing, No-Build and the Build volume conditions for the peak hours are summarized in **Table 12, Table 13, and Table 14** for the weekday AM, weekday PM and Saturday midday conditions. The analysis worksheets are provided in the Appendix.

Direction	Approach/ Movement	TABLE 12 – Intersection Capacity Analysis AM Peak Hour					
		Existing 2024		Forecasted 2025 Without Development		Forecasted 2025 With Development	
		LOS	DELAY	LOS	DELAY	LOS	DELAY
INTERSECTION	ALBANY POST ROAD (US 9) AND OLD ALBANY POST ROAD/MYSTIC DRIVE						
MYSTIC DRIVE							
Eastbound	Left Turn	C	33.2	D	37.2	D	42.5
	Through/ Right Turn	C	23.0	C	23.7	C	24.3
	Approach	C	28.1	C	30.5	C	33.5
OLD ALBANY POST ROAD							
Westbound	Approach	D	36.8	D	40.6	D	53.3
ALBANY POST ROAD (US 9)							
Northbound	Approach	A	7.3	A	7.4	A	8.0
ALBANY POST ROAD (US 9)							
Southbound	Approach	B	16.0	B	17.2	C	20.8
	OVERALL	B	18.6	C	20.2	C	25.2
INTERSECTION	OLD ALBANY POST ROAD AND SHADY LANE FARM ROAD						
SHADY LANE FARM ROAD							
Westbound	Approach	B	10.1	B	10.4	B	11.2
OLD ALBANY POST ROAD							
Southbound	Approach	A	0.1	A	0.1	A	0.2
INTERSECTION	SHADY LANE FARM ROAD AND NY 9A NORTHBOUND OFF-RAMP						
NY 9A OFF-RAMP							
Westbound	Approach	A	9.4	A	9.5	B	10.3

LOS = Level of Service

Delay = Average delay in seconds per vehicle

Direction	Approach/ Movement	TABLE 13 – Intersection Capacity Analysis PM Peak Hour					
		Existing 2024		Forecasted 2025 Without Development		Forecasted 2025 With Development	
		LOS	DELAY	LOS	DELAY	LOS	DELAY
INTERSECTION	ALBANY POST ROAD (US 9) AND OLD ALBANY POST ROAD/MYSTIC DRIVE						
MYSTIC DRIVE							
Eastbound	Left Turn	B	14.9	B	15.5	B	17.8
	Through/ Right Turn	B	14.2	B	14.7	B	16.6
	Approach	B	14.6	B	15.2	B	17.4
OLD ALBANY POST ROAD							
Westbound	Approach	B	17.5	B	19.1	C	24.8
ALBANY POST ROAD (US 9)							
Northbound	Approach	A	8.2	A	8.5	A	9.3
ALBANY POST ROAD (US 9)							
Southbound	Approach	A	9.3	B	10.4	B	13.4
	OVERALL	B	10.1	B	11.1	B	13.9
INTERSECTION	OLD ALBANY POST ROAD AND SHADY LANE FARM ROAD						
SHADY LANE FARM ROAD							
Westbound	Approach	A	9.6	A	9.9	B	10.9
OLD ALBANY POST ROAD							
Southbound	Approach	A	0.0	A	0.0	A	0.3
INTERSECTION	SHADY LANE FARM ROAD AND NY 9A NORTHBOUND OFF-RAMP						
NY 9A OFF-RAMP							
Westbound	Approach	A	9.1	A	9.2	B	10.2

LOS = Level of Service

Delay = Average delay in seconds per vehicle

Direction	Approach/ Movement	TABLE 14 – Intersection Capacity Analysis Saturday Peak Hour					
		Existing 2024		Forecasted 2025 Without Development		Forecasted 2025 With Development	
		LOS	DELAY	LOS	DELAY	LOS	DELAY
INTERSECTION	ALBANY POST ROAD (US 9) AND OLD ALBANY POST ROAD/MYSTIC DRIVE						
MYSTIC DRIVE							
Eastbound	Left Turn	B	12.5	B	12.9	B	14.0
	Through/ Right Turn	B	12.1	B	12.5	B	13.4
	Approach	B	12.3	B	12.8	B	13.8
OLD ALBANY POST ROAD							
Westbound	Approach	B	14.9	B	15.9	B	19.2
ALBANY POST ROAD (US 9)							
Northbound	Approach	A	7.8	A	7.9	A	9.1
ALBANY POST ROAD (US 9)							
Southbound	Approach	A	9.0	A	9.5	B	12.0
	OVERALL	A	9.7	B	10.1	B	12.6
INTERSECTION	OLD ALBANY POST ROAD AND SHADY LANE FARM ROAD						
SHADY LANE FARM ROAD							
Westbound	Approach	A	9.6	A	9.7	B	10.9
OLD ALBANY POST ROAD							
Southbound	Approach	A	0.0	A	0.0	A	0.4
INTERSECTION	SHADY LANE FARM ROAD AND NY 9A NORTHBOUND OFF-RAMP						
NY 9A OFF-RAMP							
Westbound	Approach	A	9.1	A	9.2	B	10.6

LOS = Level of Service

Delay = Average delay in seconds per vehicle

A descriptive summary of the Synchro analysis results shown in **Table 12**, **Table 13** and **Table 14** is provided on the following pages.

Albany Post Road (US Route 9) & Old Albany Post Road/Mystic Drive

- Under Existing conditions, the intersection operates at an overall intersection Level of Service (“LOS”) “B” during the weekday AM and weekday PM peak hours and an overall LOS “A” during the Saturday midday peak hour.
- In the future under No-Build conditions (without the proposed Project, but with forecast increases in existing traffic volumes), the intersection is anticipated to operate at an overall intersection LOS “C” during the weekday AM peak hour, an overall intersection LOS “B” during the weekday PM peak hour and at an overall intersection LOS “B” during Saturday midday peak hour.

- Under future Build conditions (with forecast increases in existing traffic volumes and Project traffic added), the intersection is anticipated to operate an overall intersection LOS “C” during the weekday AM peak hour and at an overall intersection LOS “B” during both the weekday PM and Saturday midday peak hours.

Old Albany Post Road & Shady Lane Farm Road

- Under Existing conditions, the westbound Shady Lane Farm Road approach to Old Albany Post Road operates at a LOS “B” during the weekday AM peak hour and a LOS “A” during the weekday PM and Saturday midday peak hours. The southbound Old Albany Post Road approach to Shady Farm Lane operates at a LOS “A” during each of the peak periods analyzed.
- Under future No-Build conditions (without the proposed Project but with forecasted increases in existing traffic volumes), the westbound Shady Lane Farm Road approach to Old Albany Post Road can be anticipated to operate at a LOS “B” during the weekday AM peak hour and a LOS “A” during the weekday PM and Saturday midday peak hours. The southbound Old Albany Post Road approach to Shady Farm Lane can be anticipated to operate at a LOS “A” during each of the peak periods analyzed.
- Under future Build conditions (with forecasted increases in existing traffic volumes and Project traffic added), the westbound Shady Lane Farm Road approach to Old Albany Post Road can be anticipated to operate at a LOS “B” during each of the peak periods analyzed and the southbound Old Albany Post Road approach to Shady Farm Lane can be anticipated to operate at a LOS “A” during each of the peak periods analyzed.

Shady Lane Farm Road & The Briarcliff Peekskill Parkway Northbound Off-Ramp

- Under Existing conditions, the westbound Briarcliff Peekskill Parkway Northbound Off-Ramp approach to Shady Farm Lane Road operates at a LOS “A” during each of the peak periods analyzed.
- Under future No-Build conditions (without the proposed Project but with forecasted increases in existing traffic volumes), the westbound Briarcliff Peekskill Parkway Northbound Off-Ramp approach to Shady Farm Lane Road can be anticipated to operate at a LOS “A” during each of the peak periods analyzed.
- Under future Build conditions (with forecasted increases in existing traffic volumes and Project traffic added), the westbound Briarcliff Peekskill Parkway Northbound Off-Ramp approach to Shady Farm Lane Road can be anticipated to operate at a LOS “B” during each of the peak periods analyzed.

8.0 EVENT CONDITION ANALYSES

Event conditions were analyzed by using the same methodology as for the typical-day conditions. The weekday AM, PM and Saturday Midday peak hour volumes remain unchanged. A review of NYSDOT Continuous count station data on Route 9 over the Croton River indicated that the busiest hour in the middle of a weekday is the 12:00 p.m. to 1:00 p.m. peak hour and that traffic volumes during this hour are 68% of the AM peak hour and 64% of the PM peak hour. A review of the peak-hour volumes at the busiest of the study intersections, the intersection of Route 9 with Mystic Drive and Old Albany Post Road, indicated that traffic volumes during the busiest midday hour are 68% of the AM peak hour and 78% of the PM peak hour. To provide a conservative analysis, the higher value (78%) in the PM peak hour was used. Thus, to approximate the weekday Midday peak hour, 34% ($68/2$) of the AM peak-hour volumes for each movement were added to 39% ($78/2$) of the PM peak-hour volumes for each movement.

Event project trips were determined by applying the total projected peak-hour trips (contained in Table 6¹¹) to the arrival and departure patterns presented in Figure 8. The resulting Event Peak-hour traffic volumes are shown in **Figures 12 and 13**.

Intersection capacity analyses were performed for the Event Build volumes using Synchro 12, including the pedestrian volumes, as previously described. The results of these analyses are presented in **Table 15 - 18**.

¹¹ Weekday Midday event peak-hour trips (232) were determined based on a review of the ITE AM and PM peak-generator hour trips for the to 30% of datapoints for LUC 310.



NOT TO SCALE

- Legend**
- Study Roadway
 - XX AM Peak Hour Traffic
 - (XX) PM Peak Hour Traffic
 - <XX> SAT Peak Hour Traffic
 - Study Intersection

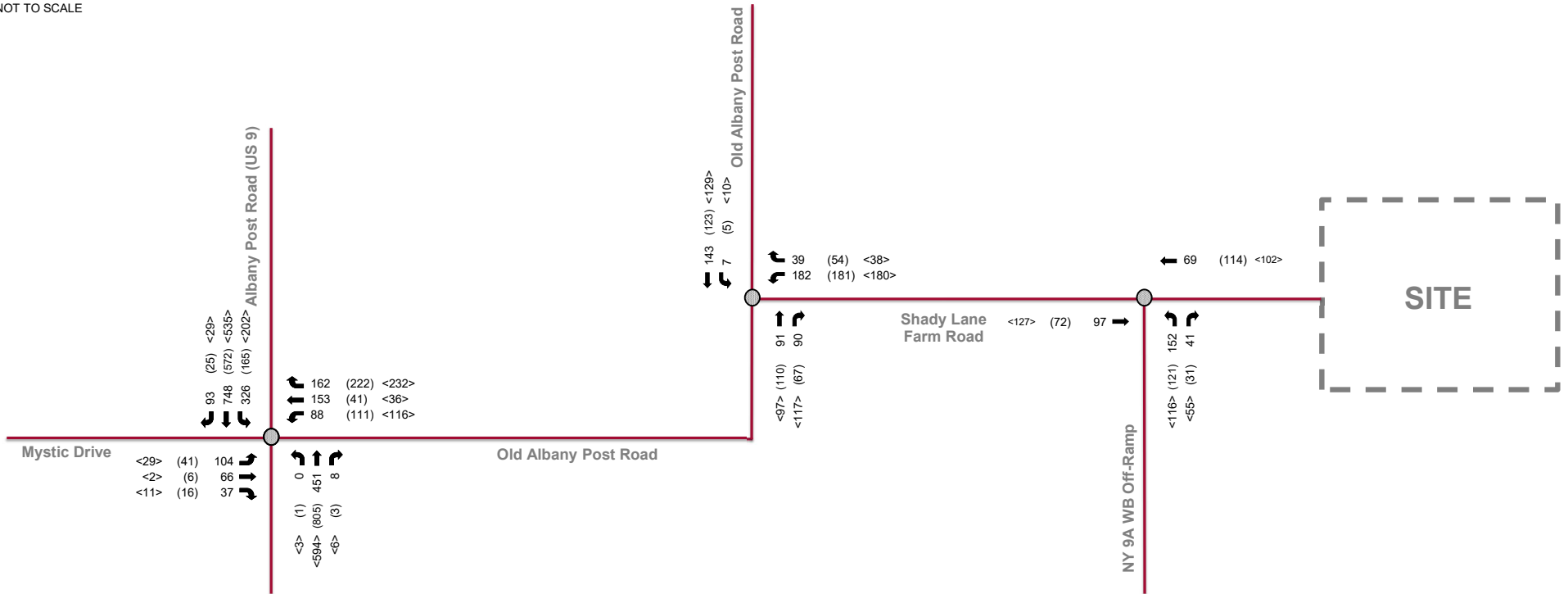
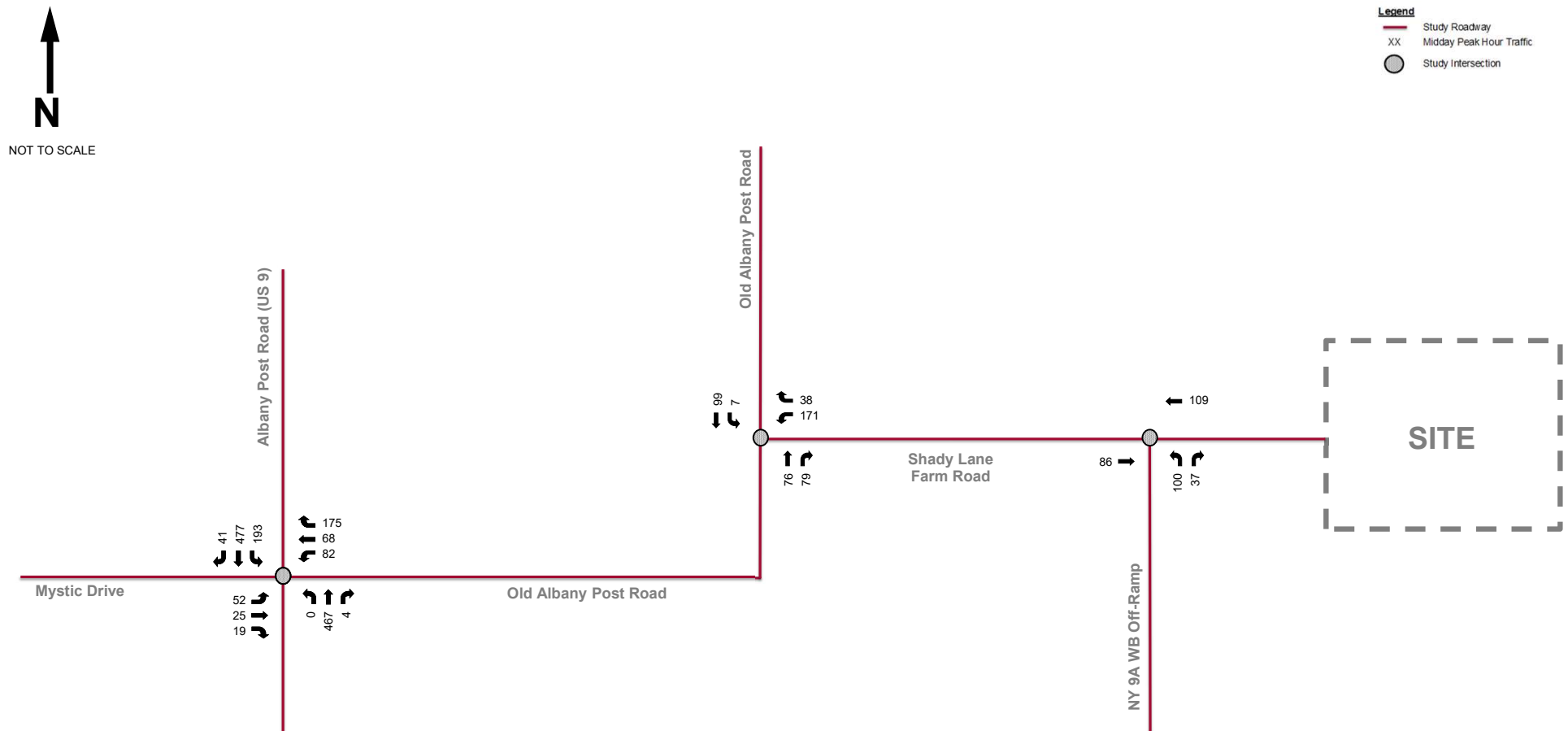


Figure 12
Forecasted 2025 Build Event Traffic Volumes
1 Old Albany Post Road
Crotonville, Westchester Co., NY



* Weekday Existing and No-Build Figures can be provided upon request

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Figure 13
Forecasted 2025 Build Midday Event Traffic Volumes
1 Old Albany Post Road
Crotonville, Westchester Co., NY

Direction	Approach/ Movement	TABLE 15 – Intersection Capacity Analysis					
		AM Peak Hour - Large Events					
		Existing 2024		Forecasted 2025 Without Development		Forecasted 2025 With Development	
		LOS	DELAY	LOS	DELAY	LOS	DELAY
INTERSECTION	ALBANY POST ROAD (US 9) AND OLD ALBANY POST ROAD/MYSTIC DRIVE						
MYSTIC DRIVE							
Eastbound	Left Turn	C	33.2	D	37.2	D	50.3
	Through/ Right Turn	C	23.0	C	23.7	C	25.2
	Approach	C	28.1	C	30.5	D	37.9
OLD ALBANY POST ROAD							
Westbound	Approach	D	36.8	D	40.6	E	62.2
ALBANY POST ROAD (US 9)							
Northbound	Approach	A	7.3	A	7.4	A	7.8
ALBANY POST ROAD (US 9)							
Southbound	Approach	B	16.0	B	17.2	C	22.2
	OVERALL	B	18.6	C	20.2	C	27.9
INTERSECTION	OLD ALBANY POST ROAD AND SHADY LANE FARM ROAD						
SHADY LANE FARM ROAD							
Westbound	Approach	B	10.1	B	10.4	B	11.4
OLD ALBANY POST ROAD							
Southbound	Approach	A	0.1	A	0.1	A	0.4
INTERSECTION	SHADY LANE FARM ROAD AND NY 9A NORTHBOUND OFF-RAMP						
NY 9A OFF-RAMP							
Westbound	Approach	A	9.4	A	9.5	B	10.8

LOS = Level of Service

Delay = Average delay in seconds per vehicle

Direction	Approach/ Movement	TABLE 16 – Intersection Capacity Analysis					
		MD Peak Hour - Large Events					
		Existing 2024		Forecasted 2025 Without Development		Forecasted 2025 With Development	
		LOS	DELAY	LOS	DELAY	LOS	DELAY
INTERSECTION	ALBANY POST ROAD (US 9) AND OLD ALBANY POST ROAD/MYSTIC DRIVE						
MYSTIC DRIVE							
Eastbound	Left Turn	B	14.9	B	15.4	B	16.2
	Through/ Right Turn	B	14.3	B	14.6	B	15.1
	Approach	B	14.6	B	15.0	B	15.7
OLD ALBANY POST ROAD							
Westbound	Approach	B	16.6	B	17.4	C	20.8
ALBANY POST ROAD (US 9)							
Northbound	Approach	A	6.9	A	7.0	A	8.2
ALBANY POST ROAD (US 9)							
Southbound	Approach	A	8.9	A	9.4	B	12.4
	OVERALL	A	9.8	B	10.2	B	13.0
INTERSECTION	OLD ALBANY POST ROAD AND SHADY LANE FARM ROAD						
SHADY LANE FARM ROAD							
Westbound	Approach	A	9.8	B	10.1	B	10.7
OLD ALBANY POST ROAD							
Southbound	Approach	A	0.0	A	0.1	A	0.5
INTERSECTION	SHADY LANE FARM ROAD AND NY 9A NORTHBOUND OFF-RAMP						
NY 9A OFF-RAMP							
Westbound	Approach	A	9.0	A	9.0	B	10.3

LOS = Level of Service

Delay = Average delay in seconds per vehicle

Direction	Approach/ Movement	TABLE 17 – Intersection Capacity Analysis					
		PM Peak Hour - Large Events					
		Existing 2024		Forecasted 2025 Without Development		Forecasted 2025 With Development	
		LOS	DELAY	LOS	DELAY	LOS	DELAY
INTERSECTION	ALBANY POST ROAD (US 9) AND OLD ALBANY POST ROAD/MYSTIC DRIVE						
MYSTIC DRIVE							
Eastbound	Left Turn	B	14.9	B	15.5	B	17.8
	Through/ Right Turn	B	14.2	B	14.7	B	16.6
	Approach	B	14.6	B	15.2	B	17.4
OLD ALBANY POST ROAD							
Westbound	Approach	B	17.5	B	19.1	C	25.6
ALBANY POST ROAD (US 9)							
Northbound	Approach	A	8.2	A	8.5	A	9.7
ALBANY POST ROAD (US 9)							
Southbound	Approach	A	9.3	B	10.4	B	14.2
	OVERALL	B	10.1	B	11.1	B	14.6
INTERSECTION	OLD ALBANY POST ROAD AND SHADY LANE FARM ROAD						
SHADY LANE FARM ROAD							
Westbound	Approach	A	9.6	A	9.9	B	11.1
OLD ALBANY POST ROAD							
Southbound	Approach	A	0.0	A	0.0	A	0.3
INTERSECTION	SHADY LANE FARM ROAD AND NY 9A NORTHBOUND OFF-RAMP						
NY 9A OFF-RAMP							
Westbound	Approach	A	9.1	A	9.2	B	10.3

LOS = Level of Service

Delay = Average delay in seconds per vehicle

Direction	Approach/ Movement	TABLE 18 – Intersection Capacity Analysis					
		Saturday Peak Hour – Large Events					
		Existing 2024		Forecasted 2025 Without Development		Forecasted 2025 With Development	
		LOS	DELAY	LOS	DELAY	LOS	DELAY
INTERSECTION	ALBANY POST ROAD (US 9) AND OLD ALBANY POST ROAD/MYSTIC DRIVE						
MYSTIC DRIVE							
Eastbound	Left Turn	B	12.5	B	12.9	B	14.8
	Through/ Right Turn	B	12.1	B	12.5	B	14.1
	Approach	B	12.3	B	12.8	B	14.6
OLD ALBANY POST ROAD							
Westbound	Approach	B	14.9	B	15.9	C	20.5
ALBANY POST ROAD (US 9)							
Northbound	Approach	A	7.8	A	7.9	A	9.1
ALBANY POST ROAD (US 9)							
Southbound	Approach	A	9.0	A	9.5	B	12.7
	OVERALL	A	9.7	B	10.1	B	13.2
INTERSECTION	OLD ALBANY POST ROAD AND SHADY LANE FARM ROAD						
SHADY LANE FARM ROAD							
Westbound	Approach	A	9.6	A	9.7	B	11.1
OLD ALBANY POST ROAD							
Southbound	Approach	A	0.0	A	0.0	A	0.6
INTERSECTION	SHADY LANE FARM ROAD AND NY 9A NORTHBOUND OFF-RAMP						
NY 9A OFF-RAMP							
Westbound	Approach	A	9.1	A	9.2	B	11.2

LOS = Level of Service

Delay = Average delay in seconds per vehicle

As can be seen from **Table 15-18**, with one minor exception, even with a larger event at the hotel/conference center overall intersection, LOS “B” or better conditions and unsignalized minor-movement LOS “B” or better conditions are projected to prevail at all locations during all 4 peak hours. This

indicates that there will be more than adequate capacity to accommodate event traffic volumes at these location and that events at the facility will not have a significant adverse traffic impact.

The one minor exception is at the intersection of US Route 9 with Old Albany Post Road/Mystic Drive during the weekday AM peak hour. The analyses indicates that, when there is a larger event at the facility, during the busiest 15 minutes¹² of the weekday AM peak hour, the overall intersection delay could increase by 7.7 seconds (and the Level of Service on the westbound, Old Albany Post Road approach to the intersection could change from “D” to “E”)¹³.

Considering that, if this occurs, it would likely be only a few times per year (when there is a large morning event), because of the short duration of such increases, and since the intersection will have adequate capacity to accommodate all vehicles during this period, this impact was determined not to be significant. However, to ensure that there will not be a significant impact during this period, additional analyses were conducted which indicated that, with implementation of a 3-second timing change (to better accommodate eastbound and westbound traffic on Old Albany Post Road and Mystic Drive), the potential increase in overall intersection delay during a larger event could be reduced to 6.7 seconds, no individual movement will see delays increase by more than 10 seconds, and the Level of Service on the westbound, Old Albany Post Road approach to the intersection will be restored from “D” to “E”. This analysis is summarized in **Table 19**.

¹² By definition, the Peak-Hour Factor generates the hourly equivalent of the peak 15 minutes.

¹³ The analysis also indicates that all movements will be operating below their lane-group capacity, as defined by a v/c ratio of 1.0.

Direction	Approach/ Movement	TABLE 19 – Intersection Capacity Analysis					
		AM Peak Hour With Signal Timing Change - Large Events					
		Existing 2024		Forecasted 2025 Without Development		Forecasted 2025 With Development*	
		LOS	DELAY	LOS	DELAY	LOS	DELAY
INTERSECTION	ALBANY POST ROAD (US 9) AND OLD ALBANY POST ROAD/MYSTIC DRIVE						
MYSTIC DRIVE							
Eastbound	Left Turn	C	33.2	D	37.2	D	40.4
	Through/ Right Turn	C	23.0	C	23.7	C	24.5
		C	28.1	C	30.5	C	32.6
OLD ALBANY POST ROAD							
Westbound	Approach	D	36.8	D	40.6	D	50.6
ALBANY POST ROAD (US 9)							
Northbound	Approach	A	7.3	A	7.4	A	8.3
ALBANY POST ROAD (US 9)							
Southbound	Approach	B	16.0	B	17.2	C	25.0
	OVERALL	B	18.6	C	20.2	C	26.9
INTERSECTION	OLD ALBANY POST ROAD AND SHADY LANE FARM ROAD						
SHADY LANE FARM ROAD							
Westbound	Approach	B	10.1	B	10.4	B	13.7
OLD ALBANY POST ROAD							
Southbound	Approach	A	0.1	A	0.1	A	0.4
INTERSECTION	SHADY LANE FARM ROAD AND NY 9A NORTHBOUND OFF-RAMP						
NY 9A OFF-RAMP							
Westbound	Approach	A	9.4	A	9.5	B	11.1

LOS = Level of Service

Delay = Average delay in seconds per vehicle

*: With 3 second timing change

9.0 CONCLUSIONS

As detailed herein, at the two unsignalized intersections studied, increases in delay will be less than 1.5 seconds and barely noticeable. At the signalized intersection of Route 9 with Mystic Drive and Old Albany Post Road, the maximum increase in delay on any movement will, on a regular day, be 12.7 seconds and the maximum overall intersection delay increase will be 5.0 seconds. In neither instance, will these increases precipitate a change in Level of Service and at all times all movements will operate at LOS "D" or better while the overall intersection will operate at LOS "C" or better.

On days with larger events, project impacts will be similar (generally less than 1.5 seconds of increase in delay at any unsignalized movement, and, excepting for the weekday AM peak hour, less than 7 seconds of delay increase on any other movement), with the only notable exception being potential weekday AM peak-hour increases in delay at the intersection of US Route 9 with Old Albany Post Road/Mystic Drive, which can be mitigated by a minor signal timing change.

Based on these findings, it is concluded that traffic generated by Project **will not result in any significant adverse impact on traffic operating conditions.**

Appendix

- Growth Rates
- Pedestrian Counts
 - Traffic Counts
- Traffic Volume Analysis
 - Synchro Reports

Growth Rates

AVERAGE ANNUAL GROWTH RATE FOR VEHICLE-MILES OF TRAVEL (VMT)

COUNTY	FACILITY	SCENARIO YEARS VEHICLE-MILES OF TRAVEL (VMT)		AVERAGE ANNUAL VMT GROWTH RATE
		2023	2050	
New York	FC 1,11,12	3,482,847	3,681,337	0.21%
	FC 2,6,14,16	4,207,114	4,213,559	0.01%
	FC 7-9,17,19	232,764	244,484	0.19%
	SUB-TOTAL	7,922,725	8,139,380	0.10%
Queens	FC 1,11,12	10,520,137	10,676,494	0.06%
	FC 2,6,14,16	7,257,344	7,308,334	0.03%
	FC 7-9,17,19	49,319	49,444	0.01%
	SUB-TOTAL	17,826,800	18,034,272	0.04%
Bronx	FC 1,11,12	4,598,739	5,151,059	0.44%
	FC 2,6,14,16	1,985,474	2,186,229	0.37%
	FC 7-9,17,19	307,746	319,825	0.15%
	SUB-TOTAL	6,891,960	7,657,112	0.41%
Kings	FC 1,11,12	4,123,941	4,354,211	0.21%
	FC 2,6,14,16	6,645,391	6,936,812	0.16%
	FC 7-9,17,19	261,679	273,972	0.17%
	SUB-TOTAL	11,031,011	11,564,995	0.18%
Richmond	FC 1,11,12	1,889,930	2,083,469	0.38%
	FC 2,6,14,16	1,191,497	1,294,278	0.32%
	FC 7-9,17,19	15,719	18,938	0.76%
	SUB-TOTAL	3,097,146	3,396,684	0.36%
Nassau	FC 1,11,12	11,049,044	11,417,848	0.12%
	FC 2,6,14,16	10,131,622	10,823,455	0.25%
	FC 7-9,17,19	1,159,005	1,239,890	0.26%
	SUB-TOTAL	22,339,670	23,481,193	0.19%
Suffolk	FC 1,11,12	13,066,082	13,969,086	0.26%
	FC 2,6,14,16	12,001,378	13,256,564	0.39%
	FC 7-9,17,19	1,827,616	2,045,029	0.44%
	SUB-TOTAL	26,895,076	29,270,678	0.33%
Westchester	FC 1,11,12	12,380,881	13,677,841	0.39%
	FC 2,6,14,16	5,935,453	6,389,708	0.28%
	FC 7-9,17,19	429,232	442,728	0.12%
	SUB-TOTAL	18,745,566	20,510,277	0.35%
Rockland	FC 1,11,12	4,088,033	4,661,666	0.52%
	FC 2,6,14,16	2,184,365	2,679,756	0.84%
	FC 7-9,17,19	126,141	154,126	0.82%
	SUB-TOTAL	6,398,538	7,495,548	0.63%
Putnam	FC 1,11,12	1,728,280	1,819,859	0.20%
	FC 2,6,14,16	736,527	757,768	0.11%
	FC 7-9,17,19	426,845	399,750	-0.24%
	SUB-TOTAL	2,891,652	2,977,377	0.11%
ALL AREAS	FC 1,11,12	66,927,915	71,492,869	0.25%
	FC 2,6,14,16	52,276,163	55,846,462	0.25%
	FC 7-9,17,19	4,836,066	5,188,186	0.27%
	TOTAL	124,040,144	132,527,517	0.25%

Facility Definition by Functional Class (FC)		
FC 1,11,12	1	Rural Interstate
	11	Urban Interstate
	12	Urban other Freeway and Expressway
FC 2,6,14,16	2	Rural Principal Arterial
	6	Rural Minor Arterial
	14	Urban Principal Arterial
	16	Urban Minor Arterial
FC 7-9, 17,19	7	Rural Major Collector
	8	Rural Minor Collector
	9	Rural local
	17	Urban Major Collector
	19	Urban Minor Collector

The Data was derived from NYMTC Conformity Determination, X- series,
PFAC adopted October 13th, 2022

Pedestrian Counts

Location: **US 9/Albany Post Rd & Old Albany Post Rd/Mystic Dr**

Project ID: 24-380050-003

City: Ossining

Date: 5/30/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	US 9/Albany Post Rd		US 9/Albany Post Rd		Old Albany Post Rd/Mystic Dr		Old Albany Post Rd/Mystic Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	2	2
7:45 AM	1	1	0	0	0	0	1	3	6
8:00 AM	0	1	0	0	0	0	0	0	1
8:15 AM	0	0	0	1	0	0	0	0	1
8:30 AM	1	0	0	0	0	0	2	0	3
8:45 AM	1	0	0	0	0	0	2	2	5
TOTAL VOLUMES :	EB 3	WB 3	EB 0	WB 1	NB 0	SB 0	NB 5	SB 7	TOTAL 19
APPROACH %'s :	50.00%	50.00%	0.00%	100.00%			41.67%	58.33%	
PEAK HR :	07:30 AM - 08:30 AM		7:30 AM						TOTAL
PEAK HR VOL :	1	2	0	1	0	0	1	5	10
PEAK HR FACTOR :	0.250	0.500		0.250			0.250	0.417	0.417
	0.375		0.250				0.375		

Location: **US 9/Albany Post Rd & Old Albany Post Rd/Mystic Dr**

Project ID: 24-380050-003

City: Ossining

Date: 5/30/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	US 9/Albany Post Rd		US 9/Albany Post Rd		Old Albany Post Rd/Mystic Dr		Old Albany Post Rd/Mystic Dr		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	3	0	0	1	0	0	1	5
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	3	0	3
5:15 PM	1	2	0	0	0	0	2	0	5
5:30 PM	0	2	0	0	0	0	0	0	2
5:45 PM	1	0	0	1	0	0	1	3	6
6:00 PM	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES :	EB 2	WB 7	EB 0	WB 1	NB 1	SB 0	NB 7	SB 4	TOTAL 22
APPROACH %'s :	22.22%	77.78%	0.00%	100.00%	100.00%	0.00%	63.64%	36.36%	
PEAK HR :	04:45 PM - 05:45 PM		4:45 PM						TOTAL
PEAK HR VOL :	1	4	0	0	0	0	5	0	10
PEAK HR FACTOR :	0.250	0.500					0.417	0.417	0.500
		0.417							

Location: **US 9/Albany Post Rd & Old Albany Post Rd/Mystic Dr**

Project ID: 24-380050-003

City: Ossining

Date: 6/1/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	US 9/Albany Post Rd		US 9/Albany Post Rd		Old Albany Post Rd/Mystic Dr		Old Albany Post Rd/Mystic Dr		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
12:15 PM									0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	2	0	0	2	0	0	0	4
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	1	0	1
2:15 PM	0	1	0	0	1	0	0	1	3
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	3	0	0	3	0	1	1	8
	0.00%	100.00%			100.00%	0.00%	50.00%	50.00%	
PEAK HR :	12:30-1:30 pm		12:00 AM						TOTAL
PEAK HR VOL :	0	2	0	0	2	0	0	0	4
PEAK HR FACTOR :	0.250				0.250				0.250

Location: Old Albany Post Rd & Shady Lane Farm Rd
City: Ossining

Project ID: 24-380050-002
Date: 5/30/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Old Albany Post Rd		Old Albany Post Rd		Shady Lane Farm Rd		Shady Lane Farm Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	2	2
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	1	0	2	3
PEAK HR :	07:30 AM - 08:30 AM		7:30 AM						TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	2	3
PEAK HR FACTOR :					0.250		0.250		0.375

Location: Old Albany Post Rd & Shady Lane Farm Rd
City: Ossining

Project ID: 24-380050-002
Date: 5/30/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Old Albany Post Rd		Old Albany Post Rd		Shady Lane Farm Rd		Shady Lane Farm Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	1	1	0	0	2
5:15 PM	0	0	0	0	2	0	0	0	2
5:30 PM	0	0	0	0	0	1	0	0	1
5:45 PM	1	0	0	0	2	0	1	0	4
6:00 PM	0	0	0	0	1	0	0	0	1
TOTAL VOLUMES : APPROACH %'s :	EB 0	WB 0	EB 0	WB 0	NB 3 60.00%	SB 2 40.00%	NB 1 100.00%	SB 0 0.00%	TOTAL 6
PEAK HR :	04:45 PM - 05:45 PM		4:45 PM						TOTAL
PEAK HR VOL :	0	0	0	0	3 0.375	2 0.500	1 0.250	0	6
PEAK HR FACTOR :					0.625		0.250		0.750

Location: Old Albany Post Rd & Shady Lane Farm Rd
City: Ossining

Project ID: 24-380050-003
Date: 6/1/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Old Albany Post Rd		Old Albany Post Rd		Shady Lane Farm Rd		Shady Lane Farm Rd		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
12:15 PM									0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	2	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	1	0	0	1
2:00 PM	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	3	0	0	3
					0.00%	100.00%			
PEAK HR :	12:30-1:30 pm		12:00 AM						TOTAL
PEAK HR VOL :	0	0	0	0	0	2	0	0	4
PEAK HR FACTOR :	0.250								0.250

Project ID: 24-380050-001

Date: 5/30/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	9A/Briarcliff- Peekskill PkwY Off-Ramp		9A/Briarcliff- Peekskill PkwY Off-Ramp		Shady Lane Farm Rd		Shady Lane Farm Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :	EB 0	WB 0	EB 0	WB 0	NB 0	SB 0	NB 0	SB 0	TOTAL 0
PEAK HR :	07:30 AM - 08:30 AM		7:30 AM						TOTAL
PEAK HR VOL : PEAK HR FACTOR :	0		0		0		0		0

Location: 9A/Briarcliff- Peekskill Pkwy Off-Ramp & Shady Lane Farm Rd
City: Ossining

Project ID: 24-380050-001
Date: 5/30/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	9A/Briarcliff- Peekskill Pkwy Off-Ramp		9A/Briarcliff- Peekskill Pkwy Off-Ramp		Shady Lane Farm Rd		Shady Lane Farm Rd	
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB
APPROACH %'s :	0	0	0	0	0	0	0	0
PEAK HR :	04:30 PM - 05:30 PM		4:30 PM					
PEAK HR VOL :	0	0	0	0	0	0	0	0
PEAK HR FACTOR :								
								TOTAL
								0

Location: 9A/Briarcliff- Peekskill Pkwy Off-Ramp & Shady Lane Farm Rd
City: Ossining

Project ID: 24-380050-003
Date: 6/1/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	9A/Briarcliff- Peekskill Pkwy Off-Ramp		9A/Briarcliff- Peekskill Pkwy Off-Ramp		Shady Lane Farm Rd		Shady Lane Farm Rd		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
12:15 PM									0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :	EB 0	WB 0	EB 0	WB 0	NB 0	SB 0	NB 0	SB 0	TOTAL 0
PEAK HR :	12:30-1:30 pm		12:00 AM						TOTAL
PEAK HR VOL : PEAK HR FACTOR :	0 0 0.250		0 0		0 0		0 0		0

Traffic Counts

National Data & Surveying Services

Intersection Turning Movement Count

Location: US 9/Albany Post Rd & Old Albany Post Rd/Mystic Dr
City: Ossining
Control: Signalized

Project ID: 24-380050-003
Date: 5/30/2024

Data - Total

NS/EW Streets:	US 9/Albany Post Rd				US 9/Albany Post Rd				Old Albany Post Rd/Mystic Dr				Old Albany Post Rd/Mystic Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	2 NT	0 NR	0 NU	0 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	0	104	0	0	22	161	3	1	13	2	3	0	16	8	40	0	373
7:15 AM	0	113	0	0	35	202	4	1	7	4	5	0	20	19	27	0	437
7:30 AM	0	114	2	0	64	235	17	0	14	14	10	0	20	38	25	0	553
7:45 AM	0	120	0	0	72	159	39	1	35	17	8	0	14	47	33	0	545
8:00 AM	0	119	0	0	70	150	24	0	41	25	13	0	19	47	16	0	524
8:15 AM	0	94	3	0	51	197	11	0	13	9	6	0	19	19	31	0	453
8:30 AM	0	97	0	0	29	184	11	0	9	1	5	0	21	8	25	0	390
8:45 AM	0	105	0	0	32	146	1	1	9	2	5	0	21	3	34	0	359
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	866	5	0	375	1434	110	4	141	74	55	0	150	189	231	0	3634
	0.00%	99.43%	0.57%	0.00%	19.50%	74.57%	5.72%	0.21%	52.22%	27.41%	20.37%	0.00%	26.32%	33.16%	40.53%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	447	5	0	257	741	91	1	103	65	37	0	72	151	105	0	2075
PEAK HR FACTOR :	0.000	0.931	0.417	0.000	0.892	0.788	0.583	0.250	0.628	0.650	0.712	0.000	0.900	0.803	0.795	0.000	0.938
	0.942				0.862				0.649				0.872				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	2 NT	0 NR	0 NU	0 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:15 PM	0	183	2	0	23	146	8	0	12	0	7	0	18	14	31	0	444
4:30 PM	0	181	1	0	16	140	5	3	8	0	2	0	14	10	29	0	409
4:45 PM	0	207	0	0	29	150	7	3	11	2	6	0	27	12	28	0	482
5:00 PM	1	179	0	0	29	154	6	0	16	3	5	0	23	13	31	0	460
5:15 PM	0	203	0	0	20	134	4	0	5	1	2	0	16	9	37	0	431
5:30 PM	0	208	0	0	29	128	5	0	9	0	3	0	19	7	26	0	434
5:45 PM	0	196	0	0	32	158	3	2	7	0	2	0	22	4	32	0	458
6:00 PM	0	177	0	0	28	138	5	2	6	1	0	0	15	10	22	0	404
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	1534	3	0	206	1148	43	10	74	7	27	0	154	79	236	0	3522
	0.07%	99.74%	0.20%	0.00%	14.64%	81.59%	3.06%	0.71%	68.52%	6.48%	25.00%	0.00%	32.84%	16.84%	50.32%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	1	797	0	0	107	566	22	3	41	6	16	0	85	41	122	0	1807
PEAK HR FACTOR :	0.250	0.958	0.000	0.000	0.922	0.919	0.786	0.250	0.641	0.500	0.667	0.000	0.787	0.788	0.824	0.000	0.937
	0.959				0.923				0.656				0.925				

National Data & Surveying Services

Intersection Turning Movement Count

Location: US 9/Albany Post Rd & Old Albany Post Rd/Mystic Dr
City: Ossining
Control: Signalized

Project ID: 24-380050-003
Date: 5/30/2024

Data - HT

NS/EW Streets:	US 9/Albany Post Rd				US 9/Albany Post Rd				Old Albany Post Rd/Mystic Dr				Old Albany Post Rd/Mystic Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	2 NT	0 NR	0 NU	0 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	0	6	0	0	0	10	0	0	0	0	0	0	2	0	1	0	19
7:15 AM	0	11	0	0	0	19	0	0	0	1	0	0	1	1	3	0	36
7:30 AM	0	9	0	0	1	13	4	0	5	3	3	0	2	13	2	0	55
7:45 AM	0	13	0	0	1	9	2	0	4	0	3	0	0	1	2	0	35
8:00 AM	0	7	0	0	2	13	0	0	1	1	0	0	1	1	3	0	29
8:15 AM	0	10	0	0	2	14	0	0	0	0	1	0	0	1	2	0	30
8:30 AM	0	9	0	0	0	21	2	0	1	0	1	0	3	3	0	0	40
8:45 AM	0	12	0	0	4	17	0	0	0	1	0	0	3	0	1	0	38
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	77	0	0	10	116	8	0	11	6	8	0	12	20	14	0	282
	0.00%	100.00%	0.00%	0.00%	7.46%	86.57%	5.97%	0.00%	44.00%	24.00%	32.00%	0.00%	26.09%	43.48%	30.43%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	39	0	0	6	49	6	0	10	4	7	0	3	16	9	0	149
PEAK HR FACTOR :	0.000	0.750	0.000	0.000	0.750	0.875	0.375	0.000	0.500	0.333	0.583	0.000	0.375	0.308	0.750	0.000	0.677
		0.750				0.847				0.477				0.412			
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	2 NT	0 NR	0 NU	0 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:15 PM	0	5	0	0	0	8	0	0	0	0	0	0	0	0	0	0	13
4:30 PM	0	5	1	0	0	5	0	0	0	0	0	0	0	0	0	0	11
4:45 PM	0	5	0	0	1	7	0	0	0	0	0	0	2	0	0	0	15
5:00 PM	0	6	0	0	1	8	0	0	0	0	0	0	1	0	1	0	17
5:15 PM	0	9	0	0	1	3	0	0	0	0	0	0	1	0	1	0	15
5:30 PM	0	9	0	0	0	4	1	0	1	0	0	0	0	0	0	0	15
5:45 PM	0	5	0	0	0	7	0	0	0	0	0	0	0	0	0	0	12
6:00 PM	0	8	0	0	0	3	0	0	0	0	0	0	1	0	0	0	12
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	52	1	0	3	45	1	0	1	0	0	0	5	0	2	0	110
	0.00%	98.11%	1.89%	0.00%	6.12%	91.84%	2.04%	0.00%	100.00%	0.00%	0.00%	0.00%	71.43%	0.00%	28.57%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	29	0	0	3	22	1	0	1	0	0	0	4	0	2	0	62
PEAK HR FACTOR :	0.000	0.806	0.000	0.000	0.750	0.688	0.250	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.500	0.000	0.912
		0.806				0.722				0.250				0.750			

National Data & Surveying Services

Intersection Turning Movement Count

Location: US 9/Albany Post Rd & Old Albany Post Rd/Mystic Dr
City: Ossining
Control: Signalized

Project ID: 24-380050-003
Date: 6/1/2024

Data - Total

NS/EW Streets:	US 9/Albany Post Rd				US 9/Albany Post Rd				Old Albany Post Rd/Mystic Dr				Old Albany Post Rd/Mystic Dr				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	2 NT	0 NR	0 NU	0 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
12:30 PM	0	129	1	0	27	128	8	2	5	0	1	0	21	9	38	0	369
12:45 PM	2	153	0	0	34	109	7	0	5	1	5	0	21	11	29	0	377
1:00 PM	1	136	0	0	18	118	2	0	6	0	1	0	27	11	33	0	353
1:15 PM	0	132	0	0	24	140	6	2	11	1	3	0	18	2	31	0	370
1:30 PM	1	130	0	0	22	137	5	2	8	1	0	0	25	9	27	0	367
1:45 PM	0	125	1	0	24	134	5	0	8	1	0	0	22	6	31	0	357
2:00 PM	0	126	0	0	29	111	7	1	10	0	2	0	13	9	25	0	333
2:15 PM	1	134	1	0	20	123	10	3	16	1	0	0	19	10	29	0	367
TOTAL VOLUMES :	5	1065	3	0	198	1000	50	10	69	5	12	0	166	67	243	0	2893
APPROACH %'s :	0.47%	99.25%	0.28%	0.00%	15.74%	79.49%	3.97%	0.79%	80.23%	5.81%	13.95%	0.00%	34.87%	14.08%	51.05%	0.00%	
PEAK HR :	12:30 PM - 01:30 PM																TOTAL
PEAK HR VOL :	3	550	1	0	103	495	23	4	27	2	10	0	87	33	131	0	1469
PEAK HR FACTOR :	0.375	0.899	0.250	0.000	0.757	0.884	0.719	0.500	0.614	0.500	0.500	0.000	0.806	0.750	0.862	0.000	0.974
		0.894				0.908				0.650				0.884			

National Data & Surveying Services

Intersection Turning Movement Count

Location: US 9/Albany Post Rd & Old Albany Post Rd/Mystic Dr
City: Ossining
Control: Signalized

Project ID: 24-380050-003
Date: 6/1/2024

Data - HT

NS/EW Streets:	US 9/Albany Post Rd				US 9/Albany Post Rd				Old Albany Post Rd/Mystic Dr				Old Albany Post Rd/Mystic Dr				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	2 NT	0 NR	0 NU	0 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
12:30 PM	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	8
12:45 PM	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	0	8
1:00 PM	0	4	0	0	0	2	0	0	0	0	0	0	1	1	1	0	9
1:15 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1:30 PM	0	4	0	0	2	3	0	0	0	0	0	0	0	0	0	0	9
1:45 PM	0	4	0	0	0	5	0	0	0	0	0	0	1	0	0	0	10
2:00 PM	0	4	0	0	1	6	0	0	0	0	0	0	0	0	0	0	11
2:15 PM	0	2	0	0	1	1	0	0	1	0	0	0	0	0	0	0	5
TOTAL VOLUMES :	0	30	0	0	4	24	0	0	1	0	0	0	2	1	1	0	63
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	14.29%	85.71%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	50.00%	25.00%	25.00%	0.00%	
PEAK HR :	12:30 PM - 01:30 PM																TOTAL
PEAK HR VOL :	0	16	0	0	0	9	0	0	0	0	0	0	1	1	1	0	28
PEAK HR FACTOR :	0.000	0.800	0.000	0.000	0.000	0.563	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250	0.000	0.778
	0.800				0.563								0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Old Albany Post Rd & Shady Lane Farm Rd
City: Ossining
Control: 1-Way Stop(WB)

Project ID: 24-380050-002
Date: 5/30/2024

Data - Total

NS/EW Streets:	Old Albany Post Rd				Old Albany Post Rd				Shady Lane Farm Rd				Shady Lane Farm Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	0	17	1	0	0	29	0	0	0	0	1	0	10	0	6	0	64
7:15 AM	0	10	0	0	0	29	0	0	0	0	0	0	17	0	6	0	62
7:30 AM	0	16	4	0	0	46	0	0	0	0	0	0	34	0	6	0	106
7:45 AM	0	22	1	0	0	34	0	0	0	0	0	0	35	0	6	0	98
8:00 AM	0	18	1	0	1	26	0	0	0	0	0	0	34	0	11	0	91
8:15 AM	0	20	2	0	0	26	0	0	0	0	0	0	17	0	6	0	71
8:30 AM	0	10	1	0	0	28	0	0	0	0	0	0	14	0	9	0	62
8:45 AM	0	11	0	0	0	27	0	0	0	0	0	0	16	0	9	0	63
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	124	10	0	1	245	0	0	0	0	1	0	177	0	59	0	617
	0.00%	92.54%	7.46%	0.00%	0.41%	99.59%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	75.00%	0.00%	25.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	76	8	0	1	132	0	0	0	0	0	0	120	0	29	0	366
PEAK HR FACTOR :	0.000	0.864	0.500	0.000	0.250	0.717	0.000	0.000	0.000	0.000	0.000	0.000	0.857	0.000	0.659	0.000	0.863
	0.913				0.723								0.828				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:15 PM	0	21	0	1	0	29	0	0	0	0	0	0	21	0	4	0	76
4:30 PM	0	12	0	0	0	25	0	0	0	0	0	0	20	0	10	0	67
4:45 PM	0	28	0	0	0	24	0	0	0	0	0	0	23	1	8	0	84
5:00 PM	0	21	0	0	0	24	0	0	0	0	0	0	20	0	8	0	73
5:15 PM	0	25	0	0	0	26	0	0	0	0	0	0	14	0	16	0	81
5:30 PM	0	20	0	0	0	26	0	0	0	0	0	0	16	0	5	0	67
5:45 PM	0	26	1	0	0	29	0	0	0	0	0	0	16	0	10	0	82
6:00 PM	0	23	0	0	1	22	0	0	0	0	0	0	13	0	14	0	73
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	176	1	1	1	205	0	0	0	0	0	0	143	1	75	0	603
	0.00%	98.88%	0.56%	0.56%	0.49%	99.51%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	65.30%	0.46%	34.25%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	94	0	0	0	100	0	0	0	0	0	0	73	1	37	0	305
PEAK HR FACTOR :	0.000	0.839	0.000	0.000	0.000	0.962	0.000	0.000	0.000	0.000	0.000	0.000	0.793	0.250	0.578	0.000	0.908
	0.839				0.962								0.867				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Old Albany Post Rd & Shady Lane Farm Rd
City: Ossining
Control: 1-Way Stop(WB)

Project ID: 24-380050-002
Date: 5/30/2024

Data - HT

NS/EW Streets:	Old Albany Post Rd				Old Albany Post Rd				Shady Lane Farm Rd				Shady Lane Farm Rd					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
	0	1	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
	7:00 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	2	0	5
	7:15 AM	0	1	0	0	0	3	0	0	0	0	0	0	2	0	4	0	10
	7:30 AM	0	2	0	0	0	9	0	0	0	0	0	0	6	0	0	0	17
	7:45 AM	0	3	0	0	0	2	0	0	0	0	0	0	1	0	1	0	7
	8:00 AM	0	2	0	0	0	4	0	0	0	0	0	0	1	0	3	0	10
	8:15 AM	0	6	0	0	0	2	0	0	0	0	0	0	1	0	1	0	10
	8:30 AM	0	1	0	0	0	5	0	0	0	0	0	0	0	0	5	0	11
8:45 AM	0	2	0	0	0	4	0	0	0	0	0	0	1	0	1	0	8	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	18	0	0	0	31	0	0	0	0	0	0	12	0	17	0	78	
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%					41.38%	0.00%	58.62%	0.00%		
PEAK HR :	07:30 AM - 08:30 AM																TOTAL	
PEAK HR VOL :	0	13	0	0	0	17	0	0	0	0	0	0	9	0	5	0	44	
PEAK HR FACTOR :	0.000	0.542	0.000	0.000	0.000	0.472	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.417	0.000	0.647	
	0.542				0.472								0.583					

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	2	0	2	0
	4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	2	0	3	0
	5:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	5	0	0	0	1	0	0	0	0	0	0	5	0	5	0	16
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%					50.00%	0.00%	50.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	2	0	0	0	1	0	0	0	0	0	0	3	0	3	0	9
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.250	0.000	0.321
	0.250				0.250								0.300				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Old Albany Post Rd & Shady Lane Farm Rd
City: Ossining
Control: 1-Way Stop(WB)

Project ID: 24-380050-002
Date: 6/1/2024

Data - Total

NS/EW Streets:	Old Albany Post Rd				Old Albany Post Rd				Shady Lane Farm Rd				Shady Lane Farm Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
12:30 PM	0	19	0	0	0	28	0	0	0	0	0	0	26	0	6	0	79
12:45 PM	0	20	0	1	0	23	0	0	0	0	0	0	19	0	8	0	71
1:00 PM	0	14	0	1	0	36	0	0	0	0	0	0	13	0	6	0	70
1:15 PM	0	23	1	0	0	18	0	0	0	0	0	0	19	0	4	0	65
1:30 PM	0	19	1	2	0	23	0	0	0	0	0	0	17	0	7	0	69
1:45 PM	0	16	0	0	0	20	0	0	0	0	0	0	22	0	6	0	64
2:00 PM	0	17	0	0	0	16	0	0	0	0	0	0	17	0	5	0	55
2:15 PM	0	10	0	0	0	23	0	0	0	0	0	0	17	0	4	0	54
TOTAL VOLUMES :	0	138	2	4	0	187	0	0	0	0	0	0	150	0	46	0	527
APPROACH %'s :	0.00%	95.83%	1.39%	2.78%	0.00%	100.00%	0.00%	0.00%					76.53%	0.00%	23.47%	0.00%	
PEAK HR :	12:30 PM - 01:30 PM																TOTAL
PEAK HR VOL :	0	76	1	2	0	105	0	0	0	0	0	0	77	0	24	0	285
PEAK HR FACTOR :	0.000	0.826	0.250	0.500	0.000	0.729	0.000	0.000	0.000	0.000	0.000	0.000	0.740	0.000	0.750	0.000	0.902
	0.823				0.729								0.789				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Old Albany Post Rd & Shady Lane Farm Rd
City: Ossining
Control: 1-Way Stop(WB)

Project ID: 24-380050-002
Date: 6/1/2024

Data - HT

NS/EW Streets:	Old Albany Post Rd				Old Albany Post Rd				Shady Lane Farm Rd				Shady Lane Farm Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
12:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
1:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL VOLUMES :	0	5	0	0	0	0	0	0	0	0	0	0	2	0	0	0	7
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0	0	0	0	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	12:30 PM - 01:30 PM																TOTAL
PEAK HR VOL :	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4
PEAK HR FACTOR :	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	1.000
	0.500												0.500				

Location: 9A/Briarcliff- Peekskill Pkwy Off-Ramp & Shady Lane Farm Rd
City: Ossining
Control: 2-Way Stop(NB/WB)

Project ID: 24-380050-001
Date: 5/30/2024

NS/EW Streets:		9A/Briarcliff- Peelskill Pkwy Off-Ramp				9A/Briarcliff- Peelskill Pkwy Off-Ramp				Shady Lane Farm Rd				Shady Lane Farm Rd					
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
		0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
7:00 AM		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
7:15 AM		5	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	7	
7:30 AM		6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
7:45 AM		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
8:00 AM		4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
8:15 AM		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
8:30 AM		3	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	6	
8:45 AM		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
TOTAL VOLUMES :		NL 27	NT 0	NR 2	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 3	WR 0	WU 0	TOTAL 32	
APPROACH %'s :		93.10% 0.00% 6.90% 0.00%												0.00% 100.00% 0.00% 0.00%					
PEAK HR :		07:30 AM - 08:30 AM																TOTAL 14	
PEAK HR VOL :		14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.583	
PEAK HR FACTOR :		0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.583	
		0.583																	
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
		0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
4:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM		4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
4:45 PM		5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
5:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5:30 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL VOLUMES :		NL 10	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 10	
APPROACH %'s :		100.00% 0.00% 0.00% 0.00%																	
PEAK HR :		04:30 PM - 05:30 PM																TOTAL 10	
PEAK HR VOL :		10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.500	
PEAK HR FACTOR :		0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	
		0.500																	

National Data & Surveying Services

Intersection Turning Movement Count

Location: 9A/Briarcliff- Peekskill Pkwy Off-Ramp & Shady Lane Farm Rd
City: Ossining
Control: 2-Way Stop(NB/WB)

Project ID: 24-380050-001
Date: 6/1/2024

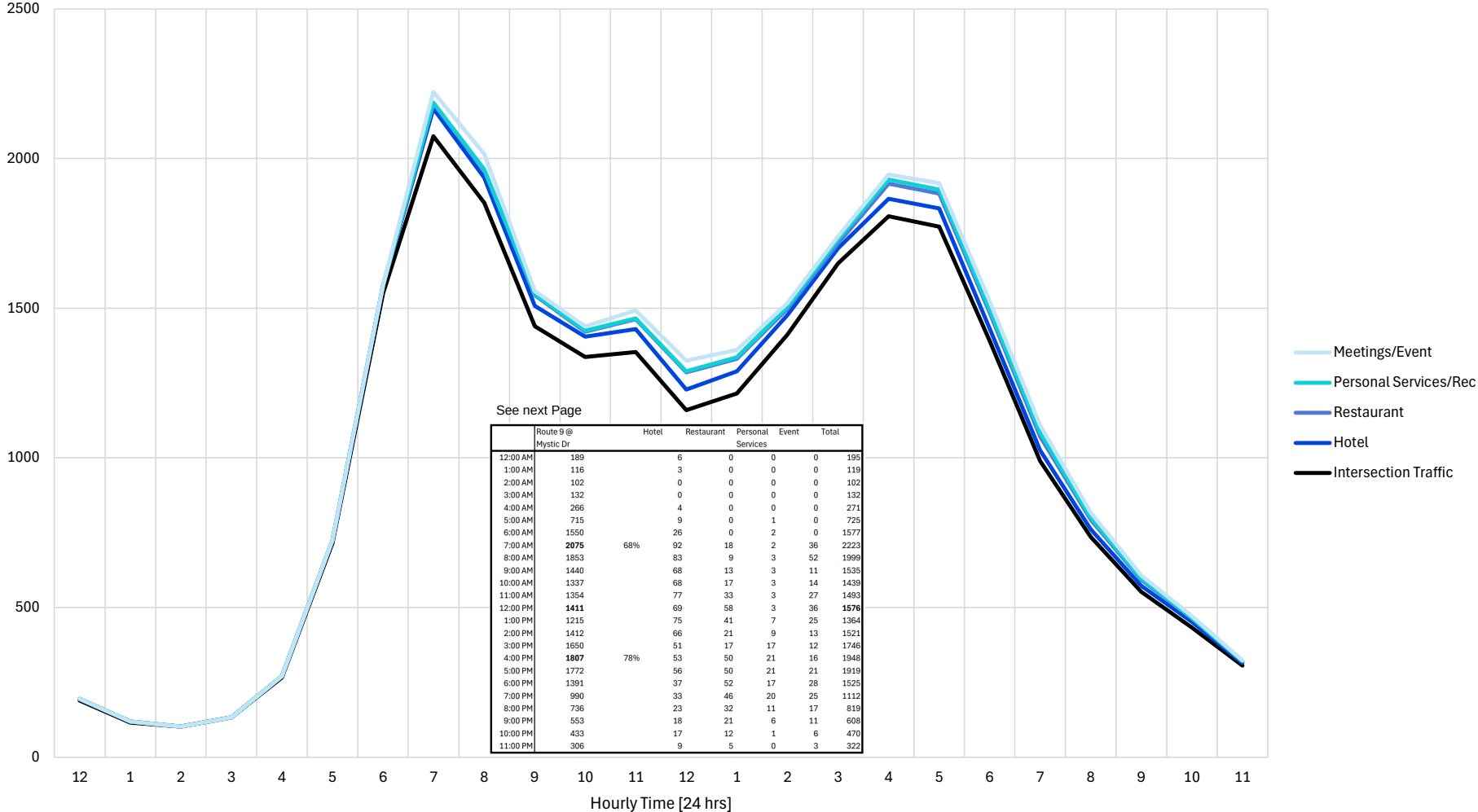
Data - Total

NS/EW Streets:	9A/Briarcliff- Peekskill Pkwy Off-Ramp				9A/Briarcliff- Peekskill Pkwy Off-Ramp				Shady Lane Farm Rd				Shady Lane Farm Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
12:30 PM	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
12:45 PM	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
1:00 PM	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
1:15 PM	23	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	24
1:30 PM	23	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	25
1:45 PM	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
2:00 PM	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
2:15 PM	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
TOTAL VOLUMES :	NL 196	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 2	ER 0	EU 0	WL 0	WT 1	WR 0	WU 0	TOTAL 199
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	12:30 PM - 01:30 PM																TOTAL
PEAK HR VOL :	101	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	102
PEAK HR FACTOR :	0.789	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.797
	0.789									0.250							

Project ID: 24-380050-001
Date: 6/1/2024

Traffic Volume Analysis

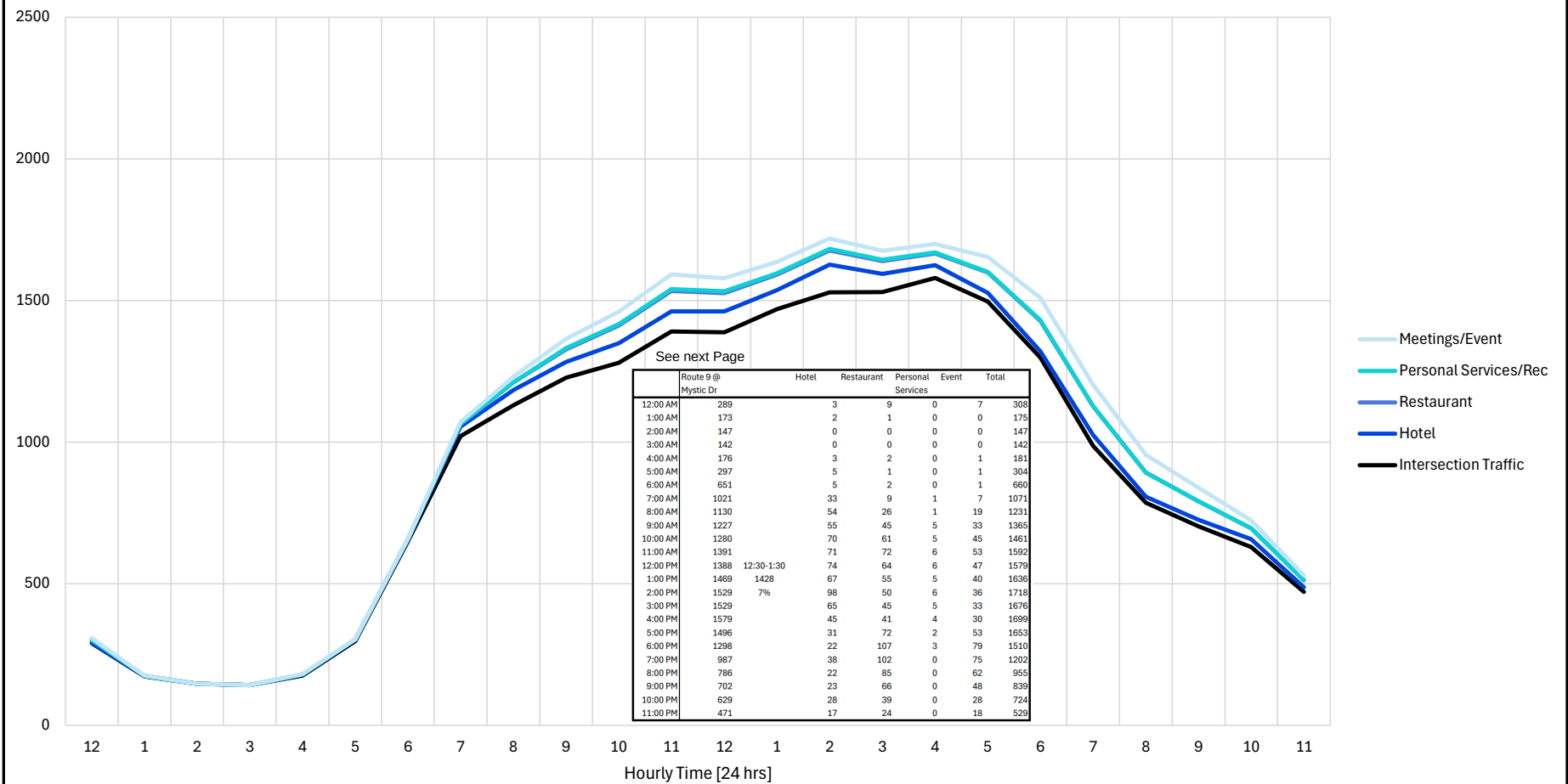
Weekday Hourly Traffic Volumes Route 9 at Old Albany Post Road



Projected Weekday Hourly Traffic Volumes at the intersection of Route 9 with Mystic Drive/ Old Albany Post Road

	Route 9 @ Mystic Dr	Hotel	Restaurant	Personal Services	Event	Total	
12:00 AM	189		6	0	0	0	195
1:00 AM	116		3	0	0	0	119
2:00 AM	102		0	0	0	0	102
3:00 AM	132		0	0	0	0	132
4:00 AM	266		4	0	0	0	271
5:00 AM	715		9	0	1	0	725
6:00 AM	1550		26	0	2	0	1577
7:00 AM	2075	68%	92	18	2	36	2223
8:00 AM	1853		83	9	3	52	1999
9:00 AM	1440		68	13	3	11	1535
10:00 AM	1337		68	17	3	14	1439
11:00 AM	1354		77	33	3	27	1493
12:00 PM	1411		69	58	3	36	1576
1:00 PM	1215		75	41	7	25	1364
2:00 PM	1412		66	21	9	13	1521
3:00 PM	1650		51	17	17	12	1746
4:00 PM	1807	78%	53	50	21	16	1948
5:00 PM	1772		56	50	21	21	1919
6:00 PM	1391		37	52	17	28	1525
7:00 PM	990		33	46	20	25	1112
8:00 PM	736		23	32	11	17	819
9:00 PM	553		18	21	6	11	608
10:00 PM	433		17	12	1	6	470
11:00 PM	306		9	5	0	3	322

Saturday Hourly Traffic Volumes Route 9 at Old Albany Post Road



Projected Saturday Hourly Traffic Volumes at the intersection of Route 9 with Mystic Drive/ Old Albany Post Road

	Route 9 @ Mystic Dr		Hotel	Restaurant	Personal Services	Event	Total
12:00 AM	289		3	9	0	7	308
1:00 AM	173		2	1	0	0	175
2:00 AM	147		0	0	0	0	147
3:00 AM	142		0	0	0	0	142
4:00 AM	176		3	2	0	1	181
5:00 AM	297		5	1	0	1	304
6:00 AM	651		5	2	0	1	660
7:00 AM	1021		33	9	1	7	1071
8:00 AM	1130		54	26	1	19	1231
9:00 AM	1227		55	45	5	33	1365
10:00 AM	1280		70	61	5	45	1461
11:00 AM	1391		71	72	6	53	1592
12:00 PM	1388	12:30-1:30	74	64	6	47	1579
1:00 PM	1469	1428	67	55	5	40	1636
2:00 PM	1529	7%	98	50	6	36	1718
3:00 PM	1529		65	45	5	33	1676
4:00 PM	1579		45	41	4	30	1699
5:00 PM	1496		31	72	2	53	1653
6:00 PM	1298		22	107	3	79	1510
7:00 PM	987		38	102	0	75	1202
8:00 PM	786		22	85	0	62	955
9:00 PM	702		23	66	0	48	839
10:00 PM	629		28	39	0	28	724
11:00 PM	471		17	24	0	18	529

Continuous Count Station data, Route 9 over the Croton River																					
Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average		Total	Average	Average	Average	
Time	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	Workday	7 Day	Count	Weekday	Sat	Sun	
12:00 AM	633	349	274	425	400	439	556	613	269	306	275	324	359	550	350	368	5772	342	553	623	
1:00 AM	444	229	175	234	228	312	336	379	149	208	155	196	209	325	215	229	3579	210	331	412	
2:00 AM	335	203	156	224	207	243	295	275	145	184	113	186	191	268	188	191	3025	185	282	305	
3:00 AM	324	286	220	265	244	267	264	297	232	233	184	211	252	278	234	217	3557	239	271	311	
4:00 AM	340	529	486	501	485	477	320	304	476	457	451	489	464	352	476	366	6131	482	336	322	
5:00 AM	449	1299	1383	1382	1280	1026	548	406	1252	1306	1330	1415	1253	589	1297	883	14918	1293	569	428	
6:00 AM	869	2786	2785	2969	2863	2169	1122	666	2872	2859	3012	2917	2779	1369	2801	2288	32037	2801	1246	768	
7:00 AM	1233	3739	3618	3756	3536	2941	1832	1019	3953	4097	3984	4160	3722	2074	3751	3119	43664	3751	68%	1953	1126
8:00 AM	1430	3425	3154	3416	3213	2871	1996	1340	3458	3559	3558	3603	3238	2326	3350	2899	40587	3350	2161	1385	
9:00 AM	2011	2500	2573	2588	2659	2507	2209	1842	2482	2669	2663	2775	2606	2485	2602	2469	34569	2602	2347	1927	
10:00 AM	2250	2428	2366	2426	2464	2660	2417	2122	2145	2357	2433	2498	2388	2479	2417	2388	33433	2417	2448	12:30 to	2186
11:00 AM	2684	2429	2362	2611	2469	2980	2695	2507	2174	2170	2405	2419	2454	2623	2447	2499	34982	2447	2659	1:30	2596
12:00 PM	2522	2490	2478	2686	2689	3033	2688	2591	2278	2409	2454	2343	2637	2619	2478	2160	35917	2550	2654	2731	2557
1:00 PM	2570	2521	2611	2644	2816	3078	2724	2807	2435	2468	2689	2540	2926	2894	2590	2266	37723	2673	2809		2689
2:00 PM	2723	3060	2941	3019	3169	3661	2945	2644	3034	2815	3089	2899	3365	2901	3003	2517	42265	3105	2923	7%	2684
3:00 PM	2881	3642	3356	3426	3691	3815	2876	2361	3818	3400	3831	3482	3818	2973	3581	2838	47370	3628	2925		2621
4:00 PM	2855	3918	3709	4101	3860	4177	3009	2323	4293	3722	4148	3819	3991	3031	3946	3056	50956	3974	64%	3020	2589
5:00 PM	2385	4164	3926	3754	3624	3867	2836	2101	3830	3631	4312	3999	3866	2886	3905	2961	49181	3897	2861		2243
6:00 PM	2138	3017	3079	2845	3056	2895	2439	2301	3126	2786	3494	3136	3149	2526	3067	2425	39987	3058	2483		2220
7:00 PM	1724	2115	2302	2162	1926	2169	1823	2184	1964	2135	2570	2137	2284	1951	2164	1785	29446	2176	1887		1954
8:00 PM	1365	1543	1713	1710	1609	1696	1488	1939	1331	1566	1719	1596	1711	1518	1598	1364	22504	1619	1503		1652
9:00 PM	1071	1097	1218	1303	1307	1332	1396	1392	975	1126	1286	1166	1343	1289	1185	1045	17301	1215	1343		1232
10:00 PM	801	815	918	991	1023	1204	1196	897	704	853	936	914	1170	1211	894	804	13633	953	1204		849
11:00 PM	499	527	666	712	707	879	922	569	513	625	592	577	924	880	615	556	9592	672	901		534

Understanding and Applying Trip Generation Manual Data

Use Fitted Curve Equation when:

- A fitted curve equation is provided, and the data plot has at least 20 data points

OR

- A fitted curve equation is provided, the curve has an R^2 of at least 0.75, the fitted curve falls within data cluster, and the weighted standard deviation is more than 55 percent of the weighted average.

Use Weighted Average when:

- The data plot has at least three data points (and preferably, six or more);
- The R^2 value for the fitted curve is less than 0.75 or no fitted curve equation is provided;
- The weighted standard deviation for the average rate is less than 55 percent of the weighted average rate; and
- The weighted average rate is within data cluster in plot.

Table 8: **Anticipated Trip Generation – Senior Living Land Uses**

Using the ITE Trip Generation Manual, *11th Edition*, data for Land Use Code 254: Congregate Care. Saturday Peak Hour trips were not provided, ergo, a ratio-based estimation approach was implemented to approximate the potential trips. Using the largest available trip generation number as a baseline (Weekday, PM Peak Hour) and applying a proportional ratio, we could extrapolate and provide a conservative estimation of 65 Combined Independent and Assisted Living trips on Saturday at peak hour (see calculations below).

$$\frac{81 \text{ Assisted Living Sat Trips}}{72 \text{ Assisted Living PM Trips}} \times 59 \text{ Combined Independent and Assisted Living PM Trips} \\ = 65 \text{ Combined Independent and Assisted Living Sat Trips}$$

Synchro Reports

Existing Condition

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	65	37	72	151	105	0	447	5	257	741	92
Future Volume (vph)	103	65	37	72	151	105	0	447	5	257	741	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.95			0.96			1.00			0.99	
Flt Protected	0.95	1.00			0.99			1.00			0.99	
Satd. Flow (prot)	1655	1632			1891			3231			3237	
Flt Permitted	0.40	1.00			0.89			1.00			0.72	
Satd. Flow (perm)	703	1632			1708			3231			2353	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	110	69	39	77	161	112	0	476	5	273	788	98
RTOR Reduction (vph)	0	22	0	0	19	0	0	1	0	0	8	0
Lane Group Flow (vph)	110	86	0	0	331	0	0	480	0	0	1151	0
Confl. Peds. (#/hr)	3		1	1		3	6					6
Heavy Vehicles (%)	10%	6%	19%	4%	11%	9%	0%	9%	0%	2%	7%	7%
Turn Type	Perm	NA		Perm	NA			NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	18.5	18.5			18.5			45.1			45.1	
Effective Green, g (s)	18.5	18.5			18.5			45.1			45.1	
Actuated g/C Ratio	0.24	0.24			0.24			0.60			0.60	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	172	399			417			1927			1403	
v/s Ratio Prot		0.05						0.15				
v/s Ratio Perm	0.16				c0.19						c0.49	
v/c Ratio	0.64	0.22			0.79			0.25			0.82	
Uniform Delay, d1	25.6	22.8			26.8			7.2			12.0	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	7.6	0.3			10.0			0.1			4.0	
Delay (s)	33.2	23.0			36.8			7.3			16.0	
Level of Service	C	C			D			A			B	
Approach Delay (s/veh)		28.1			36.8			7.3			16.0	
Approach LOS		C			D			A			B	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			18.6									B
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			75.6							14.0		
Intersection Capacity Utilization			83.6%								E	
Analysis Period (min)			15									
c Critical Lane Group												

Intersection						
Int Delay, s/veh	4.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	120	29	76	8	1	132
Future Vol, veh/h	120	29	76	8	1	132
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-12	-	4	-	-	-10
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	8	17	17	0	0	13
Mvmt Flow	140	34	88	9	1	153

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	250	94	0
Stage 1	94	-	-
Stage 2	156	-	-
Critical Hdwy	4.08	5.17	-
Critical Hdwy Stg 1	3.08	-	-
Critical Hdwy Stg 2	3.08	-	-
Follow-up Hdwy	3.572	3.453	-
Pot Cap-1 Maneuver	857	953	-
Stage 1	974	-	-
Stage 2	952	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	856	952	-
Mov Cap-2 Maneuver	856	-	-
Stage 1	973	-	-
Stage 2	951	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v10.14		0	0.06
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	873	14
HCM Lane V/C Ratio	-	-	0.198	0.001
HCM Control Delay (s/veh)	-	-	10.1	7.4
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.7	0

Intersection						
Int Delay, s/veh	8.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	143	9	9	0	0	6
Future Vol, veh/h	143	9	9	0	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-4	-	12	-	-	-12
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	10	0	0	0	0	0
Mvmt Flow	164	10	10	0	0	7

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	17	10	0
Stage 1	10	-	-
Stage 2	7	-	-
Critical Hdwy	5.7	5.8	-
Critical Hdwy Stg 1	4.7	-	-
Critical Hdwy Stg 2	4.7	-	-
Follow-up Hdwy	3.59	3.3	-
Pot Cap-1 Maneuver	984	1078	-
Stage 1	994	-	0
Stage 2	997	-	0
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	984	1078	-
Mov Cap-2 Maneuver	984	-	-
Stage 1	994	-	-
Stage 2	997	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.42	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 989	-
HCM Lane V/C Ratio	- 0.177	-
HCM Control Delay (s/veh)	- 9.4	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.6	-

Existing 2024 MD Peak Hour
3: Albany Post Road (US 9) & Mystic Drive/Old Albany Post Road

Existing 2024
09/23/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	24	19	58	67	83	0	463	2	129	473	41
Future Volume (vph)	51	24	19	58	67	83	0	463	2	129	473	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	0.99			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.93			0.95			1.00			0.99	
Flt Protected	0.95	1.00			0.99			1.00			0.99	
Satd. Flow (prot)	1750	1758			1949			2820			2892	
Flt Permitted	0.67	1.00			0.89			1.00			0.75	
Satd. Flow (perm)	1238	1758			1757			2820			2190	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	54	26	20	62	71	88	0	493	2	137	503	44
RTOR Reduction (vph)	0	15	0	0	27	0	0	0	0	0	7	0
Lane Group Flow (vph)	54	31	0	0	194	0	0	495	0	0	677	0
Confl. Peds. (#/hr)	3		1	1		3	6					6
Heavy Vehicles (%)	4%	1%	2%	3%	5%	4%	0%	25%	0%	3%	25%	2%
Turn Type	Perm	NA		Perm	NA			NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	10.9	10.9			10.9			24.3			24.3	
Effective Green, g (s)	10.9	10.9			10.9			24.3			24.3	
Actuated g/C Ratio	0.23	0.23			0.23			0.51			0.51	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	285	405			405			1451			1127	
v/s Ratio Prot		0.02						0.18				
v/s Ratio Perm	0.04				c0.11						c0.31	
v/c Ratio	0.19	0.08			0.48			0.34			0.60	
Uniform Delay, d1	14.6	14.2			15.7			6.7			8.0	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	0.3	0.1			0.9			0.1			0.9	
Delay (s)	14.9	14.3			16.6			6.9			8.9	
Level of Service	B	B			B			A			A	
Approach Delay (s/veh)		14.6			16.6			6.9			8.9	
Approach LOS		B			B			A			A	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			9.8									
HCM 2000 Volume to Capacity ratio			0.60									
Actuated Cycle Length (s)			47.2									
Intersection Capacity Utilization			64.6%									
Analysis Period (min)			15									
c Critical Lane Group												

Existing 2024 MD Peak Hour
6: Old Albany Post Road & Shady Lane Farm Road

Existing 2024
09/23/2024

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	72	26	63	3	0	84
Future Volume (Veh/h)	72	26	63	3	0	84
Sign Control	Stop		Free			Free
Grade	-12%		4%			-10%
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	81	29	71	3	0	94
Pedestrians	1					
Lane Width (ft)	10.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)			1098			
pX, platoon unblocked						
vC, conflicting volume	168	74			75	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	168	74			75	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	97			100	
cM capacity (veh/h)	819	982			1536	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	110	74	94			
Volume Left	81	0	0			
Volume Right	29	3	0			
cSH	856	1700	1536			
Volume to Capacity	0.13	0.04	0.00			
Queue Length 95th (ft)	11	0	0			
Control Delay (s/veh)	9.8	0.0	0.0			
Lane LOS	A					
Approach Delay (s/veh)	9.8	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		3.9				
Intersection Capacity Utilization		16.7%		ICU Level of Service		A
Analysis Period (min)		15				

Existing 2024 MD Peak Hour
8: Shady Lane Farm Road & NY 9A WB Off-Ramp

Existing 2024
09/23/2024

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	92	4	3	0	0	5
Future Volume (Veh/h)	92	4	3	0	0	5
Sign Control	Stop		Free			Free
Grade	-4%		12%			-12%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	102	4	3	0	0	6
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	9	3			3	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	9	3			3	
tC, single (s)	6.5	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.6	3.3			2.2	
p0 queue free %	90	100			100	
cM capacity (veh/h)	994	1087			1632	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	106	3	6			
Volume Left	102	0	0			
Volume Right	4	0	0			
cSH	997	1700	1700			
Volume to Capacity	0.11	0.00	0.00			
Queue Length 95th (ft)	9	0	0			
Control Delay (s/veh)	9.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s/veh)	9.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		8.3				
Intersection Capacity Utilization		15.3%		ICU Level of Service		A
Analysis Period (min)		15				

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	6	16	85	41	122	1	797	0	107	566	25
Future Volume (vph)	41	6	16	85	41	122	1	797	0	107	566	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.89			0.93			1.00			0.99	
Flt Protected	0.95	1.00			0.98			1.00			0.99	
Satd. Flow (prot)	1783	1706			1938			3389			3342	
Flt Permitted	0.61	1.00			0.88			0.95			0.71	
Satd. Flow (perm)	1138	1706			1730			3234			2378	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	44	6	17	90	44	130	1	848	0	114	602	27
RTOR Reduction (vph)	0	13	0	0	39	0	0	0	0	0	4	0
Lane Group Flow (vph)	44	10	0	0	225	0	0	849	0	0	739	0
Confl. Peds. (#/hr)	5					5	5					5
Heavy Vehicles (%)	2%	0%	0%	5%	0%	2%	0%	4%	0%	3%	4%	4%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	11.9	11.9			11.9			25.1			25.1	
Effective Green, g (s)	11.9	11.9			11.9			25.1			25.1	
Actuated g/C Ratio	0.24	0.24			0.24			0.51			0.51	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	276	414			420			1656			1218	
v/s Ratio Prot		0.01										
v/s Ratio Perm	0.04				c0.13			0.26			c0.31	
v/c Ratio	0.16	0.02			0.54			0.51			0.61	
Uniform Delay, d1	14.6	14.1			16.1			7.9			8.5	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	0.3	0.0			1.3			0.3			0.9	
Delay (s)	14.9	14.2			17.5			8.2			9.3	
Level of Service	B	B			B			A			A	
Approach Delay (s/veh)		14.6			17.5			8.2			9.3	
Approach LOS		B			B			A			A	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			10.1									
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			49.0									
Intersection Capacity Utilization			77.9%									
Analysis Period (min)			15									
c Critical Lane Group												

Intersection						
Int Delay, s/veh	3.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	79	41	94	0	0	100
Future Vol, veh/h	79	41	94	0	0	100
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-12	-	4	-	-	-10
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	8	2	0	0	1
Mvmt Flow	87	45	103	0	0	110

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	218	108	0
Stage 1	108	-	-
Stage 2	110	-	-
Critical Hdwy	4.04	5.08	-
Critical Hdwy Stg 1	3.04	-	-
Critical Hdwy Stg 2	3.04	-	-
Follow-up Hdwy	3.536	3.372	-
Pot Cap-1 Maneuver	885	964	-
Stage 1	979	-	-
Stage 2	979	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	882	960	-
Mov Cap-2 Maneuver	882	-	-
Stage 1	976	-	-
Stage 2	979	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.64	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	907	1489
HCM Lane V/C Ratio	-	-	0.145	-
HCM Control Delay (s/veh)	-	-	9.6	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0

Intersection						
Int Delay, s/veh	8.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	112	2	1	0	0	8
Future Vol, veh/h	112	2	1	0	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-4	-	12	-	-	-12
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	9	0	0	0	0	0
Mvmt Flow	120	2	1	0	0	9

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	10	1	0
Stage 1	1	-	-
Stage 2	9	-	-
Critical Hdwy	5.69	5.8	-
Critical Hdwy Stg 1	4.69	-	-
Critical Hdwy Stg 2	4.69	-	-
Follow-up Hdwy	3.581	3.3	-
Pot Cap-1 Maneuver	995	1090	-
Stage 1	1004	-	0
Stage 2	998	-	0
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	995	1090	-
Mov Cap-2 Maneuver	995	-	-
Stage 1	1004	-	-
Stage 2	998	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.12	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 996	-
HCM Lane V/C Ratio	- 0.123	-
HCM Control Delay (s/veh)	- 9.1	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.4	-

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	2	11	93	35	140	3	589	1	110	530	29
Future Volume (vph)	29	2	11	93	35	140	3	589	1	110	530	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.87			0.93			1.00			0.99	
Flt Protected	0.95	1.00			0.98			1.00			0.99	
Satd. Flow (prot)	1821	1675			1958			3421			3414	
Flt Permitted	0.63	1.00			0.88			0.95			0.75	
Satd. Flow (perm)	1202	1675			1752			3256			2596	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	30	2	11	96	36	144	3	607	1	113	546	30
RTOR Reduction (vph)	0	8	0	0	42	0	0	0	0	0	5	0
Lane Group Flow (vph)	30	5	0	0	234	0	0	611	0	0	684	0
Confl. Peds. (#/hr)	2					2			2	2		
Heavy Vehicles (%)	0%	0%	0%	1%	3%	1%	0%	3%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	11.3	11.3			11.3			20.4			20.4	
Effective Green, g (s)	11.3	11.3			11.3			20.4			20.4	
Actuated g/C Ratio	0.26	0.26			0.26			0.47			0.47	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	310	433			453			1519			1211	
v/s Ratio Prot		0.00										
v/s Ratio Perm	0.02				c0.13			0.19			c0.26	
v/c Ratio	0.10	0.01			0.52			0.40			0.56	
Uniform Delay, d1	12.3	12.0			13.9			7.6			8.4	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.0			1.0			0.2			0.6	
Delay (s)	12.5	12.1			14.9			7.8			9.0	
Level of Service	B	B			B			A			A	
Approach Delay (s/veh)		12.3			14.9			7.8			9.0	
Approach LOS		B			B			A			A	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			9.7									
HCM 2000 Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			43.7									
Intersection Capacity Utilization			72.5%									
Analysis Period (min)			15									
c Critical Lane Group												

Existing 2024 Saturday Peak Hour
6: Old Albany Post Road & Shady Lane Farm Road

Existing 2024 Saturday Peak Hour
08/29/2024

Intersection						
Int Delay, s/veh	3.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	82	26	81	3	0	112
Future Vol, veh/h	82	26	81	3	0	112
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-12	-	4	-	-	-10
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	0	3	0	0	0
Mvmt Flow	91	29	90	3	0	124

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	218	94	0	0	95	0
Stage 1	94	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	4.03	5	-	-	4.1	-
Critical Hdwy Stg 1	3.03	-	-	-	-	-
Critical Hdwy Stg 2	3.03	-	-	-	-	-
Follow-up Hdwy	3.527	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	888	1000	-	-	1511	-
Stage 1	987	-	-	-	-	-
Stage 2	976	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	887	998	-	-	1509	-
Mov Cap-2 Maneuver	887	-	-	-	-	-
Stage 1	986	-	-	-	-	-
Stage 2	976	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.55	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	911	1509
HCM Lane V/C Ratio	-	-	0.132	-
HCM Control Delay (s/veh)	-	-	9.5	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0

Existing 2024 Saturday Peak Hour
8: Shady Lane Farm Road & NY 9A WB Off-Ramp

Existing 2024 Saturday Peak Hour
08/29/2024

Intersection						
Int Delay, s/veh	8.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	108	0	3	0	0	0
Future Vol, veh/h	108	0	3	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-4	-	12	-	-	-12
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	0	0	0	0	0
Mvmt Flow	135	0	4	0	0	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	5	4	0	-	-	-
Stage 1	4	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	5.62	5.8	-	-	-	-
Critical Hdwy Stg 1	4.62	-	-	-	-	-
Critical Hdwy Stg 2	4.62	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	-	-
Pot Cap-1 Maneuver	1018	1086	-	0	0	-
Stage 1	1020	-	-	0	0	-
Stage 2	1022	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	1018	1086	-	-	-	-
Mov Cap-2 Maneuver	1018	-	-	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	1022	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.08	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 1018	-
HCM Lane V/C Ratio	- 0.133	-
HCM Control Delay (s/veh)	- 9.1	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.5	-

No Build Condition

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	66	37	75	153	116	0	451	6	272	748	93
Future Volume (vph)	104	66	37	75	153	116	0	451	6	272	748	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.95			0.95			1.00			0.99	
Flt Protected	0.95	1.00			0.99			1.00			0.99	
Satd. Flow (prot)	1655	1633			1886			3231			3237	
Flt Permitted	0.39	1.00			0.89			1.00			0.71	
Satd. Flow (perm)	671	1633			1704			3231			2333	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	111	70	39	80	163	123	0	480	6	289	796	99
RTOR Reduction (vph)	0	22	0	0	20	0	0	1	0	0	8	0
Lane Group Flow (vph)	111	87	0	0	346	0	0	485	0	0	1176	0
Confl. Peds. (#/hr)	3		1	1		3	6					6
Heavy Vehicles (%)	10%	6%	19%	4%	11%	9%	0%	9%	0%	2%	7%	7%
Turn Type	Perm	NA		Perm	NA			NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	19.2	19.2			19.2			46.9			46.9	
Effective Green, g (s)	19.2	19.2			19.2			46.9			46.9	
Actuated g/C Ratio	0.25	0.25			0.25			0.60			0.60	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	164	401			418			1940			1400	
v/s Ratio Prot		0.05						0.15				
v/s Ratio Perm	0.17				c0.20						c0.50	
v/c Ratio	0.68	0.22			0.83			0.25			0.84	
Uniform Delay, d1	26.6	23.5			27.9			7.3			12.6	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	10.5	0.3			12.7			0.1			4.6	
Delay (s)	37.2	23.7			40.6			7.4			17.2	
Level of Service	D	C			D			A			B	
Approach Delay (s/veh)		30.5			40.6			7.4			17.2	
Approach LOS		C			D			A			B	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			20.2									
HCM 2000 Volume to Capacity ratio			0.86									
Actuated Cycle Length (s)			78.1									
Intersection Capacity Utilization			85.3%									
Analysis Period (min)			15									
c Critical Lane Group												

Intersection						
Int Delay, s/veh	4.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	123	37	91	11	1	143
Future Vol, veh/h	123	37	91	11	1	143
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-12	-	4	-	-	-10
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	8	17	17	0	0	13
Mvmt Flow	143	43	106	13	1	166
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	282	113	0	0	120	0
Stage 1	113	-	-	-	-	-
Stage 2	169	-	-	-	-	-
Critical Hdwy	4.08	5.17	-	-	4.1	-
Critical Hdwy Stg 1	3.08	-	-	-	-	-
Critical Hdwy Stg 2	3.08	-	-	-	-	-
Follow-up Hdwy	3.572	3.453	-	-	2.2	-
Pot Cap-1 Maneuver	839	935	-	-	1481	-
Stage 1	967	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	838	934	-	-	1480	-
Mov Cap-2 Maneuver	838	-	-	-	-	-
Stage 1	966	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s/v10.35		0	0.05			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	859	13	-	
HCM Lane V/C Ratio	-	-	0.217	0.001	-	
HCM Control Delay (s/veh)	-	-	10.3	7.4	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.8	0	-	

Forecasted 2025 No-Build AM Peak Hour
8: Shady Lane Farm Road & NY 9A WB Off-Ramp

Forecasted 2025 No-Build AM Peak Hour
08/29/2024

Intersection						
Int Delay, s/veh	8.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	152	13	13	0	0	9
Future Vol, veh/h	152	13	13	0	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-4	-	12	-	-	-12
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	10	0	0	0	0	0
Mvmt Flow	175	15	15	0	0	10

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	25	15	0	-	-	-
Stage 1	15	-	-	-	-	-
Stage 2	10	-	-	-	-	-
Critical Hdwy	5.7	5.8	-	-	-	-
Critical Hdwy Stg 1	4.7	-	-	-	-	-
Critical Hdwy Stg 2	4.7	-	-	-	-	-
Follow-up Hdwy	3.59	3.3	-	-	-	-
Pot Cap-1 Maneuver	976	1072	-	0	0	-
Stage 1	991	-	-	0	0	-
Stage 2	994	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	976	1072	-	-	-	-
Mov Cap-2 Maneuver	976	-	-	-	-	-
Stage 1	991	-	-	-	-	-
Stage 2	994	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.54	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 983	-
HCM Lane V/C Ratio	- 0.193	-
HCM Control Delay (s/veh)	- 9.5	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.7	-

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	25	19	61	68	100	0	467	3	142	477	41
Future Volume (vph)	52	25	19	61	68	100	0	467	3	142	477	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	0.99			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.94			0.94			1.00			0.99	
Flt Protected	0.95	1.00			0.99			1.00			0.99	
Satd. Flow (prot)	1750	1761			1939			2820			2898	
Flt Permitted	0.63	1.00			0.89			1.00			0.73	
Satd. Flow (perm)	1156	1761			1755			2820			2152	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	55	27	20	65	72	106	0	497	3	151	507	44
RTOR Reduction (vph)	0	15	0	0	31	0	0	0	0	0	7	0
Lane Group Flow (vph)	55	32	0	0	212	0	0	500	0	0	695	0
Confl. Peds. (#/hr)	3		1	1		3	6					6
Heavy Vehicles (%)	4%	1%	2%	3%	5%	4%	0%	25%	0%	3%	25%	2%
Turn Type	Perm	NA		Perm	NA			NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	11.4	11.4			11.4			25.3			25.3	
Effective Green, g (s)	11.4	11.4			11.4			25.3			25.3	
Actuated g/C Ratio	0.23	0.23			0.23			0.52			0.52	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	270	412			410			1465			1117	
v/s Ratio Prot		0.02						0.18				
v/s Ratio Perm	0.05				c0.12						c0.32	
v/c Ratio	0.20	0.08			0.52			0.34			0.62	
Uniform Delay, d1	15.0	14.5			16.3			6.8			8.3	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	0.4	0.1			1.1			0.1			1.1	
Delay (s)	15.4	14.6			17.4			7.0			9.4	
Level of Service	B	B			B			A			A	
Approach Delay (s/veh)		15.0			17.4			7.0			9.4	
Approach LOS		B			B			A			A	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			10.2									B
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			48.7							14.0		
Intersection Capacity Utilization			66.5%									C
Analysis Period (min)			15									
c Critical Lane Group												

Forecasted 2025 No-Build MD Peak Hour
6: Old Albany Post Road & Shady Lane Farm Road

No-Build 2025
09/23/2024

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	77	33	76	5	1	99
Future Volume (Veh/h)	77	33	76	5	1	99
Sign Control	Stop		Free			Free
Grade	-12%		4%			-10%
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	87	37	85	6	1	111
Pedestrians	1					
Lane Width (ft)	10.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)			1098			
pX, platoon unblocked						
vC, conflicting volume	202	89			92	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	202	89			92	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	96			100	
cM capacity (veh/h)	782	963			1514	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	124	91	112			
Volume Left	87	0	1			
Volume Right	37	6	0			
cSH	828	1700	1514			
Volume to Capacity	0.15	0.05	0.00			
Queue Length 95th (ft)	13	0	0			
Control Delay (s/veh)	10.1	0.0	0.1			
Lane LOS	B		A			
Approach Delay (s/veh)	10.1	0.0	0.1			
Approach LOS	B					
Intersection Summary						
Average Delay		3.9				
Intersection Capacity Utilization		19.0%		ICU Level of Service		A
Analysis Period (min)		15				

Forecasted 2025 No-Build MD Peak Hour
8: Shady Lane Farm Road & NY 9A WB Off-Ramp

No-Build 2025
09/23/2024

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	92	4	3	0	0	5
Future Volume (Veh/h)	92	4	3	0	0	5
Sign Control	Stop		Free			Free
Grade	-4%		12%			-12%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	102	4	3	0	0	6
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	9	3			3	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	9	3			3	
tC, single (s)	6.5	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.6	3.3			2.2	
p0 queue free %	90	100			100	
cM capacity (veh/h)	994	1087			1632	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	106	3	6			
Volume Left	102	0	0			
Volume Right	4	0	0			
cSH	997	1700	1700			
Volume to Capacity	0.11	0.00	0.00			
Queue Length 95th (ft)	9	0	0			
Control Delay (s/veh)	9.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s/veh)	9.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		8.3				
Intersection Capacity Utilization		15.3%		ICU Level of Service		A
Analysis Period (min)		15				

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	6	16	91	41	151	1	805	1	119	572	25
Future Volume (vph)	41	6	16	91	41	151	1	805	1	119	572	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.89			0.93			1.00			0.99	
Flt Protected	0.95	1.00			0.98			1.00			0.99	
Satd. Flow (prot)	1783	1706			1927			3389			3341	
Flt Permitted	0.55	1.00			0.88			0.95			0.67	
Satd. Flow (perm)	1031	1706			1731			3234			2263	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	44	6	17	97	44	161	1	856	1	127	609	27
RTOR Reduction (vph)	0	13	0	0	45	0	0	0	0	0	4	0
Lane Group Flow (vph)	44	10	0	0	257	0	0	858	0	0	759	0
Confl. Peds. (#/hr)	5					5	5					5
Heavy Vehicles (%)	2%	0%	0%	5%	0%	2%	0%	4%	0%	3%	4%	4%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	13.1	13.1			13.1			26.9			26.9	
Effective Green, g (s)	13.1	13.1			13.1			26.9			26.9	
Actuated g/C Ratio	0.25	0.25			0.25			0.52			0.52	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	259	429			436			1672			1170	
v/s Ratio Prot		0.01										
v/s Ratio Perm	0.04				c0.15			0.27			c0.34	
v/c Ratio	0.17	0.02			0.59			0.51			0.65	
Uniform Delay, d1	15.2	14.6			17.1			8.2			9.1	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	0.3	0.0			2.0			0.3			1.3	
Delay (s)	15.5	14.7			19.1			8.5			10.4	
Level of Service	B	B			B			A			B	
Approach Delay (s/veh)		15.2			19.1			8.5			10.4	
Approach LOS		B			B			A			B	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			11.1									
HCM 2000 Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			52.0									
Intersection Capacity Utilization			80.8%									
Analysis Period (min)			15									
c Critical Lane Group												

Forecasted 2025 No-Build PM Peak Hour
6: Old Albany Post Road & Shady Lane Farm Road

Forecasted 2025 No-Build PM Peak Hour
08/29/2024

Intersection						
Int Delay, s/veh	3.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	91	51	110	0	0	123
Future Vol, veh/h	91	51	110	0	0	123
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-12	-	4	-	-	-10
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	8	2	0	0	1
Mvmt Flow	100	56	121	0	0	135

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	261	126	0	0	126	0
Stage 1	126	-	-	-	-	-
Stage 2	135	-	-	-	-	-
Critical Hdwy	4.04	5.08	-	-	4.1	-
Critical Hdwy Stg 1	3.04	-	-	-	-	-
Critical Hdwy Stg 2	3.04	-	-	-	-	-
Follow-up Hdwy	3.536	3.372	-	-	2.2	-
Pot Cap-1 Maneuver	861	948	-	-	1473	-
Stage 1	973	-	-	-	-	-
Stage 2	970	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	858	944	-	-	1467	-
Mov Cap-2 Maneuver	858	-	-	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	970	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.92	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	887	1467
HCM Lane V/C Ratio	-	-	0.176	-
HCM Control Delay (s/veh)	-	-	9.9	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0

Forecasted 2025 No-Build PM Peak Hour
8: Shady Lane Farm Road & NY 9A WB Off-Ramp

Forecasted 2025 No-Build PM Peak Hour
08/29/2024

Intersection						
Int Delay, s/veh	7.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	121	5	1	0	0	21
Future Vol, veh/h	121	5	1	0	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-4	-	12	-	-	-12
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	9	0	0	0	0	0
Mvmt Flow	130	5	1	0	0	23

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	24	1	0
Stage 1	1	-	-
Stage 2	23	-	-
Critical Hdwy	5.69	5.8	-
Critical Hdwy Stg 1	4.69	-	-
Critical Hdwy Stg 2	4.69	-	-
Follow-up Hdwy	3.581	3.3	-
Pot Cap-1 Maneuver	980	1090	-
Stage 1	1004	-	0
Stage 2	987	-	0
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	980	1090	-
Mov Cap-2 Maneuver	980	-	-
Stage 1	1004	-	-
Stage 2	987	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.24	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 984	-
HCM Lane V/C Ratio	- 0.138	-
HCM Control Delay (s/veh)	- 9.2	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.5	-

Forecasted 2025 No-Build Saturday Peak Hour Forecasted 2025 No-Build Saturday Peak Hour
3: Albany Post Road (US 9) & Mystic Drive/Old Albany Post Road 08/29/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	2	11	96	36	155	3	594	2	125	535	29
Future Volume (vph)	29	2	11	96	36	155	3	594	2	125	535	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.87			0.93			1.00			0.99	
Flt Protected	0.95	1.00			0.98			1.00			0.99	
Satd. Flow (prot)	1821	1675			1954			3420			3412	
Flt Permitted	0.59	1.00			0.88			0.95			0.73	
Satd. Flow (perm)	1135	1675			1755			3255			2517	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	30	2	11	99	37	160	3	612	2	129	552	30
RTOR Reduction (vph)	0	8	0	0	45	0	0	0	0	0	5	0
Lane Group Flow (vph)	30	5	0	0	251	0	0	617	0	0	706	0
Confl. Peds. (#/hr)	2					2			2	2		
Heavy Vehicles (%)	0%	0%	0%	1%	3%	1%	0%	3%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	11.9	11.9			11.9			21.7			21.7	
Effective Green, g (s)	11.9	11.9			11.9			21.7			21.7	
Actuated g/C Ratio	0.26	0.26			0.26			0.48			0.48	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	296	437			457			1548			1197	
v/s Ratio Prot		0.00										
v/s Ratio Perm	0.03				c0.14			0.19			c0.28	
v/c Ratio	0.10	0.01			0.55			0.40			0.59	
Uniform Delay, d1	12.8	12.5			14.5			7.7			8.7	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	0.2	0.0			1.4			0.2			0.7	
Delay (s)	12.9	12.5			15.9			7.9			9.5	
Level of Service	B	B			B			A			A	
Approach Delay (s/veh)		12.8			15.9			7.9			9.5	
Approach LOS		B			B			A			A	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			10.1			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			45.6			Sum of lost time (s)			14.0			
Intersection Capacity Utilization			74.4%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

Forecasted 2025 No-Build Saturday Peak Hour Forecasted 2025 No-Build Saturday Peak Hour
6: Old Albany Post Road & Shady Lane Farm Road 08/29/2024

Intersection						
Int Delay, s/veh	3.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	83	33	97	6	0	129
Future Vol, veh/h	83	33	97	6	0	129
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-12	-	4	-	-	-10
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	0	3	0	0	0
Mvmt Flow	92	37	108	7	0	143

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	256	113	0	0	116	0
Stage 1	113	-	-	-	-	-
Stage 2	143	-	-	-	-	-
Critical Hdwy	4.03	5	-	-	4.1	-
Critical Hdwy Stg 1	3.03	-	-	-	-	-
Critical Hdwy Stg 2	3.03	-	-	-	-	-
Follow-up Hdwy	3.527	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	866	981	-	-	1485	-
Stage 1	980	-	-	-	-	-
Stage 2	970	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	865	980	-	-	1482	-
Mov Cap-2 Maneuver	865	-	-	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	970	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	895	1482
HCM Lane V/C Ratio	-	-	0.144	-
HCM Control Delay (s/veh)	-	-	9.7	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0

Forecasted 2025 No-Build Saturday Peak Hour Forecasted 2025 No-Build Saturday Peak Hour
8: Shady Lane Farm Road & NY 9A WB Off-Ramp 08/29/2024

Intersection						
Int Delay, s/veh	8.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	117	0	6	0	0	0
Future Vol, veh/h	117	0	6	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-4	-	12	-	-	-12
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	0	0	0	0	0
Mvmt Flow	146	0	8	0	0	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	9	8	0	-	-	-
Stage 1	8	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	5.62	5.8	-	-	-	-
Critical Hdwy Stg 1	4.62	-	-	-	-	-
Critical Hdwy Stg 2	4.62	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	-	-
Pot Cap-1 Maneuver	1014	1082	-	0	0	-
Stage 1	1017	-	-	0	0	-
Stage 2	1022	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	1014	1082	-	-	-	-
Mov Cap-2 Maneuver	1014	-	-	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	1022	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.15	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 1014	-
HCM Lane V/C Ratio	- 0.144	-
HCM Control Delay (s/veh)	- 9.1	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.5	-

Build Condition - Typical Day

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	66	37	87	153	157	0	451	7	300	748	93
Future Volume (vph)	104	66	37	87	153	157	0	451	7	300	748	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.95			0.95			1.00			0.99	
Flt Protected	0.95	1.00			0.99			1.00			0.99	
Satd. Flow (prot)	1655	1633			1871			3230			3238	
Flt Permitted	0.35	1.00			0.89			1.00			0.70	
Satd. Flow (perm)	603	1633			1689			3230			2302	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	111	70	39	93	163	167	0	480	7	319	796	99
RTOR Reduction (vph)	0	22	0	0	25	0	0	1	0	0	8	0
Lane Group Flow (vph)	111	87	0	0	398	0	0	486	0	0	1206	0
Confl. Peds. (#/hr)	3		1	1		3	6					6
Heavy Vehicles (%)	10%	6%	19%	4%	11%	9%	0%	9%	0%	2%	7%	7%
Turn Type	Perm	NA		Perm	NA			NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	21.3	21.3			21.3			49.3			49.3	
Effective Green, g (s)	21.3	21.3			21.3			49.3			49.3	
Actuated g/C Ratio	0.26	0.26			0.26			0.60			0.60	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	155	421			435			1927			1373	
v/s Ratio Prot		0.05						0.15				
v/s Ratio Perm	0.18				c0.24						c0.52	
v/c Ratio	0.72	0.21			0.91			0.25			0.88	
Uniform Delay, d1	27.9	24.0			29.8			7.9			14.1	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	14.6	0.2			23.5			0.1			6.7	
Delay (s)	42.5	24.3			53.3			8.0			20.8	
Level of Service	D	C			D			A			C	
Approach Delay (s/veh)		33.5			53.3			8.0			20.8	
Approach LOS		C			D			A			C	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			25.2									
HCM 2000 Volume to Capacity ratio			0.91									
Actuated Cycle Length (s)			82.6									
Intersection Capacity Utilization			89.4%									
Analysis Period (min)			15									
c Critical Lane Group												

Forecasted 2025 Build AM Peak Hour
6: Old Albany Post Road & Shady Lane Farm Road

Forecasted 2025 Build AM Peak Hour
08/29/2024

Intersection						
Int Delay, s/veh	4.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	176	39	91	53	4	143
Future Vol, veh/h	176	39	91	53	4	143
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-12	-	4	-	-	-10
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	8	17	17	0	0	13
Mvmt Flow	205	45	106	62	5	166

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	313	138	0
Stage 1	138	-	-
Stage 2	176	-	-
Critical Hdwy	4.08	5.17	-
Critical Hdwy Stg 1	3.08	-	-
Critical Hdwy Stg 2	3.08	-	-
Follow-up Hdwy	3.572	3.453	-
Pot Cap-1 Maneuver	822	913	-
Stage 1	958	-	-
Stage 2	945	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	819	913	-
Mov Cap-2 Maneuver	819	-	-
Stage 1	958	-	-
Stage 2	942	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v11.15		0	0.21
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	834	49
HCM Lane V/C Ratio	-	-	0.3	0.003
HCM Control Delay (s/veh)	-	-	11.2	7.5
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1.3	0

Forecasted 2025 Build AM Peak Hour
8: Shady Lane Farm Road & NY 9A WB Off-Ramp

Forecasted 2025 Build AM Peak Hour
08/29/2024

Intersection						
Int Delay, s/veh	6.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	152	24	56	0	0	63
Future Vol, veh/h	152	24	56	0	0	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-4	-	12	-	-	-12
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	10	0	0	0	0	0
Mvmt Flow	175	28	64	0	0	72

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	137	64	0
Stage 1	64	-	-
Stage 2	72	-	-
Critical Hdwy	5.7	5.8	-
Critical Hdwy Stg 1	4.7	-	-
Critical Hdwy Stg 2	4.7	-	-
Follow-up Hdwy	3.59	3.3	-
Pot Cap-1 Maneuver	864	1013	-
Stage 1	952	-	0
Stage 2	946	-	0
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	864	1013	-
Mov Cap-2 Maneuver	864	-	-
Stage 1	952	-	-
Stage 2	946	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 882	-
HCM Lane V/C Ratio	- 0.229	-
HCM Control Delay (s/veh)	- 10.3	-
HCM Lane LOS	- B	-
HCM 95th %tile Q(veh)	- 0.9	-

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	6	16	107	41	207	1	805	3	163	572	25
Future Volume (vph)	41	6	16	107	41	207	1	805	3	163	572	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.89			0.92			1.00			0.99	
Flt Protected	0.95	1.00			0.99			1.00			0.99	
Satd. Flow (prot)	1783	1706			1913			3388			3336	
Flt Permitted	0.46	1.00			0.89			0.95			0.61	
Satd. Flow (perm)	855	1706			1729			3233			2062	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	44	6	17	114	44	220	1	856	3	173	609	27
RTOR Reduction (vph)	0	12	0	0	53	0	0	0	0	0	3	0
Lane Group Flow (vph)	44	11	0	0	325	0	0	860	0	0	806	0
Confl. Peds. (#/hr)	5					5	5					5
Heavy Vehicles (%)	2%	0%	0%	5%	0%	2%	0%	4%	0%	3%	4%	4%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.7	16.7			16.7			33.2			33.2	
Effective Green, g (s)	16.7	16.7			16.7			33.2			33.2	
Actuated g/C Ratio	0.27	0.27			0.27			0.54			0.54	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	230	460			466			1734			1105	
v/s Ratio Prot		0.01										
v/s Ratio Perm	0.05				c0.19			0.27			c0.39	
v/c Ratio	0.19	0.02			0.70			0.50			0.73	
Uniform Delay, d1	17.4	16.6			20.3			9.1			10.9	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	0.4	0.0			4.5			0.2			2.4	
Delay (s)	17.8	16.6			24.8			9.3			13.4	
Level of Service	B	B			C			A			B	
Approach Delay (s/veh)		17.4			24.8			9.3			13.4	
Approach LOS		B			C			A			B	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			13.9									
HCM 2000 Volume to Capacity ratio			0.75									
Actuated Cycle Length (s)			61.9									
Intersection Capacity Utilization			86.5%									
Analysis Period (min)			15									
c Critical Lane Group												

Intersection						
Int Delay, s/veh	4.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	163	53	110	64	5	123
Future Vol, veh/h	163	53	110	64	5	123
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-12	-	4	-	-	-10
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	8	2	0	0	1
Mvmt Flow	179	58	121	70	5	135

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	307	161	0
Stage 1	161	-	-
Stage 2	146	-	-
Critical Hdwy	4.04	5.08	-
Critical Hdwy Stg 1	3.04	-	-
Critical Hdwy Stg 2	3.04	-	-
Follow-up Hdwy	3.536	3.372	-
Pot Cap-1 Maneuver	835	916	-
Stage 1	961	-	-
Stage 2	966	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	829	913	-
Mov Cap-2 Maneuver	829	-	-
Stage 1	957	-	-
Stage 2	962	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v10.89		0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	848	70
HCM Lane V/C Ratio	-	-	0.28	0.004
HCM Control Delay (s/veh)	-	-	10.9	7.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1.1	0

Forecasted 2025 Build PM Peak Hour
8: Shady Lane Farm Road & NY 9A WB Off-Ramp

Forecasted 2025 Build PM Peak Hour
08/29/2024

Intersection						
Int Delay, s/veh	4.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↑			↑
Traffic Vol, veh/h	121	30	69	0	0	95
Future Vol, veh/h	121	30	69	0	0	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-4	-	12	-	-	-12
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	9	0	0	0	0	0
Mvmt Flow	130	32	74	0	0	102
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	176	74	0	-	-	-
Stage 1	74	-	-	-	-	-
Stage 2	102	-	-	-	-	-
Critical Hdwy	5.69	5.8	-	-	-	-
Critical Hdwy Stg 1	4.69	-	-	-	-	-
Critical Hdwy Stg 2	4.69	-	-	-	-	-
Follow-up Hdwy	3.581	3.3	-	-	-	-
Pot Cap-1 Maneuver	829	1001	-	0	0	-
Stage 1	947	-	-	0	0	-
Stage 2	926	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	829	1001	-	-	-	-
Mov Cap-2 Maneuver	829	-	-	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s/v10.17		0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBTWBLn1		SBT			
Capacity (veh/h)	-	859	-			
HCM Lane V/C Ratio	-	0.189	-			
HCM Control Delay (s/veh)	-	10.2	-			
HCM Lane LOS	-	B	-			
HCM 95th %tile Q(veh)	-	0.7	-			

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	2	11	115	36	226	3	594	4	174	535	29
Future Volume (vph)	29	2	11	115	36	226	3	594	4	174	535	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.87			0.92			1.00			0.99	
Flt Protected	0.95	1.00			0.98			1.00			0.99	
Satd. Flow (prot)	1822	1675			1939			3418			3408	
Flt Permitted	0.48	1.00			0.89			0.95			0.69	
Satd. Flow (perm)	928	1675			1757			3254			2376	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	30	2	11	119	37	233	3	612	4	179	552	30
RTOR Reduction (vph)	0	8	0	0	55	0	0	1	0	0	5	0
Lane Group Flow (vph)	30	5	0	0	334	0	0	618	0	0	756	0
Confl. Peds. (#/hr)	2					2			2	2		
Heavy Vehicles (%)	0%	0%	0%	1%	3%	1%	0%	3%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	15.8	15.8			15.8			25.8			25.8	
Effective Green, g (s)	15.8	15.8			15.8			25.8			25.8	
Actuated g/C Ratio	0.29	0.29			0.29			0.48			0.48	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	273	493			517			1566			1143	
v/s Ratio Prot		0.00										
v/s Ratio Perm	0.03				c0.19			0.19			c0.32	
v/c Ratio	0.11	0.01			0.65			0.39			0.66	
Uniform Delay, d1	13.8	13.4			16.5			8.9			10.6	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	0.2	0.0			2.8			0.2			1.5	
Delay (s)	14.0	13.4			19.2			9.1			12.0	
Level of Service	B	B			B			A			B	
Approach Delay (s/veh)		13.8			19.2			9.1			12.0	
Approach LOS		B			B			A			B	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			12.6									
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			53.6									
Intersection Capacity Utilization			81.3%									
Analysis Period (min)			15									
c Critical Lane Group												

Forecasted 2025 Build Saturday Peak Hour
2: Old Albany Post Road & Shady Lane Farm Road

Forecasted 2025 Build Saturday Peak Hour
08/29/2024

Intersection						
Int Delay, s/veh	4.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	173	38	97	78	7	129
Future Vol, veh/h	173	38	97	78	7	129
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-12	-	4	-	-	-10
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	0	3	0	0	0
Mvmt Flow	192	42	108	87	8	143

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	312	153	0	0	196
Stage 1	153	-	-	-	-
Stage 2	159	-	-	-	-
Critical Hdwy	4.03	5	-	-	4.1
Critical Hdwy Stg 1	3.03	-	-	-	-
Critical Hdwy Stg 2	3.03	-	-	-	-
Follow-up Hdwy	3.527	3.3	-	-	2.2
Pot Cap-1 Maneuver	835	945	-	-	1388
Stage 1	966	-	-	-	-
Stage 2	964	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	829	944	-	-	1386
Mov Cap-2 Maneuver	829	-	-	-	-
Stage 1	965	-	-	-	-
Stage 2	958	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v10.86		0	0.39
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	848	93
HCM Lane V/C Ratio	-	-	0.277	0.006
HCM Control Delay (s/veh)	-	-	10.9	7.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1.1	0

Forecasted 2025 Build Saturday Peak Hour
3: Shady Lane Farm Road & NY 9A WB Off-Ramp

Forecasted 2025 Build Saturday Peak Hour
08/29/2024

Intersection						
Int Delay, s/veh	4.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	117	36	85	0	0	95
Future Vol, veh/h	117	36	85	0	0	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-4	-	12	-	-	-12
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	0	0	0	0	0
Mvmt Flow	146	45	106	0	0	119

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	225	106	0	-	-	-
Stage 1	106	-	-	-	-	-
Stage 2	119	-	-	-	-	-
Critical Hdwy	5.62	5.8	-	-	-	-
Critical Hdwy Stg 1	4.62	-	-	-	-	-
Critical Hdwy Stg 2	4.62	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	-	-
Pot Cap-1 Maneuver	802	965	-	0	0	-
Stage 1	940	-	-	0	0	-
Stage 2	931	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	802	965	-	-	-	-
Mov Cap-2 Maneuver	802	-	-	-	-	-
Stage 1	940	-	-	-	-	-
Stage 2	931	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v10.58		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 835	-
HCM Lane V/C Ratio	- 0.229	-
HCM Control Delay (s/veh)	- 10.6	-
HCM Lane LOS	- B	-
HCM 95th %tile Q(veh)	- 0.9	-

Build Condition - Event

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	66	37	88	153	162	0	451	8	326	748	93
Future Volume (vph)	104	66	37	88	153	162	0	451	8	326	748	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.95			0.95			1.00			0.99	
Flt Protected	0.95	1.00			0.99			1.00			0.99	
Satd. Flow (prot)	1655	1633			1869			3230			3239	
Flt Permitted	0.33	1.00			0.89			1.00			0.69	
Satd. Flow (perm)	579	1633			1688			3230			2276	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	111	70	39	94	163	172	0	480	9	347	796	99
RTOR Reduction (vph)	0	22	0	0	26	0	0	1	0	0	7	0
Lane Group Flow (vph)	111	87	0	0	403	0	0	488	0	0	1235	0
Confl. Peds. (#/hr)	3		1	1		3	6					6
Heavy Vehicles (%)	10%	6%	19%	4%	11%	9%	0%	9%	0%	2%	7%	7%
Turn Type	Perm	NA		Perm	NA			NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	21.2	21.2			21.2			51.1			51.1	
Effective Green, g (s)	21.2	21.2			21.2			51.1			51.1	
Actuated g/C Ratio	0.25	0.25			0.25			0.61			0.61	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	145	410			424			1957			1379	
v/s Ratio Prot		0.05						0.15				
v/s Ratio Perm	0.19				c0.24						c0.54	
v/c Ratio	0.77	0.21			0.95			0.25			0.90	
Uniform Delay, d1	29.2	25.0			31.0			7.7			14.3	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	21.1	0.3			31.1			0.1			7.9	
Delay (s)	50.3	25.2			62.2			7.8			22.2	
Level of Service	D	C			E			A			C	
Approach Delay (s/veh)		37.9			62.2			7.8			22.2	
Approach LOS		D			E			A			C	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			27.9									
HCM 2000 Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			84.3									
Intersection Capacity Utilization			90.5%									
Analysis Period (min)			15									
c Critical Lane Group												

Forecasted 2025 Build Event AM Peak Hour

Forecasted 2025 Build Event

3: Albany Post Road (US 9) & Mystic Drive/Old Albany Post Road

09/01/2024

With 3 Second timing change to minimize delay increases, if needed

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	66	37	88	153	162	0	451	8	326	748	93
Future Volume (vph)	104	66	37	88	153	162	0	451	8	326	748	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.95			0.95			1.00			0.99	
Flt Protected	0.95	1.00			0.99			1.00			0.99	
Satd. Flow (prot)	1655	1634			1869			3230			3239	
Flt Permitted	0.35	1.00			0.89			1.00			0.69	
Satd. Flow (perm)	605	1634			1688			3230			2277	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	111	70	39	94	163	172	0	480	9	347	796	99
RTOR Reduction (vph)	0	22	0	0	27	0	0	1	0	0	7	0
Lane Group Flow (vph)	111	87	0	0	402	0	0	488	0	0	1235	0
Confl. Peds. (#/hr)	3		1	1		3	6					6
Heavy Vehicles (%)	10%	6%	19%	4%	11%	9%	0%	9%	0%	2%	7%	7%
Turn Type	Perm	NA		Perm	NA			NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	22.6	22.6			22.6			50.6			50.6	
Effective Green, g (s)	22.6	22.6			22.6			50.6			50.6	
Actuated g/C Ratio	0.27	0.27			0.27			0.59			0.59	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	160	433			447			1918			1352	
v/s Ratio Prot		0.05						0.15				
v/s Ratio Perm	0.18				c0.24						c0.54	
v/c Ratio	0.69	0.20			0.90			0.25			0.91	
Uniform Delay, d1	28.2	24.3			30.2			8.3			15.4	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	12.3	0.2			20.4			0.1			9.6	
Delay (s)	40.4	24.5			50.6			8.3			25.0	
Level of Service	D	C			D			A			C	
Approach Delay (s/veh)		32.6			50.6			8.3			25.0	
Approach LOS		C			D			A			C	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			26.9									
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			85.2									
Intersection Capacity Utilization			90.5%									
Analysis Period (min)			15									
c Critical Lane Group												

Forecasted 2025 Build Event AM Peak Hour
6: Old Albany Post Road & Shady Lane Farm Road

Forecasted 2025 Build Event
08/29/2024

Intersection						
Int Delay, s/veh	4.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	182	39	91	90	7	143
Future Vol, veh/h	182	39	91	90	7	143
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-12	-	4	-	-	-10
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	8	17	17	0	0	13
Mvmt Flow	212	45	106	105	8	166

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	342	159	0
Stage 1	159	-	-
Stage 2	183	-	-
Critical Hdwy	4.08	5.17	-
Critical Hdwy Stg 1	3.08	-	-
Critical Hdwy Stg 2	3.08	-	-
Follow-up Hdwy	3.572	3.453	-
Pot Cap-1 Maneuver	807	894	-
Stage 1	951	-	-
Stage 2	943	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	801	894	-
Mov Cap-2 Maneuver	801	-	-
Stage 1	950	-	-
Stage 2	936	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.43	0	0.36
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	816	84
HCM Lane V/C Ratio	-	-	0.315	0.006
HCM Control Delay (s/veh)	-	-	11.4	7.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1.4	0

Intersection						
Int Delay, s/veh	5.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↑			↑
Traffic Vol, veh/h	152	41	97	0	0	69
Future Vol, veh/h	152	41	97	0	0	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-4	-	12	-	-	-12
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	10	0	0	0	0	0
Mvmt Flow	175	47	111	0	0	79

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	191	111	0	-	-	-
Stage 1	111	-	-	-	-	-
Stage 2	79	-	-	-	-	-
Critical Hdwy	5.7	5.8	-	-	-	-
Critical Hdwy Stg 1	4.7	-	-	-	-	-
Critical Hdwy Stg 2	4.7	-	-	-	-	-
Follow-up Hdwy	3.59	3.3	-	-	-	-
Pot Cap-1 Maneuver	814	959	-	0	0	-
Stage 1	916	-	-	0	0	-
Stage 2	940	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	814	959	-	-	-	-
Mov Cap-2 Maneuver	814	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	940	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v10.81		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 841	-
HCM Lane V/C Ratio	- 0.264	-
HCM Control Delay (s/veh)	- 10.8	-
HCM Lane LOS	- B	-
HCM 95th %tile Q(veh)	- 1.1	-

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	25	19	82	68	175	0	467	4	193	477	41
Future Volume (vph)	52	25	19	82	68	175	0	467	4	193	477	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.94			0.93			1.00			0.99	
Flt Protected	0.95	1.00			0.99			1.00			0.99	
Satd. Flow (prot)	1749	1771			1908			2821			2920	
Flt Permitted	0.49	1.00			0.90			1.00			0.70	
Satd. Flow (perm)	900	1771			1737			2821			2081	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	55	27	20	87	72	186	0	497	4	205	507	44
RTOR Reduction (vph)	0	15	0	0	44	0	0	0	0	0	7	0
Lane Group Flow (vph)	55	32	0	0	301	0	0	501	0	0	749	0
Confl. Peds. (#/hr)	5					5	5					5
Heavy Vehicles (%)	4%	1%	2%	3%	5%	4%	0%	25%	0%	3%	25%	2%
Turn Type	Perm	NA		Perm	NA			NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	15.1	15.1			15.1			28.6			28.6	
Effective Green, g (s)	15.1	15.1			15.1			28.6			28.6	
Actuated g/C Ratio	0.27	0.27			0.27			0.51			0.51	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	243	480			470			1448			1068	
v/s Ratio Prot		0.02						0.18				
v/s Ratio Perm	0.06				c0.17						c0.36	
v/c Ratio	0.23	0.07			0.64			0.35			0.70	
Uniform Delay, d1	15.8	15.1			17.9			8.0			10.3	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	0.5	0.1			2.9			0.1			2.1	
Delay (s)	16.2	15.1			20.8			8.2			12.4	
Level of Service	B	B			C			A			B	
Approach Delay (s/veh)		15.7			20.8			8.2			12.4	
Approach LOS		B			C			A			B	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			13.0									B
HCM 2000 Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			55.7							14.0		
Intersection Capacity Utilization			74.0%									D
Analysis Period (min)			15									
c Critical Lane Group												

Forecasted 2025 Build Event MD Peak Hour
6: Old Albany Post Road & Shady Lane Farm Road

Forecasted 2025 Build Event
08/29/2024

Intersection						
Int Delay, s/veh	4.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	171	38	76	79	7	99
Future Vol, veh/h	171	38	76	79	7	99
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-12	-	4	-	-	-10
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	4	4	5	0	0	6
Mvmt Flow	192	43	85	89	8	111
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	262	135	0	0	179	0
Stage 1	135	-	-	-	-	-
Stage 2	127	-	-	-	-	-
Critical Hdwy	4.04	5.04	-	-	4.1	-
Critical Hdwy Stg 1	3.04	-	-	-	-	-
Critical Hdwy Stg 2	3.04	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	-	-	2.2	-
Pot Cap-1 Maneuver	861	951	-	-	1409	-
Stage 1	970	-	-	-	-	-
Stage 2	973	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	852	947	-	-	1403	-
Mov Cap-2 Maneuver	852	-	-	-	-	-
Stage 1	966	-	-	-	-	-
Stage 2	967	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s/v10.68		0	0.5			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	868	119	-	
HCM Lane V/C Ratio	-	-	0.271	0.006	-	
HCM Control Delay (s/veh)	-	-	10.7	7.6	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	1.1	0	-	

Intersection						
Int Delay, s/veh	4.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	100	37	86	0	0	109
Future Vol, veh/h	100	37	86	0	0	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-4	-	12	-	-	-12
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	9	0	0	0	0	0
Mvmt Flow	111	41	96	0	0	121

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	217	96	0
Stage 1	96	-	-
Stage 2	121	-	-
Critical Hdwy	5.69	5.8	-
Critical Hdwy Stg 1	4.69	-	-
Critical Hdwy Stg 2	4.69	-	-
Follow-up Hdwy	3.581	3.3	-
Pot Cap-1 Maneuver	793	977	-
Stage 1	930	-	-
Stage 2	911	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	793	977	-
Mov Cap-2 Maneuver	793	-	-
Stage 1	930	-	-
Stage 2	911	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v10.26		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 836	-
HCM Lane V/C Ratio	- 0.182	-
HCM Control Delay (s/veh)	- 10.3	-
HCM Lane LOS	- B	-
HCM 95th %tile Q(veh)	- 0.7	-

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	6	16	111	41	222	1	805	3	165	572	25
Future Volume (vph)	41	6	16	111	41	222	1	805	3	165	572	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.89			0.92			1.00			1.00	
Flt Protected	0.95	1.00			0.99			1.00			0.99	
Satd. Flow (prot)	1783	1706			1910			3388			3335	
Flt Permitted	0.44	1.00			0.89			0.95			0.61	
Satd. Flow (perm)	829	1706			1729			3233			2050	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	44	6	17	118	44	236	1	856	3	176	609	27
RTOR Reduction (vph)	0	12	0	0	55	0	0	0	0	0	3	0
Lane Group Flow (vph)	44	11	0	0	343	0	0	860	0	0	809	0
Confl. Peds. (#/hr)	5					5	5					5
Heavy Vehicles (%)	2%	0%	0%	5%	0%	2%	0%	4%	0%	3%	4%	4%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	17.7	17.7			17.7			33.8			33.8	
Effective Green, g (s)	17.7	17.7			17.7			33.8			33.8	
Actuated g/C Ratio	0.28	0.28			0.28			0.53			0.53	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	231	475			481			1720			1091	
v/s Ratio Prot		0.01										
v/s Ratio Perm	0.05				c0.20			0.27			c0.39	
v/c Ratio	0.19	0.02			0.71			0.50			0.74	
Uniform Delay, d1	17.4	16.6			20.6			9.5			11.5	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	0.4	0.0			5.0			0.2			2.8	
Delay (s)	17.8	16.6			25.6			9.7			14.2	
Level of Service	B	B			C			A			B	
Approach Delay (s/veh)		17.4			25.6			9.7			14.2	
Approach LOS		B			C			A			B	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			14.6			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			63.5			Sum of lost time (s)			14.0			
Intersection Capacity Utilization			87.7%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Forecasted 2025 Build Event PM Peak Hour
6: Old Albany Post Road & Shady Lane Farm Road

Forecasted 2025 Build Event
08/29/2024

Intersection						
Int Delay, s/veh	4.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	181	54	110	67	5	123
Future Vol, veh/h	181	54	110	67	5	123
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-12	-	4	-	-	-10
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	8	2	0	0	1
Mvmt Flow	199	59	121	74	5	135

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	309	163	0
Stage 1	163	-	-
Stage 2	146	-	-
Critical Hdwy	4.04	5.08	-
Critical Hdwy Stg 1	3.04	-	-
Critical Hdwy Stg 2	3.04	-	-
Follow-up Hdwy	3.536	3.372	-
Pot Cap-1 Maneuver	835	915	-
Stage 1	960	-	-
Stage 2	966	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	828	911	-
Mov Cap-2 Maneuver	828	-	-
Stage 1	956	-	-
Stage 2	962	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v11.12		0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	846	70
HCM Lane V/C Ratio	-	-	0.305	0.004
HCM Control Delay (s/veh)	-	-	11.1	7.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1.3	0

Intersection						
Int Delay, s/veh	4.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	121	31	72	0	0	114
Future Vol, veh/h	121	31	72	0	0	114
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-4	-	12	-	-	-12
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	9	0	0	0	0	0
Mvmt Flow	130	33	77	0	0	123

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	200	77	0
Stage 1	77	-	-
Stage 2	123	-	-
Critical Hdwy	5.69	5.8	-
Critical Hdwy Stg 1	4.69	-	-
Critical Hdwy Stg 2	4.69	-	-
Follow-up Hdwy	3.581	3.3	-
Pot Cap-1 Maneuver	808	998	-
Stage 1	944	-	0
Stage 2	910	-	0
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	808	998	-
Mov Cap-2 Maneuver	808	-	-
Stage 1	944	-	-
Stage 2	910	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v10.31		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 841	-
HCM Lane V/C Ratio	- 0.194	-
HCM Control Delay (s/veh)	- 10.3	-
HCM Lane LOS	- B	-
HCM 95th %tile Q(veh)	- 0.7	-

Forecasted 2025 Build Event Saturday Peak Hour
1: Albany Post Road (US 9) & Mystic Drive/Old Albany Post Road

Forecasted 2025 Build Event
08/29/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	2	11	116	36	232	3	594	6	202	535	29
Future Volume (vph)	29	2	11	116	36	232	3	594	6	202	535	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	11	12	12	12	12
Grade (%)		-2%			-3%			-2%			5%	
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	1.00			0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.87			0.92			1.00			0.99	
Flt Protected	0.95	1.00			0.99			1.00			0.99	
Satd. Flow (prot)	1821	1675			1938			3417			3405	
Flt Permitted	0.47	1.00			0.89			0.95			0.67	
Satd. Flow (perm)	900	1675			1757			3253			2315	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	30	2	11	120	37	239	3	612	6	208	552	30
RTOR Reduction (vph)	0	8	0	0	56	0	0	1	0	0	4	0
Lane Group Flow (vph)	30	5	0	0	340	0	0	620	0	0	786	0
Confl. Peds. (#/hr)	2					2			2	2		
Heavy Vehicles (%)	0%	0%	0%	1%	3%	1%	0%	3%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.6	16.6			16.6			27.9			27.9	
Effective Green, g (s)	16.6	16.6			16.6			27.9			27.9	
Actuated g/C Ratio	0.29	0.29			0.29			0.49			0.49	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	264	492			516			1606			1143	
v/s Ratio Prot		0.00										
v/s Ratio Perm	0.03				c0.19			0.19			c0.34	
v/c Ratio	0.11	0.01			0.66			0.39			0.69	
Uniform Delay, d1	14.6	14.1			17.5			8.9			11.0	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	0.2	0.0			3.0			0.2			1.7	
Delay (s)	14.8	14.1			20.5			9.1			12.7	
Level of Service	B	B			C			A			B	
Approach Delay (s/veh)		14.6			20.5			9.1			12.7	
Approach LOS		B			C			A			B	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			13.2									
HCM 2000 Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			56.5									
Intersection Capacity Utilization			82.6%									
Analysis Period (min)			15									
c Critical Lane Group												

Forecasted 2025 Build Event Saturday Peak Hour
2: Old Albany Post Road & Shady Lane Farm Road

Forecasted 2025 Build Event
08/29/2024

Intersection						
Int Delay, s/veh	4.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	180	38	97	117	10	129
Future Vol, veh/h	180	38	97	117	10	129
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-12	-	4	-	-	-10
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	0	3	0	0	0
Mvmt Flow	200	42	108	130	11	143
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	340	175	0	0	240	0
Stage 1	175	-	-	-	-	-
Stage 2	166	-	-	-	-	-
Critical Hdwy	4.03	5	-	-	4.1	-
Critical Hdwy Stg 1	3.03	-	-	-	-	-
Critical Hdwy Stg 2	3.03	-	-	-	-	-
Follow-up Hdwy	3.527	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	820	926	-	-	1339	-
Stage 1	959	-	-	-	-	-
Stage 2	962	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	811	925	-	-	1337	-
Mov Cap-2 Maneuver	811	-	-	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	953	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v11.12		0		0.56		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	829	129	-	
HCM Lane V/C Ratio	-	-	0.292	0.008	-	
HCM Control Delay (s/veh)	-	-	11.1	7.7	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	1.2	0	-	

Intersection						
Int Delay, s/veh	4.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↑			↑
Traffic Vol, veh/h	116	55	127	0	0	102
Future Vol, veh/h	116	55	127	0	0	102
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-4	-	12	-	-	-12
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	0	0	0	0	0
Mvmt Flow	145	69	159	0	0	128

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	286	159	0	-	-	-
Stage 1	159	-	-	-	-	-
Stage 2	128	-	-	-	-	-
Critical Hdwy	5.62	5.8	-	-	-	-
Critical Hdwy Stg 1	4.62	-	-	-	-	-
Critical Hdwy Stg 2	4.62	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	-	-
Pot Cap-1 Maneuver	750	908	-	0	0	-
Stage 1	901	-	-	0	0	-
Stage 2	924	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	750	908	-	-	-	-
Mov Cap-2 Maneuver	750	-	-	-	-	-
Stage 1	901	-	-	-	-	-
Stage 2	924	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v11.19		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 795	-
HCM Lane V/C Ratio	- 0.269	-
HCM Control Delay (s/veh)	- 11.2	-
HCM Lane LOS	- B	-
HCM 95th %tile Q(veh)	- 1.1	-