

Engineering & Design

Traffic Impact Study

April 26, 2022

577 Route 208 LLC Village of South Blooming Grove Orange County, New York

Prepared for:

Classic Tile 495 Route 208 Monroe, NY 10950 Prepared by:

Th

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Project No. 21006899A



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I. Introduction

A. Project Description and Location

(Figure No. 1)

This report has been prepared to evaluate the potential traffic impacts associated with the proposed office development ("the Project"), which is planned to be developed on the property located at 577 NYS Route 208 in the Village of South Blooming Grove, Orange County, New York. The site is proposed to consist of 3 buildings (1 existing). The new buildings will include approximately 73,920 square feet of office space and approximately 17,250 square feet of warehouse space. As shown on Figure No. 1, access to the development is proposed via a new access connection at the northerly end of the site from NYS Route 208 with the existing access to be closed.

A Design Year of 2025 has been utilized in completing the traffic analysis in order to evaluate future traffic conditions associated with this proposed development.

B. Scope of Study

This study has been prepared to identify current and future traffic operating conditions on the surrounding roadway network and to assess the potential traffic impacts of the Project.

All available traffic count data for the study area intersections were obtained from previous reports prepared by our office. These data were supplemented with new traffic counts collected by representatives of Colliers Engineering & Design CT, P.C. These data were also compared to count data obtained from the New York State Department of Transportation (NYSDOT). Together these data were utilized to establish the Year 2022 Existing Traffic Volumes representing existing traffic conditions in the vicinity of the site.

The Year 2022 Existing Traffic Volumes were then projected to the 2025 Design Year to take into account background traffic growth. In addition, traffic for other specific potential or approved developments in the area were estimated and then added to the Projected Traffic Volumes to obtain the Year 2025 No-Build Traffic Volumes.

Estimates were then made of the potential traffic that the proposed development would generate during each of the peak hours (see Section III-C for further discussion). The resulting site generated traffic volumes were then added to the roadway system and combined with the Year 2025 No-Build Traffic Volumes resulting in the Year 2025 Build Traffic Volumes.

The Existing, No-Build and Build Traffic Volumes were then compared to roadway capacities based on the procedures from the Highway Capacity Manual to determine existing and future Levels of Service and operating conditions. Recommendations for improvements were made where necessary to serve the existing and/or future traffic volumes.



II. Existing Roadway and Traffic Descriptions

A. Description of Existing Roadways

As shown on Figure No. 1, the proposed warehouse development will be accessed from NYS Route 208. The following is a brief description of the roadways located within the study area. In addition, Section III-F provides a further description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service and any recommended improvements for each of the study area intersections. Appendix "D" contains copies of the capacity analyses which indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

1. NYS Route 208

NYS Route 208 is a major north/south roadway that runs throughout Orange County. The roadway originates at a "T" type signalized intersection with NYS Route 17M in the Village of Monroe and continues in a northeasterly direction having an interchange connection with NYS Route 17. It continues northward and intersects with several area roadways, including Museum Village Road and Mountain Road and continues north into the Village of Washingtonville. NYS Route 208 generally consists of one lane in each direction with a double yellow center line and white edge line with narrow paved shoulders. In the immediate vicinity of the site, NYS Route 208 has a posted speed limit of 45 MPH.

2. Mountain Road (CR 44)

Mountain Road (CR 44) is a two-lane County road (CR 44) that originates at a "T" type intersection with NYS Route 208 and traverses generally eastbound providing access to the Village of Kiryas Joel and surrounding communities. The roadway consists of a double yellow centerline and white edge line with narrow paved shoulders. Mountain Road has a posted speed limit of 40 MPH. It should be noted that Mountain Road east of NYS Route 208 has a fairly steep grade approaching NYS Route 208.

B. 2022 Existing Traffic Volumes

(Figures No. 2 and 3)

Manual traffic counts were collected by representatives of Colliers Engineering & Design CT, P.C. on Tuesday, March 29, 2022 for the AM and PM Peak Hours to determine the existing traffic volume conditions at the study area intersections. These traffic counts were then compared to traffic volume data from previous traffic studies conducted by our office and to traffic volume data available from the New York State Department of Transportation (NYSDOT) for the NYS Route 208 corridor. Based on this information, the Year 2022 Existing Traffic Volumes were established for the Weekday Peak AM and Weekday Peak PM Hours at the following study area intersections.

- NYS Route 208 and Mountain Road (CR 44)
- NYS Route 208 and Existing Site Driveway



Based upon a review of the traffic counts, the peak hours were generally identified as follows:

- Weekday Peak AM Hour 7:30 AM - 8:30 AM
- 5:00 PM 6:00 PM Weekday Peak PM Hour

The resulting Year 2022 Existing Traffic Volumes are shown on Figures No. 2 and 3 for the Weekday Peak AM Hour and Weekday Peak PM Hour, respectively.

C. Accident Data

(Table A, Appendix E)

Accident data for the area roadways was requested from NYSDOT for the latest five-year period. Once received, the data will be summarized according to type, severity, and contributing factors and will be contained in Table A, Appendix "E".



III. Evaluation of Future Traffic Conditions

A. 2025 No-Build Traffic Volumes

(Figure No. 4 through 9)

The Year 2022 Existing Traffic Volumes were increased by a growth factor of 0.5% per year to account for general background growth resulting in the Year 2025 Projected Traffic Volumes which are shown on Figures No. 4 and 5 for each of the Peak Hours. In addition, traffic from other specific potential or planned developments in the area were estimated including:

- Clovewood
- Mixed-Use South Blooming Grove
- Bald Hill Estates
- 815 Route 208 Development
- Smith Farms (Monroe)
- Monroe Professional Square, LLC
- Kiryas Joel Annexation
- Ara Bagels
- Stonegate Drive
- SBG Mixed-Use (Chess Builders)

The resulting traffic volumes associated with these other developments are shown on Figures No. 6 and 7 for each of the Peak Hours. These volumes were added to the 2025 Projected Traffic Volumes resulting in the Year 2025 No-Build Traffic Volumes, which are shown on Figures No. 8 and 9 for the Weekday AM and PM Peak Hours, respectively.

B. Site Generated Traffic Volumes

(Table No. 1)

Estimates of the amount of traffic to be generated by the proposed office development during each of the peak hours were developed based on information published by the Institute of Transportation Engineers (ITE) as contained in the report entitled "Trip Generation", 11th Edition, 2021, based on Land Use Categories – 710 – Office and 712 – Small Office. Table No. 1 summarizes the trip generation rates and corresponding site generated traffic volumes for the Weekday Peak AM and Weekday Peak PM Hours.

C. Arrival/Departure Distribution

(Figures No. 10 and 11)

It was necessary to establish arrival and departure distributions to assign the site generated traffic volumes to the surrounding roadway network. Based on a review of the Existing Traffic Volumes and the expected travel patterns on the surrounding roadway network, the distributions were identified. The anticipated arrival and departure distributions are shown on Figures No. 10 and 11, respectively.



D. 2025 Build Conditions Traffic Volumes

(Figures No. 12 through 15)

The site generated traffic volumes were assigned to the roadway network based on the arrival and departure distributions referenced above. The resulting site generated traffic volumes for each of the study area intersections are shown on Figures No. 12 and 13 for each of the peak hours, respectively. The site generated traffic volumes were then added to the Year 2025 No-Build Traffic Volumes to obtain the Year 2025 Build Traffic Volumes. The resulting Year 2025 Build Traffic Volumes are shown on Figures No. 14 and 15 for the Weekday Peak AM and Weekday Peak PM Hours, respectively.

E. Description of Analysis Procedures

It was necessary to perform capacity analyses in order to determine existing and future traffic operating conditions at the study area intersections. The following is a brief description of the analysis method utilized in this report:

1. Signalized Intersection Capacity Analysis

The capacity analysis for a signalized intersection was performed in accordance with the procedures described in the Highway Capacity Manual, 6th Edition, dated 2016, published by the Transportation Research Board. The terminology used in identifying traffic flow conditions is Levels of Service. A Level of Service "A" represents the best condition and a Level of Service "F" represents the worst condition. A Level of Service "C" is generally used as a design standard while a Level of Service "D" is acceptable during peak periods. A Level of Service "E" represents an operation near capacity. In order to identify an intersection's Level of Service, the average amount of vehicle delay is computed for each approach to the intersection as well as for the overall intersection.

2. Unsignalized Intersection Capacity Analysis

The unsignalized intersection capacity analysis method utilized in this report was also performed in accordance with the procedures described in the Highway Capacity Manual, 6th Edition, dated 2016. The procedure is based on total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. The average total delay for any particular critical movement is a function of the service rate or capacity of the approach and the degree of saturation. In order to identify the Level of Service, the average amount of vehicle delay is computed for each critical movement to the intersection.

Additional information concerning signalized and unsignalized Levels of Service can be found in Appendix "C" of this report.

F. Results of Analysis

(Table No. 2)

Capacity analyses which take into consideration appropriate truck percentages, pedestrian activity, roadway grades and other factors were performed at the study area intersections



utilizing the procedures described above to determine the Levels of Service and average vehicle delays. Summarized below are a description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service as well as any recommended improvements.

Table No. 2 summarizes the results of the capacity analysis for the 2022 Existing, 2025 No-Build and 2025 Build Conditions. Appendix "D" contains copies of the capacity analysis which also indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

1. NYS Route 208 and Mountain Road (CR 44)

NYS Route 208 and Mountain Road (CR 44) intersect at an unsignalized "T" type intersection. All approaches to the intersection consist of one lane in each direction and is stop-sign controlled.

Capacity analysis was conducted for this intersection utilizing the 2022 Existing Traffic Volumes. The analysis results indicate that the left turn from Mountain Road at the intersection is currently operating at a Level of Service "F" during the AM and PM Peak Hours. Additionally, left turn movements to and from NYS Route 208 onto Mountain Road are difficult during peak hours due to the significant through traffic volumes on NYS Route 208, which leads to vehicular conflicts and significantly impacts the operation of this intersection.

Based upon a review of the traffic volumes for the Existing and No-Build conditions, due to the heavy through volumes along the corridor, the provision of a separate left turn lane on NYS Route 208 and a two-lane exit on the Mountain Road approach at this intersection are warranted based on NYSDOT design criteria. It should also be noted that NYSDOT, at the request of the Village, is currently evaluating the need for signalization or other improvements at this location.

The capacity analysis was recomputed using the 2025 No-Build and Build Traffic volumes including signalization and turn lane improvements on all approaches. These results indicate that the intersection is expected to experience overall Levels of Service "C" or better during the AM and PM Peak Hours under future conditions. The results are shown in the Level of Service Summary Tables contained in Appendix "B".

2. NYS Route 208 and Site Driveway

NYS Route 208 and the Site Driveway intersect at an uncontrolled "T" type intersection. All approaches consist of a single lane. This intersection currently operates as a right-turn-in/right-turn-out access.

Capacity analysis was conducted for this intersection utilizing the 2022 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "C" during the AM and an overall "E" during the PM Peak Hours.



The capacity analysis was recomputed using the 2025 No-Build Traffic volumes. These results indicate that the intersection is expected to experience Levels of Service "D" during the AM Peak Hour and a Level of Service "F" during the PM Peak Hour.

Under the 2025 Build condition, the existing driveway will be closed, and a new driveway will be constructed at the northerly end of the site. A Level of Service "E" will be experienced during the AM Peak Hour and the PM Peak Hour will continue to operate at a Level of Service "F".

Based on a review of the future traffic volumes at this location, the provision of a separate left turn lane is warranted at this location primarily due to the significant through traffic along NYS Route 208. As part of the NYSDOT Highway Work Permit process, the separate left turn lane should be incorporated into the plans and should include a land dedication along the site frontage for this, as well as to accommodate additional improvements in the corridor. It should also be noted that with the provision of already planned signalization of the intersection of NYS Route 208 and Mountain Road, the driveway operation will also benefit from the increased gaps in traffic that are created as a result of the traffic signal.

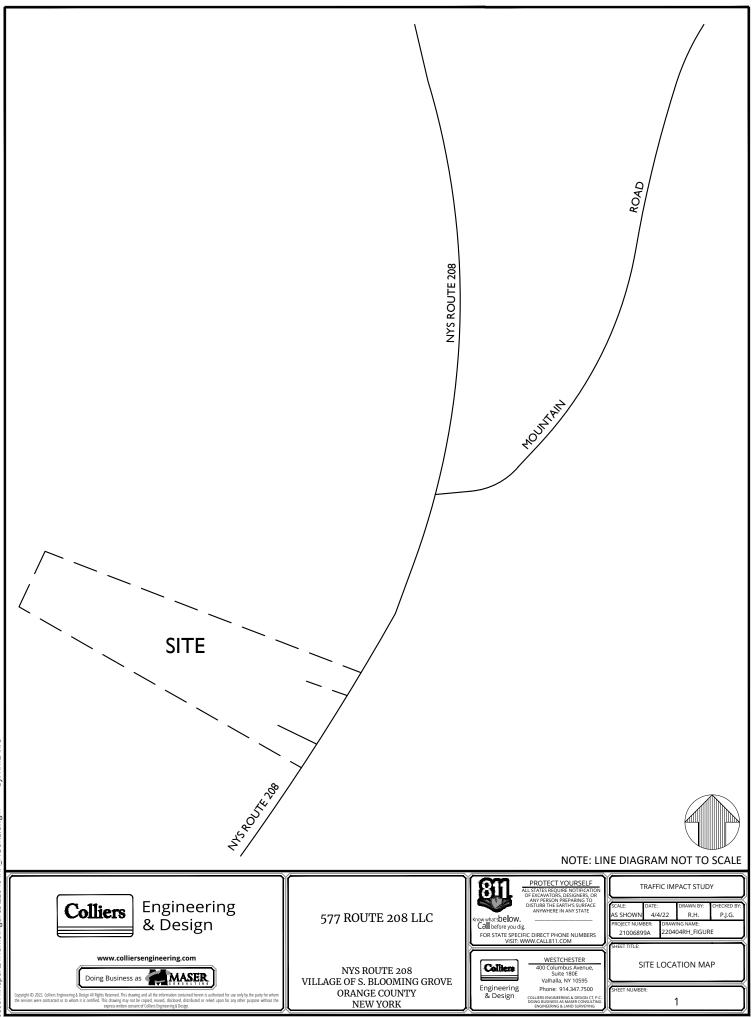


IV. Summary and Conclusion

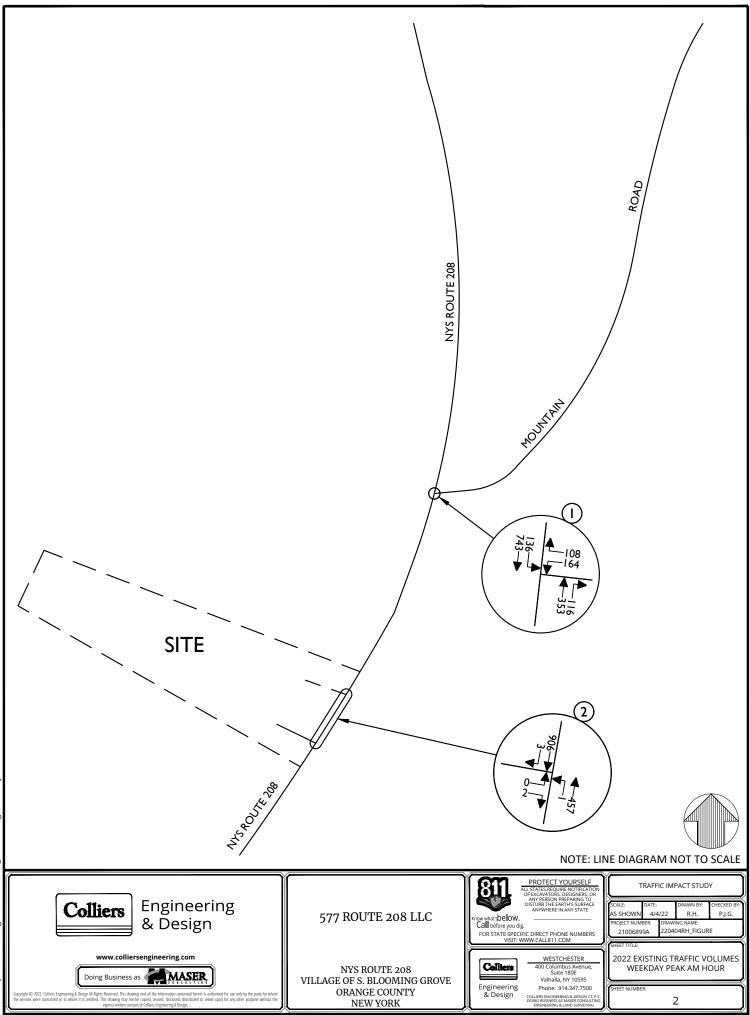
Based on the above analysis, similar Levels of Service and delays will be experienced at the area intersections under the future No-Build and future Build Conditions. Based on the significant through traffic along NYS Route 208, access related improvements including provision of a separate left turn lane on NYS Route 208 will be required. With this improvement and the NYSDOT planned signalization improvements at the NYS Route 208/Mountain Road intersection, the proposed office development traffic is not expected to cause any significant impact in overall operation.

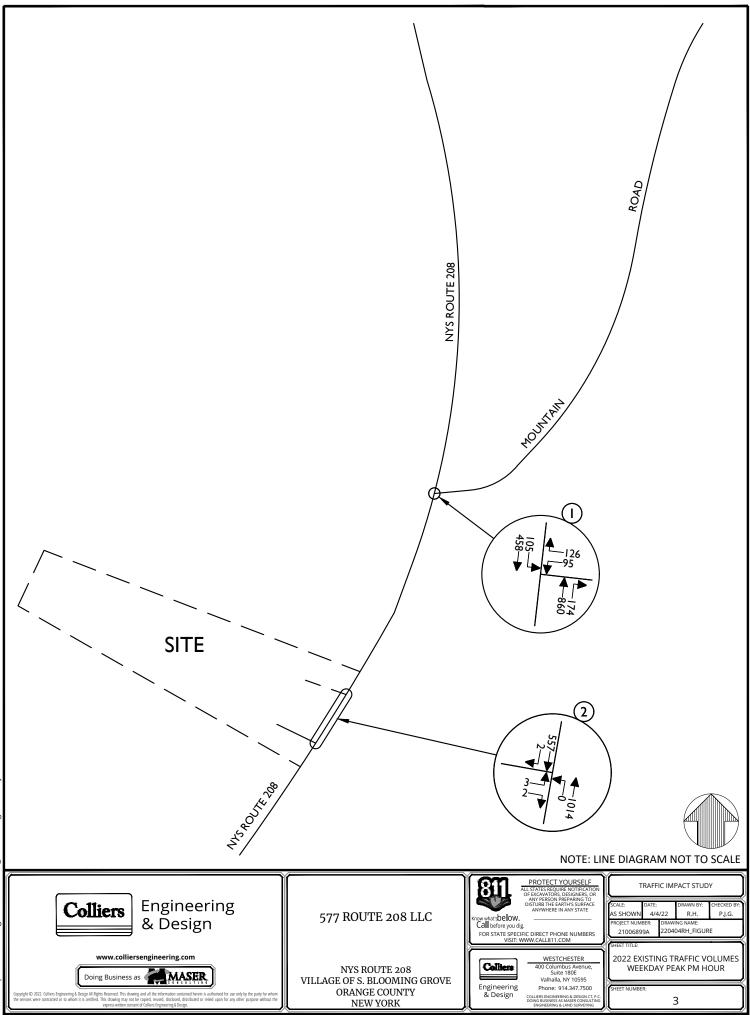


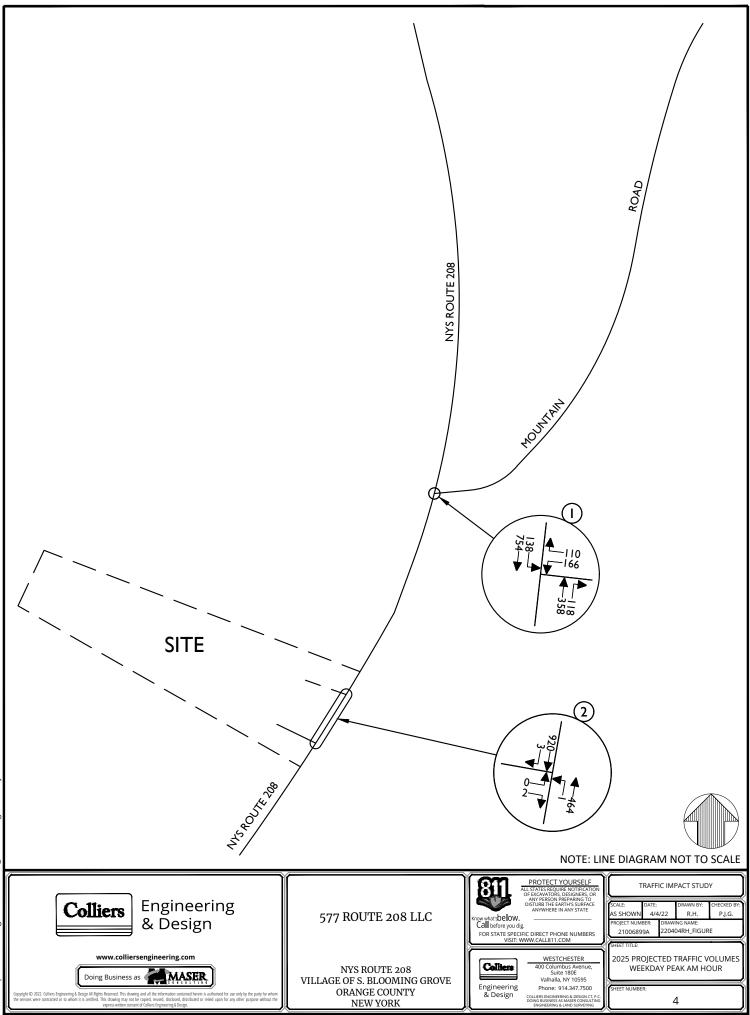
Traffic Impact Study Appendix A | Traffic Figures

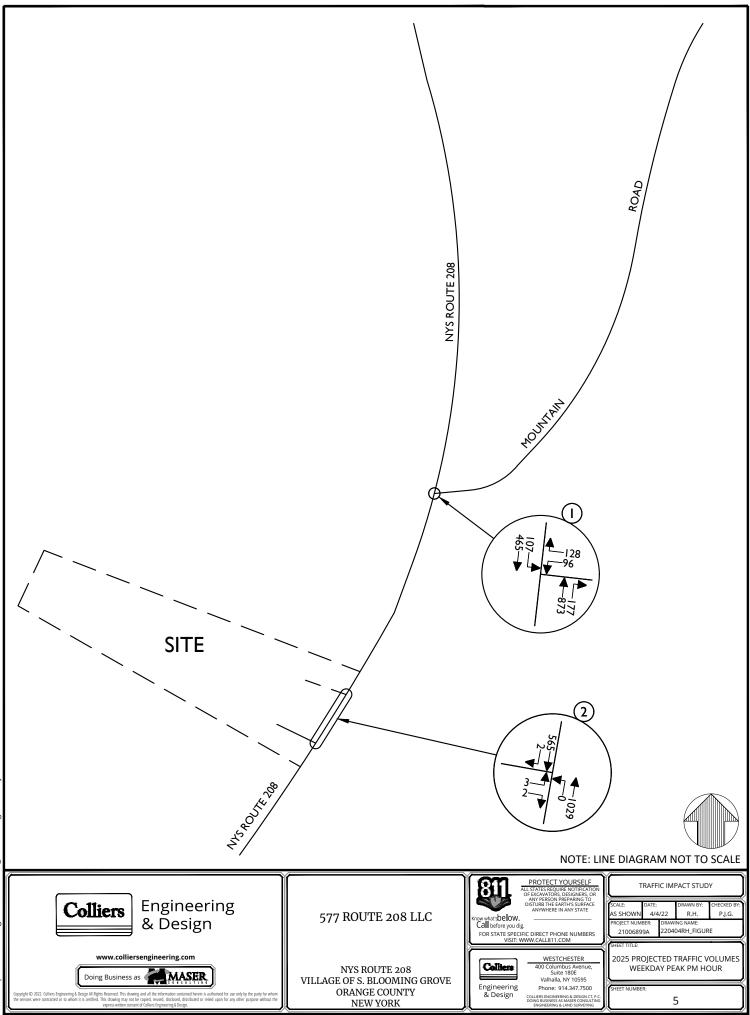


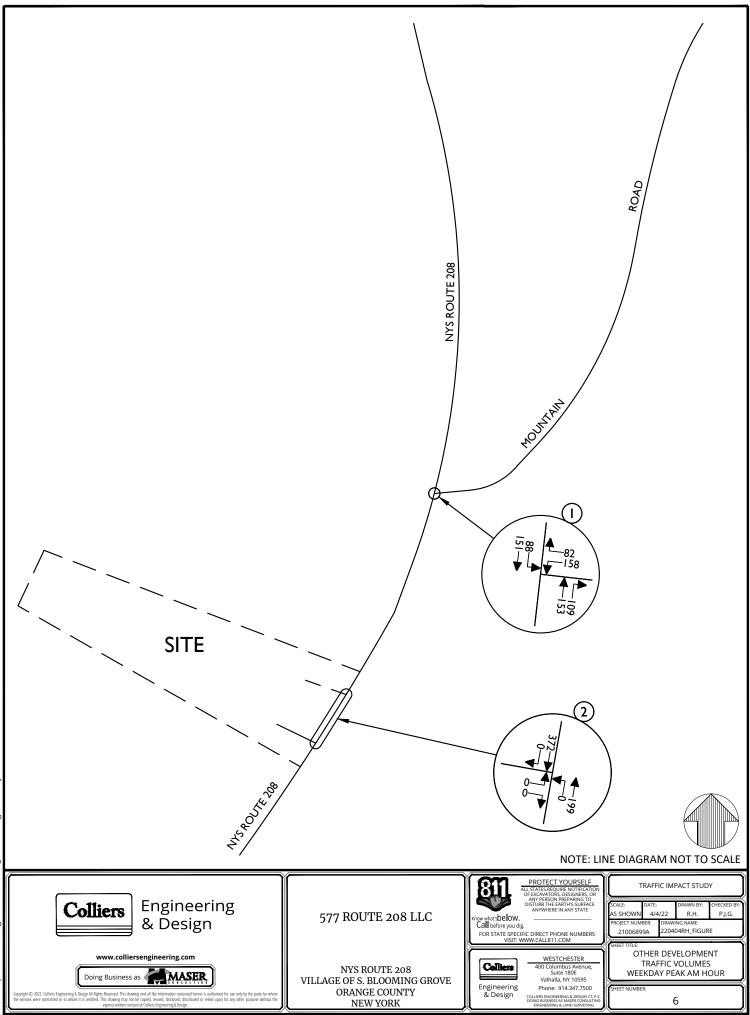
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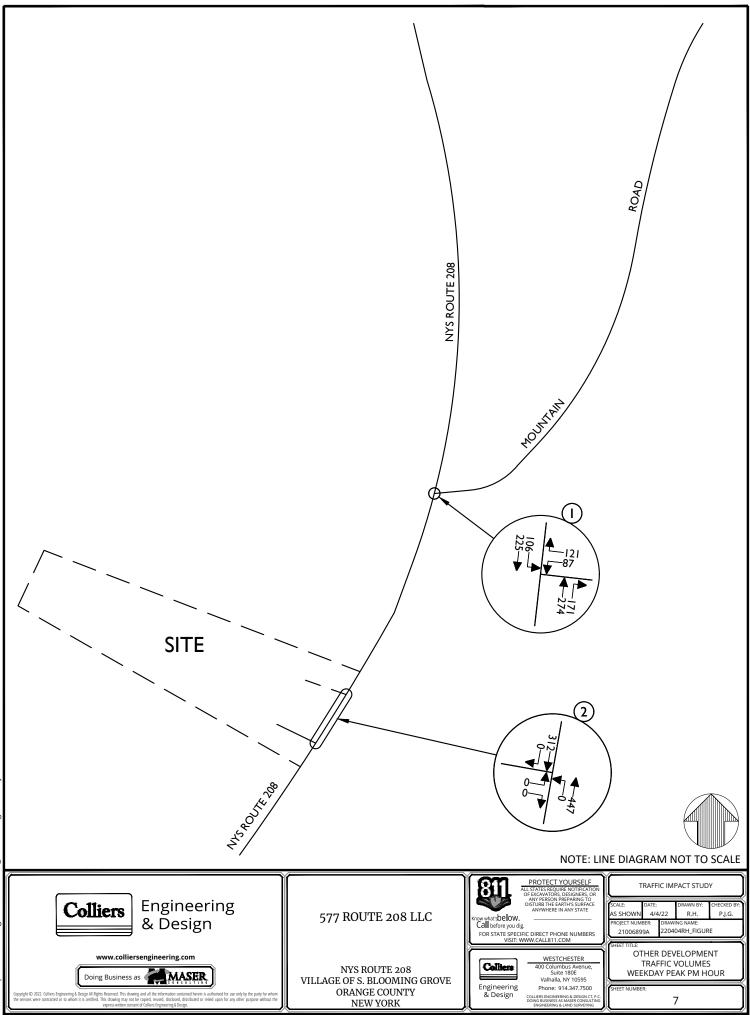


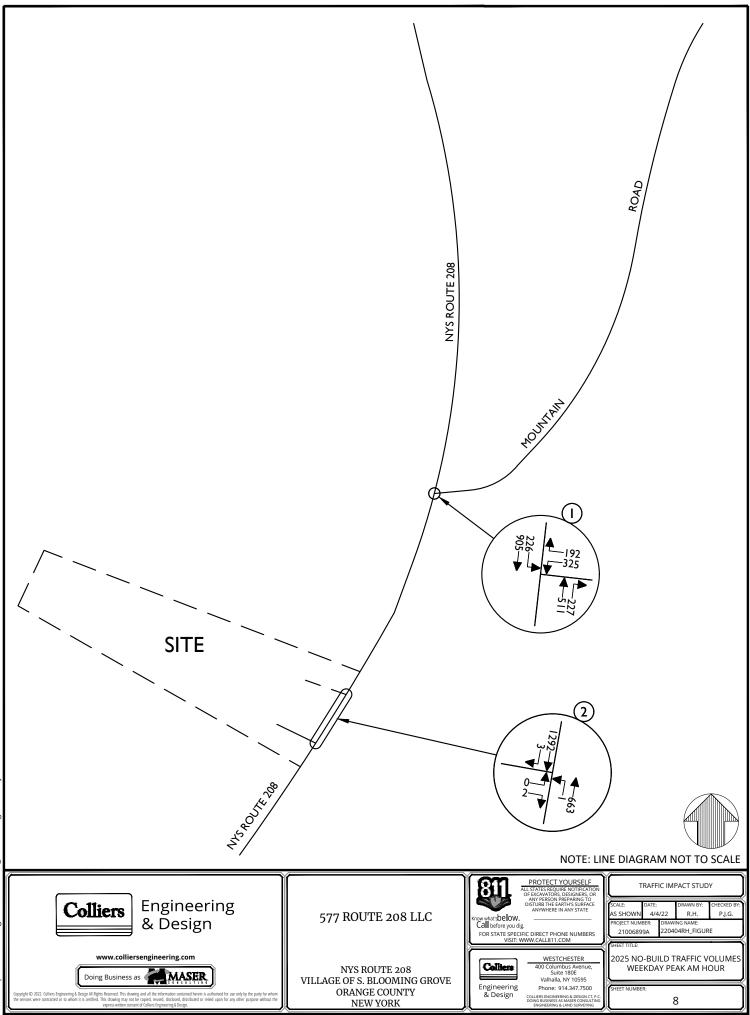


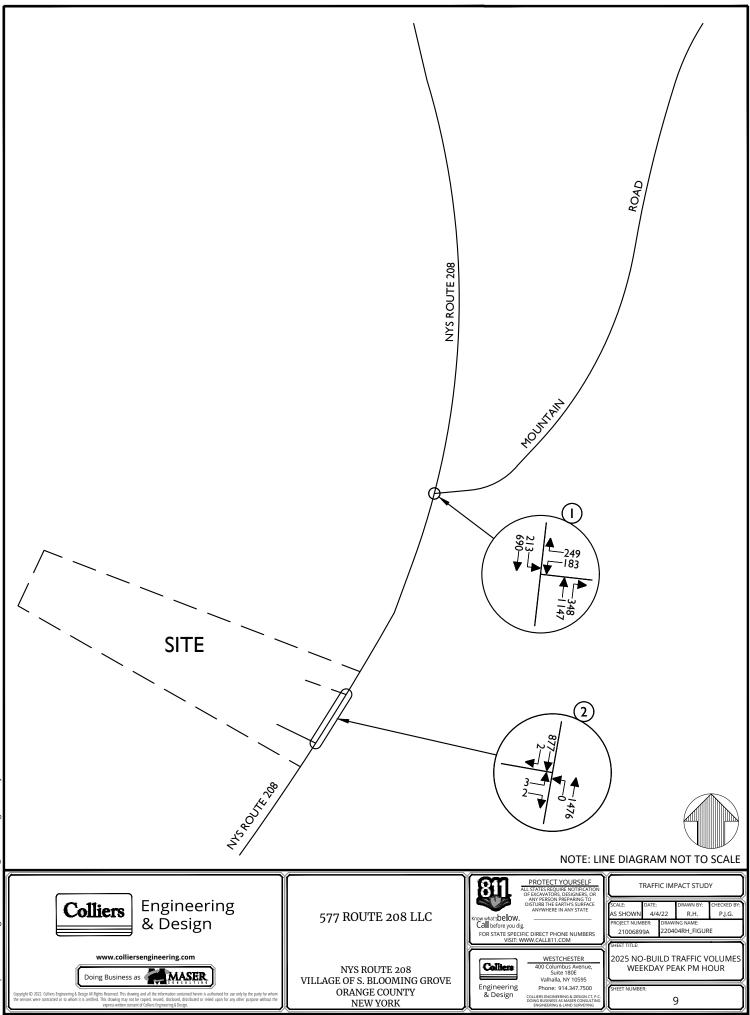


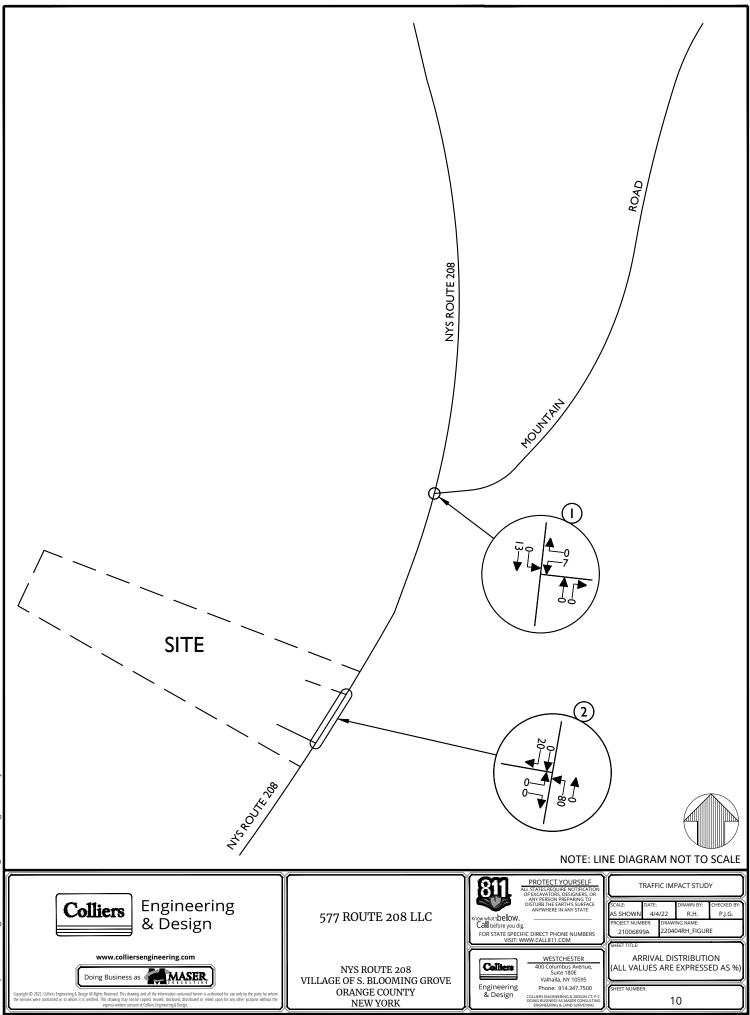


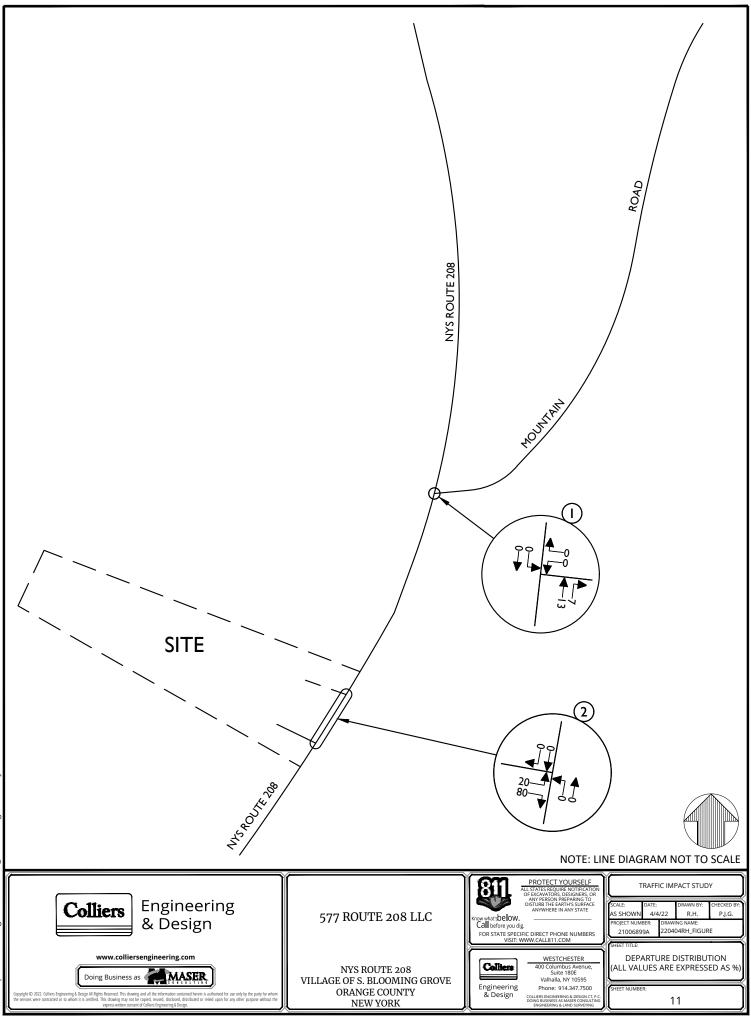


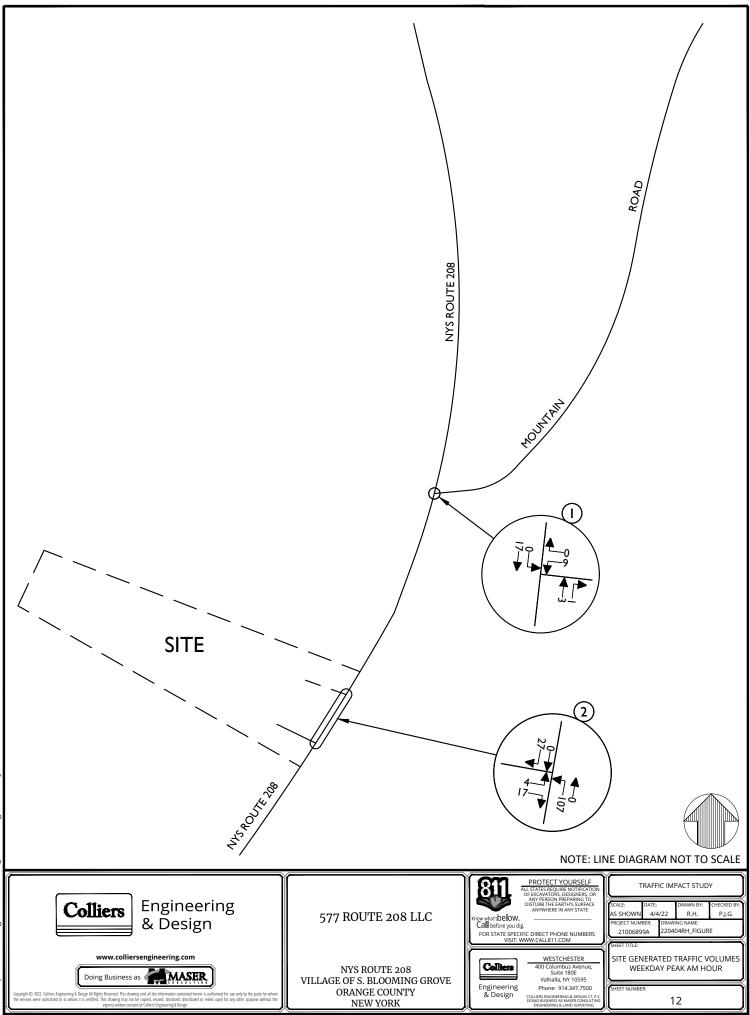




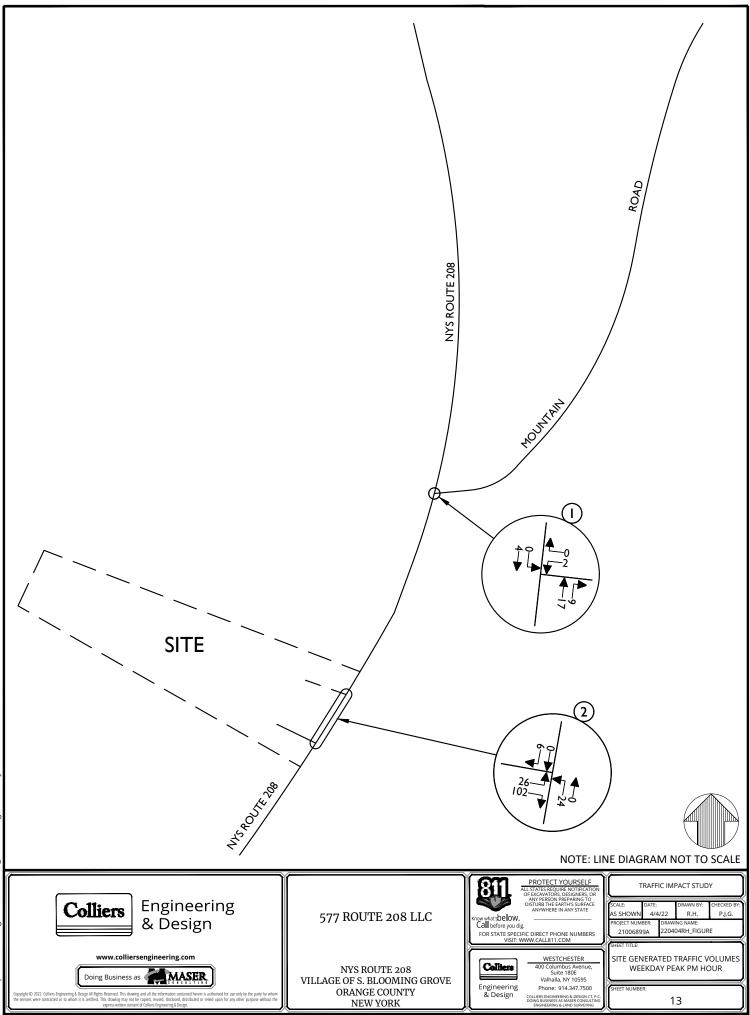




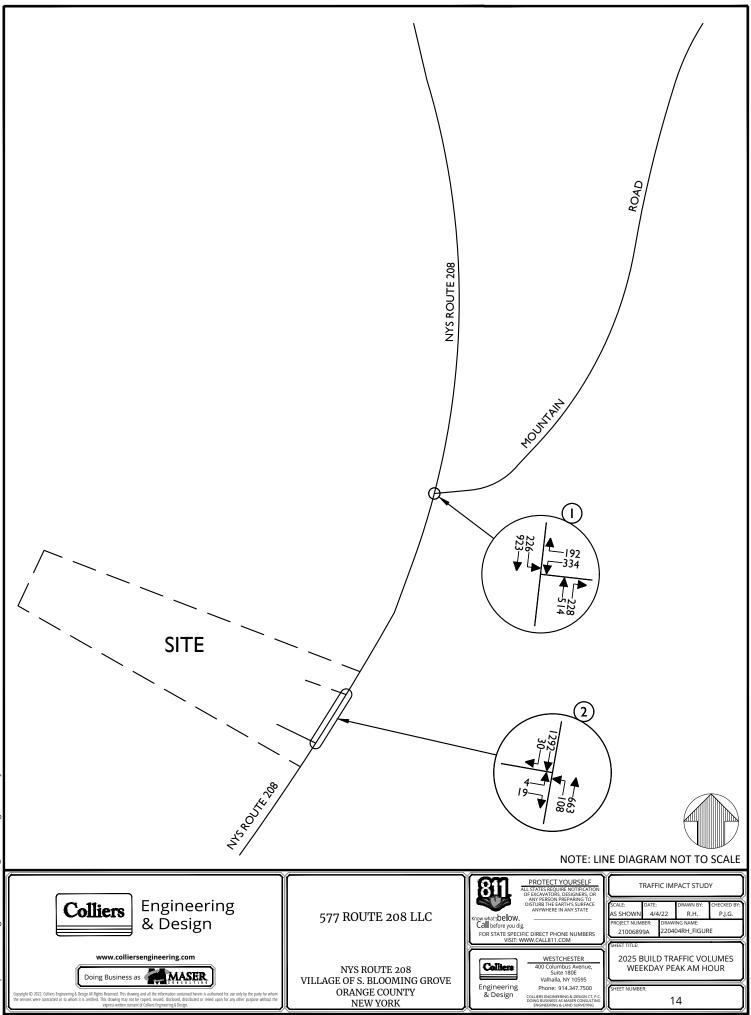


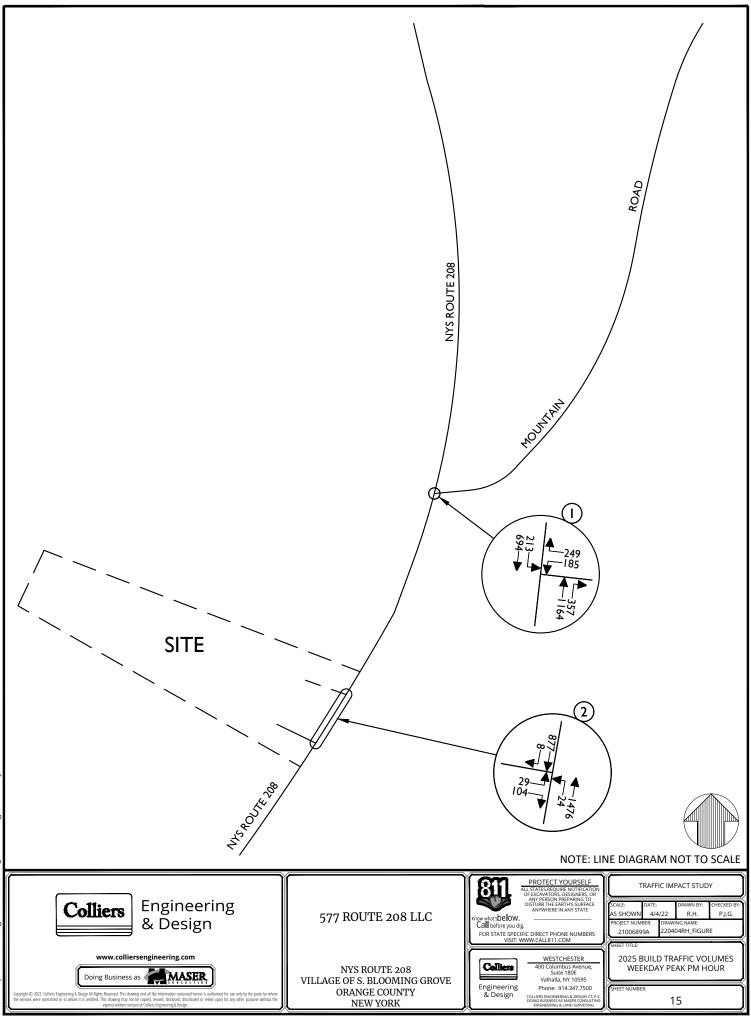


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Traffic Impact Study Appendix B | Tables



Table No. 1 Hourly Trip Generation Rates (HTGR) and Anticipated Site Generated Traffic Volumes

577 Route 208 LLC	En	try	Ex	kit
Village of S. Blooming Grove, NY	HTGR ¹	Volume	HTGR ¹	Volume
New Office (73,920 Sq. Ft.)				
Peak AM Hour	1.54	114	0.21	15
Peak PM Hour	0.30	22	1.45	107
New Warehouse (17,250 s.f.)				
Peak AM Hour	1.15	20	0.34	6
Peak PM Hour	0.46	8	1.19	21
TOTAL				
Peak AM Hour		134		21
Peak PM Hour		30		128

NOTES:

1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 11TH EDITION, 2021. BASED ON REVIEW OF ITE LAND USE CODE - 710 - GENERAL OFFICE BUILDING AND ITE LAND USE CODE - 150 - WAREHOUSE.

NYS Route 208 &					2022 Existing		2025 No-Build					
NYS Route 208 &			v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
	Unsigna	alized										
Mountain Road												
Mountain Road	WB	LR	0.94	F	74.1	5.79	F	N/A	6.36	F	N/A	-
NYS Route 208	SB	LT	0.14	А	9.2	0.31	В	11.6	0.31	В	11.7	-
Geometric Improvements & Signaliz	zation											
Mountain Road	WB	L	-	-	-	0.87	D	52.6	0.87	D	53.1	0.5
		R	-	-	-	0.41	D	36.0	0.40	D	35.5	-0.5
NYS Route 208	NB	Т	-	-	-	0.58	С	23.9	0.59	С	24.0	0.1
		R	-	-	-	0.25	А	7.6	0.25	А	7.4	-0.2
NYS Route 208	SB	L	-	-	-	0.63	В	18.5	0.63	В	18.6	0.1
		Т	-	-	-	0.82	С	24.2	0.84	С	25.2	1.0
	Over	all	-	-	-	-	C	26.8	-	C	27.3	0.5
NYS Route 208 &	Unsigna	alized										
Existing Site Driveway												
Existing Site Driveway	EB	LR	0.01	С	20.6	0.02	D	34.5	0.42	F	103.8	69.3
NYS Route 208	NB	LT	0.00	В	10.1	0.00	В	12.2	0.24	В	14.7	2.5
Separate Left Turn Lane on NYS Rou	<u>ute 208</u>											
Existing Site Driveway	EB	LR	-	-	-	-	-	-	0.22	E	45.9	-
NYS Route 208	NB	LT	-	-	-	-	-	-	0.24	В	14.7	-
	Mountain Road NYS Route 208 Geometric Improvements & Signali Mountain Road NYS Route 208 NYS Route 208 NYS Route 208 Existing Site Driveway NYS Route 208 Existing Site Driveway NYS Route 208 Separate Left Turn Lane on NYS Rou Existing Site Driveway	Mountain Road WB NYS Route 208 SB Geometric Improvements & Signalization Mountain Road WB NYS Route 208 NB NYS Route 208 SB Over NYS Route 208 & Unsigna Existing Site Driveway EB NYS Route 208 NB Separate Left Turn Lane on NYS Route 208 Existing Site Driveway EB	Mountain Road WB LR NYS Route 208 SB LT Geometric Improvements & Signalization Mountain Road WB L R NYS Route 208 NB T R NYS Route 208 SB L T Overal NYS Route 208 & SB L T Overal SE LT Existing Site Driveway EB LR NYS Route 208 NB LT	Mountain Road NYS Route 208WB SBLR LT0.94 0.14Geometric Improvements & SignalizationMountain RoadWBL R- RNYS Route 208NBT R- RNYS Route 208SBL R- RNYS Route 208SBL R- RNYS Route 208SBL T- RNYS Route 208SBL C- TNYS Route 208 & Existing Site DrivewayUnsignalized R- CExisting Site DrivewayEB NBLR O.000.01 O.00Separate Left Turn Lane on NYS Route 208ER R- CExisting Site DrivewayEB RLR-Existing Site DrivewayEB RLR-Existing Site DrivewayEB RLR-	Mountain Road NYS Route 208WB SBLR LT0.94 0.14F AGeometric Improvements & SignalizationMountain RoadWB RL R- - - R- - - - - R- - - - - - - R- - - - - - - - - - - - 	Mountain Road NYS Route 208WB SBLR LT0.94 0.14F A74.1 9.2Geometric Improvements & SignalizationNM Mountain RoadL R- - CMountain RoadWBL R- NYS Route 208NB SBT R- NYS Route 208SB C TL NYS Route 208SB C TL NYS Route 208SB C TL NYS Route 208SB C TL NYS Route 208 & Existing Site DrivewayEB NBLR LT0.01 0.00C C 20.6 B20.6 10.1Separate Left Turn Lane on NYS Route 208EB NBLRExisting Site DrivewayEB NBLRExisting Site DrivewayEB NBLRExisting Site DrivewayEB NBLRSeparate Left Turn Lane on NYS Route 208EB NBLR	Mountain Road NYS Route 208WB SBLR LT0.94 0.14F A74.1 9.25.79 0.31Geometric Improvements & SignalizationMountain Road RWB RL0.87 0.41Mountain Road NYS Route 208WB RL0.87 0.41NYS Route 208 NBNB TT0.41 0.58R0.58 0.25R-0.58 0.25NYS Route 208 NBSB TL0.63 0.82T0.63 0.82-0.63 0.82NYS Route 208 &Unsignalized T0.82 0.82NYS Route 208 &Unsignalized NB0.02 0.00NYS Route 208 &EB NBLR0.01 0.00C B20.6 10.10.02 0.00Separate Left Turn Lane on NYS Route 208 Existing Site DrivewayEB EB LRExisting Site DrivewayEB NBLR	Mountain Road WB LR 0.94 F 74.1 5.79 F Seometric Improvements & Signalization Image: Construct of the second of	Mountain Road NYS Route 208 WB SB LR LT 0.94 F 74.1 5.79 F N/A Geometric Improvements & Signalization N LT 0.14 A 9.2 0.31 B 11.6 Mountain Road WB L 0.87 D 52.6 Mountain Road WB L 0.41 D 36.0 NYS Route 208 NB T 0.58 C 23.9 NYS Route 208 NB T 0.63 B 18.5 NYS Route 208 SB L 0.63 B 18.5 NYS Route 208 & SB L 0.82 C 24.2 Overal - 6.5 0.82 C 24.2 Separate 208 & LT 0.01 C 20.6 0.02 D 34.5 NYS Route 208 N	Mountain Road NYS Route 208 WB SB LR LT 0.94 0.14 F 74.1 5.79 0.31 F N/A 6.36 0.31 Geometric Improvements & Signalization V L - - - - 0.31 B 11.6 0.31 Mountain Road WB L - - - 0.87 D 52.6 0.87 Mountain Road WB L - - - 0.41 D 36.0 0.40 NYS Route 208 NB T - - 0.58 C 23.9 0.59 R - - 0.41 D 36.0 0.40 NYS Route 208 NB T - - 0.58 C 23.9 0.59 R - - - 0.63 B 18.5 0.63 R - - - 0.82 C 24.2 0.84 Existing Site Driveway EB LR	Mountain Road NYS Route 208 WB SB LR LT 0.94 0.14 F A 74.1 9.2 5.79 0.31 F B N/A 6.36 6.36 F B Geometric Improvements & Signalization VB L - - 0.31 B 11.6 0.31 B Mountain Road WB L - - 0.87 D 52.6 0.87 D Mountain Road WB L - - 0.41 D 36.0 0.40 D NYS Route 208 NB T - - 0.58 CC 23.9 0.59 C NYS Route 208 SB L - - 0.63 B 18.5 0.63 B NYS Route 208 & SB L - - - 0.63 B 18.5 0.42 C NYS Route 208 & R Unsignalized T - - 0.22 24.2 0.24 F Existing Site Driveway EB LR	Mountain Road NYS Route 208 WB SB LR SB 0.94 LT F 0.14 74.1 A 5.79 9.2 F 0.31 N/A 6.36 11.6 F 0.31 N/A Geometric Improvements & Signalization VB L - - - 0.31 B 11.6 0.31 B 11.7 Geometric Improvements & Signalization VB L - - - 0.87 D 52.6 0.87 D 53.1 Mountain Road WB L - - 0.25 A 7.6 <

Table No. 2 Level of Service Summary Table Weekday Peak AM Hour

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

2) THE N/A DELAY REPRESENTS RESULTS OVER 200 SECOND DELAY.

Table No. 2 Level of Service Summary Table Weekday Peak PM Hour

				2022 Existing		2025 No-Build			2025 Build			Change in Delay	
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	No-Build to Build
1	NYS Route 208 &	Unsign	alized										
	Mountain Road												
	Mountain Road	WB	LR	0.87	F	66.3	28.42	F	N/A	50.76	F	N/A	-
	NYS Route 208	SB	LT	0.18	В	12.1	0.56	С	24.9	0.58	D	26.0	-
	W/ Geometric Improvements & Signali	zation											
	Mountain Road	WB	L	-	-	-	0.62	D	49.6	0.62	D	49.8	0.2
			R	-	-	-	0.60	D	42.7	0.60	D	42.6	-0.1
	NYS Route 208	NB	Т	-	-	-	0.93	С	31.4	0.94	С	33.7	2.3
			R	-	-	-	0.27	А	3.8	0.28	Α	3.9	0.1
	NYS Route 208	SB	L	-	-	-	0.90	E	68.2	0.92	E	77.1	8.9
			Т	-	-	-	0.48	А	6.0	0.48	Α	6.0	0.0
		Ove	rall	-	-	-	-	C	26.8	-	C	28.3	1.5
2	NYS Route 208 & Existing Site Driveway	Unsign	alized										
	Existing Site Driveway NYS Route 208	EB NB	LR LT	0.04 0.00	E A	35.6 0.0	0.15 0.00	F A	125.3 0.0	2.41 0.03	F B	N/A 10.1	- 10.1
	W/ Separate Left Turn Lane on NYS Ro	<u>ute 208</u>											
	Existing Site Driveway NYS Route 208	EB NB	LR LT	-	- -	- -	-	-	- -	0.65 0.03	E A	48.9 9.9	-

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

2) THE N/A DELAY REPRESENTS RESULTS OVER 200 SECOND DELAY.



Traffic Impact Study Appendix C | Level of Service Standards



Level of Service Standards

Level of Service for Signalized Intersections

Level of Service (LOS) can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group.

- LOS A describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
- **LOS B** describes operations with control delay between 10 and 20 s/veh and a volume-tocapacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
- **LOS C** describes operations with control delay between 20 and 35 s/veh and a volume-tocapacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate.
- **LOS D** describes operations with control delay between 35 and 55 s/veh and a volume-tocapacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long.
- **LOS E** describes operations with control delay between 55 and 80 s/veh and a volume-tocapacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long.
- **LOS F** describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long.

A lane group can incur a delay less than 80 s/veh when the volume-to-capacity ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and volume-to-capacity ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 s/veh represents failure from a delay perspective).



The Level of Service Criteria for signalized intersections are given in Exhibit 19-8 from the *Highway Capacity Manual, 6th Edition* published by the Transportation Research Board.

Exhibit 19-8 LOS by Volume-to-Capacity Ratio

Control Delay (s/veh)	v/c ≤ 1.0	v/c ≥ 1.0
≤10	А	F
>10-20	В	F
>20-35	С	F
>35-55	D	F
>55-80	E	F
>80	F	F

For approach-based and intersection wide assessments, LOS is defined solely by control delay.



Level of Service Criteria For Two-Way Stop-Controlled (TWSC) Unsignalized Intersections

Level of Service (LOS) for a two-way stop-controlled (TWSC) intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns. LOS is not defined for the intersection as a whole or for major-street approaches.

The Level of Service Criteria for TWSC unsignalized intersections are given in Exhibit 20-2 from the Highway Capacity Manual, 6th Edition published by the Transportation Research Board.

Control Delay (s/veh)	v/c ≤ 1.0	v/c ≥ 1.0
0-10	А	F
>10-15	В	F
>15-25	С	F
>25-35	D	F
>35-50	E	F
>50	F	F

Exhibit 20-2 LOS by Volume-to-Capacity Ratio

The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

As Exhibit 20-2 notes, LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

The Level of Service Criteria for unsignalized intersections are somewhat different from the criteria for signalized intersections.



Level of Service Criteria For All-Way Stop-Controlled (AWSC) Unsignalized Intersections

The Levels of Service (LOS) for all-way stop-controlled (AWSC) intersections are given in Exhibit 21-8. As the exhibit notes, LOS F is assigned if the volume-to-capacity (v/c) ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

The Level of Service Criteria for AWSC unsignalized intersections are given in Exhibit 21-8 from the *Highway* Capacity *Manual, 6th Edition* published by the Transportation Research Board.

Control Delay (s/veh)	v/c ≤ 1.0	v/c ≥ 1.0
0-10	А	F
>10-15	В	F
>15-25	С	F
>25-35	D	F
>35-50	E	F
>50	F	F

Exhibit 21-8 LOS by Volume-to-Capacity Ratio

For approaches and intersection wide assessment, LOS is defined solely by control delay.



Traffic Impact Study Appendix D | Capacity Analysis

Traffic Impact Study | Appendices

2022 Existing Traffic Volumes 1: NYS Route 208 & Mountain Rd

	4	•	1	1	1	Ļ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		ţ,			et.
Traffic Volume (vph)	164	108	353	116	136	743
Future Volume (vph)	164	108	353	116	136	743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	12	12
Grade (%)	-10%		-2%			-1%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.946		0.967			
Flt Protected	0.971					0.992
Satd. Flow (prot)	1631	0	1657	0	0	1761
Flt Permitted	0.971					0.992
Satd. Flow (perm)	1631	0	1657	0	0	1761
Link Speed (mph)	40		55			55
Link Distance (ft)	628		503			2244
Travel Time (s)	10.7		6.2			27.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	11%	9 %	21%	16%	6%
Adj. Flow (vph)	173	114	372	122	143	782
Shared Lane Traffic (%)						
Lane Group Flow (vph)	287	0	494	0	0	925
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.98	0.94	0.99	0.99	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type: C)ther					
Control Type: Unsignalized						

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Intersection Int Delay, s/veh 13.2 Movement WBL WBR NBT NBR SBT SBL Lane Configurations Y Þ 4 Traffic Vol, veh/h 164 353 136 743 108 116 Future Vol, veh/h 164 108 353 116 136 743 Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free **RT** Channelized None None None ---0 Storage Length -Veh in Median Storage, # 0 0 0 ---Grade, % -10 -2 -1 ---Peak Hour Factor 95 95 95 95 95 95 Heavy Vehicles, % 7 11 9 21 16 6 Mvmt Flow 173 114 372 122 143 782

Major/Minor N	Minor1	Ν	/lajor1	Ν	Najor2	
Conflicting Flow All	1501	433	0	0	494	0
Stage 1	433		-	-	-	-
Stage 2	1068	-	-	-	-	-
Critical Hdwy	4.47	5.31	-	-	4.26	-
Critical Hdwy Stg 1	3.47	-	-	-	-	-
Critical Hdwy Stg 2	3.47	-	-	-	-	-
	3.563	3.399	-	-	2.344	-
Pot Cap-1 Maneuver	301	681	-	-	1001	-
Stage 1	818	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	225	681	-	-	1001	-
Mov Cap-2 Maneuver	225	-	-	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s			0		1.4	
HCM LOS	F		0		1.4	
HOW LOS	1					
Minor Lane/Major Mvn	nt	NBT	NBRW		SBL	SBT
Capacity (veh/h)		-	-	306	1001	-
HCM Lane V/C Ratio		-	- (0.936		-
HCM Control Delay (s	;)	-	-	74.1	9.2	0
HCM Lane LOS		-	-	F	А	А
HCM 95th %tile Q(veh	h)	-	-	9.2	0.5	-

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2022 Existing Traffic Volumes 2: NYS Route 208 & Existing Site Driveway

	٠	7	1	t	ţ	~
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			et.	Þ	
Traffic Volume (vph)	0	2	1	457	906	3
Future Volume (vph)	0	2	1	457	906	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12
Grade (%)	3%			-5%	6%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected						
Satd. Flow (prot)	1043	0	0	1712	1664	0
Flt Permitted						
Satd. Flow (perm)	1043	0	0	1712	1664	0
Link Speed (mph)	30			45	45	
Link Distance (ft)	123			414	503	
Travel Time (s)	2.8			6.3	7.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	50%	2%	10%	7%	33%
Adj. Flow (vph)	0	2	1	486	964	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2	0	0	487	967	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	0.97	1.01	1.09	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type: C	Other					
Control Type: Unsignalized						

Job# 21006899A - R.H.

Intersection

Int Delay, s/veh 0

ini Delay, siven	0						
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	Y			ŧ	t,		
Traffic Vol, veh/h	0	2	1	457	906	3	}
Future Vol, veh/h	0	2	1	457	906	3	
Conflicting Peds, #/hr	0	0	0	0	0	0)
Sign Control	Stop	Stop	Free	Free	Free	Free	•
RT Channelized	-	None	-	None	-	None	2
Storage Length	0	-	-	-	-	-	
Veh in Median Storage	e, # 0	-	-	0	0	-	
Grade, %	3	-	-	-5	6	-	
Peak Hour Factor	94	94	94	94	94	94	ł
Heavy Vehicles, %	2	50	2	10	7	33	
Mvmt Flow	0	2	1	486	964	3	

Major/Minor	Minor2	Ν	Major1	Ν	1ajor2		
Conflicting Flow All	1454	966	967	0	-	0	
Stage 1	966	-	-	-	-	-	
Stage 2	488	-	-	-	-	-	
Critical Hdwy	7.02	7	4.12	-	-	-	
Critical Hdwy Stg 1	6.02	-	-	-	-	-	
Critical Hdwy Stg 2	6.02	-	-	-	-	-	
Follow-up Hdwy	3.518	3.75	2.218	-	-	-	
Pot Cap-1 Maneuver	113	233	712	-	-	-	
Stage 1	314	-	-	-	-	-	
Stage 2	569	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuve	r 113	233	712	-	-	-	
Mov Cap-2 Maneuve	r 113	-	-	-	-	-	
Stage 1	313	-	-	-	-	-	
Stage 2	569	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay,	s 20.6		0		0		
HCM LOS	С						
Minor Lane/Major Mv	rmt	NBL	NBTE	EBLn1	SBT	SBR	
Capacity (veh/h)		712	-	233	-	-	

Capacity (veh/h)	/12	- 233	-	-	
HCM Lane V/C Ratio	0.001	- 0.009	-	-	
HCM Control Delay (s)	10.1	0 20.6	-	-	
HCM Lane LOS	В	A C	-	-	
HCM 95th %tile Q(veh)	0	- 0	-	-	

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2022 Existing Traffic Volumes 1: NYS Route 208 & Mountain Rd

	4	×	1	1	1	Ļ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		ħ			र्स
Traffic Volume (vph)	95	126	860	174	105	458
Future Volume (vph)	95	126	860	174	105	458
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	12	12
Grade (%)	-10%		-2%			-1%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.923		0.977			
Flt Protected	0.979					0.991
Satd. Flow (prot)	1642	0	1838	0	0	1832
Flt Permitted	0.979					0.991
Satd. Flow (perm)	1642	0	1838	0	0	1832
Link Speed (mph)	40		55			55
Link Distance (ft)	628		503			2244
Travel Time (s)	10.7		6.2			27.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	7%	2%	2%	9 %	2%
Adj. Flow (vph)	100	133	905	183	111	482
Shared Lane Traffic (%)						
Lane Group Flow (vph)	233	0	1088	0	0	593
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.98	0.94	0.99	0.99	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type: C	Other					
Control Type: Unsignalized						

Intersection Int Delay, s/veh 8.8 Movement WBL WBR NBT NBR SBT SBL Lane Configurations Y Þ 4 Traffic Vol, veh/h 95 126 860 105 458 174 Future Vol, veh/h 95 126 860 174 105 458 Conflicting Peds, #/hr 0 0 0 0 0 0 Stop Sign Control Stop Free Free Free Free **RT** Channelized None None None ---0 Storage Length -Veh in Median Storage, # 0 0 0 ---Grade, % -2 -10 -1 ---Peak Hour Factor 95 95 95 95 95 95 Heavy Vehicles, % 5 7 2 2 9 2 Mvmt Flow 100 133 905 183 111 482

Major/Minor I	Minor1	Ν	/lajor1	Ν	/lajor2	
Conflicting Flow All	1701	997	0		1088	0
Stage 1	997	-	-	-	-	-
Stage 2	704	-	-	-	-	-
Critical Hdwy	4.45	5.27	-	-	4.19	-
Critical Hdwy Stg 1	3.45	-	-	-	-	-
Critical Hdwy Stg 2	3.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.363	-	-	2.281	-
Pot Cap-1 Maneuver	256	382	-	-	616	-
Stage 1	613	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver		382	-	-	616	-
Mov Cap-2 Maneuver		-	-	-	-	-
Stage 1	613	-	-	-	-	-
Stage 2	541	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	5 66.3		0		2.3	
HCM LOS	F					
Minor Lane/Major Mv	mt	NBT	NBRW	/RI n1	SBL	SBT
Capacity (veh/h)	mt	NDT	NDIW	269	616	301
HCM Lane V/C Ratio		-	-	0.865		-
HCM Control Delay (s		-	-	66.3	12.1	0
HCM Lane LOS	2)	-	-	00.3 F	12.1 B	A
HCM 95th %tile Q(ve	h)	-	-	7.3	0.6	-
				1.5	0.0	

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2022 Existing Traffic Volumes 2: NYS Route 208 & Existing Site Driveway

	٠	*	1	Ť	Ļ	~
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			र्स	Þ	
Traffic Volume (vph)	3	2	0	1014	557	2
Future Volume (vph)	3	2	0	1014	557	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	11	12
Grade (%)	3%			-5%	6%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.946					
Flt Protected	0.971					
Satd. Flow (prot)	1629	0	0	1828	1747	0
Flt Permitted	0.971					
Satd. Flow (perm)	1629	0	0	1828	1747	0
Link Speed (mph)	30			45	45	
Link Distance (ft)	158			414	503	
Travel Time (s)	3.6			6.3	7.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%
Adj. Flow (vph)	3	2	0	1067	586	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	0	0	1067	588	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.02	0.97	1.01	1.09	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type: C	Other					
Control Type: Unsignalized						

Job# 21006899A - R.H.

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	ħ	
Traffic Vol, veh/h	3	2	0	1014	557	2
Future Vol, veh/h	3	2	0	1014	557	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	e, # 0	-	-	0	0	-
Grade, %	3	-	-	-5	6	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	3	2	2
Mvmt Flow	3	2	0	1067	586	2

Major/Minor I	Minor2	1	Major1	N	1ajor2	
Conflicting Flow All	1654	587	588	0	-	0
Stage 1	587	-	-	-	-	-
Stage 2	1067	-	-	-	-	-
Critical Hdwy	7.02	6.52	4.12	-	-	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy		3.318	2.218	-	-	-
Pot Cap-1 Maneuver		485	987	-	-	-
Stage 1	504	-	-	-	-	-
Stage 2	277	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver		485	987	-	-	-
Mov Cap-2 Maneuver		-	-	-	-	-
Stage 1	504	-	-	-	-	-
Stage 2	277	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	35.6		0		0	
HCM LOS	Е					
Minor Lane/Major Mv	mt	NBL	NDT	EBLn1	SBT	SBR
						JDK
Capacity (veh/h) HCM Lane V/C Ratio		987	-	123 0.043	-	-
HCM Control Delay (s		- 0	-	35.6	-	-
HCM Lane LOS	5)	A	-	35.0 E	-	-
HCM 95th %tile Q(ve	h)	0	-	0.1	-	-
	11/	0	-	0.1	-	-

Job# 21006899A - R.H.

	4	×	1	1	1	Ļ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		ħ			é.
Traffic Volume (vph)	325	192	511	227	226	905
Future Volume (vph)	325	192	511	227	226	905
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	12	12
Grade (%)	-10%		-2%			-1%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.950		0.958			
Flt Protected	0.970					0.990
Satd. Flow (prot)	1638	0	1631	0	0	1750
Flt Permitted	0.970					0.990
Satd. Flow (perm)	1638	0	1631	0	0	1750
Link Speed (mph)	40		55			55
Link Distance (ft)	628		503			2244
Travel Time (s)	10.7		6.2			27.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	11%	9 %	21%	16%	6%
Adj. Flow (vph)	342	202	538	239	238	953
Shared Lane Traffic (%)						
Lane Group Flow (vph)	544	0	777	0	0	1191
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.98	0.94	0.99	0.99	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type: C)ther					
Control Type: Unsignalized						

Delay, s/veh						
	487.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y	WBR	4	NDR		<u>اردی</u>
Traffic Vol, veh/h	325	192	511	227	226	905
Future Vol, veh/h	325	192	511	227	226	905
Conflicting Peds, #/h		0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- Stop	None	-	None	-	None
Storage Length	0	NULLE -	-	NUNC -	-	NULLE
0 0	-		-		-	0
Veh in Median Stora	•	-	0	-	-	
Grade, %	-10	-	-2	-	-	-1
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	7	11	9	21	16	6
Mvmt Flow	342	202	538	239	238	953
Major/Minor	Minor1	Ν	/lajor1	٨	Iniar?	
					/lajor2	
Conflicting Flow All	2087	658	0	0	777	0
Stage 1	658	-	-	-	-	-
Stage 2	1429	-	-	-	-	-
Critical Hdwy	4.47	5.31	-	-	4.26	-
Critical Hdwy Stg 1	3.47	-	-	-	-	-
Critical Hdwy Stg 2	3.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.399	-	-	2.344	-
Pot Cap-1 Maneuver		539	-	-	780	_
Stage 1	729	-	-	-	-	
Stage 2	476					_
	470	-	-	-	-	
Platoon blocked, %	(0	500	-	-	700	-
Mov Cap-1 Maneuve		539	-	-	780	-
Mov Cap-2 Maneuve		-	-	-	-	-
Stage 1	729	-	-	-	-	-
Stage 2	~ 168	-	-	-	-	-
A mana a ah					CD	
Approach	WB		NB		SB	
			0		2.3	
HCM Control Delay\$	-					
	F					
HCM Control Delay\$	F					
HCM Control Delay\$ HCM LOS		NDT				ODT
HCM Control Delay\$ HCM LOS Minor Lane/Major My		NBT	NBRM		SBL	SBT
HCM Control Delay\$ HCM LOS Minor Lane/Major My Capacity (veh/h)	vmt	NBT -	-	94	780	SBT -
HCM Control Delay\$ HCM LOS Minor Lane/Major My	vmt	NBT -	-		780	SBT -
HCM Control Delay\$ HCM LOS Minor Lane/Major My Capacity (veh/h) HCM Lane V/C Ratio	vmt D	-	-	94	780	<u>SBT</u> - - 0
HCM Control Delay\$ HCM LOS Minor Lane/Major My Capacity (veh/h)	vmt D	-	-	94 5.789	780 0.305	-
HCM Control Delay\$ HCM LOS Minor Lane/Major My Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (HCM Lane LOS	vmt D (s)	-	- - \$-2	94 5.789 243.9 F	780 0.305 11.6 B	- - 0
HCM Control Delay\$ HCM LOS Minor Lane/Major My Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (HCM Lane LOS HCM 95th %tile Q(ve	vmt D (s)	-	- - \$-2	94 5.789 243.9	780 0.305 11.6	- - 0 A
HCM Control Delay\$ HCM LOS Minor Lane/Major My Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (HCM Lane LOS	vmt D (s)	-	- - \$-2	94 5.789 243.9 F	780 0.305 11.6 B	- - 0 A

2025 No-Build Traffic Volumes 2: NYS Route 208 & Existing Site Driveway

	٠	1	•	t	ţ	~
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			ą	Þ	
Traffic Volume (vph)	0	2	1	663	1292	3
Future Volume (vph)	0	2	1	663	1292	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12
Grade (%)	3%			-5%	6%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected						
Satd. Flow (prot)	1043	0	0	1712	1664	0
Flt Permitted						
Satd. Flow (perm)	1043	0	0	1712	1664	0
Link Speed (mph)	30			45	45	
Link Distance (ft)	123			414	503	
Travel Time (s)	2.8			6.3	7.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	50%	2%	10%	7%	33%
Adj. Flow (vph)	0	2	1	705	1374	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2	0	0	706	1377	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	0.97	1.01	1.09	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
	Other					
	лпеі					
Control Type: Unsignalized						

Job# 21006899A - R.H.

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	Þ	
Traffic Vol, veh/h	0	2	1	663	1292	3
Future Vol, veh/h	0	2	1	663	1292	3
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	e, # 0	-	-	0	0	-
Grade, %	3	-	-	-5	6	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	50	2	10	7	33
Mvmt Flow	0	2	1	705	1374	3

Major/Minor N	Minor2	N	Major1	Ν	1ajor2	
Conflicting Flow All	2083	1376	1377	0	-	0
Stage 1	1376	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Critical Hdwy	7.02	7	4.12	-	-	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.518		2.218	-	-	-
Pot Cap-1 Maneuver	41	124	498	-	-	-
Stage 1	186	-	-	-	-	-
Stage 2	434	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver		124	498	-	-	-
Mov Cap-2 Maneuver		-	-	-	-	-
Stage 1	185	-	-	-	-	-
Stage 2	434	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	34.5		0		0	
HCM LOS	D		-		-	
Minor Long/Major Mur	mt	ND	NDTE		CDT	CDD
Minor Lane/Major Mvr	nt	NBL		EBLn1	SBT	SBR
Capacity (veh/h)		498	-		-	-
HCM Lane V/C Ratio		0.002		0.017	-	-
HCM Control Delay (s	5)	12.2	0	34.5	-	-
HCM Lane LOS		В	А	D	-	-

HCM 95th %tile Q(veh)

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		ţ,			र्भ
Traffic Volume (vph)	183	249	1147	348	213	690
Future Volume (vph)	183	249	1147	348	213	690
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	12	12
Grade (%)	-10%		-2%			-1%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.922		0.969			
Flt Protected	0.979					0.988
Satd. Flow (prot)	1640	0	1823	0	0	1820
Flt Permitted	0.979					0.988
Satd. Flow (perm)	1640	0	1823	0	0	1820
Link Speed (mph)	40		55			55
Link Distance (ft)	628		503			2244
Travel Time (s)	10.7		6.2			27.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	7%	2%	2%	9%	2%
Adj. Flow (vph)	193	262	1207	366	224	726
Shared Lane Traffic (%)						
Lane Group Flow (vph)	455	0	1573	0	0	950
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.98	0.94	0.99	0.99	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type: C	Other					
Control Type: Unsignalized						

ersection						
Int Delay, s/veh	1955.6		_	_		_
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			¢,			4
Traffic Vol, veh/h	183	249	1147	348	213	690
Future Vol, veh/h	183	249	1147	348	213	690
Conflicting Peds, #/I		0	0	0	0	0/0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	_	-	-	-
Veh in Median Stora	-	-	0	-	-	0
Grade, %	-10	-	-2	-	-	-1
			-2 95			
Peak Hour Factor	95	95		95	95	95
Heavy Vehicles, %	5	7	2	2	9	2
Mvmt Flow	193	262	1207	366	224	726
Major/Minor	Minor1	Λ	/lajor1	Λ	Najor2	
Conflicting Flow All	2564		0	0	1573	0
Stage 1	1390	-	-	-	-	-
Stage 2	1174	-	-	-	-	-
Critical Hdwy	4.45	5.27	-	-	4.19	-
Critical Hdwy Stg 1	3.45	-	-	-	-	-
Critical Hdwy Stg 2	3.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.363	-	-	2.281	-
Pot Cap-1 Maneuve			-	-	400	-
Stage 1	492	- 200	-	-	-	-
Stage 2	556	-	_	_	_	_
Platoon blocked, %	550	_	-	_	-	
	7	250	-	-	400	-
Mov Cap-1 Maneuve		~ 250	-	-	400	-
Mov Cap-2 Maneuve		-	-	-	-	-
Stage 1	492	-	-	-	-	-
Stage 2	~ 34	-	-	-	-	-
Annraach			ND		CD	
Approach	WB		NB		SB	
HCM Control Delaty;			0		5.9	
HCM LOS	F					
Minor Lane/Major M	vmt	NBT	NBRW	/RI n1	SBL	SBT
	IVIIIL	NDT	NDIW			301
Capacity (veh/h)		-	-	16	400	-
HCM Lane V/C Rati		-		28.421		-
HCM Control Delay	(S)	-	\$ 12	2798.4	24.9	0
HCM Lane LOS		-	-	F	С	А
HCM 95th %tile Q(v	reh)	-	-	57.8	3.3	-
Notes						
					000	
~: Volume exceeds	capacity	\$: [Jelay e	xceeds	300s	+: C

Synchro 11 Report Page 2

2025 No-Build Traffic Volumes 2: NYS Route 208 & Existing Site Driveway

Job# 21006899A - R.H.

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	Þ	
Traffic Vol, veh/h	3	2	0	1476	877	2
Future Vol, veh/h	3	2	0	1476	877	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	e, # 0	-	-	0	0	-
Grade, %	3	-	-	-5	6	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	3	2	2
Mvmt Flow	3	2	0	1554	923	2

Major/Minor N	Minor2	N	Major1	Ν	1ajor2	
Conflicting Flow All	2478	924	925	0	-	0
Stage 1	924	-	-	-	-	-
Stage 2	1554	-	-	-	-	-
Critical Hdwy	7.02	6.52	4.12	-	-	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy		3.318		-	-	-
Pot Cap-1 Maneuver	22	302	739	-	-	-
Stage 1	331	-	-	-	-	-
Stage 2	148	-	-	-	-	-
Platoon blocked, %	~~		700	-	-	-
Mov Cap-1 Maneuver		302	739	-	-	-
Mov Cap-2 Maneuver		-	-	-	-	-
Stage 1	331	-	-	-	-	-
Stage 2	148	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	125.3		0		0	
HCM LOS	F					
Minor Lane/Major Mvr	nt	NBL	NBTE	BI n1	SBT	SBR
Capacity (veh/h)		739	-	35	-	-
HCM Lane V/C Ratio		-	_		-	-
HCM Control Delay (s	;)	0		125.3	_	_
HCM Lane LOS	/	A	-	F	-	-
				•		

HCM 95th %tile Q(veh)

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2025 Build Traffic Volumes 1: NYS Route 208 & Mountain Rd

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		¢Î,			र्स
Traffic Volume (vph)	334	192	514	228	226	923
Future Volume (vph)	334	192	514	228	226	923
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	12	12
Grade (%)	-10%		-2%			-1%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.951		0.959			
Flt Protected	0.969					0.990
Satd. Flow (prot)	1639	0	1633	0	0	1751
Flt Permitted	0.969					0.990
Satd. Flow (perm)	1639	0	1633	0	0	1751
Link Speed (mph)	40		55			55
Link Distance (ft)	628		503			2244
Travel Time (s)	10.7		6.2			27.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	11%	9 %	21%	16%	6%
Adj. Flow (vph)	352	202	541	240	238	972
Shared Lane Traffic (%)						
Lane Group Flow (vph)	554	0	781	0	0	1210
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.98	0.94	0.99	0.99	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
71	Other					
Control Type: Unsignalized						

Lane Configurations Y Image: Configuration in the configuratine configuration
MovementWBLWBRNBTNBRSBLSBTLane ConfigurationsY>>>>Traffic Vol, veh/h334192514228226923Future Vol, veh/h334192514228226923Conflicting Peds, #/hr000000Sign ControlStopStopFreeFreeFreeFreeRT Channelized-None-None-NoneStorage Length0-00Grade, %-102
Lane Configurations Y Image: Configuration in the image: Configuration in the image: Configuration in the image: Configuration in the image: Conflicting Peds, #/hr O </td
Traffic Vol, veh/h 334 192 514 228 226 923 Future Vol, veh/h 334 192 514 228 226 923 Conflicting Peds, #/hr 0 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free Free RT Channelized - None - None - None Storage Length 0 - - - - - - Veh in Median Storage, # 0 - 0 - - - - Grade, % -10 - -2 - - - -
Future Vol, veh/h334192514228226923Conflicting Peds, #/hr000000Sign ControlStopStopFreeFreeFreeRT Channelized-None-None-Storage Length0Veh in Median Storage, #0-0Grade, %-102
Conflicting Peds, #/hr00000Sign ControlStopStopFreeFreeFreeRT Channelized-None-NoneNoneStorage Length0Veh in Median Storage, #0-0-0Grade, %-10-2
Sign ControlStopStopFreeFreeFreeFreeFreeRT Channelized-None-None-NoneStorage Length0Veh in Median Storage, #0-0Grade, %-102
RT ChannelizedNoneNoneNoneStorage Length0Veh in Median Storage, #0-0Grade, %-102-
Storage Length 0 - - - - - - - - C Veh in Median Storage, # 0 - 0 0
Veh in Median Storage, # 0 - 0 - - 0 Grade, % -10 - -2 - - -
Grade, % -102
Peak Hour Factor 95 95 95 95 95 95
Heavy Vehicles, % 7 11 9 21 16 6
Mvmt Flow 352 202 541 240 238 972
Major/Minor Minor1 Major1 Major2
Conflicting Flow All 2109 661 0 0 781 0
Stage 1 661
Stage 2 1448
Critical Hdwy 4.47 5.31 4.26
Critical Hdwy Stg 1 3.47
Critical Hdwy Stg 2 3.47
Follow-up Hdwy 3.563 3.399 - 2.344
Pot Cap-1 Maneuver ~ 176 537 - 778
Stage 1 728
Stage 2 471
Stage 2 471 Platoon blocked, %
Stage 2 471 - -
Stage 2 471 - - - - - - - Platoon blocked, % - </td
Stage 2 471 - - - Platoon blocked, % - - - Mov Cap-1 Maneuver ~ 59 537 - 778 Mov Cap-2 Maneuver ~ 59 - - - Stage 1 728 - - -
Stage 2 471 -
Stage 2 471 - - - Platoon blocked, % - - - Mov Cap-1 Maneuver ~ 59 537 - 778 Mov Cap-2 Maneuver ~ 59 - - - Stage 1 728 - - -
Stage 2 471 - - - Platoon blocked, % - - - Mov Cap-1 Maneuver ~ 59 537 - 778 Mov Cap-2 Maneuver ~ 59 - - - Stage 1 728 - - -

HCM	Control	Delay\$ \$2508.	4
HCM	LOS		F

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	- 87	778	-		
HCM Lane V/C Ratio	-	- 6.364	0.306	-		
HCM Control Delay (s)	-	\$-2508.4	11.7	0		
HCM Lane LOS	-	- F	В	А		
HCM 95th %tile Q(veh)	-	- 61.7	1.3	-		
Notes						
~: Volume exceeds capacity	\$: I	Delay exceeds	s 300s	+: Co	mputation Not Defined	*: All major volume in platoon

2025 Build Traffic Volumes 2: NYS Route 208 & Existing Site Driveway

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Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			÷.	ħ	
Traffic Volume (vph)	4	19	108	663	1292	30
Future Volume (vph)	4	19	108	663	1292	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12
Grade (%)	3%			-5%	6%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.887				0.997	
Flt Protected	0.992			0.993		
Satd. Flow (prot)	1121	0	0	1717	1651	0
Flt Permitted	0.992			0.993		
Satd. Flow (perm)	1121	0	0	1717	1651	0
Link Speed (mph)	30			45	45	
Link Distance (ft)	123			414	503	
Travel Time (s)	2.8			6.3	7.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	50%	2%	10%	7%	33%
Adj. Flow (vph)	4	20	115	705	1374	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	24	0	0	820	1406	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	0.97	1.01	1.09	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type: C	Other					
Control Type: Unsignalized						

Job# 21006899A - R.H.

Intersection Int Delay, s/veh 1.9 Movement EBL EBR NBL NBT SBT SBR Y Lane Configurations 4 Þ Traffic Vol, veh/h 4 108 663 1292 30 19 Future Vol, veh/h 1292 4 19 108 663 30 Conflicting Peds, #/hr 0 0 0 0 0 0 Stop Sign Control Stop Free Free Free Free **RT** Channelized None -None -None -0 Storage Length Veh in Median Storage, # 0 0 0 ---Grade, % 3 -5 6 ---Peak Hour Factor 94 94 94 94 94 94 Heavy Vehicles, % 2 50 2 10 7 33 Mvmt Flow 4 20 115 705 1374 32

Major/Minor	Minor2	ſ	Major1	Ν	lajor2	
Conflicting Flow All	2325		1406	0	-	0
Stage 1	1390	-	-	-	-	-
Stage 2	935	-	-	-	-	-
Critical Hdwy	7.02	7	4.12	-	-	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.518		2.218	-	-	-
Pot Cap-1 Maneuver		122	485	-	-	-
Stage 1	183	-	-	-	-	-
Stage 2	327	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver		122	485	-	-	-
Mov Cap-2 Maneuver		-	-	-	-	-
Stage 1	112	-	-	-	-	-
Stage 2	327	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	s 103.8		2.1		0	
HCM LOS	F				-	
Minor Long/Major Ma	mt	ND	NDT		CDT	CDD
Minor Lane/Major Mv	mt	NBL	INRT	EBLn1	SBT	SBR
Capacity (veh/h)		485	-	59	-	-
HCM Lane V/C Ratio		0.237		0.415	-	-
HCM Control Delay (s	S)	14.7		103.8	-	-
HCM Lane LOS		В	A	F	-	-

Job# 21006899A - R.H.

HCM 95th %tile Q(veh)

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2025 Build Traffic Volumes 1: NYS Route 208 & Mountain Rd

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		ţ,			र्भ
Traffic Volume (vph)	185	249	1164	357	213	694
Future Volume (vph)	185	249	1164	357	213	694
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	12	12
Grade (%)	-10%		-2%			-1%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.923		0.968			
Flt Protected	0.979					0.988
Satd. Flow (prot)	1642	0	1821	0	0	1820
Flt Permitted	0.979					0.988
Satd. Flow (perm)	1642	0	1821	0	0	1820
Link Speed (mph)	40		55			55
Link Distance (ft)	628		503			2244
Travel Time (s)	10.7		6.2			27.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	7%	2%	2%	9%	2%
Adj. Flow (vph)	195	262	1225	376	224	731
Shared Lane Traffic (%)						
Lane Group Flow (vph)	457	0	1601	0	0	955
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.98	0.94	0.99	0.99	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type: C	Other					
Control Type: Unsignalized						

Job# 21006899A - R.H.

ersection						
Int Delay, s/veh 3	8519.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y	VUDI		NDK	JDL	<u>उठा</u> दी
		240		257	111	
Traffic Vol, veh/h	185	249	1164	357	213	694
Future Vol, veh/h	185	249	1164	357	213	694
Conflicting Peds, #/hr		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	e, # 0	-	0	-	-	0
Grade, %	-10	-	-2	-	-	-1
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	7	2	2	9	2
Mvmt Flow	195	262	1225	376	224	731
	190	202	1220	370	224	131
Major/Minor N	/linor1	Ν	/lajor1	Ν	/lajor2	
Conflicting Flow All	2592	1413	0		1601	0
Stage 1	1413	-	-	-	-	-
Stage 2	1179	-	-	-	-	-
Ŭ				-	-	-
Critical Hdwy	4.45	5.27	-	-	4.19	-
Critical Hdwy Stg 1	3.45	-	-	-	-	-
Critical Hdwy Stg 2	3.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.363	-	-	2.281	-
Pot Cap-1 Maneuver	~ 114	~ 244	-	-	390	-
Stage 1	486	-	-	-	-	-
Stage 2	555	_	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 4	~ 244	_	-	390	_
Mov Cap-2 Maneuver	~ 4	277		-	370	
	486	-	-		-	-
Stage 1		-	-	-	-	-
Stage 2	~ 18	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay,\$s2			0		6.1	
			0		0.1	
HCM LOS	F					
Minor Lane/Major Mvn	nt	NBT	NBRV	/BI n1	SBL	SBT
Capacity (veh/h)		-	-	9	390	001
HCM Lane V/C Ratio				50.76		-
	、	-				-
HCM Control Delay (s))	-		23198	26	0
HCM Lane LOS		-	-	F	D	А
HCM 95th %tile Q(veh	ו)	-	-	58.9	3.5	-
Notes						
			2 . 1		200-	0
~: Volume exceeds ca	pacity	\$: L	Jelay e	xceeds	300s	+: C

2025 Build Traffic Volumes 2: NYS Route 208 & Existing Site Driveway

	٠	7	1	t	Ļ	~
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			र्स	Þ	
Traffic Volume (vph)	29	104	24	1476	877	8
Future Volume (vph)	29	104	24	1476	877	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	11	12
Grade (%)	3%			-5%	6%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.895				0.999	
Flt Protected	0.989			0.999		
Satd. Flow (prot)	1570	0	0	1826	1745	0
Flt Permitted	0.989			0.999		
Satd. Flow (perm)	1570	0	0	1826	1745	0
Link Speed (mph)	30			45	45	
Link Distance (ft)	158			414	503	
Travel Time (s)	3.6			6.3	7.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%
Adj. Flow (vph)	31	109	25	1554	923	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	140	0	0	1579	931	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.02	0.97	1.01	1.09	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type: C	Other					
Control Type: Unsignalized						

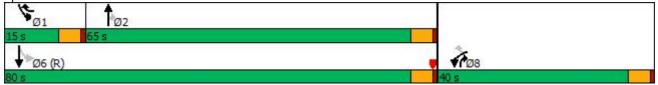
Job# 21006899A - R.H.

Intersection								
Int Delay, s/veh	42.2							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	Y			et.	ţ,			
Traffic Vol, veh/h	29	104	24	1476	877	8		
Future Vol, veh/h	29	104	24	1476	877	8		
Conflicting Peds, #/hr		0	0	0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-	None	-		-	None		
Storage Length	0	-		-		-		
Veh in Median Storag		_	_	0	0	_		
Grade, %	3	-	-	-5	6			
Peak Hour Factor	95	- 95	- 95	-5 95	95	- 95		
	95 2	95 2	95 2	95 3	95 2	95 2		
Heavy Vehicles, % Mvmt Flow	31	2 109	25		923	2		
	31	109	25	1554	923	ð		
Major/Minor	Minor2	Ν	Anior1	Δ	Inior?			
			Major1		/lajor2			
Conflicting Flow All	2531	927	931	0	-	0		
Stage 1	927	-	-	-	-	-		
Stage 2	1604	-	-	-	-	-		
Critical Hdwy	7.02	6.52	4.12	-	-	-		
Critical Hdwy Stg 1	6.02	-	-	-	-	-		
Critical Hdwy Stg 2	6.02	-	-	-	-	-		
Follow-up Hdwy				-	-	-		
Pot Cap-1 Maneuver		301	735	-	-	-		
Stage 1	330	-	-	-	-	-		
Stage 2	139	-	-	-	-	-		
Platoon blocked, %				-	-	-		
Mov Cap-1 Maneuver	~ 15	301	735	-	-	-		
Mov Cap-2 Maneuver		-	-	-	-	-		
Stage 1	248	-	-	-	-	-		
Stage 2	139	-	-	-	-	-		
Approach	EB		NB		SB			
HCM Control Delay, \$			0.2		0			
HCM LOS	F		0.2		0			
	r							
					077	055		
Minor Lane/Major Mvr	nt	NBL	NBTI	EBLn1	SBT	SBR		
Capacity (veh/h)		735	-	58	-	-		
HCM Lane V/C Ratio		0.034		2.414	-	-		
HCM Control Delay (s	5)	10.1	0\$	795.8	-	-		
HCM Lane LOS		В	А	F	-	-		
HCM 95th %tile Q(vel	h)	0.1	-	14	-	-		
Notes								
~: Volume exceeds ca	apacity	<u>\$</u> .1	Delav e	xceeds	3005	+' C	omputation Not Defined	*: All major volume in plator
	puony	ψ. Ι	Soldy C	ACCCUS	3003	1.0	omputation Not Defined	. All major volume in plato

1. NTO Route 200 0						
	1	•	1	1	1	ţ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		1		101	<u>, 1</u>	<u></u>
Traffic Volume (vph)	325	192	T 511	227	226	T 905
Future Volume (vph)	325	192	511	227	226	905
	325 1900	192	1900	1900	1900	905 1900
Ideal Flow (vphpl)	1900		1900		1900	1900
Lane Width (ft)		12		12	12	
Grade (%)	-10%	100	-2%	50	100	-1%
Storage Length (ft)	0	100		50	100	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1712	1528	1761	1348	1564	1801
Flt Permitted	0.950				0.317	
Satd. Flow (perm)	1712	1528	1761	1348	522	1801
Right Turn on Red	1712	Yes		Yes	JEE	1001
Satd. Flow (RTOR)		152		239		
	40	TJZ	55	237		55
Link Speed (mph)						
Link Distance (ft)	628		503			2244
Travel Time (s)	10.7		6.2		0.55	27.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	11%	9 %	21%	16%	6%
Adj. Flow (vph)	342	202	538	239	238	953
Shared Lane Traffic (%)						
Lane Group Flow (vph)	342	202	538	239	238	953
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		12		_0	12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
. ,	10		10			10
Two way Left Turn Lane	0.00	0.04	0.00	0.00	0.00	0.00
Headway Factor	0.98	0.94	0.99	0.99	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	83	83	83	83	83	83
Trailing Detector (ft)	-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	40	40	40	40	40
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel		OI+EX		U†EX	CI+EX	
	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43	43	43	43	43	43
Detector 2 Size(ft)	40	40	40	40	40	40
Detector 2 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1 1	2	9111 - 07	- μπ+μτ 1	6
Permitted Phases	0		Z	o 2		U
	0	8	2		6	,
Detector Phase	8	1	2	8	1	6

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Switch Phase						
Minimum Initial (s)	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	10.0	10.0	15.0	10.0	10.0	15.0
Total Split (s)	40.0	15.0	65.0	40.0	15.0	80.0
Total Split (%)	33.3%	12.5%	54.2%	33.3%	12.5%	66.7%
Maximum Green (s)	35.0	10.0	60.0	35.0	10.0	75.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	Мах	None	None	C-Max
v/c Ratio	0.86	0.31	0.55	0.21	0.53	0.77
Control Delay	64.0	8.1	20.3	2.1	12.9	19.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.0	8.1	20.3	2.1	12.9	19.8
Queue Length 50th (ft)	254	25	311	6	63	457
Queue Length 95th (ft)	343	72	451	41	117	781
Internal Link Dist (ft)	548		423			2164
Turn Bay Length (ft)		100		50	100	
Base Capacity (vph)	499	655	980	1226	451	1230
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.31	0.55	0.19	0.53	0.77
Intersection Summary						
Area Type:	Other					
Cycle Length: 120						
Actuated Cycle Length: 1	120					
Offset: 0 (0%), Reference		6:SBTL,	Start of I	Red		
Natural Cycle: 60		,				
Control Type: Actuated-C	Coordinated					
Splits and Phases: 1:	NYS Route	208 & M	ountain R	2d		



Job# 21006899A - R.H.

	4	×.	t	1	1	ţ	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	٦	1	1	1	7	1	
Traffic Volume (veh/h)	325	192	511	227	226	905	
Future Volume (veh/h)	325	192	511	227	226	905	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach	No		No			No	
Adj Sat Flow, veh/h/ln	2188	2128	1844	1663	1699	1849	
Adj Flow Rate, veh/h	342	202	538	239	238	953	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	
Percent Heavy Veh, %	7	11	9	21	16	6	
Cap, veh/h	394	491	922	971	380	1156	
Arrive On Green	0.19	0.19	0.50	0.50	0.08	0.63	
Sat Flow, veh/h	2084	1804	1844	1410	1618	1849	
Grp Volume(v), veh/h	342	202	538	239	238	953	
Grp Sat Flow(s), veh/h/ln	2084	1804	1844	1410	1618	1849	
Q Serve(g_s), s	19.1	11.0	24.7	7.6	8.3	47.8	
Cycle Q Clear(g_c), s	19.1	11.0	24.7	7.6	8.3	47.8	
Prop In Lane	1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	394	491	922	971	380	1156	
V/C Ratio(X)	0.87	0.41	0.58	0.25	0.63	0.82	
Avail Cap(c_a), veh/h	608	676	922	971	380	1156	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	47.2	35.8	21.2	7.0	16.0	17.4	
Incr Delay (d2), s/veh	5.4	0.2	2.7	0.6	2.4	6.7	
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/In	10.3	4.8	10.3	3.8	2.8	18.8	
Unsig. Movement Delay, s/ve	eh						
LnGrp Delay(d),s/veh	52.6	36.0	23.9	7.6	18.5	24.2	
LnGrp LOS	D	D	С	А	В	С	
Approach Vol, veh/h	544		777			1191	
Approach Delay, s/veh	46.4		18.9			23.0	
Approach LOS	D		В			С	
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	15.0	65.0				80.0	27.7
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax),	s 10.0	60.0				75.0	35.0
Max Q Clear Time (g_c+I1),	s 10.3	26.7				49.8	21.1
Green Ext Time (p_c), s	0.0	2.3				3.4	1.6
Intersection Summary							
HCM 6th Ctrl Delay			26.8				
HCM 6th LOS			С				

Lane Group WBL WBR NBT NBR SBL SBT Lane Configurations Image: Configuratio
Lane Configurations Image: Configuration in the image: Configuratin the image: Configuration in the image: Configuration in the im
Traffic Volume (vph) 183 249 1147 348 213 690 Future Volume (vph) 183 249 1147 348 213 690 Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 Lane Width (ft) 11 12 12 12 12 12 12 Grade (%) -10% -2% -1% 50 100 50 100 Storage Length (ft) 0 100 50 100 50 100 Storage Lanes 1 1 1 1 1 1 1 Taper Length (ft) 25 86 1.00 1.00 1.00 1.00 1.00 Fit 0.850 0.850 0.850 0.950 5.0 1.00
Future Volume (vph)1832491147348213690Ideal Flow (vphpl)1900190019001900190019001900Lane Width (ft)111212121212Grade (%)-10%-2%-1%50100Storage Length (ft)010050100Storage Lanes1111Taper Length (ft)2586Lane Util. Factor1.001.001.001.00Flt Protected0.9500.8500.850Flt Protected0.9500.9500.050Satd. Flow (prot)174515851881159988Aft. Flow (perm)174515851881159988
Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 Lane Width (ft) 11 12 12 12 12 12 Grade (%) -10% -2% -1% -1% Storage Length (ft) 0 100 50 100 Storage Lanes 1 1 1 1 Taper Length (ft) 25 86 Lane Util. Factor 1.00 1.00 1.00 1.00 Frt 0.850 0.850 0.950 Satd. Flow (prot) 1745 1585 1881 1599 1664 1872 Flt Permitted 0.950 0.050 0.050 0.050 0.050
Lane Width (ft) 11 12 12 12 12 Grade (%) -10% -2% -1% Storage Length (ft) 0 100 50 100 Storage Lanes 1 1 1 1 Taper Length (ft) 25 86 Lane Util. Factor 1.00 1.00 1.00 1.00 Frt 0.850 0.850 0.950 Flt Protected 0.950 0.950 0.950 Satd. Flow (prot) 1745 1585 1881 1599 1664 1872 Flt Permitted 0.950 0.050 0.050 0.050 0.050
Grade (%) -10% -2% -1% Storage Length (ft) 0 100 50 100 Storage Lanes 1 1 1 1 Taper Length (ft) 25 86 Lane Util. Factor 1.00 1.00 1.00 1.00 Frt 0.850 0.850 0.950 Flt Protected 0.950 0.950 0.950 Satd. Flow (prot) 1745 1585 1881 1599 1664 1872 Flt Permitted 0.950 0.050 0.050 0.050 0.050 0.050 Satd. Flow (perm) 1745 1585 1881 1599 88 1872
Storage Length (ft) 0 100 50 100 Storage Lanes 1 1 1 1 1 Taper Length (ft) 25 86 100 1.00
Storage Lanes 1 1 1 1 Taper Length (ft) 25 86 Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 Frt 0.850 0.850 0.950 0.950 Flt Protected 0.950 0.950 1881 1599 1664 1872 Flt Permitted 0.950 0.050 0.050 0.050 0.050 Satd. Flow (perm) 1745 1585 1881 1599 88 1872
Taper Length (ft) 25 86 Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 Frt 0.850 0.850 0.950 0.950 Flt Protected 0.950 1585 1881 1599 1664 1872 Satd. Flow (prot) 1745 1585 1881 1599 88 1872 Satd. Flow (perm) 1745 1585 1881 1599 88 1872
Lane Util. Factor 1.00 <th1.00< th=""> 1.00 1.00</th1.00<>
Frt 0.850 0.850 Flt Protected 0.950 0.950 Satd. Flow (prot) 1745 1585 1881 1599 1664 1872 Flt Permitted 0.950 0.050 0.050 Satd. Flow (perm) 1745 1585 1881 1599 88 1872
Flt Protected 0.950 0.950 Satd. Flow (prot) 1745 1585 1881 1599 1664 1872 Flt Permitted 0.950 0.050 0.050 Satd. Flow (perm) 1745 1585 1881 1599 88 1872
Satd. Flow (prot)174515851881159916641872Flt Permitted0.9500.0500.050Satd. Flow (perm)1745158518811599881872
Flt Permitted 0.950 0.050 Satd. Flow (perm) 1745 1585 1881 1599 88 1872
Satd. Flow (perm) 1745 1585 1881 1599 88 1872
Dight Turn on Dod
Right Turn on Red Yes Yes
Satd. Flow (RTOR) 91 96
Link Speed (mph) 40 55 55
Link Distance (ft) 628 503 2244
Travel Time (s) 10.7 6.2 27.8
Peak Hour Factor 0.98 0.98 0.98 0.98 0.98
Heavy Vehicles (%) 5% 7% 2% 2% 9% 2%
Adj. Flow (vph) 187 254 1170 355 217 704
Shared Lane Traffic (%)
Lane Group Flow (vph) 187 254 1170 355 217 704
Enter Blocked Intersection No No No No No No
Link Offset(ft) 0 0 0
Crosswalk Width(ft) 16 16 16
Two way Left Turn Lane
Headway Factor 0.98 0.94 0.99 0.99 0.99
Turning Speed (mph) 15 9 9 15
Number of Detectors222222
Detector Template
Leading Detector (ft) 83 83 83 83 83 83
Trailing Detector (ft) -5 -5 -5 -5 -5 -5
Detector 1 Position(ft) -5 -5 -5 -5 -5 -5
Detector 1 Size(ft) 40 40 40 40 40 40
Detector 1 Type CI+Ex CI+Ex CI+Ex CI+Ex CI+Ex CI+Ex
Detector 1 Channel
Detector 1 Extend (s) 0.0 0.0 0.0 0.0 0.0 0.0
Detector 1 Queue (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Detector 1 Delay (s) 0.0
Detector 1 Deray (s) 0.0 <th0.0< th=""> 0.0 <th0.0< th=""></th0.0<></th0.0<>
Detector 2 Type CI+Ex CI+Ex CI+Ex CI+Ex CI+Ex CI+Ex
Detector 2 Channel
Detector 2 Extend (s) 0.0 0.0 0.0 0.0 0.0 0.0
Turn Type Prot pm+ov NA pm+ov pm+pt NA
Protected Phases 8 1 2 8 1 6
Permitted Phases 8 2 6
Detector Phase 8 1 2 8 1 6

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Switch Phase						
Minimum Initial (s)	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	10.0	10.0	15.0	10.0	10.0	15.0
Total Split (s)	25.0	15.0	80.0	25.0	15.0	95.0
Total Split (%)	20.8%	12.5%	66.7%	20.8%	12.5%	79.2%
Maximum Green (s)	20.0	10.0	75.0	20.0	10.0	90.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	0.0	Lead	Lag	0.0	Lead	0.0
Lead-Lag Optimize?		Yes	Yes		Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	C-Max	None	None	Max
v/c Ratio	0.78	0.48	1.00	0.27	0.88	0.48
Control Delay	71.8	25.5	25.9	0.27	67.5	6.4
Queue Delay	0.0	0.0	0.0	0.9	07.5	0.4
Total Delay	71.8	25.5	25.9	0.0	67.5	6.4
Queue Length 50th (ft)	141	102	775	12	119	166
Queue Length 95th (ft)	217	184	m612	m10	#303	259
Internal Link Dist (ft)	548	104	423	IIIIO	π 303	2164
Turn Bay Length (ft)	540	100	423	50	100	2104
Base Capacity (vph)	290	526	1175	1348	246	1459
Starvation Cap Reductn	2,90	0	0	0	240	0
	0	0	0	0	0	0
Spillback Cap Reductn						
Storage Cap Reductn	0	0 49	0	0 26	0	0
Reduced v/c Ratio	0.64	0.48	1.00	0.26	0.88	0.48
Intersection Summary						
Area Type:	Other					
Cycle Length: 120						
Actuated Cycle Length: 12	20					
Offset: 0 (0%), Reference	d to phase	2:NBT, 5	Start of R	ed		
Natural Cycle: 90	·					
Control Type: Actuated-Co	pordinated					
# 95th percentile volume		capacity,	queue m	nay be lo	nger.	
Queue shown is maxim				J	5	
m Volume for 95th perce				pstream	signal.	
					0	
Splits and Phases: 1: N	YS Route	208 & M	ountain F	?d		
Sa1 02	(P)					

Ø1	Ø2 (R)	2 a 🖉
15 s	80 s	
₩Ø6		€7 08
95 s		25 s

Job# 21006899A - R.H.

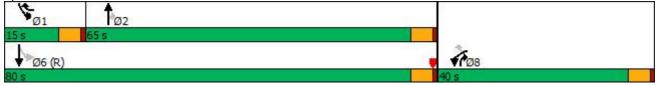
Iovement WBL WBR NBT NBR SBL SBT ane Configurations I
ane Configurations i
raffic Volume (veh/h)1832491147348213690uture Volume (veh/h)1832491147348213690uture Volume (veh/h)1832491147348213690uture Volume (veh/h)1832491147348213690uture Volume (veh/h)1832491147348213690uture Volume (veh/h)1832491147348213690ed-Bike Adj(A_pbT)1.001.001.001.001.00arking Bus, Adj1.001.001.001.001.00/ork Zone On ApproachNoNoNo/ork Zone On ApproachNoNoNodj Sat Flow, veh/h/In22182188194919491804dj Flow Rate, veh/h1872541170355217704eak Hour Factor0.980.980.980.980.980.98ercent Heavy Veh, %572292ap, veh/h304420126313082421476rrive On Green0.140.140.650.650.080.77at Flow, veh/h211318541949165117181909rp Volume(v), veh/h1872541170355217704
uture Volume (veh/h) 183 249 1147 348 213 690 nitial Q (Qb), veh 0 0 0 0 0 0 0 ed-Bike Adj(A_pbT) 1.00 1.00 1.00 1.00 1.00 1.00 arking Bus, Adj 1.00 1.00 1.00 1.00 1.00 1.00 /ork Zone On Approach No No No No dj Sat Flow, veh/h/In 2218 2188 1949 1949 1804 1909 dj Flow Rate, veh/h 187 254 1170 355 217 704 eak Hour Factor 0.98 0.98 0.98 0.98 0.98 0.98 ercent Heavy Veh, % 5 7 2 2 9 2 ap, veh/h 304 420 1263 1308 242 1476 rrive On Green 0.14 0.14 0.65 0.65 0.08 0.77 at Flow, veh/h 2113 1854 1949 1651 1718 1909 rip Volume(v), veh/h
ed-Bike Adj(A_pbT) 1.00 1.00 1.00 1.00 arking Bus, Adj 1.00 1.00 1.00 1.00 1.00 /ork Zone On Approach No No No No dj Sat Flow, veh/hln 2218 2188 1949 1949 1804 1909 dj Flow Rate, veh/h 187 254 1170 355 217 704 eak Hour Factor 0.98 0.98 0.98 0.98 0.98 0.98 ercent Heavy Veh, % 5 7 2 2 9 2 ap, veh/h 304 420 1263 1308 242 1476 rrive On Green 0.14 0.14 0.65 0.65 0.08 0.77 at Flow, veh/h 2113 1854 1949 1651 1718 1909 rp Volume(v), veh/h 187 254 1170 355 217 704
arking Bus, Adj1.001.001.001.001.001.001.00/ork Zone On ApproachNoNoNoNodj Sat Flow, veh/h/In221821881949194918041909dj Flow Rate, veh/h1872541170355217704eak Hour Factor0.980.980.980.980.980.98ercent Heavy Veh, %572292ap, veh/h304420126313082421476rrive On Green0.140.140.650.650.080.77at Flow, veh/h211318541949165117181909rp Volume(v), veh/h1872541170355217704
Vork Zone On Approach No No No dj Sat Flow, veh/h/ln 2218 2188 1949 1949 1804 1909 dj Sat Flow, veh/h/ln 2218 2188 1949 1949 1804 1909 dj Flow Rate, veh/h 187 254 1170 355 217 704 eak Hour Factor 0.98 0.98 0.98 0.98 0.98 0.98 ercent Heavy Veh, % 5 7 2 2 9 2 ap, veh/h 304 420 1263 1308 242 1476 rrive On Green 0.14 0.14 0.65 0.65 0.08 0.77 at Flow, veh/h 2113 1854 1949 1651 1718 1909 rp Volume(v), veh/h 187 254 1170 355 217 704
dj Sat Flow, veh/h/ln221821881949194918041909dj Flow Rate, veh/h1872541170355217704eak Hour Factor0.980.980.980.980.980.98ercent Heavy Veh, %572292ap, veh/h304420126313082421476rrive On Green0.140.140.650.650.080.77at Flow, veh/h211318541949165117181909rp Volume(v), veh/h1872541170355217704
dj Flow Rate, veh/h1872541170355217704eak Hour Factor0.980.980.980.980.980.980.98ercent Heavy Veh, %572292ap, veh/h304420126313082421476rrive On Green0.140.140.650.650.080.77at Flow, veh/h211318541949165117181909rrp Volume(v), veh/h1872541170355217704
eak Hour Factor0.980.980.980.980.980.98ercent Heavy Veh, %572292ap, veh/h304420126313082421476rrive On Green0.140.140.650.650.080.77at Flow, veh/h211318541949165117181909rrp Volume(v), veh/h1872541170355217704
ercent Heavy Veh, %572292ap, veh/h304420126313082421476rrive On Green0.140.140.650.650.080.77at Flow, veh/h211318541949165117181909irp Volume(v), veh/h1872541170355217704
ap, veh/h304420126313082421476rrive On Green0.140.140.650.650.080.77at Flow, veh/h211318541949165117181909rp Volume(v), veh/h1872541170355217704
rrive On Green0.140.140.650.650.080.77at Flow, veh/h211318541949165117181909rp Volume(v), veh/h1872541170355217704
at Flow, veh/h211318541949165117181909irp Volume(v), veh/h1872541170355217704
rp Volume(v), veh/h 187 254 1170 355 217 704
rp Sat Flow(s),veh/h/ln 2113 1854 1949 1651 1718 1909
. Serve(g_s), s 10.0 14.7 63.4 6.8 7.9 15.9
ycle Q Clear(g_c), s 10.0 14.7 63.4 6.8 7.9 15.9
rop In Lane 1.00 1.00 1.00 1.00
ane Grp Cap(c), veh/h 304 420 1263 1308 242 1476
/C Ratio(X) 0.62 0.60 0.93 0.27 0.90 0.48
vail Cap(c_a), veh/h 352 463 1263 1308 243 1476
CM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00
pstream Filter(I) 1.00 1.00 1.00 1.00 1.00 1.00
niform Delay (d), s/veh 48.3 41.6 18.6 3.3 37.1 4.9
ncr Delay (d2), s/veh 1.3 1.1 12.9 0.5 31.1 1.1
itial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0
ile BackOfQ(50%), veh/ln 5.3 6.7 27.1 3.7 8.2 4.4
nsig. Movement Delay, s/veh
nGrp Delay(d),s/veh 49.6 42.7 31.4 3.8 68.2 6.0
nGrp LOS D D C A E A
pproach Vol, veh/h 441 1525 921
pproach Delay, s/veh 45.6 25.0 20.7
pproach LOS D C C
imer - Assigned Phs 1 2 6
hs Duration (G+Y+Rc), s 14.9 82.8 97.8
hange Period (Y+Rc), s 5.0 5.0 5.0 5.0
lax Green Setting (Gmax), s 10.0 75.0 90.0
lax Q Clear Time (g_c+I1), s 9.9 65.4 17.9
ireen Ext Time (p_c), s 0.0 4.3 2.1
tersection Summary
CM 6th Ctrl Delay 26.8
CM 6th LOS C

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	<u>NDL</u>	1	1	1	502	<u> </u>
Traffic Volume (vph)	334	192	514	228	226	923
Future Volume (vph)	334	192	514	228	226	923
Ideal Flow (vphpl)	1900	192	1900	1900	1900	1900
Lane Width (ft)	1900	1900	1900	1900	1900	1900
Grade (%)	-10%	12	-2%	12	12	-1%
Storage Length (ft)		100	-270	50	100	-170
	0	100		50 1	100	
Storage Lanes		Í		1		
Taper Length (ft)	25	1.00	1.00	1.00	86	1.00
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt Fit Droto start	0.050	0.850		0.850	0.050	
Flt Protected	0.950	4500	47/4	40.40	0.950	4004
Satd. Flow (prot)	1712	1528	1761	1348	1564	1801
Flt Permitted	0.950				0.313	
Satd. Flow (perm)	1712	1528	1761	1348	515	1801
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		148		240		
Link Speed (mph)	40		55			55
Link Distance (ft)	628		503			2244
Travel Time (s)	10.7		6.2			27.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	11%	9%	21%	16%	6%
Adj. Flow (vph)	352	202	541	240	238	972
Shared Lane Traffic (%)	552	202	51	270	200	/12
Lane Group Flow (vph)	352	202	541	240	238	972
Enter Blocked Intersection	No	No	No	Z40 No	No	No
			Left		Left	Left
Lane Alignment	Left 11	Right		Right	Leit	
Median Width(ft)			12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	0.98	0.94	0.99	0.99	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	83	83	83	83	83	83
Trailing Detector (ft)	-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	40	40	40	40	40
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel	CI. LA		SI. LA		51. CA	01. <i>L</i> A
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
3 • • •						
Detector 2 Position(ft)	43	43	43	43	43	43
Detector 2 Size(ft)	40	40	40	40	40	40
Detector 2 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pm+ov	NA	pm+ov	pm+pt	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2	6	
Detector Phase	8	1	2	8	1	6
	5		2	Ŭ		v

Synchro 11 Report Page 1

	4	•	t	1	1	ţ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Switch Phase						
Minimum Initial (s)	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	10.0	10.0	15.0	10.0	10.0	15.0
Total Split (s)	40.0	15.0	65.0	40.0	15.0	80.0
Total Split (%)	33.3%	12.5%	54.2%	33.3%	12.5%	66.7%
Maximum Green (s)	35.0	10.0	60.0	35.0	10.0	75.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	Мах	None	None	C-Max
v/c Ratio	0.87	0.31	0.56	0.21	0.54	0.79
Control Delay	64.8	8.4	20.8	1.9	13.2	21.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.8	8.4	20.8	1.9	13.2	21.1
Queue Length 50th (ft)	261	27	311	5	65	488
Queue Length 95th (ft)	355	75	450	36	117	#823
Internal Link Dist (ft)	548		423			2164
Turn Bay Length (ft)		100		50	100	
Base Capacity (vph)	499	657	973	1222	444	1223
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.31	0.56	0.20	0.54	0.79
Intersection Summary						
Area Type:	Other					
Cycle Length: 120						
Actuated Cycle Length: 12	20					
Offset: 0 (0%), Reference		6:SBTL,	Start of I	Red		
Natural Cycle: 65		/				
Control Type: Actuated-Co	oordinated					
<pre># 95th percentile volume</pre>		capacity.	queue m	ay be lo	nger.	
Queue shown is maxin				J	J	
		J				

Splits and Phases: 1: NYS Route 208 & Mountain Rd



Job# 21006899A - R.H.

ement WBL WBR NBT NBR SBL SBT
e Configurations 🎽 🎢 🤺 🎢 🌴
fic Volume (veh/h) 334 192 514 228 226 923
re Volume (veh/h) 334 192 514 228 226 923
al Q (Qb), veh 0 0 0 0 0 0
-Bike Adj(A_pbT) 1.00 1.00 1.00 1.00
ting Bus, Adj 1.00 1.00 1.00 1.00 1.00 1.00
k Zone On Approach No No No
Sat Flow, veh/h/ln 2188 2128 1844 1663 1699 1849
Flow Rate, veh/h 352 202 541 240 238 972
k Hour Factor 0.95 0.95 0.95 0.95 0.95 0.95
cent Heavy Veh, % 7 11 9 21 16 6
, veh/h 404 500 922 978 379 1156
ve On Green 0.19 0.19 0.50 0.50 0.08 0.63
Flow, veh/h 2084 1804 1844 1410 1618 1849
Volume(v), veh/h 352 202 541 240 238 972
Sat Flow(s), veh/h/ln 2084 1804 1844 1410 1618 1849
erve(g_s), s 19.7 10.9 24.9 7.5 8.3 49.9
le Q Clear(g_c), s 19.7 10.9 24.9 7.5 8.3 49.9
o In Lane 1.00 1.00 1.00 1.00
e Grp Cap(c), veh/h 404 500 922 978 379 1156
Ratio(X) 0.87 0.40 0.59 0.25 0.63 0.84
il Cap(c_a), veh/h 608 676 922 978 379 1156
I Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00
tream Filter(I) 1.00 1.00 1.00 1.00 1.00 1.00
orm Delay (d), s/veh 46.9 35.3 21.2 6.8 16.1 17.8
Delay (d2), s/veh 6.2 0.2 2.7 0.6 2.5 7.5
al Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0
BackOfQ(50%),veh/ln 10.7 4.7 10.4 3.8 2.8 19.8
ig. Movement Delay, s/veh
rp Delay(d),s/veh 53.1 35.5 24.0 7.4 18.6 25.2
rpLOS D D C A B C
roach Vol, veh/h 554 781 1210
roach Delay, s/veh 46.7 18.9 23.9
roach LOS D B C
er - Assigned Phs 1 2 6
Duration (G+Y+Rc), s 15.0 65.0 80.0
nge Period (Y+Rc), s 5.0 5.0 5.0 5.0
Green Setting (Gmax), s 10.0 60.0 75.0
Q Clear Time (g_c+l1), s 10.3 26.9 51.9
en Ext Time (p_c), s 0.0 2.3 3.4
rsection Summary
A 6th Ctrl Delay 27.3
/ 6th LOS C

	٨	*	•	t	ţ	~
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			र्स	f,	
Traffic Volume (vph)	4	19	108	663	1292	30
Future Volume (vph)	4	19	108	663	1292	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12
Grade (%)	3%			-5%	6%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.887				0.997	
Flt Protected	0.992			0.993		
Satd. Flow (prot)	1121	0	0	1717	1651	0
Flt Permitted	0.992			0.993		
Satd. Flow (perm)	1121	0	0	1717	1651	0
Link Speed (mph)	30			45	45	
Link Distance (ft)	167			414	503	
Travel Time (s)	3.8			6.3	7.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	50%	2%	10%	7%	33%
Adj. Flow (vph)	4	20	115	705	1374	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	24	0	0	820	1406	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.07	1.07	0.97	1.01	1.09	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
J1	Other					
Control Type: Unsignalized						

Intersection

Int Delay, s/veh 1.3

int Delay, s/ven	1.3						
Movement	EBL	EBR	NBL	NBT	SBT	SBR	2
Lane Configurations	Y			4	ţ,		
Traffic Vol, veh/h	4	19	108	663	1292	30)
Future Vol, veh/h	4	19	108	663	1292	30)
Conflicting Peds, #/hr	0	0	0	0	0	0)
Sign Control	Stop	Stop	Free	Free	Free	Free	è
RT Channelized	-	None	-	None	-	None	è
Storage Length	0	-	-	-	-	-	-
Veh in Median Storage	e, # 0	-	-	0	0	-	-
Grade, %	3	-	-	-5	6	-	-
Peak Hour Factor	94	94	94	94	94	94	1
Heavy Vehicles, %	2	50	2	10	7	33	3
Mvmt Flow	4	20	115	705	1374	32	2

Conflicting Flow All 2325 1390 1406 0 - 0 Stage 1 1390 - - - - - - Stage 2 935 - - - - - - Critical Hdwy 7.02 7 4.12 - - - - Critical Hdwy Stg 1 6.02 - - - - - - Critical Hdwy Stg 2 6.02 - - - - - - Follow-up Hdwy 3.518 3.75 2.218 - - - -
Stage 2 935 - - - - Critical Hdwy 7.02 7 4.12 - - - Critical Hdwy Stg 1 6.02 - - - - - Critical Hdwy Stg 2 6.02 - - - - -
Critical Hdwy 7.02 7 4.12 - - Critical Hdwy Stg 1 6.02 - - - - Critical Hdwy Stg 2 6.02 - - - -
Critical Hdwy 7.02 7 4.12 - - - Critical Hdwy Stg 1 6.02 - - - - - Critical Hdwy Stg 2 6.02 - - - - -
Critical Hdwy Stg 2 6.02
Follow up Udwy 2 510 2 75 2 210
Pot Cap-1 Maneuver 28 122 485
Stage 1 183
Stage 2 327
Platoon blocked, %
Mov Cap-1 Maneuver 17 122 485
Mov Cap-2 Maneuver 82
Stage 1 112
Stage 2 327
Approach EB NB SB
HCM Control Delay, s 45.9 2.1 0
HCM LOS E
Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h)	485	- 112	-	-
HCM Lane V/C Ratio	0.237	- 0.218	-	-
HCM Control Delay (s)	14.7	0 45.9	-	-
HCM Lane LOS	В	A E	-	-
HCM 95th %tile Q(veh)	0.9	- 0.8	-	-

Job# 21006899A - R.H.

	1	A.	Ť	1	6	ţ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	NDL	1	1	1	<u> </u>	1
Traffic Volume (vph)	185	249	1164	357	213	694
Future Volume (vph)	185	249	1164	357	213	694
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	1900	1900	1900	1900	1900	1900
Grade (%)	-10%	12	-2%	12	12	-1%
Storage Length (ft)	0	100	-270	50	100	-170
	1	100		50	100	
Storage Lanes	25	I		1		
Taper Length (ft)		1 00	1 00	1.00	86	1 00
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt Fit Directional		0.850		0.850	0.050	
Flt Protected	0.950	4505	1001	4500	0.950	4070
Satd. Flow (prot)	1745	1585	1881	1599	1664	1872
Flt Permitted	0.950	45.55			0.050	
Satd. Flow (perm)	1745	1585	1881	1599	88	1872
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		87		96		
Link Speed (mph)	40		55			55
Link Distance (ft)	628		503			2244
Travel Time (s)	10.7		6.2			27.8
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	5%	7%	2%	2%	9%	2%
Adj. Flow (vph)	189	254	1188	364	217	708
Shared Lane Traffic (%)	,					
Lane Group Flow (vph)	189	254	1188	364	217	708
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11	Nyn	12	Nynt	LOIL	12
Link Offset(ft)	0		0			0
	16		16			16
Crosswalk Width(ft)	10					10
Two way Left Turn Lane	0.00	0.04	Yes	0.00	0.00	0.00
Headway Factor	0.98	0.94	0.99	0.99	0.99	0.99
Turning Speed (mph)	15	9	-	9	15	-
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	83	83	83	83	83	83
Trailing Detector (ft)	-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	40	40	40	40	40
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43	43	43	43	43	43
Detector 2 Size(ft)	43	43	43	43	43	43
.,		40 CI+Ex	40 CI+Ex	40 CI+Ex	40 CI+Ex	40 CI+Ex
Detector 2 Type Detector 2 Channel	CI+Ex	UI+EX	UI+EX	UI+EX	UI+EX	UI+EX
	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pm+ov	NA	pm+ov	pm+pt	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2	6	
Detector Phase	8	1	2	8	1	6

Synchro 11 Report Page 1

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Switch Phase						
Minimum Initial (s)	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	10.0	10.0	15.0	10.0	10.0	15.0
Total Split (s)	25.0	15.0	80.0	25.0	15.0	95.0
Total Split (%)	20.8%	12.5%	66.7%	20.8%	12.5%	79.2%
Maximum Green (s)	20.0	10.0	75.0	20.0	10.0	90.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	C-Max	None	None	Мах
v/c Ratio	0.78	0.49	1.01	0.28	0.89	0.49
Control Delay	71.9	26.1	30.0	0.9	68.9	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.9	26.1	30.0	0.9	68.9	6.5
Queue Length 50th (ft)	142	105	~858	13	120	169
Queue Length 95th (ft)	220	187	m658	m11	#303	262
Internal Link Dist (ft)	548		423			2164
Turn Bay Length (ft)		100		50	100	
Base Capacity (vph)	290	523	1175	1348	244	1457
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.49	1.01	0.27	0.89	0.49
Intersection Summary						
Area Type:	Other					
Cycle Length: 120						
Actuated Cycle Length: 12	20					
Offset: 0 (0%), Reference		2:NBT, 5	Start of R	ed		
Natural Cycle: 90						
Control Type: Actuated-Co	oordinated					
 Volume exceeds capa 		e is theor	etically in	finite.		
Queue shown is maxin						
# 95th percentile volume				nay be lor	nger.	
Queue shown is maxin				, , , , , , , , , , , , , , , , , , ,	J -	
m Volume for 95th perce				ostream	signal.	
					9	
	IYS Route	208 & M	ountain R	2d		
★						



Movement WBL WBR NBR SBL SBT Lane Configurations 1		•	•	Ť	1	6	ţ		
Lane Configurations Image: Configurations Configurat	Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Traffic Volume (veh/h) 185 249 1164 357 213 694 Future Volume (veh/h) 185 249 1164 357 213 694 Initial O (Di), veh 0 0 0 0 0 0 Parking Bus, Adj 1.00 1.00 1.00 1.00 1.00 1.00 Vork Zone O Approach No No No No Adj Flow, veh/h 189 254 1188 364 217 708 Peak Hour Factor 0.98 0.99 0.93 0.92 0.40 0.92 0.92 0.92 0.92				-					
Future Volume (veh/h) 185 249 1164 357 213 694 Initial O (Ob), veh 0 0 0 0 0 0 Ped-Bike Adj(ApbT) 1.00 1.00 1.00 1.00 1.00 Work Zone On Approach No No No No Adj Sat Flow, veh/h 128 218 1949 1909 Add Flow Rate, veh/h 189 254 1188 364 217 708 Peak Hour Factor 0.98 0.92 0.41									
Initial Q (Qb), veh 0 0 0 0 0 0 Ped-Bike Adj(A, pbT) 1.00 1.00 1.00 1.00 1.00 1.00 Parking Bus, Adj 1.00 1.00 1.00 1.00 1.00 1.00 Work Zone On Approach No No No No No Adj Flow Rate, veh/h 128 218 1188 364 217 708 Peak Hour Factor 0.98 0.98 0.98 0.98 0.98 0.98 Percent Heavy Veh, % 5 7 2 2 9 2 Cap, veh/h 304 421 1263 1307 235 1476 Arrive On Green 0.14 0.65 0.65 0.08 0.77 Sat Flow, veh/h 113 1854 1949 1651 1718 1909 Gr Sat Flow(s), veh/h/ln 2113 1854 1949 1651 1718 1909 Q Serve(G_2), s 10.1 14.7 66.0 7.1 8.6 16.1 Cycle O Clear(g_c), veh/h									
Ped-Bike Adj(A_pbT) 1.00 1.00 1.00 1.00 1.00 Parking Bus, Adj 1.00 1.00 1.00 1.00 1.00 1.00 Vork Zone On Approach No No No No No Adj Sat Flow, veh/h/ln 2218 2188 1949 1949 1804 1909 Adj Flow Rate, veh/h 189 254 1188 364 217 708 Peak Hour Factor 0.98 0.98 0.98 0.98 0.98 0.98 Percent Heavy Veh, % 5 7 2 2 9 2 Cap, veh/h 304 421 1263 1307 235 1476 Arrive On Green 0.14 0.14 0.65 0.68 0.77 Sat Flow(S), veh/h/ln 213 1854 1949 1651 1718 1909 Grp Sat Flow(S), veh/h/ln 213 1854 1949 1651 1718 1909 Sat Flow, veh/h 214 1263 1307 235 1476 V/C Ratio (X), veh/h 10.1 1.4.7 66.0									
Parking Bus, Adj 1.00 1.00 1.00 1.00 No No Work Zone On Approach No No No No Adj Sat Flow, veh/h/n 2218 2188 1949 1804 1909 Adj Flow Rate, veh/h 189 254 1188 364 217 708 Peak Hour Factor 0.98 0.98 0.98 0.98 0.98 0.98 Percent Heavy Veh, % 5 7 2 2 9 2 Cap, veh/h 304 421 1263 1307 235 1476 Arrive On Green 0.14 0.14 0.65 0.65 0.08 0.77 Sat Flow, veh/h 2113 1854 1949 1651 1718 1909 Q Serve(g_s), s 10.1 14.7 66.0 7.1 8.6 16.1 Prop In Lane 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Lane Grp Cap(C), veh/h 304 421 1263 1307 235 1476 HCM Platoon Ratio 1.									
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Deak Hour Factor 0.98 0.98 0.98 0.98 0.98 Dercent Heavy Veh, % 5 7 2 2 9 2 Cap, veh/h 304 421 1263 1307 235 1476 Arrive On Green 0.14 0.65 0.65 0.06 0.077 Sat Flow, veh/h 2113 1854 1949 1651 1718 1909 Srp Sat Flow(s), veh/h/ln 2113 1854 1949 1651 1718 1909 2 Serve(g_s), s 10.1 14.7 66.0 7.1 8.6 16.1 Cycle O Clear(g_c), s 10.1 14.7 66.0 7.1 8.6 16.1 Prop In Lane 1.00 1.00 1.00 1.00 1.00 1.00 Avail Cap(c_a), veh/h 352 464 1263 1307 235 1476 HOM Platon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 Jniforn Delay(d), siveh 48.3 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
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	reen Ext Time (p_c), s	0.0	3.6				2.2	0.5	
	tersection Summary								
				28.3					
ICM 6th LOS C	2								

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Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			र्स	Þ	
Traffic Volume (vph)	29	104	24	1476	877	8
Future Volume (vph)	29	104	24	1476	877	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	11	12
Grade (%)	3%			-5%	6%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.895				0.999	
Flt Protected	0.989			0.999		
Satd. Flow (prot)	1570	0	0	1826	1745	0
Flt Permitted	0.989			0.999		
Satd. Flow (perm)	1570	0	0	1826	1745	0
Link Speed (mph)	30			45	45	
Link Distance (ft)	140			414	503	
Travel Time (s)	3.2			6.3	7.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%
Adj. Flow (vph)	30	106	24	1506	895	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	136	0	0	1530	903	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.07	1.02	0.97	1.01	1.09	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
71	Other					
Control Type: Unsignalized						

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2.7					
EBL	EBR	NBL	NBT	SBT	SBR
Y			÷	t,	
29	104	24	1476	877	8
29	104	24	1476	877	8
r 0	0	0	0	0	0
Stop	Stop	Free	Free	Free	Free
-	None	-	None	-	None
0	-	-	-	-	-
ge, # 1	-	-	0	0	-
3	-	-	-5	6	-
98	98	98	98	98	98
2	2	2	3	2	2
30	106	24	1506	895	8
	29 29 r 0 Stop - 0 ge, # 1 3 98 2	29 104 29 104 r 0 0 Stop Stop - None 0 - ge, # 1 - 3 - 98 98 2 2	29 104 24 29 104 24 r 0 0 0 Stop Stop Free - 0 - - - 0 - - - 0 - - - 0 - - - 0 - - - 0 - - - 98 98 98 98 2 2 2 2	29 104 24 1476 29 104 24 1476 r 0 0 0 Stop Stop Free Free - None - None 0 - - - ge, # 1 - - 0 3 - - -5 98 98 98 98 2 2 2 3	29 104 24 1476 877 29 104 24 1476 877 r 0 0 0 0 0 Stop Stop Free Free Free Free None - None - - - 0 - - - - - ge, # 1 - - 0 0 3 - - -5 6 98 98 98 98 98 98 2 2 2 3 2 3 2

~: Volume exceeds capacity

\$: Delay exceeds 300s +: Computation Not Defined

*: All major volume in platoon

Job# 21006899A - R.H.



Traffic Impact Study Appendix E | Accident Data

Traffic Impact Study | Appendices



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